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## THE GIBSON COMPANY, Indianapolis

All prices in this Catalog PRECEDED BY THE LETTERS D.P. are subject to a discount of $50 \%$ and $10 \%$
except in the case of very few pages, which we list below, and which take special discounts. These pages are easily located as the following words appear at the bottom of each one: "Special Discount Applies to Prices on This Page," printed in italics.

For the convenience of our Dealers we have shown a retail price on the articles in this Catalog. This price is shown in heavy black-face type, thus ( $\$ 12.00$ ), and is the price at which you should sell these accessories. The Retail Price must not be used when figuring your discount. Always be sure to figure discounts from those prices having the letters D.P. in front of them.
Pages On Which Special Discounts Apply

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165 Gordon Seat Covers
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167 Gordon Seat Covers
174 Weed Chains, 1 to 11 pairs
174 Weed Chains, 12 pairs or over In making up 12 pair lots, 100 cross chains will be considered equal to I pair chains
175 Weed Chains for Solid Tires, 1 to 11 pairs ............ 25 per cent
175 Weed Chains for Solid Tires, 12 pairs or over ........331/s per cent
180 Vulcan Springs … ........................................ 40 per cent
181 Vulcan Springs ........................................... 40 per cent
182 Vulcan Springs ............................................ 40 per cent
183
per cent
per cent
190 Fafnir Ball Bearings, Single Lots per cent
190 Fafnir Ball Bearings, Dozen Lots
per cent
238 Leak-Proof Piston Rings
324 Weed Chains for Ford, 1 to 11 pairs.
per cent
324 Weed Chains for Ford, 12 pairs or over.
per cent
324 For prices on Falcon Tires and Tubes see Special Price List
366 to 371 Parts for Ford
25 per cent
NOTE-Falcon Tires and Tubes and Klaxon Horns are subject to a cash discount of five per cent. All other items are aubject to the regular cash discount of 2 per cent., unless specified in the catalog that the prices are net.

A simple formula for figuring the net dealer's price on a discount of fifty and ten per cent. is as follows:

## If the list price is D.P \$12.22-

Divide the amount by two - . . thus: 2) $\$ 12.22$

$$
\begin{aligned}
& \text { Then take ten per cent. off the result-thus: } \begin{array}{r}
6.11 \\
\text { Which makes the net price } \\
\hline \frac{.61}{}
\end{array} \text {. }
\end{aligned}
$$

We believe you will find our prices as low (quality and service considered) as those of any legitimate jobber or distributor. We know that our stock is the most up to date in this line, and that it will pay you to send your orders to this House. Every consideration will be given your requirements, and should the prices shown in this catalog be changed you will receive the benefit of such change.

## PRICES

# FALCON AUTOMOBILE TIRES AND TUBES 

## Price List Effective January 18th, 1916 <br> THESE PRICES ARE CURRENT AND ARE NOT GUARANTEED

## Falcon Casings

Consumers' and Dealers' Prices

| Size | $\begin{gathered} \text { Consmar's } \\ \text { Price } \end{gathered}$ | Dealer's Price | $\begin{aligned} & \text { Consmr's } \\ & \text { Price } \end{aligned}$ | Dealer's Price | Size |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Smooth Thread Casings | Smooth Thread Casings | $\begin{aligned} & \text { Non- } \\ & \text { Skid } \\ & \text { Cssing } \end{aligned}$ | $\begin{aligned} & \text { Non- } \\ & \text { Nivid } \\ & \text { Casings } \end{aligned}$ |  |
| $28 \times 3$ | \$1100 | \$8 42 | \$12 65 | $\$ 968$ | 28x3 |
| $30 \times 3$ | 1170 | 897 | 1350 | 1031 | $30 \times 3$ |
| $32 \times 3$ | 1335 | 1022 | 1540 | 1178 | $32 \times 3$ |
| 30x31/2 | 1530 | 1169 | 1760 | 1346 | 30x31/2 |
| $31 \times 31 / 2$ | 1645 | 1258 | 1890 | 1448 | $31 \times 31 / 2$ |
| $32 \times 31 / 2$ | 1760 | 1346 | 2025 | 1549 | $32 \times 31 / 2$ |
| $34 \times 31 / 2$ | 2130 | 1628 | 2455 | 1877 | $34 \times 31 / 2$ |
| 30x4 | 2265 | 1734 | 2600 | 1990 | 30x4 |
| $31 \times 4$ | 2385 | 1826 | 2745 | 2100 | $31 \times 4$ |
| $32 \times 4$ | 2440 | 1868 | 2810 | 2151 | 32 x 4 |
| $33 \times 4$ | 2560 | 1957 | 2940 | 2251 | $33 \times 4$ |
| $34 \times 4$ | 2605 | 1994 | 3005 | 2297 | $34 \times 4$ |
| $35 \times 4$ | 2740 | 2096 | 3145 | 2407 | $35 \times 4$ |
| $36 \times 4$ | 2785 | 2129 | 3200 | 2449 | $36 \times 4$ |
| $37 \times 4$ | 3020 | 2311 | 3470 | 2656 | $37 \times 4$ |
| $34 \times 41 / 2$ | 3615 | 2765 | 4160 | 3181 | $34 \times 41 / 2$ |
| $35 \times 41 / 2$ | 3630 | 2778 | 4175 | 3193 | $35 \times 41 / 2$ |
| $36 \times 41 / 2$ | 3685 | 2820 | 4240 | 3244 | $36 \times 41 / 2$ |
| $37 \times 41 / 2$ | 3995 | 3055 | 4590 | 3510 | $37 \times 41 / 2$ |
| 35x5 | 4215 | 3225 | 4850 | 3711 | $35 \times 5$ |
| $36 \times 5$ | 4115 | 3147 | 4730 | 3619 | $36 \times 5$ |
| $37 \times 5$ | 4300 | 3290 | 4945 | 3783 | $37 \times 5$ |
| $37 \times 51 / 2$ | 6295 | 4817 | 7240 | 5539 | $37 \times 51 / 2$ |

All sizes made in Regular Clincher, Q. D. Clincher and Straight Side.
Prices for Metric Sizes same as prices for Relative Standard Sizes.

All prices quoted in this list are subject to change without notice.

## Falcon Red and Gray Tubes <br> Consumers' and Dealers' Prices

| Size | $\begin{gathered} \text { Consmr's } \\ \text { Price } \end{gathered}$ | Dealer'a Price | Consmr's Price | Dealer'a Price | Size |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Price Gray Tube | Price Gray Tabe | Price Red Tube | Price Red Tube |  |
| Comb't'n |  |  |  |  | Comb't'n |
| Ford | \$3 30 | \$2 53 | \$380 | \$2 90 | Ford |
| 28x 3 | 265 | 203 | 300 | 231 | 28x3 |
| 30x3 | 280 | 215 | 320 | 244 | 30x3 |
| $30 \times 31 / 2$ | 335 | 256 | 385 | 295 | 30x31/2 |
| $31 \times 31 / 2$ | 345 | 265 | 395 | 303 | $31 \times 31 / 2$ |
| $32 \times 31 / 2$ | 355 | 270 | 400 | 307 | $32 \times 31 / 2$ |
| $34 \times 31 / 2$ | 375 | 286 | 430 | 328 | $34 \times 31 / 2$ |
| $36 \times 31 / 2$ | 400 | 307 | 460 | 353 | $36 \times 31 / 2$ |
| 30x4 | 440 | 337 | 505 | 387 | 30x 4 |
| $31 \times 4$ | 455 | 349 | 530 | 404 | $31 \times 4$ |
| $32 \times 4$ | 475 | 362 | 540 | 413 | $32 \times 4$ |
| $33 \times 4$ | 480 | 366 | 550 | 421 | $33 \times 4$ |
| $34 \times 4$ | 495 | 378 | 565 | 433 | $34 \times 4$ |
| $35 \times 4$ | 520 | 396 | 595 | 454 | 35x4 |
| $36 \times 4$ | 535 | 408 | 610 | 468 | $36 \times 4$ |
| $37 \times 4$ | 545 | 417 | 625 | 480 | $37 \times 4$ |
| $34 \times 41 / 2$ | 625 | 480 | 725 | 555 | $34 \times 41 / 2$ |
| $35 \times 41 / 2$ | 635 | 484 | 730 | 560 | $35 \times 41 / 2$ |
| $36 \times 41 / 2$ | 650 | 496 | 750 | 572 | $36 \times 41 / 2$ |
| $37 \times 41 / 2$ | 680 | 521 | 780 | 597 | $37 \times 41 / 2$ |
| $35 \times 5$ | 765 | 585 | 880 | 673 | $35 \times 5$ |
| $36 \times 5$ | 780 | 597 | 895 | 685 | 36x5 |
| $37 \times 5$ | 790 | 606 | 915 | 699 | $37 \times 5$ |
| $37 \times 51 / 2$ | 865 | 661 | 990 | 758 | $37 \times 51 / 2$ |

MOTORCYCLE TUBE PRICES

|  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | :--- |
| $28 \times 21 / 4$ | $\$ 2$ | 10 | $\$ 1$ | 60 | $\$ 2$ | 55 | $\$ 1$ |
| $28 \times 24$ | $28 \times 21 / 4$ |  |  |  |  |  |  |
| $28 \times 23$ | 2 | 35 | 1 | 80 | 2 | 85 | 2 |



THERE IS AN HONOR IN BUSINESS THAT IS THE FINEGOLD OF IT:THAI RECKONS WIIH EVERY MAN JUSTLY: THAT REGARDS KINDNESS AND FAIRNESSABOVEALLEISE.ITBECOMES AMAN MORETHANHISFURNISHINGS OR HIS HOUSE. IT SPEAKS FOR HIM IN THE HEARTOF EVERYONE. HIS FRIENDSHIPS ARE SERFNE AND SECURE. HIS STRENGTH ISUKEA YOUNG TREE BY THE RIVER.
"THE BUSINESS YEAR BOOK

* This is our sixteenth year in the distribution and sale of motor car accessories, and this, our sixteenth annual catalog, is, we believe, the most complete publication of its kind ever distributed in the motor car accessory field.
* In the past we have made a consistent effort to simplify our line and have catalogued only those articles that have a known reputation for service and efficient performance. We carry no obsolete, untried or unsalable materials, and before attempting to market any device or accessory, it is first subjected to analysis and test by our Engineering and Research Departments in a completely equipped physical and chemical testing laboratory which we maintain for that exclusive purpose.
* This catalog will prove a valuable guide to every Dealer in the selection of his goods and shop equipment. It displays only the best obtainable from the markets of the world, and contains a line of information valuable alike to the Dealer, Engineer or Mechanic in the automobile field.
We display in this book a line of accessories manufactured by the Solar Manufacturing Company. These specialties represent the highest grade possible to produce and are offered with our recommendation.
s) Your attention is directed to the line of Falcon automobile casings, inner tubes and Falcon tire accessories. These are the highest grade in material, workmanship and construction, and are superior to anything manufactured for their particular purpose and service. They carry a guarantee to the consumer that is positive insurance to the Dealer.
* The reputation of this Company has been established through the maintenance of a "single outlet policy." We cater to the legitimate automobile dealer or garage operator We protect this policy as far as it lies within our power. Should our literature fall into the hands of the illegitimate "cut-rate" concern or the consumer, he has obtained it by misrepresentation, and we will appreciate your notifying us of such cases.
sp The three factors contributing to the wonderful success of this Company are: Service, Quality and fair Treatment. These fundamentals of every business are a creed with us. Our constant aim is to give every possible assistance and co-operation, and to conserve the interests of all our Dealers.
se Organization is the key note of success in any line. We have an organization trained to the needs of the automobile accessory business. The Company is officered by men of wide experience, sound business judgment and unlimited means. These factors are of exceptional benefit to every Dealer. They are a guarantee that his transactions will be handled promptly and in an equitable and satisfactory manner. It also guarantees relations with a house that is established on a sound business basis and will remain a permanent institution. Any bank, trust company or commercial agency will establish our responsibility.
* We cover the major portion of the United States with trained salesmen. There are however, some points that we cannot reach advantageously. From those districts, and in fact from all our trade, we invite their business by mail. A good proportion of all orders we handle are sent us by this method. These orders receive the same careful at tention, quick shipment, and the sender is insured the same price advantage he would receive should the order have been taken by one of our representatives. The name "Gibson" is a guarantee to all Dealers, and this guarantee insures safety in the handling of your mail order business. If our salesmen do not visit you, advise us, and we will have a representative call.
to There may be some articles you need that we do not show in our catalog. If this should be the case, do not hesitate to send us your order. If the item can be had, we will obtain it for you.
to Finally-we solicit your consideration-your business-we assure you a class of "service" and "treatment" that will justify your confidence.
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PITTSBURGH, PA.


## MOTORCAR ACCESSORIESANDTIRES SHOPEQUIPMENTAND ELECTRICAL SUPPLIES CATALOG FOR 1916

FOUNDED 1900 AVAIIABLE RESOURCES \$7,000, OOO. OO WE SERVE THE DEALER ONLY

THEGIBSON COMPANY 416-424 NORTH CAPITOL BOULEVARD IN DLANAPOLIS

## INDIANAPOLIS

IS

## "THE HEART OF TRADE"


$\{$ With exceptional shipping facilities and being centrally located, it is the ideal distributing point. G It is within fifty miles of the center of population of the United States. G A letter mailed at any point fifteen hundred miles distant will be delivered at Indianapolis within thirty hours. These important factors, combined with
'GIBSON QUALITY" SERVICE
insure the dealer quick deliveries on all requirements

# Ohc GIBSONGOMPANY 

## EXTENSION OF GIBSON QUALITY SERVICE

On account of the great reduction recently, in express rates by the various express companies, together with the lower rates on parcel post and the increase in the weight limit, Gibson Quality Service can now be obtained by all dealers, regardless of your location and at practically the same rates as if ordered from your neighboring jobber.

With these facilities at your command, dealers a thousand miles away can draw on our unlimited stock with the confidence that your orders will be filled promptly and properly and goods received with quick dispatch. INDIANAPOLIS, SITUATED PRACTICALLY IN THE CENTER OF THE UNITED STATES, MAKES AN IDEAL DISTRIBUTING POINT, AND IT ALSO BEING ONE OF THE LEADING RAILWAY CENTERS OF THE COUNTRY, GIVES YOU AN ADDED ADVANTAGE FOR RATES AND QUICK TRANSPORTATION.

We give below, rates to various points from Indianapolis. In some cases parcel post rates are lower than express rates, in which event we take the lower rate. We always use our best judgment in making shipments.

Minimum Rates on Shipments Up to Twenty Pounds

| $\begin{aligned} & \text { F1HOM } \\ & \text { INDIANAPOLIS } \\ & \text { TO } \end{aligned}$ | $\stackrel{5}{5}_{\text {Lbs. }}$ | $\begin{gathered} 10 \\ \text { Lbs. } \end{gathered}$ | $\begin{gathered} 15 \\ \text { Lbs. } \end{gathered}$ | $\begin{gathered} 20 \\ \text { Lbs. } \end{gathered}$ | $\begin{array}{cc} \hline \text { FROMI } & \\ \text { INDIANAPOLIS } \\ \text { TO } \\ \text { Libs. } \end{array}$ | $\begin{gathered} 10 \\ \text { Lbs. } \end{gathered}$ | ${ }_{\text {Lhas. }}^{15}$ | Lhas. | $\begin{gathered} \text { FHOM } \\ \text { INDBYAYOLIs } \\ \text { To } \end{gathered}$ | Liw. | Lhis. | $\begin{aligned} & 15 \\ & \text { Lhes. } \end{aligned}$ | Liva |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALABAMA- |  |  |  |  | Iowa-(Continued.) |  |  |  | NORTH DaKOt |  |  |  |  |
| Anniston | 223 | $\bullet 43$ | 51 | 62 | $\mathrm{FL}^{\text {Ft D Dige }}$. $\ldots \ldots \ldots$ *23 | 40 | 51 | 61 | Fargo |  | 49 | 63 | 78 |
| Birmingham | 33 | 40 | 50 | ${ }^{60}$ | Ottumwa .........** | 4 | +34 | $\stackrel{+4}{+1}$ | OHIO- |  |  |  |  |
| Mobile ${ }_{\text {Montgor }}$ |  | 45 | 58 | 71 | Sioux City .........23 | 43 | 0 | 73 |  |  |  |  |  |
| Montgomery |  | 43 | 54 | 66 | Waterloo .......... 23 | 37 | 45 |  | Akron Rellefontaine | 10 | 14 | -19 | ${ }_{-24}^{41}$ |
| Selma ARIZONA |  | 43 | 5 | 66 | KANSAS- |  |  |  | Cincinuati | +00 | ${ }^{1+}$ | -19 | 24 |
| ARIZONA- |  |  |  |  | Atchison .........*23 | 40 | 51 | 61 | Columbus |  | 24 | 34 | 39 |
| ${ }_{\text {Pboenix }}$ | * 51 | 96 | 13 | 173 | Oberlin ...........*32 | 54 | 71 | 88 | Canton | '1+ | -24 | 34 | 44 |
| ARESANSAS |  | 33 | 129 | 166 | Topeka | . 43 | ${ }_{61}^{51}$ | $\frac{61}{17}$ | Dayton | * | ${ }^{1+1}$ | '19 | 24 |
| Ft 8mith | *23 | * 43 | 6 | 73 | KENTUCKY- | \% |  |  | ${ }_{\text {Vima }} \mathrm{T}$ remon | 18 | ${ }^{+1}$ | -19 | $\cdots$ |
| Little Rock |  | 42 | 54 | 65 | Rowling Green ...*14 | 24 | 34 | 39 | Marietta | 14 | 24 | *34 | 41 |
| Pine Bluft | *23 | 42 | 54 | 65 | Frankfort .........*et | 14 | 119 | $\pm 4$ | Portsmouth | $1+$ | 24 | -34 | +4 |
| California - |  |  |  |  | Henderso | ${ }^{14}$ | ${ }^{19}$ | $\cdots$ | Springfield | co | ${ }^{14}$ | ${ }^{19}$ | *24 |
| Los Angeles | 51 | *101 | 150 | 194 | Louisvlite . . . . . . . ${ }^{*} 09$ | $\cdot 14$ | +19 | -2t | St Marys | ${ }^{+09}$ | ${ }^{1+}$ | -19 | $\bullet 24$ |
| COLORADO- |  |  |  |  | Lexington ........*09 | ${ }^{14}$ | ${ }^{19}$ | -2 | Toledo |  | 24 | 34 | 39 |
| Denver | 32 | 60 | 50 | 100 | Owensboro | ${ }^{14}$ | -19 | -24 | Youngstown |  | - | *34 | $\stackrel{44}{ }$ |
| CONNECTICUT- |  |  |  |  | Paducab .......... ${ }^{14}$ | -24 | 3 | 39 | Zanesville | '14 | -2 | * 31 | ${ }^{41}$ |
| Hartford .... |  | 42 | 53 | 64 | Lovisiana - |  |  |  | OKlahosa- |  |  |  |  |
| DELAWARE |  |  |  |  | Baton Rouge .....*23 | 48 | 62 | 76 | Gutbrie |  | 50 | 66 | 81 |
| Dover ..... | -23 | 39 | 48 | 58 | New Orleans .....*32 | 48 |  | 9 | Oklahoma City | 89 | 50 | 6 | 81 |
| DIST, COLUME |  |  |  |  | Shreveport ........ 32 | 49 | 63 | 78 | Muskogee |  | $\pm 43$ | 80 | 74 |
| Wasbington | .23 | 38 | 47 | 56 | MAINE- |  |  |  | Tulsa |  | *3 | 58 |  |
| FLORIDA- |  |  |  |  | Augusta | 46 | $\infty$ | 73 | OREGON- |  |  |  |  |
| Jacksonville |  | 91 | 66 | 112 | MARILAND- |  |  |  | Portland |  | 109 | 153 | 198 |
| Pensacola : |  | 47 | 60 | 74 | Baltimore | 38 | 4 | 36 | PENNSYLVANI |  |  |  |  |
| Tampa |  | 55 | 72 | 30 | Massachuset |  |  |  | Philatelphia |  | 39 | 48 <br> 4 | 58 |
| GEORGIA- |  |  |  |  | Eoston | 42 | 5 | 6 | Pitsturg |  |  |  |  |
| Atlanta | 23 | 42 | 53 | 64 | MICHIGAN- |  |  |  | RHODE ISLAN |  |  |  |  |
| Columbus |  | 4, 4 | 57 | 70 |  | -24 | 34 | 99 |  |  | 13 | 5 | 6 |
| Macon Rome |  | 29 | 48 | 5 | Battle Creek ....... $1+$ | 24 | 34 | 41 | 8. Calrolina |  |  |  |  |
| Savannah | 23 | -43 | 62 | 76 | Cold Water . . . . . 404 | -14 | *19 | -21 | ${ }_{\text {Columbia }}$ |  | $\bullet 43$ | ${ }_{6}$ | 60 |
| IDAHO- |  |  |  |  | Detroit Grand | -24 | $\stackrel{+1}{4+}$ | 41 | spartansburg | 23 | 43 | 57 | 69 |
| Boise | 51 | 97 | 135 | 174 | Grand Kamapor ........'14 | -1 | 4 | 41 | SOUTH DAKOT |  |  |  |  |
| INDAANA- |  |  | *19 |  | Nyles .............*09 | * 14 | 19 | 24 | Sloux Falls . | 2 | 43 | 57 | (2) |
| Bloomington | 40 | ,14 | *19 | 24 | St. Joseph |  |  |  | TENNESSEE- |  |  |  |  |
| Connersville | 40 | ${ }^{* 14}$ | -19 | -2 | MinNEsota- | 41 | 52 | 63 | Chatanooga | 14 | *24 | 3 | * 41 |
| Evansville | -09 | ${ }^{14}$ | -19 | 24 | Gulfport. | 45 | 58 | 71 | Nasliville |  | *24 | 4 | , |
| Frankfort | 09 | ${ }^{1+1}$ | ${ }^{*} 19$ | 24 | Jackson ........... ${ }^{* 3}$ | 43 | 5 | 68 | TEXAS- |  |  |  |  |
| Ft. Way | ${ }^{09}$ | ${ }^{1+1}$ | *19 | 24 | Meridian .......... ${ }^{\text {a }}$ \% | 43 | , | ${ }^{60}$ | Austin |  | 60 | 90 | 100 |
| Kokomo | ${ }_{40}$ | ${ }^{*} 14$ | ${ }_{+19} 19$ |  | Natchex $\begin{aligned} & \text { Vickshurg }\end{aligned}$ | +3 43 | -59 | \% | Dallas |  | 54 | 71 | 88 |
| Lofayette |  | ${ }_{-14}$ | ${ }^{19} 19$ | ${ }_{24}$ | Vicksturg MSSoURI- | 4 | 4 | 6 | E1 Paso | 41 | 71 | 105 | 134 |
| Muncie | *19 | -14 | -19 | 20. | , Jefferson City |  | 4 |  | Ge. Worth |  |  | it |  |
| Mt. Verno | 09 | 14 | ${ }^{*} 19$ | \% 4 | Kansas City .......23 | 39 | 48 | 88 | San Antoni |  | ${ }^{*} 6$ | 8 | 108 |
| Richmond | 12 | -1+ | ${ }^{+19}$ | 或 4 | St. Louis . . . . . . . ${ }^{*}$ +1t | $\stackrel{24}{ }$ | $\stackrel{3}{48}$ | 41 |  |  |  |  |  |
| Terre Hant |  |  | ${ }^{-19}$ | -2-4 | St, Josepl $\ldots$.......*23 | ${ }^{3}$ | 48 |  | Salt Lake City |  | '81 | 116 | 148 |
| Vincennes. | *09 | ${ }^{*} 14$ | -19 | -24 | MONTANA- Bute | '81 | 120 | 153 | SETMONT- |  |  |  |  |
| ILLINOIS- |  |  |  |  | Butte |  |  |  | Burlington |  | 42 | 53 | 4 |
| Bloomington | ${ }^{\circ} 1$ | *14 | * 19 | * $2+$ | NEBRRASKA |  |  |  |  |  |  |  |  |
| Cairo |  | -1 | - 19 |  | Omaha ..............23 | 41 | 52 | 63 | Lyncbburg | 23 | 39 | 49 | 59 |
| Champaign |  | ${ }_{* 1+}^{1+}$ | ${ }^{*} 19$ | +24 | NEVADA- |  |  |  | Norfole | 23 | 43 | 5 | 69 |
| Chicago . |  | ${ }^{1+1}$ | ${ }^{*} 19$ | +24 | Reno ............. ${ }^{5} 51$ | *101 | 147 | 190 | richmond |  | 12 | \% | 64 |
| Clinton | 09 | -14 | -19 | -24 | NEW HAMPSHIRE- |  |  |  | WASHINGTON |  |  |  |  |
| Decatur |  | ${ }^{14} 14$ | -19 | $\stackrel{24}{ }$ | Berlin ......... | 43 | \% | 07 | Seattle |  | 108 | 15. | 196 |
| Jollet. | 14 | -2 | . 34 | 39 | NEW JELISET-..... 30 Newark | 40 | 51 | 61 | W. V1RGINIA- |  |  |  |  |
| ${ }_{\text {Ploline }}$ |  | -24 | -31 |  | NEW MEXICO- |  |  |  | Chartioston ${ }^{\text {Huntiog }}$ |  | 27 | ${ }^{3}$ | - ${ }^{4}$ |
| ${ }_{\text {Paris }}$ |  | ${ }^{2+}$ | -19 | $* 24$ | Santa Fe ..........**1 | 66 | 90 | 113 | Martinsburg |  | 37 |  | 54 |
| Quincy | 14 | *1 | *34 | 41 | NEW YORK- |  |  |  | Wheeling .. |  | $\cdots$ | * | 44 |
| Fock Island | ${ }^{14}$ | - 4 | -3+ | 3 | Buffalo Now York | 41 | 51 |  | WISCONSIN- |  |  |  |  |
| Springtield | 1 | - 4 | 32 | 36 |  |  |  |  | Madison | ${ }^{14}$ | * 24 | * | 44 |
| Iowa- |  |  |  |  | N. Asheville |  |  |  | Mill waukee |  | $\cdots$ | ${ }^{+3}$ | 44 |
| Curlior Fantis |  | 37 | 45 | 54 | Charlotte | 43 |  |  | Racine |  |  |  |  |
| Davenport | 14 | * 2 | 43 | 4 | Fraleigh ........... | 43 | ${ }^{1}$ |  | Wroxing- |  | 61 |  |  |
| Des Moines | 23 | 8 | 47 | 60 | Wimmios |  |  |  | -neyerue |  |  |  |  |

# THE "GIBSON" POLICY 

Quality Goods Immediate Shipment Fair Treatment

## Instructions for Ordering

## DESCRIPTION OF ARTICLES

Write your order plainly, describe goods wanted carefully. Give all necessary information. Use our catalog number and page wherever possible. If it should happen that we are temporarily out of an article ordered, and unable to secure it without delay, rather than hold shipment and inconvenience you, we may take the liberty of shipping an article similar and of equal quality, in which event you will be promptly notified, and if our action is unsatisfactory you can return the article to us, we assuming all charges.

## SHIPPING INSTRUCTIONS

Be sure and state specifically how you wish your order shipped;-whether by freight, express, traction or parcel post. If method of transportation is not indicated, we use our own judgment, choosing the quickest and cheapest route. If the goods are to be shipped to one of your customers and be charged direct to you, kindly give us all necessary data that the invoice may be properly sent you.

## TERMS

Our terms are 30 days net or two ( $2 \%$ ) per cent for cash in ten (10) days, except on Falcon Casings and Inner Tubes, Automobile Tires and Klaxon Horns, on which items the cash discount is five ( $5 \%$ ) per cent instead of two ( $2 \%$ ) per cent.

## RATINGS

If you are not rated in Dun's or Bradstreet's and do not have a line of credit with us, it will expedite shipment and favor us if you will send us satisfactory reference covering your responsibility, and we will be pleased to open an account with you. If you are in immediate need of the goods, and do not have a rating, we would suggest your sending remittance with order or instructing us to ship C. O. D., sending sufficient funds with your order to insure charges both ways.

## REMITTANCES

May be made by check, draft, post office or express money order or currency if the latter is sent in a registered letter.

## LIABILITY IN TRANSIT

We exercise the utmost care in the packing and shipping of all orders; when they leave our establishment they are in first-class condition. We are not responsible for loss or damage to goods in transit. Our liability ceases when the goods are delivered to the transportation company and receipted for by them. At the same time, if such cases are reported to us, we will gladly co-operate with our customers in having all claims adjusted.

## RETURNED MERCHANDISE

Goods returned to us must have all charges prepaid. When returning goods for repairs, credit or exchange, MARK EACH PACKAGE PLAINLY with your name and address. At the same time write us fully by separate mail, giving specific details covering reason for return. When orders have been correctly filled, we can not allow the return of goods, unless a full explanation has been made and our consent obtained. If accepted, all goods returned in a salable condition-so they can be sold as new goods-will be credited at the price prevailing when the goods are returned, less a 10 per cent service and rehandling charge, and shipping expenses.

## CLAIMS

Claims for shortage, damages, etc., must be made within ten days from date of invoice.

## PRICES

All prices shown in this catalog and quotations made by this company are subject to change and may be withdrawn without notice. All articles quoted are subject to prior sale. At the time this catalog is published the European war is still in progress, and prices on all raw materials are very uncertain. We can not guarantee prices on any articles, and while we will use every effort to protect our trade, our prices and deliveries must of necessity be governed by market conditions and our ability to obtain materials.

## ERRORS

We make mistakes. We use every vigilance to avoid them. Serving thousands of dealers as we do, with our large organization, errors are bound to creep in. When they happen, we are only too glad to correct them, if the fault lies with us. We can only serve you satisfactorily and hold your trade by giving you the "Square Deal" to which you are entitled.

## "FALCON" Single Cure Wrapped Tread Process of Tire Manufacture



OF ALL THE PROBLEMS confronting the motorist, the bulk of them have been solved with the exception of tire upkeep and expense, which without question constitute seventyfive per cent. of all "motor ailments." This, in a measure, is easily explained. The automobile industry, which has sprung up with lightning-like rapidity in little more than a decade, gave early manufacturers of tires little or no opportunity for necessary experimentation or investigation of the best methods of manufacture or the varying demands that would be placed upon tires in automobile service.

The automobile itself, an offshoot of the bicycle industry, naturally attracted the attention of bicycle tire manufacturers, and the methods in use at that time were continued in the building of automobile tires. This method was the "full-moulded" process, which method is still used by a few manufacturers, not because they believe this method possesses advantages over any other, but because it would involve the scrapping of an enormous amount of equipment which they have installed during that period of the automobile industry when "quantity of output rather than quality of product" was the watchword.

But a new era for the motorist has arrived, for new manufacturers with improved methods based on careful experiments and extensive tests have entered the field.

This new method is the "Single Cure Wrapped Tread Process" of "Vulcanization in Live Steam instead of Dry Heat."

This is the method used in the manufacture of Falcon Casings, which, coupled with "Falcon" standards, gives the motorist the much-desired and long-sought perfect automobile tire. An evidence of the superiority of the Single Cure Wrapped Tread Process is reflected by the fact that practically every manufacturer of the modern school is using it, and that many of the older ones are gradually coming to it. We review briefly this process on the following pages.

The "FALCON" Process of Tire Manufacture



Your attention is directed to the Tensile Testing Machine, shown on this page. Every bolt of Fabric purchased by us is tested for tensile strength. You will note the piece in the machine shows a strength of 390 pounds to the square inch. This is a fair average of what is expected from this material.

The material for the Breaker strip is subjected to the same drastic test, and none is accepted unless it meets the exacting approval of our test inspectors. A large percentage of tire troubles can be attributed to weak and unsatisfactory fabric, which will permit blow-outs, when the least excess pressure is exerted on the tire. We discard or reject many bolts of fabric that would ordinarily be accepted as standard by the majority of Tire Manufacturers.

After having tested and accepted the Fabric, the next and most important step is the selection of the Rubber. There are many kinds, some of which, while fair for work of this nature, does not have the flexibility, resiliency and toughness demanded by the "Falcon" standard; we therefore use nothing but the highest-grade "Up-River Para" rubber, knowing it to be vastly superior to any of the other kinds.

We have now selected our materials, let us pass to the manufacturing of the "Falcon" Single-cure Wrapped Tread Tires.

## The "FALCON" Process of Tire Manufacture

0HE next step after having selected the most excellent materials from all the markets of the world, is the calendering of the fabric. This is the process of forcing the pure rubber through the very close mesh of the fabric. This is a mostimportant and exacting operation. Unless great care is exercised, there is constant liability of an uneven permeation of the fabric. When this occurs, the uniformity of the carcass is destroyed and
 there is a possibility of one layer separating from the other and a short-lived, unsatisfactory tire is the result

We show on this page one of the Friction Calenders, one of a battery of ponderous machines on which the calendering process is performed under the "Falcon" process. As in the selection of the raw materials, the same great care is exercised in the calendering and in every process or operation in the construction of the "Falcon" Single-cure Wrapped Tread Casings. We have installed what is considered the latest improved and largest calender in operation to-day. This machine is so constructed that the regulation of the distribution of the rubber is controlled to the thickness of a hair; this machine is driven by a $300 \mathrm{H} . \mathrm{P}$. motor. The huge rolls of these calenders have the smoothness of glass; they are heated internally by steam, the temperature being regulated to a degree that positively insures uniform application of the rubber to the fabric, which is the very life of the tire itself.
"Falcon" standards in manufacture are employed in this process. To guarantee the ultimate "beyond criticism" Tire, this same exacting standard is maintained in every department. That Standard is reflected in the long and satisfactory service the "Falcon" Tire renders its users.

We now have the materials worked into a form that permits the next step in the production of the Tire, which is that of building the Tire from the foundation of calendered fabric.

# The "FALCON" Process of Tire Manufacture 



कHE NEXT operation in building the "Falcon"'Tire is the construction of the fabric carcass. The carcass is built by stretching the required number of plies of calendered fabric, one over another, around a metal core, of the same shape as the Tire that is to be made.

The old method of tire building was by hand, which method was unsatisfactory and uncertain. One of the most important essentials in the manufacture of a perfect tire is perfect adhesion and a uniform stretch of the fabric plies, of which its carcass is built. If one small spot does not adhere or if uniform stretching is not effected, a weak spot is developed in the carcass that will eventually result in a blow-out after the tire is placed in use. It is manifest, therefore, that when buit by hand, there is great possibility of a lack of uniformity, owing to the changeable strength of the tire-builder, which will naturally vary over the working day.
"Falcon" Casings are built on the most highly developed machine ever devised for this purpose. It represents many years of study in the process of tire making, and is absolutely infallible in its operation. One of the "Falcon" Tire Building Machines is shown on this page. Please observe that the lower roll contains frictioned or rubberized (calendered) fabric, which is fed directly over the core. The upper roll merely strips off the light covering of muslin, which is used to protect the rubberized (calendered) surfaces of the fabric, from contamination and handling from the time it is calendered until it is ready for use in building a carcass.

Please note that the tension on the fabric is absolutely uniform, and that there is no possibility of "spots" not adhering. After the required number of layers have been applied, we have our carcass complete and we are now ready for the next operation in the "Falcon" standard of Tire Manufacture.

## The "FALCON" Process of Tire Manufacture

O
HE OLDER processes of Tire manufacture contemplated the use of moulds. This has been proven a very unsatisfactory and questionable method, as, after the Tire had been placed in the mould, the uneven expansion and contraction of the Tire and the mould would invariably cause some part of the carcass to "pinch," which would rupture the fabric and thus weaken the entire structure. After the Tire is placed in use, the point where this pinch occurred is its weakest point, and the result is almost invariably a blow-out.

With the "Falcon" Single CureWrapped Tread process, the following method is employed: after the Tire is completely built upon the core, a light ring is placed upon either side of the completed Tire. These rings exactly conform to the bead of the tire and extend up to about one-fourth of an inch below the tread. As these rings are drawn together, the fabric is drawn tight, away from the apex of the tire toward the bead. It is therefore impossible for a pinch or buckle to occur. This eliminates one of the most troublesome features heretofore found in tire manufacture and that is the pinching of the fabric.

The fit of these rings is so exact that they must conform to micrometer measurements-a part of the "Falcon" standard.

After theserings are in place, the carcass is wrapped with heavy cotton tape by the machine shown on this page. This tape is uniformly distributedover the whole surface and under strong tension. This compression gives the tread the utmost cohesion and insures an absolutely even flow of rubber during vulcanization.

You will observe that the mechanical accuracy of the wrapping machine positively insures even application of the wrapping material, and that there is absolutely no possible opportunity for a variation of the pressure exerted on the carcass by the tape.

The Tire is now ready for the most important and vital operation in its production. The vulcanizing process as used under the "Falcon" standard preserves the vitality of the raw materials and guarantees every "Falcon" user the utmost in Tire value.


# The "FALCON" Process of Tire Manufacture 

aVERY manufacturer of a commodity should take pride in his product. If his efforts have been consistent and conscientious, he has the satisfaction of knowing that he has given the world the best it is possible to construct. So it is with the "Falcon" Tire. The high standard necessary throughout its manufacture guarantees the user the very highest value obtainable in Tires. Excellence in Raw Materials, the most skilled workmen in the industry, together with the most improved modern machinery obtainable, leaves nothing to be desired in the delivering of a superior Tire to the ultimate user-the Motorist. There must, however, be some means at hand whereby the manufacturer can determine the full merit of his product, operating under the same conditions as it
 wouldencounterinactualservice.

To satisfy ourselves that "Falcon" Tires are beyond criticism, and that they will give extended service to every purchaser, the factory has installed the machine illustrated on this page. This is the latest improved tire-testing machine. A tire is selected at random from every heat, and tested to destruction on this machine. The method of testing is as follows: the tire is first placed on the wheel in exactly the same manner as it is applicd to the automobile wheel in daily practice; the wheel is then placed on the testing machine. You will ${ }^{\text {d }}$ please note the weight at the end of the arm-this weight is adjusted to the comparative weight of the car using this same size tire. This insures the same pressure as would be found in regular road driving, with a loaded car. The tire is in contact (with this weight bearing thereon) with a wheel having irregular corrugations, which correspond with the usual road obstructions and ruts. The wheels to which the tires are attached are driven by a motor, and the wheels having the corrugations are in turn driven by the tires. This gives exactly the same result as driving a car over a hard, rough and stony road. Please note also the speedometer on the side of the machine. It tells the mileage obtained in these tests. There is no harder test possible for a tire. We have tried them all, but "Falcon" standards demand the most severe tests ever invented. The result is, that unless the production of every heat will meet a certain mileage, that heat is discarded.

If any method, any device, any process can be found that will improve "Falcon" Casings, you may be assured it will become a part of the "Falcon" standard of producing Tires that are supreme in the tire field.

## "FALCON" Casing Construction <br> 

Of greatest importance in the manufacture of Automobile Casings is the selection of the fabric, the construction of the breaker strip, the frictioning of the fabric, and the proper compounding of the rubber (to which, of course, must be added high standards of manufacture with properly designed machinery) and the most rigid inspection and test.


## THE BREAKER STRIP

This very important factor in the life of a Casing must be of selected long staple cotton, preferably Sea Island. As it is the element which binds the carcass to the tread, care should be exercised in the weaving-an uneven mesh means uneven distribution of the rubber "rivets," and would without question weaken the the "hold" of the tread to the casing. ©lllustration No. 1 shows the kind of breaker strip used in the majority of tires; note the unevenness of the mesh, and the fact that there is nothing to prevent the spreading of the strands, making the "rivets" of various size and thus permitting the usual loosening of the tread, where this class of material is employed.

## "FALCON" BREAKER STRIP

"FALCON" Standards insist on the superfine in all materials entering into the manufacture of the "FALCON" products. gillustration No. 2 shows the Breaker Strip used in "FAlCON" Casings. Note the weave, the correct and regular spacing of the mesh. This Breaker Strip is made of the highest grade long staple Sea Istand Cotton; it costs several cents per pound more than the other kind, but gives hundreds of miles more in service to the motorist.


No. 2-" Falcon" Breaker Strip

## CARCASS FABRIC

In more than 80 per cent. of the tires manufactured Domestic Staple Cotton is used. The principal reason is owing to the cost. This Fabric will give ordinary service, and being one of the "hidden" elements in tire construction, the motorist is none the wiser. Its strength is variable, and there is that constant possibility of defects which finally result in blow-outs and quick deterioration of the whole structure. "FALCON" Carcass is made from Sea Island Fabric (long staple), the most expensive cotton fabric on the market. It is uniform in weight and texture, and guarantees the motorist exceptional strength in his tires and consequent long life. GNote the uniformity of this fabric
 as shown in Figure 3.

## "FALCON" Tube Construction



## 

The unprecedented demand for Automobile Tires and Tubes has proven a great temptation to many manufacturers. The big difficulty has been to produce enough tubes to supply this demand. The consequence has been that tubes have been made of the very cheapest materials obtainable, and of the lightest construction possible.

The "FALCON" Tubes are made with the greatest care from the very highest grade "Up-River-Para" Rubber, using just enough compound to insure toughness and vitality. It has not been a question of large production, but a desire to manufacture the best and longest lived tube possible to produce. The "FALCON" Tube is uniform in material and thickness, and after it is finished it is subjected to the most rigid inspection and test. Nothing is overlooked in its manufacture that could improve its quality or longevity.

These tubes are of liberal size and are carefully packed.

Note the illustration showing the comparative thickness of the "FALCON" Tube and another tube that is widely advertised as being of extra heavy construction. The walls of the "FALCON" Tube are nearly double in thickness, and bear in mind that the materials in the "FALCON" are the most expensive and purest obtainable.


An inner tube, while a very small part of an automobile, is one of the most important factors in the complete enjoyment of motoring. Faulty tubes cause much trouble, and very often serious accidents. This is one of the things that should be the highest grade obtainable - better to pay a little more for "FALCON" Tubes and have the assurance that your tube worries are reduced to a minimum.
BUY FALCONS FIRST-BECAUSE FALCONS LAST

# "FALCON" Single Cure Wrapped Tread Casings 



## PLAIN TREAD

IT is impossible to do justice to the appearance of the "Falcon" Casing in an engraving. The illustration on this page shows the plain tread. It is without exception the finest product ever offered in this line. The appearance, workmanship and design are so far above the average a comparison is impossible. All "Falcon" Casings are built oversize. They have more pure rubber and high-grade fabric than any other tire on the market. A four-inch tire is larger than four inches in diameter.

The perfect symmetry of the "Falcon" Tire Tread is owing to the Single Cure Wrapped Tread Process of Vulcanization. There are no "lumps" or flat places as is the case with Moulded Tread Tires. This insures even wear over the whole tread and avoids quick deterioration of the carcass.

All the natural life-giving oils, so necessary to the preservation of the fabric and the rubber, are retained; the chemical and physical content of these elements being preserved by the live steam process of vulcanizing. When Tires of the moulded tread type are vulcanized dry heat is used. This takes away these waxes and oils, reducing the vitality of the fabric and rubber, and in consequence, shortening the life of the casing.
"Falcon" standards, as described in the preceding pages, are the positive insurance to the motorist of absolute uniformity in this product. Careless construction or selection of raw materials means a lot to the ultimate purchaserit may mean an accident more costly than all the tires he would use in a lifetime. "Falcon" Casings are all the same-the best in every sense, from the selection of the materials entering into their construction to the final inspection and test.

At the time this catalog is published the European war is still in progress and the market on all raw material entering into the manufacture of Casings and Tubes being very uncertain, it is practically impossible to publish a list of prices that would obtain for any period of time. We are inserting in the front of this catalog a price list current at this time. Send us your orders for "Falcon" Tires and Tubes. We assure you that you will receive the lowest prevailing price on date your order is sent.

# "FALCON" Single Cure Wrapped Tread Casings 

## NON-SKID TREAD

QON-SKID tires are gaining in popularity. Heretofore the various types of non-skid tires offered have not been designed to meet the varying conditions encountered in every-day service, with the result that some users have not had the success that is possible with a welldesigned non-skid tread.

The "Falcon" Non-skid Tread is of special design, based on actual experience and many tests. You will please note in the photograph that the non-skid is not merely an indentation in the tread, but is a special thickness added to the regular plain tread tire, giving that much more additional wearing surface and in no way robbing the tire of thickness or strength. This piece is vulcanized on the tire at the same time the whole tire is vulcanized. The crescents are of special curvat ure, which, together with the angles at the points, insure constant contact with the road surface, causing them to "grip instead of slip," and this non-skid feature remains until the tires are worn out, whereas, with the raised type of non-skid tire the non-skid feature is retained but a short time.

Every conceivable operation, apparatus and test looking to the production of absolutely perfect automobile casings are employed in the manufacture of "Falcon"' Tires. The non-skid was adopted after exhaustive, comparative tests with numerous designs, and as built is nearer the ideal non-skid tire than any other on the market.
"Falcon" Casings are warranted to give complete satisfaction. The purchaser is protected by a triple guarantee: that of the manufacturer, the Gibson Company and the dealer. Any casings proving defective will be adjusted on a mileage basis. We have many instances where "Falcon" Casings have given as high as 8,000 miles and were still in service.

Dealers should recommend the "Falcon" Non-skid Casings. They give the motorist additional mileage for his money and at the same time insure him against accidents and slipping.



The "Falcon" Red Inner Tube is the "Superlative" in inner tubes. It has been made for the discriminating motorist and is without equal in this line. Some people demand the exceptional in quality and we have made this tube for that class.

The"Falcon" Red Inner Tube contains the same high-grade"Up-RiverPara" Rubber as used in the "Falcon" Gray Tube but is compounded in a different manner. The process of manufacture takes somewhat longer time and the methods employed in handling are slightly different. The finished product is tested in every conceivable manner and when delivered to the motorist is as near perfect as human ingenuity can make it. "Falcon"Standards, as applied to Casings and Gray Inner Tubes, dominate the "Falcon" Red Inner Tube.
"Falcon" Red Inner Tubes are extra heavy in thickness. Their color is a fine golden brown. The compound used in their manufacture gives a peculiar flexibility to the tube and at the same time preserves the texture of the material. "Falcon" Red Inner Tubes never deteriorate.
"Falcon" Red Inner Tubes are packed in the same manner as the Gray: first in waxed paper, then in rubberized water-proof bags, and the whole in high-grade lithographed boxes. This package is dust-proof, water-proof and proof against abrasion and rough handling when placed in the tool box.
"Falcon" Tubes bear a triple guarantee: that of the manufacturer, The Gibson Company and the dealer. The motorist takes no chance on this warranted product and service and satisfaction are positively assured him.

At the time this catalog is published the European war is still in progress and the market on all raw material entering into the manufacture of Casings and Tubes being very uncertain, it is practically impossible to publish a list of prices that would obtain for any period of time. We are inserting in the front of this catalog a price list current at this time. Send us your orders for "Falcon" Tires and Tubes. We assure you that you will receive prevailing price on date your order is sent.

# The GIBSON GMPANY 

## FALCON BLOW-OUT PATCHES



## Falcon Hook-On Boots

No. 40. $3 \times 8$ inch, each . . . . . . . . . . 80.76

No, 41, $3 \frac{1}{2} \times 8$ inels, each .............. . . . 5 Each.. D.I. \$1.0G Doxen. D.P. \$11.t5
No. 12. $4 \times 9$ inch, pach ............. . 80 ERacb, D. P. \$1.16 Doxen. I. I', \$12.7
No. 48. 4! $x$ ! insh. each ............... . 85

No, 41, 5xt ineh, each ............ 1.00 Each..D.P. \$1.is Thozer. D, I, $\$ 14$ iss

## Falcon Lace-On Boots

No. 30. $3 \times 8$ imeh, rach ............. so, 28 Each.. D.P. \$1.11 Dozen. . D.P. \$12.00

No. 81, $3 \frac{2}{2} 8$ inch, cach . .......... 90 Fiacil. D.F. \$1.32 Dozen. . D.P. \$14.40

Ne. 38, 4x! inch, rach, ............ 1.00


No, 2:3, 43x! inch, each. . . . . . . . . . . . . 1.10


No, 54, 5x! imelh, carh...... . . . . . . . . 1.15 Kach. D.P. $\$ 1,46$ Doxen. . D. I, \$18,90

Falcon Double Wing Blow-Out Patches

Six Ply Black Friction with White Itnbber Treat and Tipa, Dach. .D.1' \$0.-5 1hozen. . D.P, \$6,00 No. 21. is $\times 9$ ineh. each ........... 交 Each. D.P. \$0.42 Dozen . II.P. s6.6i

 No. Zit, $18 \times 10$ inch, each …
 Each. IH.P, \$0.ks Dozed. D.P. si.55



No. 30-Lace-On Boots

# The GIBSONOOMPANY 

BLOW-OUT PATCHES AND RELINERS

## Firestone Inside Blow-Out Patches

The Firestone Blow-Out Patch is made with extra strength and stiffness, and will hold any ordinary cut or blow-out without help of an outside boot. The flaps, which fit snugly around the bead of the tire, hold the patch firmly in place.


Firestone Inside Blow-Out Patches, $3 \times 10$ inches, each
Each. .D.P. $\$ 0.66$
Firestone Inside Blow-Out Patches, $3 \frac{1}{2} \times 10$ inches, each
Each. .D.P. $\$ 0.77$
Firestone Inside Blow-Out Patches, $4 \times 10$ inches, each
Each.. D.P. 80.88
Firestone Inside Blow-Out Patches, $4 \frac{1}{2} \times 10$ inches, each
Each. .D.P. $\$ 1.00$
Firestone Inside Blow-Out Patches, $5 \times 10$ inches, each
Each. .D.P. \$1.11

## Firestone Hook-On Boots

Firestone HookOn Boot has the same toughness of tread for which Firestone tires are famous, and has the quality of fabric that gives strength for any temporary trip, no matter how exacting the test.
Firestone Hook-On Boots, 3-inch, each. ............ . $\$ 1.00$ Each. D.P. $\$ 1.44$
Firestone Hook-On Boots, $3 \frac{1}{2}$-inch, each. . . . . . . . . . 1.10
Each.. D.P. $\$ 1.54$
Firestone Hook-On Boots, 4-inch, each............ . . . 1.25
Each. D.P. $\$ 1.66$
Firestone Hook-On Boots, $4 \frac{1}{2}$-inch, each........... . . 1.40
Each..D.P. $\$ 1.76$
Firestone Hook-On Boots, 5 -inch, each............ . . 1.50
Each. D.P. $\$ 2.00$

## Firestone Lace-On Boots

It differs from the Hook-On Boot already described only in the manner of it being attached, since it has all the strength, toughness and service features of the regular Firestone building.

Firestone Lace-On Boots, 3 -inch, each $\$ 1.10$ Each. . D.P. $\$ 1.66$
Firestone Lace-On Boots, $3 \frac{1}{2}$ and 4 -inch, each...... 1.25 Each. D.P. $\$ 1.76$
Firestone Lace-On Boots, $4 \frac{1}{2}$ and 5 -inch, each. .... 1.50
Each. . D.P. $\$ 2.22$

Dobbins Blow-Out Chains



The Dobbins Blow-Out Chain reinforces the shoe and holds the worst blow-out so securely that it becomes the strongest part of the tire. Made for either clincher or straight side tires, In ordering specify type wanted.
Dobbins Blow-Out Chain for 3 or $3 \frac{1}{2}$ inch tires, each
$\$ 1.00$
Each. . D.P. $\$ 1.48$
Dobbins Blow-Out Chain for 4 or $4 \frac{1}{\text { inch tires, }}$ each
1.50

Each. . D.P. $\$ 2.22$
Dobbins Blow-Out Chain for 5 or $5 \frac{1}{2}$ inch tires, each
1.75

Each. . D.P. $\$ 2.60$


## Falcon <br> Lapped End Reliners

Lapped End Relinery wilt double the life of any casing, old or new, Vsers have secured from 1,000 to have secured from 1,000 to
2,500 miles from old, worn. 2,500 miles from old, worn-
out casings ready to be out casings ready to be
discarded. Made of extria discorded. Made of extra
Iuality monlded on regular tire light-welght duck and cores, they fit perfectly. Out. sibe covered with our self-vulcanizing preparation, the Reliner becomes, in use, cemented to and a part of the casing. Can not creep, buckle or chafe tube. We rcommend their use.

| Size Ply. | Retail Price. | Sixe Ply. | Retall Price. |
| :---: | :---: | :---: | :---: |
| $28 \times 3$..... 3. | . $\$ 1.90$ | $35 \times 4$. . . . 3 | . 83.40 |
| Each.. D. P, \$0.77 |  | Each. D.P. 8505 |  |
| 30x3 ..... 3 | 2.00 | $36 \times 4$. . . . 3 | 3.55 |
| Each, . D.P. 82.54 |  | Eacls. II, P. 8.22 |  |
| 32x3 .... 3 | 2.15 | $37 \times 4 \ldots 3$ | 3.70 |
| Each.. D. P, $8: 16$ |  | Each.. D, P. 夂卜. 41 |  |
| $30 \times 3!$. . . 3 | 2.40 | $40 \times 4$. . . . 3 | 4.00 |
| Fach.. D. P. \& , 5 L |  |  |  |
| $31 \times 3!$ | 2.50 | $32 \times 4 \frac{1}{1}$ | 3.30 |
| Eacb...D.P. 85,06 |  | 1anch..E.P. 81.88 |  |
| $32 \times 3!$. . . . 3 | 2.60 | $34 \times 4 \frac{1}{2}$ | 3.40 |
| Fach, D, P. \$3,84 |  | Each, D.1. S5.04 |  |
| $34 \times 3$ ! | 2.80 | $35 \times 4 \frac{1}{2} \ldots$. | 3.55 |
| Each, . D, P. \$4.15 |  | Kach..D.P. $\$ 5.22$ |  |
| $36 \times 3!$... 3 | 3.10 | $36 \times 4!$ | 3.65 |
| Each,..1.P, 84, ${ }^{\text {a }}$ |  | Each...D.P. S. 40 |  |
| 30x4 . . . . 3 | 2.80 | $37 \times 4 \frac{1}{2} \ldots . .4$ | 3.85 |
| Each., D.P. 84.15 |  | Each..D.P. 8 5, 6i6 |  |
| $31 \times 4 \quad .{ }^{\text {a }}$, 3 | 3.00 | $34 \times 5$ | 4.00 |
| Nach. . D, P. $\$ 4.33$ |  | Each., DP, 85.88 |  |
| $32 \times 4$..... 3 | 3.10 | $35 \times 5$ | 4.15 |
| Each.. D.P. $\$ 1.50$ |  | Each.-D.P. $\$ 6.10$ |  |
| $33 \times 4$..... 3 | 3.15 | $36 \times 5$ | 4.30 |
| Each, D.P. $\$ 4.06$ |  | Each.. D.P. 86, \%3 |  |
| 34x 4 . . . . 3 | 3.30 | $37 \times 5$ | 4.35 |
| Ench.. D.P.\$i.s8 |  | Each, , D, P, \$6, 4 |  |

## PATCHING MATERIAL, TOOLS, FLAPS, ETC.



Everloc Self Vulcanizing Fabric Patch is a sheet of uncured rubber with fabric back that prevents stretching and if applied with a coat of cement will hold permanently. Made in sheets and can be cut to suit size of repair. The ordinary job can be done in five minutes, any place and any time by anyone, and it will hold as long as the life of the tube. This is a cold patch-no heat or tools required to make repair. Just stick on patch, pump up tire and forget it. It smiles at the hot roads and continues to hold.

No. 1 Everloc Patch, size $6 \times 18$, in screw top box with tube of cement, each.
81.50

Each. .D.P. $\$ 2.00$
No. 2 Everloc Patch, size $3 \times 18$, in screw top box with tube of cement, each
1.00

Each. .D.P. $\$ 1.32$
No. 3 Everloc Patch, size $2 \times 15$, in screw top box with tube of cement, each.
Each. .D.P. $\$ 0.77$

## C. O. T. Cementless Cure Patch



The C. O. T. Cementless Cure Patch differs from other cementless patches in that there is no uncured rubber used and it is not affected by heat and where applied to tube it becomes part of same by using one coat of cementless cure which is packed in box with patches.
Price per box of eight patches and tube of cement,
each
. $\$ 0.50$
Each. .D.P. $\$ 0.56$

## Tire Repair Tools



The Sampson Repair Kit

Sampson Repair Plug for Automobile Inner Tubes. The quickest permanent repair ever devised. Requires no cement, no cleaning, no gasoline, just the bare hands; has been tested to the limit and never found wanting.

No. 1 Sampson Repair Outfit, containing tool and half dozen assorted plugs, in carton, each...... $\$ 1.50$ Each..D.P. $\$ 2.22$
No. 2 Sampson Repair Kit, as illustrated, containing tool and one dozen assorted plugs in permanent kit, each.
Each. .D.P. $\$ 3.88$
No. 3 Sampson Repair Plugs, per dozen........ 1.75 Per dozen.. D.P. $\$ 2.78$
No. 4 Sampson Repair Tool, each .50
Each..D.P. $\$ 0.77$

## Rubber Roughener



Just the thing to roughen up the parts that want to be prepared before applying cement.
Fubber Roughener, each. ........................................... . . 50.20
Dozen . . D. P. \$2.66

## Thermometers-For Vulcanizers



No. 55 Nickel Plated case, $2 \frac{3}{4}$ inches long; will fit any vulcanizer, thermometer registers 300 degrees F .
Each. D.P. \$0.77 Dozen. .D.P. \$8.88

## Firestone Flaps

A dap to protect the tabe in Clincher or Straight Side tires that bas enough shape and body to take its place easily from bigh erade ma. terinl, with enourh of that material in of them to form a in them to form a real protection, to give permanent shape and let them keep thelr
 places.
Flaps fer 3 -imeh Tires, each. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .80.85 Fuch. D.P, \$1,44
Flaps for $3 \frac{1}{2}$-inch Tires, each
Each.. D.P. $\$ 1.77$
Flaps for 4-inph Tires, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.50 Eacb. .D.P, \$2.00
Flaps far 4 -inch Tiren, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.60 Rach. D.P. $\$ 232$
Flapn for $\boldsymbol{\text { binch}}$ Tires, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.75
Eacb. D.P, $\$ 2.05$


## The GIBSON COMPANY

CEMENTS

## Michelin Cement



Michelin Pure Gum Cement, 1-ounce tubes, each . $\$ 0.10$ Dozen. . D.P. \$1.10
Michelin Pure Gum Cement, 2-ounce tubes, each... . 15
Dozen. .D.P. $\$ 1.66$
Michelin Pure Gum Cement, $\frac{1}{4}$-pint cans, each..... . 25
Dozen. .D.P. $\$ 4.00$
Michelin Pure Gum Cement, 1-pint cans, each..... . 75
Dozen. . D.P. \$13.34

## Michelin Mastic


(Put up in wide-mouth, seal-top, g-ounce cans.)
Michelin Mastic, 2-ounce cans, each . . . . . . . . . . . . $\$ 0.40$
Dozen. . D.P. $\$ 6.66$


Michelin Combination Kit, consisting of a can of Mastic and a can of cement, each. 80.50

Dozen. . D.P. 88.88

## Firestone Para Dry Patching Cement

This cement spreads easily and uniformly. It is to be applied to both surfaces that are to be welded togetber.
No. 1043 Firestone Para Patching
Cement, in tubes $2 x+1$ inches, each. $\$ 0.10$ Dozen.. D. P. $\$ 1.10$
No, 1043 Firestone Para Patching
Cement, in tubes $1 \times 6$ inches. each. .is
Dozen. . D, P, \$1.6G
No. 1043 Firentone Para Patching
Cement, in -pint eans, each...
Dozen..D.P. $\$ 2.22$


No. 1013 Firestone Para Patching
Cement, in s-pint cans. each .... \&5 Dozen. . D. P. $\$ 3.20$
No, 1043 Firentone Para Patching
Cement. in pint cans, each...................................
Dozed. . D.P. \$5. 33

Firestone Vulcanizing Cement


Firestone Gums and solvent are giren the laboratory test for purity and efficlency. The dissolving and mixing are done by scientific methods, on a ble scale, and the operators are experts who devote thelr entire time to this work.

No. 1086 Virestone Vulcanixing Cement, J-pint cans. each. . 80.15 Hozen. D, P, \&2.4
No, 1084 Firestone Vulcanixing Cement. 2-pint cans, each.. .ts bozed . D. P. \$3.55
No. 1086 Firentone Vuleanixing Cement, pint cans, each... is Doze日. . D.P. \$10, it
Ne, 1086 Firestone Vulcanizing Cement, quart cans, each.. . 50 Dозев .. D.P. $\$ 13.52$

## Firestone "Cure-Cut"



To beglect a small cut in the tire is to rob yourself milleage. Sand, grit and moisture will work tato such a eut and form blisters under the tread, which eventually results in tread separation

Firestone Cure-Cut, each
1)oxen. . It. P, 81,44
80.30

# The GIBSONGOMPANY 

25
REPAIR MATERIAL


Save nine-tenths of tire repair expense. Permanently repairs punctures in the shop or on the road. No tools or heat needed-nothing but two hands and a TireDoh Outfit. Better, quicker and easier than vulcanizing. Costs a tenth as much. Any car owner can repair his own punctures and blow-outs in tube, or cuts in casing. Takes only 15 minutes for a puncture. Costs only 2 cents. Increases tire mileage by curing small cuts in casing treads.

Regular Tire-Doh Outfit, containing $3 \frac{1}{2}$ ounces Tire-Doh and 2 ounces Tire-Doh Cement, each
. $\$ 1.00$
Dozen. .D.P. $\$ 17.76$

Junior Tire-Doh Outfit, containing $1 \frac{1}{6}$ ounces TireDoh and 1 ounce Tire-Doh Cement, each... .50 Dozen. .D.P. $\$ 8.88$


[^0]
## Narco Rubber Reviver and Refinisher



A liguid rubher compound combined with other ingredients of a bigbly heneficlat nature to anythiog of rubber or fabric-waterproofs, revives and rebinishes.

Ideal for all automoblle and velicle tops. Applied witb a brush-lasts a long time-wil not crack. Not one of those varnisby things-greatly improves the appearance of the car.
J-ounce Can-enough for waterproofing and reviving boots, coats or
other rubber goods ............... 80.50
Dozen. . DIP. $\$ 8.88$
1-quart Can-enough for a large ve-
hicle top or auto top............. 1 po Dozen , D. F. \$26.65

## Narco Tire Cut Filler

The Motorist's Self-Vulcanizer
A very beavy rubber compound that fills the cuts and boles-solidities quickly and becomes a part of the tire.

Narco Tire Cut Filler welds itself to the walls of the cut, becoming an integral part of the tire-a union so perfect no road abuse can remove it.

Narce Tire Cut Filler in small tubes,
each

Dozen...D.P. sess

## Tirenew



Tirenew prevents tire decay. A compound of pure rubber in liguid form. Upon application to the tire, it dows into the small cuts and crevices and waterproofs the exposed fabric, preventing decay. Should be used is conjunction with Narco Tire Cut Filler.

Causes the tire to look clean and new, giring the entire car a well-groomed appearance.
from injurious atmos. pheric influences. Supplied in both white and tire gray.


## TIRENEW COSTS

One 12-ounce Can, will caat flve tires ................................. . 80.50 Dozen ., D.P. $\$ 8.00$
One quart Can, will coat twelve tires ................................... 1.15 Dozen., D. P. \$1s.40
One 1-gallon Pail, will coat twenty-four tires .............. 2.15 Doze日 . . D.P. 83440
One Gallon Pail, will coat fortyDozent in D. P. sGio.00

## Adamson Repair Gum

This Vulcaniziog Rubber is especially prepared for use with Adamson Valcanisers.
It bas proven to have many advantages in general repair work.
A high-grade repair stock for use in repairing both in repairing both tubes and casings. Gum is compounded so as to give a perfect ad. hesion without the use of cement.


[^1]
## REPAIR MATERIALS

## Firestone Combination Tube Gum

When a tube is so injured as to require a large patch the repair should be vulcanized.

Two styles of gum are necessary in this case.
Firestone Combination Tube Gum is so-called because one side is semi-cured, the other uncured. The advantage of this is apparent to the repair man at once. The semi-cured side forms the inside surface of the patch. No sticking to other side of tube.
No. 3686 Firestone Combination Gum, $\frac{1}{4}-\mathrm{lb}$. boxes, each.... $\$ 0.65$
One-thirty-second gauge.
Each. . D.P. $\$ 0.77$
No. 3686 Firestone Combination Gum, $\frac{1}{2}$-lb. boxes, each.... . 90
One-thirty-second gauge.
Each. D.P. \$1.44
No. 3686 Firestone Combination Gum, 1-lb. boxes, each.... 1.75
One-thirty-second gauge.
Each. . D.P. $\$ 2.44$
No. 2054 Firestone Combination Gum, $\frac{1}{4}$-lb, boxes, each.... 50
One-thirty-second gauge.
Each.. D.P. $\$ 0.66$
No. 2054 Firestone Combination Gum, $\frac{1}{2}-\mathrm{lb}$. boxes, each.... .85
One-thirty-second gauge.
Each.. D.P. $\$ 1.10$
No. 2054 Firestone Combination Gum, 1-lb. boxes, each.... 1.60 One-thirty-second gauge.
Each. D.P. $\$ 2.22$

## Firestone Tube Gum

This gum is used most largely in connection with Firestone Combination, just described, for vulcanizing tubes.

It is an uncured gum. When the inside patch has been made with the semi-cured gum, the cavity or outside depression is filled with this tube gum and the complete patch then vulcanized.

A tube so repaired is stronger at this point than ever. See illustration of filling in patch.
No. 1086 Firestone Tube Gum, $\frac{1}{4}-\mathrm{lb}$. boxes, each. 80.55

One-thirty-second gauge.
Each. . D.P. $\$ 0.77$
No. 1086 Firestone Tube Gum, $\frac{1}{2}$-lb. boxes, each. .85
One-thirty-second gauge.
Each. .D.P. $\$ 1.32$
No. 1086 Firestone Tube Gum, 1-lb. boxes, each 1.60

One-thirty-second gauge.
Each. D.P. \$2.44


No. 1216 Firestone Tube Gum, $\frac{1}{4}$-lb. boxes, each. . . . . . . . . . . 80.75
One-thirty-second gauge.
Each. D.P. $\$ 1.00$
No. 1216 Firestone Tube Gum, $\frac{1}{2}$-lb. boxes, each. . .......... 1.00
One-thirty-qzeond gauge.
Each..D.P. \$1.44
No. 1216 Firestone Tube Gum, 1-lb. boxes, each............. 1.80 One-thirty-second gauge.
Each. D.P. $\$ 2.88$

REPAIR MATERIALS

## Firestone Tread Gum

These gums are for repairing tread cuts, putting in new sections of tread or for complete retreading.


No. 1097 Firestone Tread Gum, $\frac{1}{4}$-lb. rolls, each. ............ . 80.40
Cures Slate Gray. One-sixteenth gauge.
Each. .D.P. $\$ 0.55$
No. 1097 Firestone Tread Gum, $\frac{1}{2}-1 \mathrm{lb}$. rolls, each............. . . 75
Cures Slate Gray. One-sixteenth gauge.
Each. . D.P. $\$ 1.00$
No. 1097 Firestone Tread Gum, 1-lb. rolls, each............. 1.25
Cures Slate Gray. One-sixteenth gauge.
Each. . D.P. $\$ 1.88$
No. 1200 Firestone Tread Gum, t-lb. rolls, each............ . . 35
Cures Light Gray. One-sixteenth gauge.
Each. . D.P. \$0.46
No. 1200 Firestone Tread Gum, $\frac{1}{2}$-lb. rolls, each........... . . 60
Cures Light Gray. One-sixteenth gauge.
Each. .D.P. $\$ 0.88$
No. 1200 Firestone Tread Gum, 1-lb. rolls, each............ . . 1.10
Cures Light Gray.
Each. . D.P. \$1.76
No. 1200 is especially recommended for use with small gasoline vulcanizers.

## Firestone Cushion Gum

This highest grade Firestone treated rubber, built in between fabric and tread, insures an inseparable union. The pure gum welds with the fabric body and the tread layer or breaker layer with a grip that holds. Being extra resisting, it absorbs the sudden shocks of travel and distributes the impact of stone or rut over a wide surface, preventing to a large extent the separation of the "repair" from the tire carcass.
No. 1090 Firestone Cushion Gum, $\frac{1}{4}-\mathrm{lb}$. boxes, each.
One-thirty-second gauge.
Each. . D.P. $\$ 0.60$
No. 1090 Firestone Cushion Gum, $\frac{1}{2}$-lb. boxes, each
.70
One-thirty-second gauge.
Each. . D.P. $\$ 1.00$


No. 1090 Firestone Cushion Gum, 1-lb. boxes, each. 1.40

One thirty-second gauge.
Each. .D.P. \$2.10


## Firestone Rebuilding Fabric a

Firestone Rebuilding Fabric is light in weight but stronger than any requirement of service will ever demand.

It is frictioned with the regular extra high quality of gum, giving the Firestone long life and gripping strength.
No. 8498 Firestone Rebuilding Fabric, 1-lb. boxes, each...... $\$ 1.60$
Frictioned two sides. Skim one side.
Each. . D.P. $\$ 2.22$
No. 1398 Firestone Rebuilding Fabric, 1-lb. boxes, each...... 1.60
Frictioned two sides.
Each. . D.P. $\$ 2.22$

# Ghe GIBSONCOMPANY $\overline{\overline{A P O L I S}}$ <br> TIRE TAPE, TALC AND MICA 

Falcon Tire Tape

Every garage, repair shop and motorist has constant need for a first-class high-grade tire tape. There are many grades offered, but unless they are carefully made they refuse to adhere for any length of time. The principal essentials in the selection of tape should be its adhesiveness, a high grade cotton tape as a base, and the whole to be thoroughly waterproof.

Falcon Tire tape is the best manufactured. It is manufactured over an improved process, is guaranteed to be absolutely waterproof, and to give the very best results. It is highly adhesive and will stick where "put."


No. 1 Falcon Tire Tape, one ounce rolls, $\frac{A}{4}$-in., per pound $\$ 0.60$
Per Pound. . D.P. $\$ 0.66$
$25-\mathrm{lb}$. lots, per pound. .D.P. $\$ 0.53$


No. 2 Falcon Tire Tape, four ounce rolls, 1-in., per pound
Per Pound. . D.P. $\$ 0.66$
25-lb. lots, ver pound. . D.P. \$0.53
No. 3 Falcon Tire Tape, eight ounce rolls, 1 -in., per pound
. 60
Per Pound. . D.P. $\$ 0.66$
25-1b, lots, per pound, . D.P., 80,53

## Falcon Tire Talc

No tube should ever be placed in a casing without first sifting some tale or mica powder over the entire inner surface of the casing. Unless some material of this kind is employed, the tube is liable to pinch and grind, but the most serious possibility is the sticking of the tube to the casing. When the car is driven any distance, the friction of the tires on the road sets up a very high heat which (unless some good quality talc or mica powder is used) will soften the tube and cause it to stick to the casing.

Falcon Talc is of the very highest grade. It is ground to extra fineness, contains no lumps or grit. It is recommended for this purpose.

Falcon Tire Talc is packed in $2 \times 7$-in. cans with sifting top. Will not sift out in repair kit.

Each
.80 .10
Dozen....D.P. $\$ 1.32$ Gross....D.P. $\$ 14.44$

Falcon Mica Powder

Some prefer mica powder for the prevention of friction and sticking. We recommend Falcon Mica Powder as being the very best obtainable for the purpose, Is from selected mica, ground to a very fine powder. Is guaranteed not to cake.

Falcon Mica Powder is packed in sifting top cans, $2 \times 7$-in.


Each
80.15

Dozen. .D.P. \$2.66 Gross. .D.P. 828.88

# The GIBSONGOMPANY 

VULCANIZERS

Portable Vulcanizers



No. 140 Positive Steam Vulcanizer repairs Auto, Cyclecar, Motorcycle and Bicycle tubes; is made expressly for repairing inner tubes, using the steam principle of vulcanizing, the method used by all tire manufacturers and the only scientific way of vulcanizing. The Positive repairs a tube so that the patch actually becomes a part of the tube. It cannot come off, which frequently happens when the patches are cemented on. Repairs a hole up to 12 inches square in any sized tube in one operation. For larger repairs reset the vulcanizer.

Fncked in a neat hox with complete vincanixing onttit, consisting of measuring cup. screw, knndjuper, directions and enoush fabe repair stock to dio sison worth of repair work. Weight, each, 3 lbs ,
No. 140 Positive Steam Tube Vulcanizer.
each.
$\$ 1.50$
Each. D.P. $\$ 2.22$
No. 142 Positive Steam Combination Vulcanizer repairs both casings and tubes; is a complete steam vulcanizing plant, put up in a small box so it can be carried in the tool kit of every car. Vulcanizes by steam, not under pressure, so cannot explode. Safe, sure-needs no attention. Repairs blowouts, stone bruises, glass cuts and punctures in any sized casing or inner tube as perfectly as a large steam plant. Uses the same scientific method of vulcanizing by steam that all tire manufacturers use. Cannot burn, undercure, nor overcure.

Furnished free with each Positive Vulcanizer, a Complete Vulcanizing Outfit, including a measuring cup, steel protector hood, special wood block for repairing tubes, scissors for cutting the rubber, directions, and enough tube and casing repair rubber to do $\$ 10.00$ worth of repair work. Weight, each, 4 lbs.
No. 142 Positive Combination Steam Vulcanizer, each.................. $\$ 3.50$ Each. .D.P. $\$ 5.55$

## Horsey Inner Tube Pony Vulcanizer




The Horsey Pony Vulcanizer is specially made and constructed to demonstrate that No-Cement Tube Patches can be vulcanized after applying according to directions without the use of any cement.

Is built on the principle of large vulcanizers.
Is the only small vulcanizer that has a spring tension on tube during vulcanizing.

Is the only small vulcanizer that can be handled without danger of burning your hands and the tube.

Is the only vulcanizer that is heated with denatured alcohol, giving a steady uniform heat without flaring up, and is safe and not dangerous like gesoline. Denatured alcohol is sold everywhere.

Vulcanizer is $5 \times 6$ inches and all parts nickel plated, and is mounted on $8 \times 10$-inch board protected with galvanized iron.

It is the safest, the most complete, the most practical, the most perfect and the best value of any small vulcanizer sold. Will repair 90 per cent. of punctures and blow-outs.

It is built on scientific principles, and is indispensable to automobile owners and garages.
Horsey Pony Vulcanizer is packed in a substantial box with one box containing 12 assorted (large and small)
Horsey No-Cement Patches, sandpaper and instruction sheet, all complete, each
$\$ 3.00$ Each. .D.P.. $\$ 5.00$

## Premier Automatic Electric Vulcanizer

An absolutely safe and entirely automatic portable vulcanizer designed to operate from 110 -volt lighting circuit as electricity is used instead of highly inflammable liquids as fuel.

Simplicity of Operation-Simply connect to the lighting socket and press the button. Then forget it. Automatic heat controlling device assures just the correct temperature for a perfect job of vulcanizing.

The "PREMIER" Automatic Electric Vulcanizer reduces vulcanizing to a simple process. With this vulcanizer you simply make preparations for the repair, stick on the vulcanizer and press the button. This requires about three to five minutes time and no further
 attention is necessary, for when the repair is vulcanized the button is automatically released, which cuts off the current and the vulcanizer then cools off.

Operates under all weather conditions. No gasoline to measure, nor open flame to blow out in the wind. It will repair tubes and casings with less trouble than any other vulcanizer and burned or over-cured tubes oicasings are an absolute impossibility.

Small and compact, less cumbersome than other portable vulcanizers and as it weighs approximately two pounds it is not a burden to carry in the tool compartment, but is always ready to put a patch on an innertube that "stays put" and to heal cuts in casings while fresh, which means much toward cutting down tire expense. It is economical, saves time and eliminates all fire danger.

The outfit includes flexible connecting cord, repair gum, cement, "PECO" tire tool, a durable chain, scissors and directions ready for use. Price complete. . Each. D.P. $\$ 5.83$ In lots of six, each D.P. \$5.44

# SHALER 

## MOTORISTS’ VULCANIZERS

## PORTABLE MODELS

## Tube-Kit-For All Sized Tubes

The Tube-Kit, which is intended to be carried in the tool box of a car for emergency repairs, mends all tube injuries quickly and permanently. It is as simple and easy to use as an unsatisfactory temporary patch. This model is all that is needed if one does not want to take care of casings.

The correct amount of heat is produced by a lamp which burns gasoline or alcohol without smoke, soot or dangerous exposed flame. The fuel is contained in the lamp in such a way that accidental tipping over of the vulcanizer while in use would not cause trouble. A measure, graduated to give the proper fuel charge to cure every repair exactly right, is furnished with the vulcanizer so that no watching or regulating is necessary. The asbestos inlaid tube plate is swivelled to insure uniform pressure being applied to all parts of repair and so that the largest tube can be mended without pinching the edges. Vulcanizing surface 10 square inches. The handle is detachable and the outfit is packed in a small, strong box for carrying with car. Complete with repair material. Nickel plated.
Type F. No. 31, Shaler Tube-Kit, weight 4 lbs.
$\$ 2.00$


Each. .D.P. $\$ 2.77$

## Safety Vul-Kit-Complete for Tubes and Casings



Besides making every practicable kind of tube repairs, the Safety Vul-Kit has a $3 \frac{1}{2} x 4$ in. surface curved to fit any sized tire for mending casing injuries. This is very valuable because while tubes are only mended when the tire goes flat, casings always need attention. Small cuts neglected, quickly become blowouts. It is easy to mend a small cut while tire is on wheel. Simply fill cut with rubber, clamp on the vulcanizer and in a few minutes you have a permanent repair. Casings cost several times as much as tubes. When a casing blows out it ruins the tube too. An ounce of prevention is worth a pound of cure. As this vulcanizer produces no exposed blaze it can be used close under a fender without scorching the paint. The lamp, which burns either gasoline or alcohol, contains the fuel in such a way that it is impossible to spill blazing liquid even if the vulcanizer were accidentally upset. The fuel supply is limited to that required for perfect vulcanization. You can't overcure or undercure a repair. Tube
 repairs are cured on asbestos inlaid plate, 31 in . in diameter, which is swivelled so that uniform pressure is automatically applied to all parts of the repair. The Vul-Kit is nickeled and polished, packed with repair material in strong box for carrying in tool box of car.
Type G No. 32, Safety Vul-Kit, weight 5 lbs.
Each.. D.P. $\$ 5.00$

## Ford-Kit-For Ford Tubes and Casings



Especially designed to fit Ford tires. It mends all tube injuries and small casing cuts as perfectly and permanently as the most elaborate outfit. Can be carried in tool box for use anywhere. This vulcanizer operates the same as the Safety Vul-Kit described above, but instead of the swivelled plate for repairing tubes, has a detachable plate, the pressure being supplied by two wing nuts.
Type H No. 33, Ford-Kit, weight 5 lbs. $\qquad$ $\$ 2.75$
Each.. D.P. $\$ 3.88$

## Ford Tube-Kit-For Ford Tubes

Identical with the Ford-Kit described above, except that it does not have a concave face for casings.
Type I No. 34, Ford Tube-Kit, weight 4 lbs.
Each. .D.P. $\$ 2.44$

## Electric Heated Model



Type $\mathbf{D}$
Repairing Rim Cut

A safe, clean vulcanizer which derives its heat from the most convenient source, by attachment to any lamp socket. Anyone can mend tubes and casings perfectly with it, as the exact vulcanizing temperature is maintained indefinitely by a thermostat which automatically closes and opens the circuit-no possibility of overcuring a repair. No watching or regulating. Although impossible to overheat a repair with this vulcanizer, deep casing repairs requiring a long cure can be cured as well as superficial cuts. Successive repairs are made by moving the vulcanizer from one to another, the handle always being cool. Tube and casing surfaces are $3 \frac{1}{2} \times 7 \mathrm{in}$. Larger repairs made by resetting. One side of heater is concave for mending cuts on side or tread of any sized tire while inflated on wheel. Selfadjusting universal clamp insures uniform pressure all over the repair and makes application to tube or casing easy and quick. Patented heating unit distributes the heat equally to every part of the repair. Flat face of heater used in combination with an asbestos inlaid shelf vulcanizes two tubes as quickly as one-punctures or blowouts. Connects in place of any incandescent lamp.


Repalring Tube Cost of operation ahout 1 cent per hour. Heats as quiclty as you can get a repale ready. Facked in wooden case with complete outfit, ten foot conductlog cord, repair material, Government-tested thermometer and instruction book.
Type D No. 83, A. C. or D. C. Polished Nickel, weight 13 ths.
$\$ 12.50$ Each. D.P. $\$ 20.86$

SHOP VULCANIZERS

STEAM AND ELECTRIC HEATED

## Steam Heated Plant

Covers all requirements of a garage or repair shop. Handles every practicable sort of tube and casing repairs. Machined surface of the tube plate, $4 \times 30$ in., vulcanizes six tubes as quickly as one and can be heated independently of casing attachment. Swivelled clamps insure even pressure to all parts of any tube repair. All sizes of casings repaired by approved wrapped tread method as used by tire manufacturers. Simply build up a re-enforcement of fabric inside the casing and fill the hole with Para gum (it is unnecessary to cut away a lot of expensive rubber and fabric). The inside casing mandrel, 14 inches long, then applies heat directly against the fabric; the outside casing form, which has one side shaped for tread repairs, the other to fit close to the rim, heats from the outside. A wrapping of tape and the Shaler clamping device force new and old material into contact under enormous pressure. No air bags are necessary. The resulting repair becomes the strongest part of the tire. In order to fail, the re-enforcement would have to be torn loose and blown through the original hole, practically an impossibility. No attention is necessary after lighting burner. The boiler, a copper coil, raises steam in about twenty minutes and holds it at the right pressure indefinitely, a thermostat regulating the flame. Steam gauge and thermometer serve as a check on the operation by indicating both pressure and temperature. Safety valve eliminates danger of explosion.

When ordering, specify whether gas or gasoline burner is desired. Gasoline burner furnished unless otherwise specified.
Type NPR No. 41-Complete Garage Outfit as shown, wt. $190 \mathrm{lbs} . . \$ 60.00$ (Includes 6 clamps and blocks for tube work, bead strips for rim cuts, casing clamps, tape for wrapping treads, thermometer, steam gauge and safety valve.)
Each. .D.P. $\$ 100.00$
Type NPR No. 41-Same as above but equipped for tube work only
wt. 150 lbs .
 Each., D.P. \$58.33

## Electric Heated Plant

Some of the advantages of a vulcanizing plant heated electrically are simplicity, portability, quick heating, and that each unit may be
 purchased separately attached to
any workbench or table and used for its own distinct kind of work. Furthermore, the use of electric heated vulcanizers is perfectly safe and conflicts with no garage

This plant, Type ACE, consists on the complete of the complete
units
Type A, Type C and Type E , mounted on a strong tubular stand. It will do the same perfect work and has the same capacity as Type NPR steam plant - twenty tubes and one casing per hour.
Type C (inside casing form) and Type E (tube plate) are permanently attached to the stand and have switches to permit independent heatting. Type A (outside casing form) has five feet of conducting cord with a plug which fits a socket in the stand or any lamp socket if worle is to be done elsewhere on inflated tires. All wiring is complete in the stand and connection to elty current is made overhead, out of the way, through a plug at the top of the upright standard by means of extension cord to any lamp socket. No special wiring needed as the entire apparatus uses less current tban a flatiron.
Type ACE No. 101 for A. C., shipping wt. 115 lbs. $\$ 60.00$ Each...D.P. $\$ 100.00$

For rheostat controlled direct current equipment. add

Each. D.P. $\$ 16.67$
stand only; wired, for present users of electric equipment, ship-
ing weight 40 lbs........................................ 87.50 Each..D.P. $\$ 12.4 \mathrm{~s}$
(Specify voltage when ordering electrie vulcanizers.)

UNITS WHICH MAKE UP PLANT Can be purchased and used separately Type A-Comb Casing Form and Tube Plate


Corresponds with outside form of Type NPR, that is one face mends rim cuts, while the other fits large tread repairs. A flat surface mends one or two tubes at a time on an asbestos inlaid shelf that attaches to workbench. Temperature controlled automatically by a thermostat. No watching or regulating. Fits all sized tires and will mend cuts, etc., while tire is inflated on rim. Supplied with tube shelf, thermometer, conducting cord and full instructions.
Type A No. 61, Polished Nickel for A. C. and D. C. $\$ 13.50$ Each..D.P. $\$ 22.48$

## Type C-Inside Casing Form

Corresponds with inside form on Type NPR. Used with Type A for making casing repairs by the wrapped tread method. Fits any sized tire. Supplied with tread tape, bench brackets, conducting cord and thermometer.


Type C No. 71, Thermostat Control, A. C. only . $\$ 20.00$ Each.. D.P. $\$ 33.32$
For rheostat controlled direct current equipment add $\$ 5.00$ list. Each..D.P. $\$ 8.33$

## Type E-"Gang" or Multi-Tube Model

$4 \frac{1}{2} \times 24$ in. surface; mends 6 tubes at once or a twofoot slit at one setting. Furnished with 4 clamps and blocks for different sized repairs, conducting cord and two thermometers.
Type E 91. Thermostat Control, A. C. only, $\qquad$ . $\$ 25.00$ Each.. D.P. \$41.66.
For rbeostat controlled direct current equipment add $\$ 5.00$ list. Each.. D.P. $\$ 8.33$

# రKe GIBSONOMPANYMPOLIS <br> VULCANIZERS 

Adamson Universal Vulcanizer Model "U"

For tubes and casings.

Tire cuts ruin casings. They admit moisture to the carcass and cause the fabric to rot and weaken, grow largerend in blow-outs. You can vulcanize your casings and tubes anywhere in 15 minutes at a cost of one cent.

Quick and reliable. Absolutely automatic. Place the patch-attach the Vulcanizer, put in gasolinelight it. No further attention required. It can't burn, scorch or injure tube or casings. It can't fail to do its work. So simple anyone can operate it.

A practical vulcanizing outfit complete with repair gum ready for instant use.
Model "U," mailing weight 4 lbs..................... . . $\$ 3.00$
Each..D.P. $\$ 5.00$ Dozen. .D.P. $\$ 56.00$

## Adamson Tube Vulcanizer Model "T"

For Inner Tubes only.

A perfectly vulcanized repair in 15 minutes anywhere, on road or at home, for less than one cent.

It's quick. No cement or acid is used; the repair gum is placed on the tube according to directions. The Vulcanizer is


Patented April 1, 1913
A Complete Outht with Repair Gum, Ready for Instant Use applied by simply clamping it centrally over the repair gum and tube as illustrated. To vulcanize the repair, one ounce of gasoline is placed into the vulcanizer and ignited.
Model "T," mailing weight 4 lbs. . . . . . . . . . . . . . . . $\$ 2.00$
Each. D.P. $\$ 3.34$ Dozen. . D.P. $\$ 37.34$

Adamson Stationary Vulcanizer Model "S"

For private garages and repair shops. The most profitable investment a repairman c a n make.

This outfit is especially designed for repairing inner tubes. It is en-


Patented April 1, 1913 tirely automatic. Requires no attention. Anyone can operate it. No steam-no electricity. The most practical and most convenient vulcanizer made.

With this Vulcanizer a cut 12 inches in length is repaired in 15 to 20 minutes. You positively can not injure tubes as with other vulcanizers. The patch is prepared in the usual manner common to repair shops and the proper size cup is clamped directly over the repair. The bottom faces of the cups are polished and slightly concave; this prevents the gum from flowing and produces a perfect patch.

To vulcanize the repair, the proper amount of gasoline is placed into the Vulcanizer and ignited; no further attention is required.
Model "S," complete with $\frac{1}{2} \mathrm{lb}$. repair gum, shipping weight 30 lbs . $\$ 12.00$
Each. .D.P. $\$ 18.66$

## Adamson "Ford Special" Vulcanizer Model "M"

Especially adapted for repairing motorcycle, bicycle, Ford and cyclecar tubes.

A perfectly vulcanized repair in 15 minutes, anywhere, on road or at home, for less than one cent.

It's quick. No cement or acid is used, the repair


Putented April 1. 1913
A Patented Oufft with Repair Gum. Ready for Instant Use gum is placed on the tube according to directions. The Vulcanizer is applied by simply clamping it centrally over the repair gum and tube as illustrated. To vulcanize the repair, one ounce of gasoline is placed into the Vulcanizer and ignited.
Model "M," mailing weight 2 lbs
$\$ 1.50$
Each. .D.P. $\$ 2.48$ Dozen. . D.P. $\$ 28.00$

## The GIBSONOOMPANY

STANWELD RIMS

## Stanweld Series Twenty

Simplicity and ease of operation are the dominating qualities of the Series Twenty, Stanweld Demountable Rims.

You will fird few rims as light in weight, yet capable of performing the same functions as the Series Twenty Stanweld Rims.


Cross-Section of Ne. 21 Rim


Cross-Section of No. 32 Rim


No. 91 Kim Unlocked for Kemaval of Caxing

What a Set of Rims Consists of
A complete set of 21 or 22 rims consists of:
Four (4) Felloe Bands;
Five (5) Complete Rim Bases;
One (1) Brace Wrench.
All bolts, wedges and screws necessary for proper application of the rims to wheels are furnished.

Fer Spares
Set
Ench.
No. 21 or 22 Stanweld Rims, 30 or $32 \times 3 \frac{1}{2}, .821 .00$
No. 21 or 22 Stanweld Rims, 32, 34 or $36 \times 423.50$
No. 21 or 22 Stanweld Rims, 34 or $36 \times 4 \frac{1}{2}$ or 5
27.65
4.25


## Stanweld Series Twenty

## Spare Parts for Stanweld Series Twenty Rims

Kories Twonty Stanwell Itims are made in I wo typerthe straight-Sible Type, or Number Twenty-One Itim, und the Clincher Type, or Number Twenty-Two Rim.

Each size of the Strairlit \&itle Type is made in two differ ent widths, One width is known us the "Regular," or "Narrow Base". style, the other is known as the "New-style," or "Wide. Fase."

Clincher-Type rim-bases are NoT made in the "WileBase" style, They can, however, lie applied to the "wide. base" fellom-hand provided new welges are nsed wedges im. printerl with the letter - ${ }^{-1}$.
"Wilc--1tass" Straight-sinle Rims will NoT fit "Narrow Thase" fellow-hants. If a car is "quipped with " Narrow-Base" telloe-banals abt the owner wisbes to appily straight-side rimhases withon! changing fellowhands, he must purehase "Narrow-Base" straight-Side zim-lases.

A ear equipned wath any typm of felloe-hand that will acept Serles Twency rim-bases, sheh as the Sumber Then Gilhert-Type fontinenfal 1tim. an be re-mpipped with ney Ninmber Twenty-Two (flineler-Tvpel rim-hases or bew Number Twenty-One ontraight-Sile-Trpet "Nartow-Base" rimTasces.

When oftering spare parts always give the part number Ispe illustrationsi, the trpe of rim. the size of rim, and if the parts are desired for Straight-Side Rims, state whetber "WileBase" or "Xartow-R.ase" To Histinguish between "Wine-Base" and "Xarrow-Rase" rias all "Wille-Dase" rims are imprinted in the metal of hoth the rim-hase and relloc-hant "Wide.「:asen,"


Parts for Stanweld Rims, Types 21 and 22
Felloe Bands, 32, each
Fellec Bands, 4, each.
Felloe Fands, $4 \frac{1}{2}$ and 5 each
No. 190 Bolt, each
No. 5 Wedge Plate, rach
No. 121 Wedse with Nut, tach
Cam Laek for Lateh, vach
No. 118 Demoanting Tool, pach



Showing Turnbuckle Taol in Use

Springfield


Springfield Single Action Tire Pump. The barrel is of best Mandrel Drawn Brass Tubing, 27 Inches long. $13 / 16$ diameter, 30 gauge. Hose is of the best 5-ply rubber, guaranteed to stand 200 pounds pressure. Weight, $2 \frac{1}{f}$ pounds. Each . . . . . . . . . . . . . . . 83.50

Each.. D.P. 34.44
Dozen.. D.P. $\$ 50.66$
Crown Single Action Tire Pump for small size tires. Barrel made of beavy seamless brass tubtog, 1if-inch. Full length of pump, 20? Inches.
Each .81 .25

Each. . D.P. $\$ 1.76$ Dozen.. D. P. $\$ 20.00$

Aeolus


Acolus Double Cylinder Tire Pump. Cylinders made of seamless brass tubing; sbsolutely non-leakable. The $n i r$ intake, as well as delivery of air into tire, is at top of pump. Full lengtb, 20 Inches.
Fach
Bacb. D. P. \$2. 10 Dozern.. D, P, \&22,32
. . 39.85
Stapley Compound Tire Pump.
Will indlate a tire to required pressure quickly. Cylinder is a seamless brass tube; the loase is ono-leakable.
Stapley Pump, without gauge, each . . . . . . . . . . . . . . . . . . . . 83.50
Each.. D.P. \$.061 1rozen.. D. P, \$57 83
staptey Fump, with gauge, eanll


## The Victor

The Victor Triple Action Hand Pump will inflate tires with less strokes than any other. Has no valves to get out of order. Packing made from Metallic Tanned Leather and guaranteed. Heavy tubes expanded and soldered into the deep collar at the base. The original three-cylinder pump, Not best because it was first, but first because it is best.

Each $\qquad$ Each. D.P. $\$ 7.76$

## The Yankee Folding

The Yankee Folding Pump makes hand inflation of automobile tires a simple and easy matter. Built to clamp quickly to the running board of any automobile, it is worked easily, with one hand, from a natural upright comfortable position. This is in strong contrast to the position necessitated in the operation of the ordinary pump, which requires the use of both hands and feet, and all of
feet, and all of
the energy of one's body.


Yankee Folding Pump, without gauge, each. . . . 84.50 Each. .D.P. $\$ 7.22$

Yankee Folding Pump, with gauge, each......... 5.50 Each.. D.P. 88.88


THEVICTOR

# TKCGIBSONCOMAN 



## Kellogg Pumps

A very powerful and easy working two-cylinder pump. Pistons and stuffing boxes of special Kel$\operatorname{logg}$ design and are easily repacked. Cylinders are heavy gauge brass tubing and will not rust. The foot piece is large and strong and the handle extra smooth.

Length over all, 19 inches; large barrel, $1 \overline{7}$ inches; small barrel, 1 inch.

Inflates a tire quickly and with little effort. A thoroughly dependable pump in every way.


No. 8 Kellogg Compound Pump, each. .$\$ 2.50$ Each. . D.P.\$3.88


Will inflate a tire in the shortest possible time with the least amount of effort. Three stage compression. Pistons and stuffing boxes of special Kellogg design. Cylinders are heavy gauge brass tubing and will not rust. Foot piece is extra broad and strong. Handle extra large and finished smooth to prevent blistering the hands.

A very satisfactory, efficient, and dependable pump of large volume.

Length over all, 19 inches; sizes of barrels, 2 inches, $1 \frac{1}{2}$ inches, and 1 inch.
Kellogg Special Compound Three Barrel Pump, each
$\$ 4.00$
Each. .D.P. $\$ 6.66$

## Kellogg Engine Driven Tire Pump

For Dodge and Chevrolet


Complete with hose, gauge and all fittings for the Chevrolet and Dodge for which that model was made expressly. All metal construction, piston rings, babbitt lined bearings, and other features insure satisfactory service from this pump.

Complete instructions with installation drawings are furnished with each outfit. No machine work is needed to attach the pump. All fittings are furnished properly machined and ready to install.
No. 121 Kellogg Engine Driven Tire Pump, each . $\$ 10.00$ Each. .D.P. $\$ 15.55$

Kellogg Engine Driven Tire Pump<br>For the Model T Ford



Complete with hose, gauge, and all necessary fittings ready to install. Is attached in twenty minutes without removing radiator and does not interfere with the following starting systems: Gray \& Davis, Genemotor, Dyneto, and North East. In ordering, mention starter used.

This is a high grade pump in every way. All metal construction, piston rings, babbitt bearings, etc., and is driven by spur gears just like the larger engine driven pumps.

We recommend this pump as a very useful and dependable equipment for the Ford car.
Ford Model Kellogg Engine Driven Tire Pump, each . $\$ 8.50$ Each. . D.P. \$14.10

PUMPS

Kellogg Engine Driven Tire Pump



No． 101 Kellogz

Complete with hose，gauge and all necessary fittings，ready for in－ stallation on almost every car，including Buick，Chalmers，Chandler， Hudson，Hupmobile，Oakland，Oldsmobile，Overland，Reo and Studebaker， as well as cars using Buda，Continental，Herschell－Spillman 8 and North－ way motors．

## Guaranteed Not to Spray Oil with the Air

This feature，with all metal construction，babbitt lined bearings， piston aings，poppet valves，and the Kellogg system of lubrication，make for the superiority of the pump．

We recommend it because of its proven efficiency，durability，and the satisfactory service it has given．

In ordering give name，model and year of car to be equipped．
No． 101 Kellog Engine Driven Tire Pump，each．．．．．．．．．．．．．．．．．． 815.00 Each．．D．P．$\$ 23.32$

Fittings now ready for equipping the following cars with No． 101 Kellogg Pump．Fittings are properly de－ signed and carefully machined．They are attached without machine work in a very short time．Complete directions are furnished with each outfit：

Abhott－Detroit
Aleo
Apperson

Anburn
Euick

Cadillac
Cartercar
Case
Chalmers
Chandler
Cherrolet
Cole

Everett
Flanders
Pranklin
Grant
Haynes
Hudson
Huptmobile
fmperial
Jackson
Jeffrey
King
Kissell

Lexington
Tewis
Loxive
Marmon
Maxwyll
44－50．1912－19－14．Six Cslinder， 1914. Six Cyliwder，1：10－11－12－13，
6．45，1914－15，1．feht Six，1915．IAdvise whet ther motor base is llrilled for pump lracket．）
6．40，1915－16，6－47．1915，（Continental motor，） Eonr＇vlinder，1916．（Teet or motor．）
D4t，D45，D4G，D4T，DSH，DKE，1916， C． 25 ，C4，C3B 37, Cas C24．Co5 1915 B36，B2\％， 1538 B55，B2t，B25， 1914. $30,31,1913,28,29,1912,20,27,1911$. 1013－14－1912－1911－1910．（Early or late．） 9，1915，7，1914．5，1913－14，S，SA，It， 1912. 25，1915．35，1914－15．40，1912－18－14． 32，6－40．1915－16．26，1914－15． 24，1914，20，1915．Master Six，
1＋－15－16（Fusch Magneto）．
Four Cylinder，1914－15－16．Ispecial Pump． spato．）
Eight Cylinder，1915－16，4．series 10．1915． Seties 9 and 10，1914－15，istate whether drive gear is alrendy on motor， 1 fi－f00， $4-40,1914-15$ ．6－60，40，11113，20，1912 Six Cylinder， 1913
Six Cylinder，1918．
Six Cyllater， 1914.
Six，1915．（Sperial Pumb，\＄10．06．）
Light Six，1915．
（i－40，6－54， $1: 51+-15-16.54-1913,37.33$.
N，1916 K，1915，22，1913－14．
Six Cylinder 1915，6－54，Four Cslinder，1：14． Pour Cylindev，191：
6． $4 \times \underset{1012.14,}{4.46,}$ 1915．Majestie Olympie． 1913－14．
Font Cslibder．191＋15
Four Cyliwler，1914－15（Atwater Kent IEni－
tion）．
G－IS 1014．15，4－3，6－42．19015．（State if there is a，pan on motor for pump base．）
$1!914$ G－exi，191： 14 ．
1．40．1！914．G－68，1912－14．
Light Six．Six Eplinder，1914，Supreme Six， 1915，Four C＇slibder， 1 1611．
8ix Cslimber，1914－15．
$\pi$
11． $15: 1+$
（27，Nit1－15－16，ispucial Fwop wiso，\＄10．00．） ：ix Cshater， $1: 14$.

Mitchell
Monarelı
Moon
Marion
National
Gakland
Ohlsmobile
Werland

Ogren
Pieree－Arrow Prackaral

Faige－Detroit

Pathfinder
Paterson
Iteo the Fifth
Rimplex
speedwell
Standaral Steet
Stearns
Stuloloaker

81418
Valic
Wisateot

Continental
Northway
Euda
Tector

Six Cylinder 1：15．Four Cylfuder，Six
six Cylinder，1915．
6．40，1915．6－50，1914－15
Four Crliwher， 1912.
Six－Cylinder．1914－15．
37．49，1915， $25,48,43,1914,4-42,1913$.
却，1912－13，40， 1912.
43，1916．6． $2 \mathrm{~B}, 1915.42,1914-15$ ．G－5t，1914．
Six C＇ylinder s6，Knight 81，83，82，81，So， 75 and 12 （with Magneto Coupling Hubs $12^{\prime \prime}$ diameter）， 62 （Boseb Mag－ netof，61，38，40，41，＋2，45，46，47，4！ $50,51,52,53,51,55,56,58,50,60,61$
Six Cylintler， 1915.
1900 －15，
3－38，t－4s，1915，ISpecial，Buy from Fack－ aril． $1+48,2-38,1914$. as 1913．30 1！K心夊－65－10－11－12．
6．46．1015－16．（sifate whether there is leather coupling in water pump shaft．t．3k 1514－15，
Big Six，1915，six Cylinder， 1914.
t．35，1914．Four Cylinder，Six Cylinder， 1915.
1915．（Slate whether leather or metal dise generator coupling．）Models before 1915
$38-50,1915.38-50,1914$.
Six Cylinder，1914－15（Continental Motor）．
Pight Cylinder．1915．
Four Cylinder，1916．Six Cylinder，1：n5－16． Light 4． 1015.
Four Cylinder，Six Cylinder，1016，Six Cylin－ der 1：1t C．pather Gencerator Coupling： Fout or Six Cylinder，191t－15．Coupling

Fonf Cylinder， $191+15-16$ ．Six Cylinder． $191+15$.
Fig Six，1914－15．
Fonr Cylimber，1911－15，Six Cslibier， 1914. 1317． 150.
N11 cark＂kint motors below，
Model 40，46，65，4E，4C，7N，7W，
Morlet 33，is，42，32，40，
Moblel SS， $33^{\prime \prime} \times$ a！＂，LSU， $32^{\prime \prime} \times 54^{\prime \prime}$
Model His Six，$+\frac{1}{2}$＂$\times 6^{\prime \prime}$ ．

Herschell－spiltman Model Eight CyHinder．

## The GIBSONCOMPANY言POLIS

## PUMPS



## Stewart Engine Driven Tire Pump

The Stewart Power Pump, operated by your engine, quickly fills any size tire in a few minutes. Easily installed by any one, on any car-old or new.

A real pump for only $\$ 12.00$. Mounted right on the motor. Simply throw over the lever and the pump operates instantly. Throw out the lever when tire or air-starter is sufficiently filled up. Means keeping your tires up to proper inflation pressure.

The Stewart Tire Pump is not only the most perfect and most efficient pump built, but it is also cheaper in price than even poorly built pumps. Cylinder is a finely machined job. It is air-cooled, with projecting fins on the cylinder to aid the cooling. Double air valves are provided, which means that pump is efficient to the last pound of pressure.

There are no rubber nor leather packings to wear and cause leakage. Its capacity is such that it will fill a 36 -inch $x 42$-inch tire in less than five minutes. Piston rubs against an oil-soaked wick, which supplies every bit of oil it needs, and yet prevents excessive oiling. This wick projects outside, where oil is dropped on it through two small oilers. Crank shaft is provided with a separate oiler. The bottom of the crank-case is open, so that in case there should be the least amount of free oil it will immediately drop out. None can be carried up through the air connection and into the tires.

This is without question the best tire pump ever offered.
In ordering, state year, model and make of car pump is wanted for.
Price, with air-pressure gauge and 15 feet of high grade hose, with bracket
and gears complete, ready to install right on your car.
.812 .00
Each..D.P. $\$ 17.76$
Fittings are now ready for equipping the following cars with Stewart Pump:

Ableoti-Inedroit
$\mathrm{AlH}+\mathrm{H}$
Apperson
Anluren

Hack Hawk
Briseqe
Buda Motors Bulok

Cachillac Carterear
Case
Chalma-rx
C'labuller
Chevrolet
Cole

Davis
Eonlge
E. M. F

Enger
Franklin
Haynes
Halladay
Hudson
Hupmobile
Imperiat
Jackson
Jeffrey
 6N, 1915.
$4-40,5-60,6-45,6-48,1915 . \quad 6-60,191+$.
4.38, 6-36 5.40. 1915, + 355, 4-36 6.30, 1915. 4.40, 11114.

Model 6. 151/i,
Sorlel t. $191+-15$.
Moutel $\mathrm{F}, \mathrm{F}$, and O .
D4t, D45, DHE, D47, D55, 1916.
24C, C36, C37, C55, C4t Truck, 1915.
$24 \mathrm{~B}, 251,3 \mathrm{BH}, 37 \mathrm{E}, \mathrm{B} 55,1914$.
$24,25,36,37,4-30,4-31,1913$.
$4-28,4-2,1112$.

1011-12-13-14,
 40, 4-25, 1215. 20,1914 .
35, 1916. \#2, 26-16-6i, 1915, 2t-6, 24-4, 1914 Morlet 6, $141+15$.
Baby Grabal, 1:916, H2, H4, 1914-15,
Fight Cvlimter, 1915. G-00, 4, Little Six,
1915. Little Six, 4. 6-60, 1914.
4. 4.50, 4, 1513. Commerce Trock.

1915, $6 \mathrm{~N}, \mathrm{~F}, \mathrm{otr}$ C'ylimter. 1915
1:15-16-16.
+-30, 1:13 $=$
Six Cylinder. 1:15-16.
Six C'ylimeter, 1:14-15.
82, 1915. 6-27, 4-2人, 1914. +-50, 4-38, 6, 1513. Six Cylinder, 1!15.
45-40, 6-54, 1:914-15-16. 5t, 1913.
K, 1915.
1916. t-6it, 1915, 44, 54-f, 1914.
t-34, +4, 8, 1916 th. the ts olympic. 1915. Four C'ylinder, 1:14-15,

| King | Eight C'sliuder. 1916. |
| :---: | :---: |
| Kissel | 4-36, 6-42, 1016, 1915. |
| Feximglon-Howard 6M, 1915, 4N, 1:9\%, Nix Cxlinder, 1913.1t. |  |
| Madison | 1516. |
| Mation | 1216 |
| Maxweli |  |
| M. C. H. | 1916 |
| Mercer | 1914. |
|  | 1615, Kix Cylinder. |
| Mitchell |  1914. |
| Mown | 6-20, 4-40, 1:16, N, BN, 1915. |
| National | Six Cylibder, 1515-16, |
| Oaklatul | 8-50, 37. 38, 1516, 37, 15-48, 6-49, 1415 $30,37,49,1914$. |
| 6 Gren | (i-10, 1914-15, |
| Chilsmolile | 43, 8-4, 1915 +2, 45, 1915, 12, 64, 1914. |
| Overland |  |
| Packarl | 2.48, 4-48, 1:15, 1-18, 3-48, 1913-14. Morlel 50, 1508-5-10-11-12. |
| Paige | theric, 1916, t, 16-46, 12915, 36, 1913-1t |
| Pathfioder | 15N, 1:146. 1:14-15. |
| I'remier | 1812, 1/15. |

Heo Fout Cylimler, Kix Cylimder. 1916.
1912-13-14-15.
Standard Steel

Four Cylinder, Six f'ylinder, 1914-15-16. Four Cylinter, $191:$
(4. 1:96, +F, 1!15. 4E, 1!14. +B, 1913.

Big Six, 6.2. 1914, 11. 1915. 9. 10. 1914.
Wextent t
Witlys-Knight
 Evlinger, 0:0. + - $40.1914 . \quad+40,6,1112$ Morlel \&H. 1916.

## PUMPS

## The Manzel Engine Driven Tire Pump

Will pump the tire in less time than it usually takes to locate the hand pump
The Manzel Tire Pump is placed on the side of the motor, right under the hood, and is always ready for use. To inflate a tire it is only necessary to attach the hose, throw the gears into mesh and start the engine.

Manzel Pumps are made in two styles-the Two Cylinder Model, considered by every one to be the height of efficiency in tire pump construction, and the Single Cylinder Model, a very durable and efficient machine, which is considered to be superior to any other single cylinder pump on the market at the present time.

Both models are built on the same principle, and with the same exacting care. They are all metal and there is nothing used in the construction of either which is likely to wear out or require replacing. All parts are accurately fitted and ground, and the workmanship is equal to that of the highest priced motors. They have ample capacity for any size tire, each pump being tested to 250 pounds pressure before leaving factory.


Lubrication is by means of the splash system. There is only one place to oil. Pure

## Double Cylinder Model

Built like an enginehas fine gray iron cylinders, pistons and piston-rings-bronze connecting rods and bearings - dropforged steel crank shaftaluminum crank case.
The pistons are opposed, giving an absolutely uniform flow of air. It runs smoothly and easily and will fill the largest tire to any desired pressure in about three minutes' time.
A special feature of this model is the safety valve to prevent over-inflation of the tires.


## Single Cylinder Model

Built on the same principle as the Two Cylinder Pump. Has fine gray iron cylinder, piston and crank case-steel piston - rings - bronze connecting rod bronze bearings -drop-forged steel crank shaft.

The greatest strain on any tire pump is on its connecting rod and crank-shaft bearings. We have given this matter particular attention, providing a wide bearing on the connecting rod and on EACH side of the crank shaft.

## Any Automobile Owner Can Install the Manzel Pump

You can lngtall a Manzel Pump on your own car. The services of a mechanic are not required. There are no boles to drill or machine work of any kind to do. Brackets and necessary gears are supplied, correctly designed and fitted for each individual car, and the installation can be made by any one in about one hour's time.

## List of cars for which we can supply fittings:

## HOUBLE CYLINDER FIT'TINGS

A blott-Detwoit 44, 1912; 34-40, $44.50,1913 ; 34.40,41.50$, 50 -60, 1914; F. P. \&-egl., 1915: 8-cyl., 1916
Buick 17, 1909: 17, 19, 1910 : 26, 27, 1911; 28, 29, 34, 35, $43,1912,24,25,30,31,40$. 1913 ; B24, B25, B36, B37, $\mathrm{B} 55,1014 ; \mathrm{C} 24, \mathrm{C} 25, \mathrm{C} 36$,
 1044, $1545, ~ D 46, ~ D 47, ~ D 54$, $\begin{array}{ll}{[144,} & 145, \\ {[55,} & 1916 .\end{array}$
Cadillac '09-10-11-12-13-14.
Cartercar I., 45, 1912; 5 $1913 ; 5,7,1914 ; 9,1915$.
Case 35, 40, 1914.
Chalmers 36, 1912; 24, 1914: 26A. 26B, 29, 1915; 32, 1916.

Chander 6, 1914-15-16.
Chevrolet C6, 1913-14-15
Cole 4-40. 4-60. 1913: 6-60, 10. 4.45, 1914: 10, 4-45, Light 6, 1515: 6-60, 1916,
Dodge 1915
Elkhart 8, 1915-16.
E. N. F, $30,1910-11-12$

Enger 6-50, 1915.
Franklin 6. 1914.
Grant 6-cyi. 1915
Hndson 33, 1912: 37. 54 $1913 ; 6-40,6-54,1914-15-16$
Hupmohite 1015.
Imperial f. 1914.
Jeflrey 4, 1914-15-16.
Kissel Kar 4-10; 6-48, 6-60. Kissel Кar 4-10;
$1914 ; 4.48$,
$196,6-42$,
6.48,
6.60 , 1915
Maxwell 25. 6150. 1914: 25. 1915.

Michigan 40, 1913-14.
Price

Mitchell 4. Little 6. Big 6, 1914 ; Big G, Special 6, 1915 . Monarch $6,1915$.
Moon 6-40, 1915.
Oakland 40, 45, 1912: 35, 42 . 6.60, 1913; 36, 6-48, 6-61, $6-62,1914 ; 37,1915 ; 38,39$, 1916.

Oldsmobile, 5, 1914; 42, 6-55, 1915 ; $43,1916$.
Overland 54, 59, 1911: 61, 1912: 69, 71,1913 ; 79 . $1914 ; 80,81,82,1915$; 83, 86, 1916.
1'ackard to 1907-08-09-10-11. $12 ; 3-48,1914 ; 2-38,1915$ Fnige-Detroit $4-36,1913-14-15$; 6.46, 1915.

Rambler Cross Country 1913. Reo the Fifth 1911-12-13-14-
Simplex 3-38, 1900-10-11-12-13.
Simplex $3-38,1909-10-11 \cdot 12-13$.
Speedwell $6,1913-14$.
Standard Steel Car Co., \&, 1915-16
Studebaker 4.35, 1913; 4-25, 6 40, 1914.15.
Stutz 4, G. 1914 ; 4. 1915
Velie 4-45, 6-50, 1914; 4-45 Big 6, 11, 1915; 15, 22, 1916.

Westeott 035, U50, 1915 Trucks
Inick Truck 4C, 1915; 4D, 1916.

Lippurd-Stewart Truck 1912 1:14.
Keo Model F. 1915.
Strwart Motor Corp. 4-40, 151:5-14

## SINGLE CYLINDER FITTINGS

Abbott-Detroit 44, 1912; 44-50, OlAsmobile 6, 1914; 42, 6-55, $1913 ; 44-50,50-60,1914 ; \quad 1915 ; 43,1916$.
F. P, $1915 ;$-cyl, 1916. Cadiltac 1910.11-13-14. Cartetcar 7. 1914; 9, 1915. Case 35, 40, 1914.
Cole 6-60, 10, 4-45, 1914: 10,
$4.45,1$ Laht Six 1915.
Continental Motors 7N, 7 W Etkhart 8, 1915-16.
E. M. F. $30,1910-11-12$.

Enger f0-50, 1915.
Jrankilin E, 1914.
Huclson 6-54, 1914-15-16, Imperial $\sigma, 1914$.
Jeffery 4, 1914-15-16.
Kissel Kar 4-36, 6-42, 1915
Maxwell 6-50. 1914.
Monarch 6, 1915.
Moon 6-40, 1915.
Oakland 36,648 ; 6-62, 1914;
37,1915 : $28,39,6-49,1916$.
Packard 30 , 1907-08-09-10-11. 12, 3-48, 1914: 2-38, 1915.
Palge-Detrolt 4-36, 1913-14-15; 6-46, 1915.
Reo the Fifth, 1915-16.
Simplex 3-38, $1909-10-11-12-13$
Standard Steel Car Co., 8-cyl. 1915-16.
Studebaker 4, 6, 1916
Stutz 4, 6, 1914; 4, 1915.
Velle 10, 6-50, 1914; 11, 1915;
W $15,22,1916$.
Westcatt 035; U50, 1915.

## Trucks

Lippard-Stewart Truck 1912. 13-14.
Stewart Motor Corp. $4-40$, 1913-14

## Price

Each. D.P. $\$ 18.66$
Specinal List of Additional Models

Buick 17, 1909; 17, 19, 1910; 34, 35,$1112 ; 24,25,1913$ 124. B25, B 26,1 B37, B55, 1914: C24, C25, С36, С37, C54, C55, 1915: D44, D45, D46, D47, D54, D05, 1916. Buick Truck 4C, 1915; 4D, 1916.
Price
10.00

Each. .D.P. \$15.55
Ahove prices include necessary brackets and gears, fifteen
of air lose, pressure gauge, etc-everything ready for Feet of air hose, pressure gauge, etc-everything ready for
immociate aftachment.
If interested in any model not ilsted above, write us, as
I bis Ilst is betng added to continually.
Cherrolet 4-90, 1916: Baby Grand, Royal Mall 1914 . 15-16.
Dodge 1916.
Overland $80,81,82,1915$; 83 , 84, 88, 1916.

## The GIBSONGOMPANY

PUMPS

## Mayo Spark Plug Pump

A thoroughly reliable pumping plant which can be instantly attached to all four-cycle motors of two, four or six cylinders (not operative on two-cycle motors) and be depended upon in every instance to inflate the tire with pure, fresh air in from two to four minutes, depending on size and pressure desired. Guaranteed pressure obtainable, 100 pounds and over. Can be attached to any car in a few seconds' time and cost of outfit is final. Anybody can use it with sure results.

## Let the Motor Pump Your Tires

Simply remove a spark plug from any convenient cylinder and substitute the pump (with the hands only) is the advantageous method of attaching to all motors. After connecting the hose from the pump to the tire, the motor should be started and run on low throttle from two to four minutes until the tire has been inflated to the pressure desired.

## PUMPING TIRES THE "SPARK PLUG" WAY <br> MAKES HARD WORK EASY ON THE HOTTEST DAY

You save $25 \%$ of Your Tire Expense Using this Outfit
This claim is corroborated by thousands of automobile owners from actual experience. The Mayo Spark Plug Pump enables you to keep your tires properly to pressure all the time so that full mileage service is obtained, to say nothing of the great convenience and labor saving advantages. The pump is noiseless in operation, non-adjustable, requiring no attention whatever other than an occasional drop of oil, and works equally well on all sized cars. Small, light, compact-weighing only $2 \frac{1}{2}$ pounds-which can be carried anywhere. Always in working order and ready for use. The pump is fully guaranteed for one year-built like your motor with metal rings and to last as long as your car.

Outfit consists of pump with adapter to fit any car, 12 ft . superior hose, with connections and guaranteed accurate pressure gauge installed in the hose line ready for use.

## Price

$\qquad$
$\qquad$
Each. . D.P. $\$ 13.82$
A MAYO QUICK DETACHABLE SPARK PLUG greatly adds to the convenience of using the pump outfit, Can be installed in your motor the same as an ordinary spark plug. A quarter turn of the lock handle permits the core of the special spark plug to be slipped out-pump slips in and is locked ready for use in the same manner. Both operations in two seconds. Furnished in $\frac{7-18}{}$ and $\frac{1}{2}$-inch sizes (no metric) complete with connection for Mayo pump. $\$ 1.50$ extra.
Each. .D.P. $\$ 2.44$


A "Stay on the Motor" pump always attached and ready for service. To fit your engine, remove a cap from over one of the exhaust valves and tap same $13-24$ thread. Install pump into the valve cap as per directions furnished. This pump is fully guaranteed to give satisfactory service. Furnished complete with 14 ft , of superior hose, with accurate gauge and connections and full directions for attaching.

## Each

. $\$ 10.00$
Each. . D.P. \$16.66
Before ordering examine your motor to be sure valve cap can be drilled and tapped $1 \mathbb{Z}$-inch. If not, consult your local machinist about making a new valve cap.

## Mayo Ford Pump

A diminutive Mayo Spark Plug Pump built especially for the Ford car. A real power tire pump guaranteed to give satisfaction and inflate a tire with pure, fresh air. $32 \times 3$ size to $65-1 \mathrm{~b}$. pressure in two minutes; $32 \times 32$ size to $70-\mathrm{lb}$. pressure in three minutes. Attached and used the same as the standard Mayo Spark Plug Pump. Construction is strong -metal piston rings and valves used. No wearing parts to break or get out of order-fully guaranteed for one year.

Fitted with $\frac{1}{2}$-inch connection and furnished complete with 10 -foot hose, accurate gauge and connections.

Each
$\$ 5.00$
Each. . D.P. $\$ 8.38$


## PUMP ACCESSORIES



Pump Leather* z-Inch, each Per 1hozen. D.P. \$0.20 Per 100., Ib, I, \$1.fif

 Pump Leatlerw, 1!-ineb, +arlt
Per Dosen. D.P. $\$ 0.33^{\circ}$ Per 100.. D.P, \$1.76 Pump Leathera, $1 \frac{1}{3}$-inch, ravl



Pump Leathers

The size of a cup means the outsille diameter of the cylinder for which the cup is intended. For instance. our 1 -inch cup fits a eylinder which is one inch outside diameter. Remember this when ordering.
 I'unnj I,eathers, \&3-inch. exuls Per Thazen. IP. P. 33.32 Fer 160, 11 P. siog. (0)



## Pump Leathers in Sets



Leatber Packing Sets for the leanling makes of auto putmps Vhat they fit-
No. I Set fits the Slapley Pump, per set.

No. \& Set fis the Brown Impulse Pump, per set Per Set., D.P. $\$ 0.27$ Per Dozen Sets..D.P. $\$ 1.88$
No. 3 8et 0ts the Inperial Wixon Pump, per net Per Set . D. P. \$0. 15 P'er Lozen Sets..D. P. \$1.b; No. 4 set fits the Aeolus Pump, per set
Per Set. D. P. $\$ 0.15$ Per Dozen Sets., D. P' \$1.Qi
No, 5 Set fite the Nos. 99 and 30 rumps, per set
Per Set..D.P. \$0.4i Per Dozen Sets., D.P. \$5.t0
No. 6 Set fitc the Kellogg Pump, per set
No, 7 set fits the Ikex Pump, per set

No. 8 set flts the Skinner Pump, per set. . .
Per Set.. D. P. 80.15 1'er Dozen Sets..D. P, \$1.6i
No. 13 Set fits the Kellogg Power Pump, per set
Per Set..D.P $\$ 0.44$ 1'er Jozen Kels.. IV I' $\$ 0,00$
No. 15 set fits the Vietor Pump, per set
Per Sef .. D. P. . \$0.15 Pur Dozen Sets., D, P. \$1.B6
No. 16 set fits the stapley Pumps (new model), per net
Per Set . Ib.P. $\$ 0.15$ 1'er Dozen Sels..D. I, $\$ 1.06$


No. If Pump Tubing, is/16; at ply, Per font
 Nu. til Fump 'Tubing I S bis, per fool

 sure, per fool




Armored High Pressure Tubing


Nu. 40 Fump Tubing, $\frac{3}{}$-inch. 5 pls, $\frac{1}{2}$-inch outside diameter, armored or wire wrapped in aj-font lengtha only, for sarage une

No. 50 Pump Tubing. 1-ibeh. 5 ply, S-inch outsiche tianneter,
extra quality, arbiered or wire wraptrot. ill ₹a-foot
lengths only, for garage ust
-i-1. I

## Braided Cloth Covered Pump Tubing



Na, 60 ISraited Cloth Covered Fump Tubing. 3 16-inch. The braidel eover makes this in very serviceable article and very sistisfactory under hiuh pressure, per foot....... sis
 No. 70 Braided Cloth Coverud Pump Tubing. B-inch. pur foet

## Conqueror Air Hose

The service on air line Hose is naturally barat, In orter to mett the exacting require. ments we recom. mend the Conqueror Brand, wbich is the liegt tbat can lie mate The tmle and cover are made and cover are made
from the higliest
 Frade materials Known to the rublice trabe and the plies of fabric are prac lically inkeparable. In a wora, the bose is of sach bigh grade that it will withatamal not only exposire and bard service, but will show excellent lasting qualities even when abused. It is gharanteed to stand 100 poumils prescore. To those who haf tronble with air line lowse-and there are many-ibis hose which is marle on the principle of "Not How Clieap. But How Gomal," will solve the problem.

Conquefor Aif Hese, 1-inch, furt feet
['F Font . I. P \& \& , fo
Conguerar Nir Hose, 太-insh, ber foot
.35
Per Foot . D, P. sots

## Hose Bands

Ereo IIane Hands, No. 1. Zs price,
 seo Hase Hands, No. 3, 3: price, each

$$
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& \text { Enco None thanits, Nik, \%, } / 16 \text { : price }
\end{aligned}
$$




Sufy firip Hose Manaln. Na. I. 2 innide, each
50),15

Sure firip Itome Itamiln, Ne, 3, 3 inside, fikeh
a. 5


# OKc GIBSON COMPANY 

PUMP ACCESSORIES

## Automatic Air Chuck No. 47



This air chuck has been proven to be the ideal connection at the end of storage tank hose line. It fills the long-felt demand for an automatic shut-off coupling. It will pay for itself quickly in time and air saved.
To operate, attach the air chuck to the hose line and apply to tire. The plunger will then open and permit the air to flow freely. When removed, the air chuck automatically closes, preventing the air from escaping and eliminates the necessity of running back and forth to close a valve.
Each
. $\$ 1.00$
Each. .D.P. $\$ 1.66$ Dozen, . D.P. $\$ 18.65$

## No. 46 Pump Connection

No. 46 Pump Connection is a heavy, substantial connection for air hose.
Each


Each. . D.P. \$0.33
Dozen. . D.P. $\$ 8.32$

## No. 52 Pump Connection



A perfect slip-on connection that stays on, This connection is designed so that when it is applied to the tire, a quarter turn locks it on the threads of the tire valve and it cannot come off until released. Made extra heavy, of brass, for hard service.
Each
$\mathbf{\$ 0 . 3 0}$
Each. .D.P. \$0.44 Dozen. .D.P. \$4.78
No. 45 Pump Connection
No. 45 Screw Connection for air pumps. Made entirely of brass. A good, serviceable connection with fiber washer.

## Each

$\$ 0.15$
Each. . D.P. $\$ 0.15$
Dozen. .D.P. $\$ 1.66$


No. 53 Tank Connection


No. 33
No. 53 Tank or Pipe End Connection made to fit :inch iron pipe.
Each
Each. D.P. $\$ 0.44$ Dozen. D.P. $\$ 4.44$

## Acorn Connection

The Acorn Connection will fit
 any valve, as a perfectly air-tight connection is made instantly by simply pushing it over the valve. It will pull off as easily. Absolutely gir-tight, quick, and will last for months before rubber washer needs replacing, which can be done in a few moments.
Each
Each.. D.P. $\$ 0.18$ Dozen. D.P. $\$ 1.88$
.80 .15

## Genuine "Eclair" Connection

Same type as Acorn but of better quality.
Each
80.35

Each. D.P. $\$ 0.48$ Dozen. D.P. $\$ 5.00$

## Acorn No. 3



No. 3 Acorn Connection same as regular Acorn with center pin to open valve spring and right angle stem to fit $\frac{1}{4}$-inch hose.
$\$ 0.25$
Each. D.P. $\$ 0.36$ Dozen. . D.P. $\$ 3.88$

## Acorn B



No. B Acorn Air Cock. Regular Acorn head with right angle shut-off stem. Has screw in top which may be removed and gauge with 4 pipe thread may take its place.
Each
Each. D.P. $\$ 0.88$ Dozen. D.P. $\$ 9.60$

## Acorn Washers

Rubber Washer for Acorn and similar connections.
Each
. 80.05
Box of 95 . D.P. $\$ 0.66$

## Keno Connection

No. 3 Keno Connection has a long stem and extra screw to hold the valve open when pumping.


Each
$\$ 0.30$
Each. D.P. 80.44
Dozen. D.P. $\$ 5.00$
No. 4 Keno Connection has a long stem and extra screw and fits outside Schrader valve.
Each
Each..D.P. $\$ 0.44$ Dozen. .D.P. $\$ 5.00$
80.33

# OKc GIBSON COMPANY 

## PUMP ACCESSORIES

The Romort Automatic Air Valve<br>style "A"



The Romort Automatic Air Valve, Style "A," is the most popular valve in use for heavy work. Solid bronze, practically indestructible. Made to fit any size tubing. All parts, with exception of the rubber gasket, guaranteed to wear one year without repair or replacement. Instantaneous in opening and closing; positively air tight. Impossible for users to waste air. Weight, 9 ounces.
Price, each
83.00

Each. . D.P. $\$ 5.00$

## The Romort Automatic Air Valve style "B"



The Romort Automatic Air Valve, Style "B" is a high grade air valve made to meet the popular demand for a light and inexpensive automatic air device. Solid bronze, one-piece casting, universal stem will fit any size tubing. Automatic in opening and closing. Guaranteed air tight. Highly recommended for Public Service Stations, Vulcanizers and Repair Shops. Weight, 5 ounces.
Price, each
$\$ 1.00$
Each. .D.P. \$1,66

## Romort Angle Pump Connection <br> Not Automatic



Extra heavy solid bronze one piece casting, made for direct connected air compressors of all types. Especially convenient for power tire and spark plug pumps attached to automobiles. The very best for vulcanizing and tube repair shops where automatic air connections are not required. Has threaded taper stem to fit tubing from \& to inch. Equipped with Romort design rubber washer. With exception of the rubber gasket guaranteed for one year.
Price, each
$\$ 0.40$
Each. . D.P. $\$ 0.66$

## Romort Straight Pump Connection <br> Not Automatic



Solid bronze one-piece casting, will stand severe abuse. Made for use on direct connected air pumps, hand and foot pumps. Replaces the awkward and inconvenient screw connection. Has threaded taper stem to fit tubing from $\frac{1}{\frac{1}{8}}$ to g inch. When connected to tire valve it will not leak or blow off. Equipped with Romort design rubber washer. With exception of the rubber gasket guaranteed for one year.
Price, each
$\$ 0.25$
Each.. D.P. \$0.42


The Romort tank or pipe end connection is a brass union with step up stem to fit any size hose. This union is made to fit one-half inch iron pipe and it contains a leather washer that will not come out when the union is taken off or dropped. The union is knurled so it can be taken off by hand without the use of a wrench. With this union the air line can be taken in at night, eliminating the chance of thieves stealing hose and connections.
Price, each......
$\$ 0.60$
Each.. D.P. $\$ 1.00$

## Romort Special Pump Connection Rubber



Made extra heavy of a special compound. Easily slips on and off the tire valve. Will hold firm against high or low air pressure, and positively will not blow off or turn inside out. Made especially for the Romort valves and will also fit all other pump connections. See that "Romort" is stamped on the rubber.
Price, each
$\$ 0.05$
Dozen. .D.P. $\$ 0.42$

## Romort Air Nozzle (Cushion Cleaner)

For Romort Valves and Pump Connections


This device is designed to release the air in Romort Automatic Air Valves, Styles "A" or "B," when air is required for the purpose of blowing the dirt and dust off cushion tops, foot mats, machinery, etc. When attached the air flows out of a needle point with terrific f'erce, forming a perfect and effective air cleaner. This nozzle may also be used on Romort Angle and Straight Pump Connections. Satisfaction guaranteed.
Price, each
.80 .25
Each.. D.P. 80.42

# The GIBSONGOMPANY $\overline{\overline{A P O L I S}}$ <br> VALVE TOOLS, WIRE, ETC. 



## "Three in One" Valve Tool


"Three in One." Made in one piece from drop forging. No. 1 Valve Tool, each
.$\$ 0.25$
Per Dozen..D.P. $\$ 4.26$


For re-cutting outside thread, tapping inside and removing valve from stem. Combined in one tool as shown. No. 2 Valve Tool, each
. $\mathbf{\$ 0 . 2 5}$
Per Dozen. .D.P. $\$ 4.26$


These tools are unquestionably superior to those offered generally to the trade. Minute comparison as to material, workmanship and finish solicited.
No. 3 Valve Tool, each
$\$ 0.35$
Per Dozen. .D.P. $\$ 4.66$


A very useful tool for re-threading outside or body of Standard Valves.
Each
$\$ 0.75$
Per Dozen. .D.P. $\$ 10.66$

Schrader Universal Valve Repair Tools


One Dozen on card, each
$\$ 0.25$
Per Dozen. . D.P. $\$ 4.00$


Valve Patch for 2$\}$-inch and 3 -inch tubes, each. . $\$ 0.20$
Per Dozen. D.P. $\$ 2.77$
Valve Patch for 34 -inch and 4 -inch tubes, each... . 30
Per Dozen..D.P. $\$ 3.55$
Valve Patch for $4 \frac{1}{2}$-inch and 5 -inch tubes, each... . 35
Per Dozen. .D.P. $\$ 4.00$
Brass and Copper Wire


Copper Wire, 17, 20, 22 or 24 gauge, $\frac{1}{4}-\mathrm{lb}$. spool, price
Per Dozen.. D.P. $\$ 4.44$
Brass Wire, 17, 20, 22 or 24 gauge, $\frac{1}{4}-1 \mathrm{~b}$. spool, price
Per Dozen. . D.P. $\$ 4.44$

# The GIBSON GMPANY 

## VALVES AND VALVE PARTS

Schrader Valves


No, 777 Schrader Valves, small, for $2 \frac{1}{2}$ and 3 -inch tires, each
Each. . D.P. 80.55
Ne. 725 Schrader Valves, large, for $3 \&$ to 5 -inch tires, each
Each. D.P. $\$ 0.58$
No. 792 Schrader Valves, large, for demountable tires, each
Each. D.P. 80.60

## Schrader Universal Dust Caps



No. 835
For motor tire valves


Ne. 2028
slips over vuly. and looks secure
Iy with | 1 Im .


No, 3009 For motor tire ralves

[^2]Schrader Universal Valve Parts


Used on all types of pheumatic tire valves.

Schrader Universal Valve Insides
Packed 5 in a metal box, insuring them against injury. Twenty of these small boxes in a carton.
Price, each.
80.05

Price, per box of five . . . . . . . . . . . . . . . . . . . . . . . . . . . 20
Price, per carton of 100
$4 .(4)$
Per 100.. D.P. $\$ 5.77$


No, 819
For use of No. 77 IND Sichrather Iniversal motor tite ralve.

Combination Rim Nut and Dust Cap Bushing
Each . . . . . . . . . . . . 80.10
Per Dozen. . D.P. \$1.60


No. 880
For use on motor tire ralves

## Motor Valve Cap

$$
\text { Each . . . . . . . . . . . . . } 8.05
$$

Per Dozen. . D.P. $\$ 0.66$
Per 100., D.P... $\$ 5.32$

## Pump Connection

It is a pratented device which thay be attached 6." any and all pumbs now is use for indlating antomobile or motorcycle or bicyle tites, It serews on to the end of the mbher tubing "t tie pungy as shown in the
the fire rabe liy means of a simple sr frel-nat, It foulhtuation with the contant with the tirevalve is a teflating pin which vermits of the proselom in the 'ire being taken while the pump © sill attactosal to the tize in operation.
Each .............. ................. 80.35
Each. D.P. $\$ 0,54$
Inflating Valve


For use on air lines. Automatically shuts off the air when removed from the tire valve. Shanks made to fit any hose.
Each
$\$ 1.00$
Each. .D.P. $\$ 1.61$

# The GIBSONGOMPANY 

## TIRE PRESSURE GAUGES AND TIRE CALIPER

No． 2 Pump Gauge



For use on all makes of pumps． furnished in brass or nickel plated． Made with bottom or back connec－ tion．This illustration shows back connection．In ordering specify style of connection wanted．
Each
$\$ 1.00$
Each．．D．P．\＄1．44
Dozen．．D．P．$\$ 16.00$

## No． 4 Edelmann Pump Gauge

For use on Power Pumps．
This is a Special Gauge for use in hose－line．Used largely by manufacturers of spark plug pumps．
Fits 3 －inch air hose．
Each
81.25

Each．．D．P．\＄1．54
Dozen．．D．P．$\$ 16.66$


Full size

## Invincible Tire <br> Pressure Gauge

The Invincible Tire Pres－ sure Tester is an excellent sample of high grade me－ chanical work，made sub－ stantially like any high grade pressure gauge and the best material is used in its construction．It is prac－ tically indestructible and will last a natural lifetime．

Each $\qquad$ $\$ 2.00$
Each．D．P．\＄2．44
Dozen．．D．P．$\$ 26.66$

Schrader Universal Tire Pressure Gauge


Tothing is as cosse日tial to the tour life of tires as air The only way to know whether or not your tires lave enoush ait is to measure it with a reliable tite prossurn Gunge．

Thie sebrader Eniversal Tire l＇mesture Binuge is xach ； をан世е

Cobvenient in sixe stmple ant aboelntely aceutate．
Endorsenf by Tire Manufinfurcts as the mont reliable gange ont the tharket．
E＇ick
81.001
｜noxall［1．｜．x $191 \%$

## Twitchell Gauge

The Twitshell Gange Lacks，Ahowing Trur Pressure or Nube．


The Twitchell Gange was the first pencil type gange． is built on a rimeiple that has long ago proved a success in other tooks，but hait never before heen applied to air ganges． After a mumber of improvements it torlay reprosents the last word in thre pressure gabgen．What matieularly distinguishes the Twitchelf from other pernoll type samgen．is the Tockimp device．It makes absolutels imonssible the slipping of the decice of makes absolutels imbosibile the slipping of the


The ligures indicating the pressure are white on black backgromm！and may he real with great case，13y the sense of tonch you can setermine the pressute even in the dark by counting the botches of the imbicator while floing this it is aceessary to press ngainst the smooth side of the imali


Althongh goaranteed for one year ouly，the Twitchell is so carefally made and the material theal in its construction of stuch high quality，that it will romain aceurate and be of sorviceatile nse for a mbinher of verars．
Each
81.00

Dozen ．．T T＇s19，洛

## Goodrich Tire Caliper

The Gootrich Tire Caliper girea Nan the correct intlation for ans tire．nuder any condition or load．If you start out with an extra beavy load．you neeal more air；the ealiper will show yon just how moneh．

The Goodrich Caliper tost Las wothing to do with the valve Yon ean make the tost wilhont rowovint the dast and valve caps，and soa can text without delay while the tire is lefor intlated．

Too little nir in a tire canses rim cuttiam．breaking of the sitle walls，falrie separation，and quick ruin for aby make of type of formomatic tire．Tan man air males the riding fough．thas fofoatinte the very purpose of the pommantie time The tire should always give a little onder joad，but meve The tire should iblways tive a little onde
inspection is nover a rebliable inflation fest．

Every Caliper is made of steel heavily nickel pla＇ed．When folded and in its leather holster，it orempies but smanl space in pocket or toal box．It mannot get ont of order，canmot wear ont and is bv far the theapest tire insirance rou can buy
Each
Fach．M1 $10, \$ 1,01$

# ซhe GIBSONCOMPANY $\overline{\overline{A P O L I S}}$ 

## FIRE EXTINGUISHERS

## Pyrene Fire Extinguishers



The use of Pyrene Fire Extinguishers reduces automobile fire insurance premium $15 \%$. Saving on insurance will pay for Extinguisher. It is also invaluable for garage protection because it is the best means of extinguishing burning, gasoline and other obstinate blazes. It is a permanent investment. It is guaranteed against mechanical defects, poor workmanship and material and against freezing. It weighs without holder 6 pounds, or with vehicle bracket about 7 pounds. It is substantially built of brass and will throw a stream of Pyrene Liquid about 30 feet. A few squirts of the Liquid usually suffice to extinguish a fire. The balance may be preserved for future use indefinitely provided handle is merely relocked. When empty it can be easily refilled with Pyrene Liquid. A vehicle bracket is necessary for automobile use.

Pyrene Fire Extinguisher, Brass, each.......... $\$ 7.00$ Each. . D.P. \$12.44
Pyrene Fire Extinguisher, Nickeled, each........ 8.00 Each. .D.P. \$14.22
Enameled Bracket for Pyrene Extinguisher, each.. . 50 Each. . D.P. $\$ 0.88$
Brass Bracket for Pyrene Extinguisher, each..... . 75 Each.. D.P. $\$ 1.82$
Nickeled Bracket for Pyrene Extinguisher, each. . 1.00 Each. .D.P. $\$ 1.76$
Pyrene Liquid, quart, each
Per quart. .D.P. $\$ 2.20$
Pyrene Liquid, gallon, each
Per gallon. .D.P. $\$ 8.00$

## Fire-Fly Extinguishers



Fire-Fly is a dry powder fire extinguisher and it does the work.

It is put out in convenient size tubes and does not contain any grit, therefore will not injure the bearings should it be thrown onto the engine or working parts of the machine.
Fire-Fly Fire Extinguisher, large size, each...... $\$ 0.75$ Each. . D.P. $\$ 0.78$ Dozen. . D.P. $\$ 8.33$
Fire-Fly Fire Extinguisher, small size, each..... . 50 Each.. D.P. \$0.66 Dozen. . D.P. \$6.66

## J-M Fire Extinguisher

The J-M Fire Extinguisher requires no pumping while aiming. Both hands are free to direct the stream. Can be used in cramped quarters where lack of space prevents pumping. Stream will hit a dollar at thirty feet. Puts out any fire. Instantly extinguishes any fire caused by gasoline, oil, electricity, etc., without harming fabrics, furniture or skin. Never deteriorates. Sealed at both ends. This prevents tampering and also shows you at a glance that your extinguisher is charged and ready for use. Anybody can operate it. A woman, child, or even a one-armed man can use the J-M. Reduces auto insurance 15 per cent. Inspected, approved and labeled by the Underwriters' Laboratories, Inc. Listed as an approved fire appliance by the National Board of Fire Underwriters.
Brass or Nickel, complete with brack-
et, each
Each. .D.P. $\$ 13.32$

## Alenco Underwriters' Chemical Extinguishers

The Alenco Extinguisher is made of the very best grade of Lake Superior Cold Rolled Copper. The lapped joints are first tinned and copper riveted, then the solder sweat through to the outer edge of the laps with the rivet heads well covered with solder on the inside. The dome and bottom are formed by stamping, which gives uniform strength and eliminates the unevenness of a spun shell; the inside of the shell and all parts are heavily coated, where necessary, after being formed, with a metal mixture to prevent corrosion.
The normal finish of the extinguisher is red enamel baked on. We recommend this finish as it is distinctive of fire apparatus and it is impossible for it to tarnish. Polished copper finish can also be supplied without extra charge.


Weight, empty, 17 pounds. Weight, charged and ready for use, 36 pounds. Duration of stream, $1 \neq \mathrm{min}$ utes. Capacity, 3 gallons. Chemical charge Bi-Carbonate of Soda, $1 \frac{1}{2}$ pounds. Commercial Sulphuric Acid, 4 fluid ounces. Distance a stream is thrown, 45 to 50 feet. Cost of chemicals to recharge, 50 cents. Maximum pressure in operation, 120 pounds. Extinguisher tested to 400 pounds. Bursting pressure, 600 pounds. Safety factor, 480 pounds. Experience required to use, none. Experience required to recharge, none.
Alenco Fire Extinguisher, each
. $\$ 13.50$ Each.. D.P. $\$ 23.32$

## "SOLAR" Guaranteed Spark Plugs



## THE SUPERLATIVE IN SPARK PLUGS. THIS SPARK PLUG <br> COMBINES ALL THE ESSENTIALS NECESSARY <br> TO LONG LIFE, POSITIVE FIRING AND <br> ABSOLUTE INSULATION

OHE "Solar" Spark Plug is in a class by itself. It is of extra heavy construction. lt represents the experience of years in the production of igni tion materials. It is for the discriminating motorist who insists on having the best. The "Solar" Spark Plug is guaranteed to give absolute satisfaction. I Cores (porcelains) are made from the very best imported clay combined with a special material which insures positive insula. tion and provides for the exceptional expansion and contraction to which porcelains are constantly subjected. They are baked to the proper consistency in special kilns. © Electrodes and terminals are of a special non-fusible alloy, tested for conductivity, heat resistance and expansion. G The gasket construction is the result of years of experimenting and is without exception the most efficient and best adapted to this service. It insures against leakage and will stand extreme pressures without blowing out. © Every detail looking to long and satisfactory service
has been provided for and at the price it is impossible to find a spark plug that will give the service and satisfaction that will be found in the "Solar."

- Your attention is called to the very neat design, the rugged construction of the metal parts, the heavy porcelain, the large terminal, the positive sparking points and the excellent proportions of the firing chamber. IEvery dealer should stock the "Solar" Spark Plug. It presents an excel. lent selling proposition. It insures him a satisfied customer whereverthisplug is installed. It is guaranteed to give long life and perfect results. It is the most profitable specialty that he can carry, G Every "Solar" Spark Plug is guaranteed by us. Any proving defective in material or workmanship will be replaced free of charge and without question. This means double protection to the user and provides against the worries incident to nearly every plug on the market. The "Solar" Plug is a Quality Plug.
- The "Solar" Plug is made for all cars in all sizes. Every dealer should carry a complete stock. © Each plug is packed in a neat water-proof and dust-proof metal case, which insures its safe carrying in the tool box. Packed one dozen to a carton. Order in dozens or the multiple thereof.


## Special "Buick" Type "SOLAR"

OHE Motor in "Buick" Cars requires a special plug, having a long barrel, special terminal and base. The "SOLAR" Special Buick is the type approved by the Buick Company. One of the outstanding features of the Solar Plug is its ruggedness; it is built for extraordinary serviceand gives it, too.
$7 / 8-\mathrm{in}$. Special "Buick" Type, each
$\$ 1.00$
PACKED IN DUST AND WATERPROOF CANS

| Lots 1 to | 11 | Each D. P. | E. |  |
| :--- | :--- | :--- | :--- | :--- |
| Lots 12 | to | 49 | Each D. P. | 1.11 |
| Lots 50 to 100 | $\ldots . .$. | Each D. P. | 1.06 |  |

As these plugs are packed one dozen to a carton, it will pay you to order in dozens or the multiple thereof.



Special Inch

## Champion " X " <br> THE FORD PLUG

Adopted by the Ford Motor Company as Standard Equipment on the Ford car since 1011

The following is quoted from the Ford Manual in answer to No. 76:
"There is nothing to be gained by experimenting with different makes of plugs. The make of plugs with which Ford engines are equipped when they leave the factory are best adapted to the requirements of our motor."

Champion X Spark Plugs, $\frac{1}{2}$-inch Ford, retail price,
each
Lots less than 100 , each. .D.P. $\$ 0.78$
Lots 100 or more, each. . D.P. $\$ 0.74$

## Champion

 REGULARA most reliable plug-Sturdy in construction, patented Cup Gasket Assembly, making compression leakage impossible.

Adopted as Standard Equipment on Studebaker, Maxwell and other wellknown cars.

$\frac{1}{2} \ln .2-18$, Metric

Champion Regular Spark Plugs, $\frac{1}{\frac{1}{2}}$-inch, $\frac{d}{b}$-inch or Metric. Retail price, each.
.$\$ 1.00$
Lots less than 100 , each. . D.P. $\$ 0.89$
Lots 100 or more, each. .D.P. $\$ 0.85$
In ordering state size wanted.


## Champion "O" <br> the overland plug

Specially built for use in the Overland car. Originally adopted as factory equipment.

Numerous testimonials from car owners prove it to be the one dependable plug for the Overland under all conditions, giving maximum power and efficiency.

Special 1 Inch
Champion "O" Spark Plugs, $\frac{1}{2}$-inch Overland. Retail price, each.
$\$ 1.00$
Lots less than 100 , each. . D.P. $\$ 0.89$
Lots 100 or more, each. D.P. $\$ 0.85$

## Champion Buick Plug FOR BUICK CARS

The Champion Regular $\%$-18 long plug is specially made for the Buick car. Has long shell, conical porcelain Buick terminal.

The long shell allows the spark to ignite within the cylinder instead of in a pocket, as occurs when the ordinary type plug is used.

## z-18 Leng

Champion Long Spark Plugs, $\frac{7}{8}$-inch Buick. Re-
tail price, each
. $\$ 1.00$
Lots less than 100 , each. .D.P. 80.89
Lots 100 or more, each. .D.P. 80.85

## Champion

## ONE PIEGE-HEAVY STONE

Specially made for racing cars and those of high power. Extra heavy material throughout. Absolutely compression tight.

Will give extremely satisfactory service on such cars as Cadillac, Chalmers, Chandler, Franklin, Hudson, Locomobile, Mitchell, Oldsmobile, Packard, Pierce-Arrow, StearnsKnight and Peerless.


Champion One-Piece Heavy Stone Spark Plugs,
$\frac{1}{2}$-inch, $\frac{7}{6}$-inch or Metric. Retail price, each...... $\$ 1.25$
Lots less than 100 , each..D.P. $\$ 1.32$
Lots 100 or more, each. .D.P. $\$ 1.26$
In ordering state size wanted.


## Champion

## TWO PIECE-HEAVY STONE

Made of the same heavy materials and has the same heavy construction as the Champion One-Piece Heavy Stone Plug, but has the added convenience of being easily taken apart and cleaned.

Is very well adapted to the same type of cars as shown above.
$\frac{1}{2}$ in. $2-18$, Metrie
Champion Two-Piece Heavy Stone Spark Plugs,
$\frac{1}{2}$-inch, $\frac{2}{6}$-inch or Metric. Retail price, each..... 81.25
Lots less than 100 , each. . D.P. $\$ 1.32$
Lots 100 or more, each. . D.P. $\$ 1.26$

# The GIBSONOOMPANY 

SPARK PLUGS


3 In. $\mathbf{3}-18$, Metrie
3 in. 2-18, Metrie

Champion Priming Plugs, $\frac{1}{2}$-inch, $\frac{7}{6}$-inch or Metric. Retail price, each.

## $\$ 1.25$

Lots less than 100 , each. .D.P. $\$ 1.37$
Lots 100 or more, each. .D.P. $\$ 1.32$ In ordering state size wanted.

## Champion Metz FOR METZ CARS

Adopted since 1913 as standard equipment on Metz cars.

Has extra long shell, bringing the spark well down into the cylinder.

This type of Champion Spark Plug was used in the Metz car, which won the Glidden tour in 1913, as well as many other victories.


1 in. Ex. Long

Champion Extra Long Spark Plugs, $\frac{1}{2}$-inch Metz. Retail price, each. .$\$ 1.00$
Lots less than 100 , each. . D.P. $\$ 0.89$
Lots 100 or more, each. . D.P. $\$ 0.85$


## Champion Heavy Duty

The same heavy construction as our Heavy Stone, but smaller in size.

Made for use where compactness is necessary.

Built for efficiency of the very highest type. The one piece construction makes leakage impossible.
$2 \mathrm{in} . \mathbf{2}-18$, Metric
Champion Heavy Duty Spark Plugs, $\frac{1}{2}$-inch, $\frac{t}{6}$-inch or Metric. Retail price, each.
.$\$ 1.00$
Lots less than 100 , each. .D.P. $\$ 0.89$
Lots 100 or more, each. . D.P. $\$ 0.85$
In ordering state size wanted.

## Champion Reliance

## SPARKS IN WATER

The porcelain is baked around a very fine platinum wire, with just the top brought flush with the porcelain.

The ideal plug for motor boat use. Moisture, fog and rain on the outside of this plug does not interfere with its operation.

Gives a spark so hot that it actually consumes the moisture, oil, soot and carbon which would collect on any other plug and cause short circuiting.
Champion Reliance Regular Spark Plugs, $\frac{1}{2}$-inch,
$\frac{1}{8}$-inch or Metric. Retail price, each... .. . . . . $\$ 1.00$
Lots less than 100 , each. .D.P. $\$ 1.44$
Lots 100 or more, each. . D.P. $\$ 1.32$
In ordering state size wanted.

## Champion Reliance Magneto

Has closed end, conical porcelain platinum point.

Gives extra long service and high efficiency with magneto.

Specially adapted to oily motors, as it absolutely will not foul from oil.

$\frac{3}{2}$ in, $\mathbf{3 - 1 8}$, Metric

Champion Reliance Magneto Spark Plugs, $\frac{1}{2}$-inch,
$\frac{7}{6}$-inch or Metric. Retail price, each............. $\$ 1.25$
Lots less than 100 , each. .D.P. $\$ 1.66$
Lots 100 or more, each. . D.P. $\$ 1.56$
In ordering state size wanted.


## Champion Porcelain Motorcycle

Strong, extra heavy and exceedingly durable. Short, do not project. Excessive heat or constant jolting will not injure them.

Have same general construction as other Champion Spark Plugs.
$\frac{1}{2} \mathrm{in} . \mathrm{z}-18$, Metric
Champion Porcelain Motorcycle Spark Plugs, $\frac{1}{2}$-inch,
$\frac{1}{3}$-inch or Metric. Retail price, each.
. $\$ 0.75$
Lots less than 100 , each. .D.P. $\$ 0.77$
Lots 100 or more, each. . D.P. $\$ 0.73$
In ordering state size wanted.

# Ohe GIBSON COMPANY <br> SPARK PLUGS 

## AC Titan Spark Plugs

The development of modern high speed motors has brought home the fact that their efficiency is limited by the ability of the spark plugs to stand the strain. Plugs of ordinary design that were considered perfectly good until very recently were found sorely wanting, in fact useless, when placed on high speed, high compression motors, and the main reason for their failure is the fact that they are bound to leak compression when they become hot.

AC Titan plugs are made according to a special process which keeps them gas-tight at all motor temperatures. The fact that they have been adopted by nearly all the leading manufacturers is evidence that they are particularly adapted to the modern high speed motor and, therefore, the best for all motors.

| Regular $\frac{7}{3}$ AC Titan Plug Regular enuiponent on Chalmers enodels 36 and | Long $\frac{2}{3}$ AC Titan Plug <br> This type is owe of the largest sellers, as it is regular equipment on Buick, Chalmers motel 32, Chevrolet, Enger twelve eylimler amb Olds. <br> AC Titan spark Plugs. 2 inch lons. retall price. earh . .............. $\$ 1,01$ Lots of 12. eachl, D.P. $\$ 1,22$ Lots of Sol. each, D,P. 1.11 Lots of 100, vach, D.P. 1.00 | Long Body $\frac{7}{6}$ AC Titan Plug <br> Made especially for motors on which a longer body plug is required in order to be accessible. For Chand. ler, Simplex and Wbite 1916. <br> AC Titan Spark Plugs. lopg bouly, 2 inch, retail price. each. 81.00 <br> Lots of 12 <br> Each...D. P, 81.22 <br> Lets of $\mathbf{3 0}$ <br> Each...D.P. 81.11 <br> Lots of 100 <br> Each...D.P. $\$ 1.00$ |
| :---: | :---: | :---: |
| SAE or ALAM AC Titan Plug <br> Thegular equipment on Apperson six exl. inder. Velie, Haynes. Stearus-Koight and National. <br> stamlard AC Titan spark Plugs, 2-18 thread, with small bedy (2 bex.), retail price, each \$1.00 Lats of 12 <br> Each. IV.P. $\$ 1.22$ <br> Lots of 50 <br> Each, ID,P, $\$ 1.11$ <br> Lat = of 100 <br> Each. D.F. $\$ 1.00$ | Long SAE or ALAM AC Titan Plug <br>  <br> Leng SAE or ALAM AC Titan spark Plogs, retail price, wach .......... 81.00 Tants of 12, ench. D.P. 81.22 Lats of 5if, each, D,P. 1.11 Jats of 160 . each. D.P. 1.00 | Regular $\frac{1}{2}$-inch AC Titan Plug <br> Ferommented for all cars whether old or new. on which the regular $\frac{1}{6}$ finch size is tued. Particwlarly for the following: Canlilac up to 1913, Alitclell. Overland Four 1915-1916, Oakland up to 1918. Itambler up to 1913, ftegal ann sindebaker. <br> Begular AC Titan spark <br> Plugs, 4 inch, retalt price. each ........ $\$ 1.00$ <br> Letw of 12 each, D.P. $\$ 1.22$ <br> Lets of Sin, cach, D.P. 1.11 <br> Lets of 100, vach, DPI, 1.00 |



## Long $\frac{1}{2}$-inch AC Titan Plug

For Overland und winton Cars up to 1914.
Lons AC Titan spark Plage, 3 inch, vetail price, eash

## Metric AC Titan Plug

For Pierce-Atrow 1915, Peerlegs 1915 and White 1015, aul all ears usiug metric plugs. MC Titan spark Plugs. metric, retail pries, vach

Lots of 12 Each. D.P. 8122
Lots of 50 Fach.. D, P, 81.11
Lets of 100 Kach,.D,P. $\$ 1.00$

# Ghe GIBSONCOMPANY 

## SPARK PLUGS

## AC Cico and Regular Type Two-Piece Spark Plugs



Regular ;-inch AC Cico Plag
Partienlarly recommended for Studebaker ears, and for all cars using $\ddagger$ inch standard plugs.
Regular AC Cieo spark Pless, \& inch regular.
retail price, each


## Metric Motorcycle AC Cico Plug

Wuric Motoresrle Spark Plugs for Excelsior, Emblem. Henderson. Indian, and all motoreycles asing Metric plags
AC Cice spark Plass. Metric Motorcycle.
retail price. each
80.7.3

Lots of 12 Each.. ID.P. so.s:
Lots of 50 Naeh. ID, P, 80, 78
Lots of 100 Each [ LD, D \$0,7t

Lots of in Faclo. D.P. wis
Lots of 100 Each . D.P. MO. 74


# The GIBSONGOMPANY APOLIS <br> SPARK PLUGS 

## RAJAH PLUGS

Rajah Plugs embody no freak ideas nor experiments. On account of the simplicity in construction, it is easy to repair or replace parts, and they are thoroughly mechanical in every feature. No change in construction has been made in over ten years, as none has been found necessary.

## Rajah Ford

Rajah Ford Spark Plugs, $\frac{1}{2}$ inch,
No. 2. Retail price, each..... $\$ 1.00$
Lots 1 to 11 , each. . . D.P. $\$ 1.55$
Lots 12 to 49 , each. . . D.P. 1.43
Lots 50 to 99, each. ... D.P. 1.38
Lots 100 and up, each. .D.P. 1.32

## Rajah Regular

Rajah Spark Plugs, $\frac{\downarrow}{}$ inch, $\ddagger$ inch and Metric. Retail price, each. $\$ 1.00$

Rajah Spark Plugs, $\ddagger$ inch long, for Overland or Reo. Retail price, each .81 .00

Rajah Spark Plugs, $\frac{7}{\delta}$ inch long, for Buick. Retail price, each. . $\$ 1.00$
Lots 1 to 11 , each.... D.P. $\$ 1.55$
Lots 12 to 49, each. . . D.P. 1.43
Lots 50 to 99 , each. . . D.P. 1.38
Lots 100 and up, each..D.P. 1.32

-Inch

\%-Inch

## Rajah Giant

The RAJAH Giant Spark Plug is of the same general construction as the regular Rajah Plug, but much heavier in the porcelain and metal parts. It was originally designed for racing purposes and is an ideal plug for those who desire one of this kind.

Rajah Giant Spark Plugs, $\ddagger$ inch or $\frac{\pi}{6}$ inch. Retail price, each.. $\$ 1.50$
In ordering, state size wanted.
Lots 1 to 11, each.... D.P. $\$ 1.87$
Lots 12 to 49 , each. . . D.P. 1.76
Lots 50 to 99 , each. . . D,P, 1.70
Lots 100 and up, each. . D.P. 1.65

# Ghe GIBSONCOMPANY <br> SPARK PLUGS 

## RED HEAD PLUGS

Red Head Spark Plugs are designed and constructed not as an accessory, but with a view of making them an integral part of the engine. They are manufactured in four distinct types, a variety which will enable the user to select the particular plug specified by the builder of the motor to insure its successful operation with minjmum fuel consumption.

## Red Head Regular



8-Inch Resular


3-Inch Regular


Metric Regular

Red Head Spark Plugs, Regular, $\frac{1}{\perp}$ inch, $\frac{1}{\frac{1}{2}}$ inch or Metric. Retail price, each.
$\$ 0.75$
Lots of 12 , each..D.P. $\$ 1.00$
Lots of 100 , each. .D.P. $\$ 0.94$
In ordering, state size wanted.

## Red Head Big Boy

The Red Head Big Boy is a new three-point plug designed to meet the demands of the heavy engine and will give maximum service in any engine. It will cope with modern engine conditions.
Retail price, each.
$\$ 1.00$
Lots of 12, each. .D.P. \$1.44
Lots of 100, each. . D.P. $\$ 1.39$


Biz Boy

## Red Head Priming Plug for Ford

This plug solves the problem of starting a cold engine instantly. Gasoline introduced through the cup of the Red Head Priming Plug passes down the canal drilled in the shell, flows along the porcelain and drips directly to the sparking points, where it vaporizes and is ignited. Red Head Priming Plugs can be cleaned without removal from the cylinders. Open the pet-cocks while the engine is running and the compression shoots out the carbon.
Retail price, each.
$\$ 1.25$
Lots of 12, each. . D.P. $\$ 1.66$
Priming

## RED HEAD PLUGS

Every part of the Red Head Plug is manufactured under the supervision of ignition experts and the processes of the assembly are under rigid inspection. The porcelains are made in the manufacturer's own potteries on automatic turning lathes and they are remarkable for insulating quality, mechanical strength and uniformity-the basis for our guarantee that Red Head porcelains will not crack from the heat of the motor.

Red Head Long Body


Ford and keo 3-Inch Long Body


Overland
2-Inch Extension


Buick
む-Inch Extension

In ordering, state size wanted.
Lots of 12, each..D.P. $\$ 1.00$
Lots of 100 , each.. D.P. $\$ 0.94$

## Read Head Spark Plug Display Cabinets

This Red Head Display and Stock Cabinet simplifies the sale of spark plugs.

On the display side are shown the leading models of each type, with an alphabetical index of cars and engines that shows which size plug is required. Inside of the case is a carefully selected stock of plugs, the best sellers only. No money tied up in slow-moving sizes-no sales lost-no time lost in serving your customers.

Cabinet No. 50-Contains 50 assorted plugs.

Cabinet No. 100 -Contains 100 assorted plugs.


No. 50 Cabinet

Red Head Cabinet No. 50, price, each D.P.... \$ 54.72 Red Head Cabinet No. 100, price, each D.P.... 118.06

# Ohe GIBSON COMPANY 

## SPARK PLUGS

## Herz Bougie-Mercedes-No Cleaning

Once installed, the plug need never be taken out of the motor. Forms part of the motor, same as the Piston. Not affected by oil. Abso-
 lutely Self-Cleansing. No cracking. Porcelain, it's Stone. Recommended where all others fail. A revelation in the construction of Spark Plugs.

The insulation is made of unbreakable stone, which, being pressed and baked at a temperature of over 2,000 degrees, will withstand the highest temperature without cracking.
Bougie-Mercedes Spark Plugs, $\frac{1}{2}$
inch, $\frac{\frac{z}{b}}{}$ inch or Metric. Retail
price, each..
. 81.50
In ordering state size wanted.
Lots of 12 , each. . D.P. $\$ 2.00$
Lots of 50, each. . D.P. 1.88
Lots of 100, each. D.P. 1.75

## Bougie-Mercedes Long Shank Plugs

The insulation consists of two parts, double stone. The inner member is tapered and is ground into the steel fitting without any packing whatsoever. This prevents the loosening of the insulation. The inner member gradually decreases in size, thus making the plug absolutely selfcleansing.

Every explosion makes the fit tighter and tighter. The outer member of the insulation releases the inner member of all strain and tension from the outside.
Bougie-Mercedes Long Shank Spark Plugs, $\frac{1}{2}$ inch for Ford, Maxwell or Overland, $\frac{?}{b}$ inch for Buick. Retail price, each.. $\$ 1.50$
In ordering state size wanted.
Lots of 12, each. . D.P. $\$ 2.00$
Lots of 50 , each. . D.P. 1.88
Lots of 100 , each. . D.P. 1.75


## Gibson Quality Spark Plugs

One of our popular brands. Supplied in all sizes. Designed to handle the hottest spark delivered by any magneto.
Regular type, $\frac{1}{2}$ inch or $\frac{7}{6}$ inch, each.
. 81.00
Ford type, $\frac{!}{}$ inch, each. $\$ 1.00$ Overland type, ! inch long, each

1,00
Buick type, $\frac{1}{2}$ inch, each. . 1.00
Lots of 12 , each. D.P. $\$ 0.44$
Lots of 50, each. D.P. 0.42
Lots of 100 , each. D.P. 0.40

## Soot-Proof Spark Plugs

You can not short-circuit a Soot-Proof Spark Plug. This porcelain has been subjected to the most ex-
 haustive heat tests, and while it is, of course, too much to say that it will not crack under any conditions, still it will stand more severe tests and harder use than any other insulator known, and this porcelain is used only on the Soot-Proof,

The rest of the Soot-Proof Spark Plug is constructed of materials and in a manner worthy of its splendid design and quality.
Soot-Proof Spark Plugs, $\frac{1}{2}$ inch,
$\frac{2}{3}$ inch or Metric. Retail price, each
.80 .75
In ordering state size wanted,
Lots of 12, each. . D.P. $\$ 0.66$

## Kingston Spark Plugs

The Kingston Spark Plug is a most excellent plug. They are built up of the very best grade of mica with a special fireproof cement under high pressure, then baked at a much higher temperature than they will ever be subjected to in service.
Kingston Mica Spark Plugs, $\frac{1}{4}$ inch, $\frac{7}{6}$ inch or Metric. Retail price, each.
.80 .75
In ordering state size wanted.
Lots of 12 , each. . D.P. $\$ 0.89$
Lots of 50, each. . D.P. . 88
Lots of 100 , each. D.P. .80

## Speedway Spark Plugs



Speedway Spark Plugs are designed along conservative lines, using the well-known petticoat type of
 porcelain, made from imported clay capable of taking a smooth, perfect glazing and of such quality that it will withstand wide ranges of temperature without cracking. Center electrode is exceptionally large and of one solid piece firmly fastened in core. Size and texture make them particularly adaptable to magneto use.
Speedway Spark Plugs, $\frac{1}{2}$ inch or
$\frac{t}{b}$ inch. Retail price, each.... $\$ 1.00$ Speedway Spark Plugs, $\frac{1}{2}$ inch

Ford. Retail price, each...... 1.00
In ordering state size wanted.
Lots of 12 , each. .D.P. $\$ 0.55$
Lots of 50, each. D.P. 0.50
Lots of 100, each. D.P. 0.44

#  <br> SPARK PLUGS 



## Bethlehem Five Point Spark Plugs

Special Alloy, forged by the famous Bethlehem Steel Company, is used in the shell and electrodes of Bethlehem Plugs. No heat generated in any motor car breaks the Bethlehem porcelain.
Regular Type Bethlehem Spark Plugs, it inch, $\frac{\pi}{6}$ inch or Metric. Retail price, each $\$ 1.25$
Lots of 12, each. . D.P. $\$ 1.32$
Lots of 50 , each..D.P. 1.22
Lots of 100 , each..D.P. 1.16

## Bethlehem Ford Type

Bethlehem Five Point Spark Plugs shoot the spark as near the center of the sphere of combustion as possible, down into the cylinder, not up in the plug chamber.

Type A Bethlehem Ford Special Spark Plugs, $\frac{1}{2}$ inch. Retail price, each

Lots of 12, each. .D.P. $\$ 1.32$
Lots of 50, each. . D.P. 1.22
Lots of 100 , each. . D.P. 1.16


## Bethlehem Overland Type

The Bethlehem Five Point Spark Plugs have been proven. They are a success. The multiple sparking point idea is correct.
Type C Bethlehem Spark Plugs, $\frac{1}{2}$ inch long, for Overland, Winton and Reo. Retail price, each.....\$1.25
Lots of 12, each..D.P. $\$ 1.32$
Lots of 50 , each.. D.P. 1.22
Lots of 100 , each.. D.P. 1.16

## Bethlehem Buick Type

Bethlehem Plugs are guaranteed for the life of the car if the proper plug is properly placed in the proper car.
Type D Bethlehem Spark Plugs, $\frac{7}{6}$ inch long, for Buick. Retail price, each


Lots of 12 , each. . D.P. $\$ 1.32$
Lots of 50, each. . D.P. 1.22
Lots of 100 , each. D.P. 1.16

## Bethlehem Type "K" Spark Plugs



The Type K Bethlehem Plug is a heavy duty plug especially designed for use in high-powered motors, auto trucks, motor boats and aeroplanes. One-half inch and Z inch. This plug is considerably larger than the average sized plug, thus enabling us to use a larger porcelain and insulator than has heretofore been used in any plug. The fact that we are able to increase the size of our insulator in this way give 3 it added strength and practicallly insures the car owner against any trouble from broken insulator:
Type K Bethlehem Spark Plugs, $\frac{1}{2}$ inch and $\frac{7}{x}$ inch, retail price, each. $\$ 1.50$

Lots of 12, each.. D.P. $\$ 1.66$
Lots of 50 , each. D.P. 1.55
Lots of 100 , each. D.P. 1.44

## Bethlehem Motorcycle Plugs

Mica Motorcycle Plugs. Core made of highest grade India mica.
Bethlehem Motorcycle Mica Spark Plugs, $\frac{?}{6}$ inch or Metric. Retail price, each
Lots of 12, each. .D.P. \$1.44
Lots of 100, each. D.P. 1.27

Bethlehem Spark Plug Display Case


Na. I Ihethlelhem Spark Ilaz Dinplas Case, sentains Si Assorted wizes and typex of Hethlehem I'ugs and six extra Percelains.
D. P. 864.25

No. \& Betblehem spark I'lup Display Case, ventains 86
Asonrted wizen and tspes of Bethlelem Plugs...D.F. \$45.27
 for rase,


## Mosler Vesuvius Plug

Stone (Vitite) insulator; continuous knife edge electrode gives a ribbon of flame which explodes all the gas and develops all the power of motor. Guaranteed to outlast the motor.

Mosler Vesuvius Plugs, $\frac{1}{2}$ inch, $\frac{7}{5}$ inch or metric, in round metal box, each $\qquad$
Per dozen.. D.P. $\$ 14.65$

## Vesuvius Overland Type

Special gasket construction insures absolutely gas-tight joints. The electrodes are anchored at both ends and cannot get out of adjustment. Guaranteed to outlast the motor.

Vesuvius Overland Type Plugs, $\frac{1}{2}$ inch long, in round metal box,
each . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.00$
Per Dozen. .D.P. $\$ 14.65$

## Vesuvius Buick Type

Should also be used for Winton 1915 and 1916 Chevrolet. Quality makes it "The Indestructible Plug." Guaranteed to outlast the motor.
Vesuvius Buick Type Plugs, $\frac{1}{6}$ inch
long, in round metal box, each. . $\$ 1.00$ Per Dozen.. D.P. $\$ 14.65$


## Mosler Superior Plug <br> The Ford Special and Other Sizes

Designed to meet specifications of the Ford motor. Stone Insulator (Vitite) outlasts any ordinary porcelain. Side electrode shaped to allow oil to drop off and not form at firing point.

Mosler Superior Plugs, $\frac{1}{2}$ inch, $\frac{\pi}{6}$ inch
and metric, each.
$\$ 0.75$
Per Dozen. . D.P. $\$ 8.00$
Mosler Superior Plugs, $\frac{1}{2}$ inch long,
$\frac{3}{8}$ inch long, each.
.75
Per Dozen. .D.P. $\$ 9.32$

## Mosler Spit-Fire Plug

Platinum Point Red Tag. The ends of the base being protected, makes "Spitfire" stand soot, oil and water. All platinum point plugs are boxed with "Red Tag" guarantee. Made to fit any engine.
Mosler Spitfire Platinum Point Plugs, $\frac{1}{2}$ inch standard, long and extra long, $\frac{7}{6}$ inch standard, long and extra long and metric, each. $\$ 1.25$ Per Dozen. . D.P. $\$ 23.98$


Mosler Display Cabinet


Mosler Display Cabinet contains fiftyfour plugs as follows: Twenty Vesuvius, twen ty -f our Superior Ford Special, four Buick Special, four Mica, two Spitfire and six center cores; weighs forty pounds complete with especially built shipping case, Also contains display cards, felt counter mat and full assortment of literature.

Each, D. P. $\$ 56.44$
The above price covers the contents only, no charge being made for the cabinet.

## The GIBSONOMPANY INPOLIS

SPARK PLUG PARTS

## Rajah Porcelains



Rajah Porcelains for Regular Plugs, Retail price, each
.$\$ 0.50$
In dozen lots, each. D.P. $\$ 0.78$
Rajah Porcelains for Ford Plugs. Retail price, each . 50 In dozen lots, each. . D.P. $\$ 0.78$

## Rajah Giant Porcelains

Rajah Porcelains for Giant Plugs. Retail price, each
$\$ 0.60$
In dozen lots, each. .D.P. $\$ 0.88$.

## Bethlehem Porcelains



Bethlehem Porcelain Cores, standard type, each............. 50.40 Each. D.P. 80.66

Bethlehem Porcelain Cores, Type K, each ............... . 50 Each. .D.P. $\$ 0.88$

## Champion Porcelains



Porcelaing for Champion Regular Plags, retail price, each 40 In dozen lots, each., D.P. \$0.66
Porcelains for Champion Long Plugs, retall price, each.. . 40 In dozen lots, each..D.P. 80.66


Porcelains for Champion X Plags, retail price, each...... .as In dozen lots, each.. D.P. $\$ 0.55$
Porcelains for Champion Priming Plugs, retail price, each , 50 In dozen lots, each,.D.P. $\$ 0.73$


Champlon Heavy Stone Porcelains, ench
. 50
In dozen lots, each.. D.P. $\$ 0.73$
Lower Gaskets for Champion Porcelains, retail price, each . 03 In dozen lots. .D.P. $\$ 0.40$.
Upper Copper Washers for Champion Porcelains, retail price, each
.03
In dozen lots.. D.P. $\$ 0.40$.
Asbestos Gaskets for upper portions Champion Porcelains, price, each .............
In dozen lots. D.P $\$ 0.40$.
" AC " Porcelains

${ }^{-} \mathbf{A C}{ }^{\prime}$ " Porcelain-for all " $\mathbf{A C} \mathbf{C}^{\prime}$ Plags made up to 1919, retail price, each .......................................................... se. 35 In tozen lots, each. D.P. \$0.50.

"AC" 1 Porcelain-Standard Porcelain for 1913 plugs (order by number), retail price, each ................................ In dozen lots, each. . D.P. \$0.55.

"AC" 2 Porcelain-for Special Ford, long $\frac{1}{2}$-inch priming
plug (order by number), retail price, each.............. In dozen lots, each.. D.P. $\$ 0.55$.

## Red Head Porcelains



Porcelains for Red Head, Regular. Each $\qquad$
Porcelains for Red Head, Long Body. Each...... . 45
In dozen lots, each.. D.P. $\$ 0.71$
Porcelains for Red Head, Big Boy. Each......... . . 65
In dozen lots, each. . D.P. $\$ 0.98$
Porcelains for Red Head, Combination. Each.... . 95
In dozen lots, each. D.P. $\$ 1.30$
Porcelains for Red Head, Priming. Each...... . . 55
In dozen lots, each. . D.P. $\$ 0.75$
Soot-Proof Porcelains
Porcelains for Soot-Proof Plugs. Retail price, each. $\$ 0.40$
In dozen lots, each. . D.P. $\$ 0.44$
Speedway Porcelains
Porcelains for Speedway Plugs. Retail price, each. $\$ 0.30$
In dozen lots, each. . D.P. $\$ 0.33$

# The GIBSON COMPANY 

PORCELAINS, SPARK PLUG WRENCHES AND BRUSHES

Porcelains



Solar Stone Cores, each........................... . 80.35
In dozen lots, each.. D.P. 80.44


Superior Center Cores, each.
.80 .30
In dozen lots, each.. D.P. $\$ 0.44$


Vesuvius Center Cores, each.
80.40

In dozen lots, each. . D.P. $\$ 0.55$


Spit-Fire Center Cores, with platinum points, each. $\$ 0.75$ In dozen lots, each. D.P. $\$ 1.11$


[^3] 3


No. 1 Spark Plug Wrench $\frac{\pi}{6}$ Hex closed end, $\frac{3}{4}$ Hex open end, japanned, each.
. $\$ 0.20$ In dozen lots, each. . D.P. $\$ 0.20$
No. 2 Spark Plug Wrench $\frac{f}{\mid}$ Hex closed end, ? Hex open end, nickeled, each.
In dozen lots, each. .D.P. $\$ 0.33$


No, 4 Two In One Spark Plug Wrench $\frac{7}{6}$ and 1 inch, nickeled, each
30.50

No. 5 Two In One Spark Plug Wrench, $\frac{2}{6}$ and 1! inch, nickeled, each .50
In dozen lots, each. . D.P. $\$ 0.55$


Champion Priming Plug Wrench, complete wrench for all sizes and styles of spark plugs. Retail price, each.
In dozen lots, each.. D.P. $\$ 0.55$


No. 3 Buckeye Combination Spark Plug Wrench and tire tool. One end made to fit a standard $\frac{1}{2}$-inch plug ( $\bar{A}$ inch across the hex), and this same end "stepped" so as to take care of the odd size plugs which measure $15 / 16$ inch across the hex. The other end made to fit a standard A. L. A. M. plug with large shoulder, and measuring 13 inch across the hex.
Retail price, each.
50.50

In dozen lots, each., D.P. $\$ 0.66$

## Spark Plug Brush



A very handy article to clean your spark plugs with. Has strong wire for grease and dirt, bristle hair for finer parts and two tempered thin flat steels with which to reach inaccessible parts.
Retail price, each.
80.25

In dozen lots, each. . D.P. $\$ 0.27$

# Ghe GIBSONCOMPANY㝘APOLIS 

TERMINALS

Becco Terminal Assortment


Beceo Terminals save their most in mate enalx selder and trouble. The most sulcable terminal ob the warket and the most practical for dealers or garagenen's use.

## THE BOX CONTAINS

25 Spring Clip Terminals
25 Post Terminals
25 Slot Terminals
25 Eyelet Terminals
95 Primary Terminals
96 Fibres for 9 MM Cable
ใ5 Fibres for 7 씨 Cable.
25 Brass Ferrules for 9 MM Cable.
25 Brass Ferrules for 731 Cable.
Price 15 e each- $83 ; 3$ Price loce each- $3 ; 1$ Price 10e each- 2.511 Price toe eadl- 2 .ab Priee be each- 1.25

Entire coatents $\$ 13$ 7.3

## Becco Terminals



Treceo Terminals, Stot Type. each ....)..... 80.10 Per dozen........ $\$ 1.11$
Fer box of 50..D.P. 3.06


Type With Puats
Becen Terminals, Post
Type, each
Per dozen. D.P. $\$ 1.44$ Per box of 50..D.P. 5.10


Beceo Terminals, Esplet Type, each
80.10 Per dozen....... D.1, \$1.i1 Per box of 50.. ID.1' $\$$ th:

sprons Clip Tspe
Becreo Terminals, Spring Clip Type, each........ $\$ 0.15$ Per dozen......11.1. \$1.is Per hox of $50 .$. D. $1^{*}$. 5.30

## Directions for Use of Becco Terminals

The cut below sbows the bollow screw terminal after it lax been screwed finto the cable, with the rubber insination cut open to see just how the wire strands enter the bule in the screw to make electrical contact, If you doubt this try it your self by screwing the terminal into a short plece of calife nal cut the insulation of the cable open to expose the rexult. The screw terminals are for usp on Secondary Migh Tension cahlew only.


To fasten the serew terminals, lake the cable enal to one band and the termital in the other, molsten the sarew and press the point of the screw into the end of the cable so that the wires will enter the bole of the terminal; then screw the terminal up to the sloulder by pressing and turning the same is you to when you force a mood screw

If brass ferrules or fibre sleeses are usal. the ferrules or fibres are first placed on the cable and the screw terminal is threaded fato the cable through the bole in the ferrule or fibre.

Clip Terminals


Chip Terminal, insitle diumeter 1 go for single braided and 5. M. M. Primary Itubber Cable Per tozen............... so, 60

Clip Terminal. inside diameter 235 for double braided Primary Cable Per dozen
fie)
Clip Termibal, inside diameter 310 for wrapped Magbeto and double braided Magneto Cable, Per dozen........ A
Clip Terminal, inside dianeter as for Secondary and :
M.M. Rubber Cable. Per Alexen .............................. .

Clip Terminal, inside diameter too for metiom Secondary Hraided Cable. Per dozen
.00
Clip Terminal, inside diameter 475 for kecondary Braided


All sizes, per doxi-n . IIP. sodis
I'er 100 . . . . . . . . . . . . . D.I'. 82.77

## E. G. Terminal Assortment

The box contains every type of terminal and battery connector that is in de-mand-each style is in a separate compartment - on the inside cover of the box there are illustrations that show how and where the terminals are used, and templates to guide you in quickly fitting any size of cable.


## Terminal Assortment "A"

consists of 25 Eye Terminals, 125 ( 6 sizes) Clip Terminals, 12 ( 3 sizes) Fibre Clip Terminals, 12 ( 3 sizes) Fibre Magneto Terminals, 6 Combiration Plug Terminals, 50 plain and 50 Holdfast Battery Connectors.
Total price
$\$ 8.60$
Per Box. .D.P. $\$ 12.73$

## Terminal Assortment "B"

consists of half of the quantities of Terminals and Batlery Connectors furnished in Assortment "A," excepting Fibre Clip and Fibre Magneto Terminals- 8 of each (2 sizes) included.
Total price . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 84.45
Per Box. . D.P. $\$ 6.60$

## BATTERY CONNECTORS AND TERMINALS



Standard Battery Connectors, with corrugated tips. Have sufficient spring to lock thumb nut, insuring perPer dozen. . . . . . . . . $\$ 0.30$ fect contact.
Per dozen.. D.P. $\$ 0.33$
Per 100
.............. $\$ 1.50$
Per 100., D.P. $\$ 2.00$


## Perfection Connectors

Perfection Spring Battery Connector is a distinct improvement over other Spring Connectors and can be used with or without nut.

Per dozen. . . . . . . . . $\$ 0.70$ Per dozen..D.P. $\$ 0.77$
Per 100 . . . . . . . . . . . $\$ 5.00$
Per $100 \ldots$ D.P. $\$ 5.00$

## Bull Dog Connectors



No. 1026-Bull Dog Battery Connector
Per dozen . . . . . . . . . $\$ 1.00$ Per 100 . . . . . . . . . . . . $\$ 7.50$
Per dozen..D.P. $\$ 0.78$ Per 100...D.P. $\$ 7.22$

## Copper Terminals



No. 1 Copper Terminals for small size Primary Cable ( $5 / 32$ to $3 / 16$ ).

No. 2 Copper Terminals for most of the Primary Cable (3/16 to $\frac{1}{4}$ ).
Per dozen
.......... $\$ 0.25$
Per dozen
D. P

P".... \$0.35 Par 100...D.P. $\$ 0.55$

Per 100...D.P. $\$ 1.10$


No. 3 Copper Terminals for average size Secondary Cable ( $5 / 16$ to 8).
No. 4 Copper Terminals for large Secondary Cable (7/16 to $\frac{1}{2}$ ) Per dezen........... $\$ 0.40$ Per dozen............. $\$ 0.50$ Per $100 \ldots$ D.P. $\$ 1.55$ Per $100 \ldots$ D.P. $\$ 1.76$

## Handy Box

An assortment of 100 Battery connections, 100 each of Nos. 2 and 3, and 50 each of Nos. 1 and 4 Copper Terminals, put up 'in a substantial wooden box. This assortment contains about the average quantities of the various sizes. Very handy in every garage.


No. 9 Handy Box, each.
$\$ 4.00$
Per box..D.P. $\$ 6.22$
Assortment "Rajah" Terminals


This box contains 118 Rajah Terminals- 98 Clip and 20 Primary-in the styles and sizes mostly used. The assortment is particularly valuable for garages, dealers and repair shops.
Per Box
. . $\$ 10.00$
Per box. .D.P. $\$ 12.20$

## Rajah Regular Clip Terminals



These are furnished with collar nut, which fits any spark plug.
No. 4. Clip Termi-
nals, complete,
each . . . . . . ....... $\$ 0.10$
Per dozen..D.P. $\$ 1.33$


Rajah Stud Terminal makes Champion Terminals fit Rajah Plugs, without alteration.
Each


Per dozen.. D.P. $\$ 1.33$

# The GIBSONCOMPANY䓞POLIS 

## AUTOMOBILE FUSES

We list below Union Automobile Fuses both Glass and Fibre Tube, used in connection with the electric lighting system on both Gasoline and Electric cars. Types 1A, 2A, 3A and 4A can be used for any voltage up to 50 Volts. Types 5 A and 6 A can be furnished as high as 250 Volts.


## SOLAR DRY, BATTERIES

## A Superior Grade of Dry Cell Manufactured Especially for Ignition and Open Circuit Work.

The "SOLAR" Dry Battery is equal to the best on the market and superior to the majority.

Oansmaic is manufactured in the best organized Dry Cell Plant in the world. Each Cell is individually constructed. It is made from the highest grade Zinc, Carbon and Chemicals obtainable. Each Cell is subjected to the most severe tests possible. It is allowed to age the proper length of time, and when offered the consumer, is uniform in strength, life and appearance.
Every Solar Battery is guaranteed, covering long life, high amperage and quick recuperation. We will gladly replace any not meeting our claims in this respect.

The selection of a satisfactory Dry Cell presented a big problem to us until we found the Solar. We have tested and sold all the standard makes


ONE of the most troublesome commodities carried by the dealer is the Dry Battery. The "SOLAR" will eliminate these worries. He can offer them to his trade with the knowledge that each and every one is uniform and is the highest grade manufactured.

The "SOLAR" Battery sells itself, it is neat in appearance, clean cut and attractive. Each Cell is inspected for defects and when packed are as near perfect as human ingenuity and high class machinery can make them.
We have a SPECLAL BONUS CON. TRACT to offer the wide-awake dealer. You should investigate this today. The "SOLAR" Cell is a business producer and a profit-maker.

THE SOLAR BATTERY CARRIES A TRIPLE GUARANTEE IT IS POSITIVELY THE BEST THE MARKET AFFORDS


## "SOLAR" DRY BATTERIES ROUND CARTONS

0HIS Battery is the type most used. It is particularly adapted for ignition work, hand lanterns and telephone service.

The "SOLAR" Battery is designed for heavy duty service. It will give a constant, steady flow of current at high amperage for a long period of time. It recuperates very quickly, and as they are uniform in material and construction, they give excellent results when arranged in groups (series).

## "SOLAR" DRY BATTERIES SQUARE CARTONS

gOME of our customers prefer the square carton, and for that trade we are prepared to furnish the "SOLAR" in square cartons.

The Cell is exactly the same as that contained in the round carton, possesses the same excellent features and is offered at exactly the same price as the round type.


ON account of the very uncertain condition of the raw materials market occasioned by the European war, it is impossible to quote a price on these Batteries, as the price is fluctuating from day to day. However, you are perfectly safe in sending us your orders for "SOLAR" Dry Batteries, in the assurance that you will receive the very lowest price current at that time. "SOLAR" Batteries are lower in price than other brands of the same quality. your hands. It is one of the most attractive propositions we have ever offered. SEND FOR IT TODAY!


## Columbia Regular

The Columbia Regular Battery will stand hard and heavy service. When properly packed it is not injured by transportation.

Columbia Regular Dry Cell, each
.$\$ 0.40$
Small quantities,
each..D.P, $\$ 0.65$
Half-barrel lots (62), each. .D.P. $\$ 0.63$
Barrel lots (125), each. .D.P. $\$ 0.54 \frac{1}{2}$

## Columbia Ignitors

Columbia Ignitors, made especially for heavy ignition work. Ignitors are supplied by us from a stock which is always fresh.
Columbia Ignitor Dry Cell, each
80.40

Small quantities,
each. . D.P. $\$ 0.68$
Half-barrel lots (62), each. .D.P. $\$ 0.65$
Barrel lots, each. .D.P. $\$ 0.561$

Columbia Hot Shot Battery



Columbia Hot Shot is a unit battery in an attractive red, moisture-proof case. Soldered copper strips connect the individually tested cells, which are entirely

## Columbia Multiple Battery



A unit battery for every type of ignition and heavy service. Convenient-not necessary to wedge cells in place. Only two connections to be made. All connections are soldered. Waterproof-a hermetically sealed can makes the battery impervious to the action of water.

No. 356. Columbia Multiple Battery, each...... $\$ 7.00$ Dimensions: 184 long, 82 wide, 81 high.
Each. . D.P. $\$ 13.32$
surrounded by waterproof insulating compound. It is only necessary to connect two wires to the binding posts. The battery is then ready to operate. Hot Shot is particularly useful for ignition where the variety of sizes makes it adaptable for motors of all sorts-stationary, vehicle or motor boat. It is very satisfactory for carriage lighting outfits.

They are low in cost and save trouble, worry and loss of time in hunting for poor connections. They are highly efficient, and more economical than single sets of dry cells connected with loose wires. Below are given a few of the more common sizes. If none of these meet your requirements, let us know. There is a battery made which exactly fits your need.


| Type. | Voltage. | Length. | Width. | Height. | Weight. | Each. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{*} 1461$ | 6.0 | 105 | 29 | 74 | 9 lb . | \$2.00 |
| Each. .D.P. \$3.33 |  |  |  |  |  |  |
| 1561 | 7.5 | 8 | 48 | 74 | 11 lb . | 2.50 |
| Each. D.P. \$4.18 |  |  |  |  |  |  |
| \$1661 | 9.0 | 8 | 53 | $7{ }^{\frac{1}{4}}$ | 18 lb . | 3.00 |
| Each. . D.P. $\$ 5.00$ |  |  |  |  |  |  |
| *2462 | 6.0 | 109 | 58 | 74 | 18 lb . | 4.00 |
| Each. .D.P. \$6.66 |  |  |  |  |  |  |
| 12562 | 7.5 | 134 | 53 | 74 | 22 lb . | 5.00 |

Each. . D.P. $\$ 8.33$

[^4]
## STORAGE BATTERIES

USL Starting and Lighting Storage Batteries
The electric Storage Battery end of the Motor Car Accessory Trade is the most neglected branch of that large and profitable business. It is only recently that the tar-seeing dealer bas realized the tremenflous market for a dependable storage battery.

There are over $1.000,000$ storage batteries replaced every year. Practically every one of the $2,200,000$ automobile own. ers in this coun. try buys a storage battery once every two years or less. You can therefore estimate the profit that can be derived in your immediate district from the sale of a ligh-class depeudable battery.
Tbere are many reasons why thousands of batteries of all makes have in the past proved unsatisfac-
tory. In the first place, because a, battery is a "mysterious" thing at best. most of them can be cheated. As large distributors we have been bothered so much by the general worthlessuess of inferior batteries and the constant trouble they cause that we determined some time ago to look into the storage battery business very seriously. We looked over the entire field, inspected factories, processes, materials, laboratories, etc., etc., and after a long and painstaking search we found the battery we wanted-THE NBW TYPE USL. The USL cannot be "cbeated." because every single part is built in the USL factory and is inspected plece by piece by expert inspectors. USL batteries are not assembled batteries, they are BUILT for service and loDg life.

The chief difficulty beretofore experienced in the use of starting and lighting batteries has been the rapid deterioration of the plates, due not only to fnferior materials and faulty workmanship, but more than anything else to an out-of-date, imnerfect metbod of combining the oxide paste with the grid to form the plate. More than any other factor, this paste determines the life and service of a storage battery, for its action in connection with the acid solution Hiberates the power stored in the battery, and this power is great or little, and battery life long or short as the plate is sood or bad.

THE COXIMON METHOD OF PLATE PASTING.-Brietly and without going into any obscure details or technicalities, the common method of making battery plates (and tbis method is used by every other manufactorer but the USL) is to "band-paste" them. The workman rubs the oxide paste (which sets very quickly) into tbe grid by band on one side and then turns it over and rubs in the otber side. One side "sets" before the other can be rubbed in and the whole operation results in an imperfectly welded plate, full of flaws and weak spots, which gives off an unsatisfactory flow of current, "washes" away easily, crumbles rapidly under strain and shock, and is the cause of the short life of 90 per cent. of the batteries that prove unsatisfactory to the car owner.

THE TRIUMPH OF THE MACHINE-PASTED PLATE-A diferent method of pastivg plates has been developed by the USL engineers after many years of experimenting. It is a special process and is patented: it is used exclusively by the USL Company. It produces a plate as superior to the old type as the self-starter is superior to the starting-crank. There is no uncertainty in the production of USL plates. These plates are placed in an ingenfous machine and the paste is quickly pressed into the grid from both sides at once. It is pressed in evenly and more oxide goes into the grid than can possibly be pressed in by the old, antiquated hand method. It sets as a mass, abd the result is a solid, compact plate, uniform in density throughout, which WEARS EVENLY, GIVES OFF A CONSTANT AND STEADY FLOW OF POWER, DOES NOT WASH AWAY, DOBS NOT BREAK DOWN OR CRUMBLE FROM ROAD SHOCK OR VIBFATION, AND THEREFORE LASTS LONGER THAN ANY OTHER STARTING AND LIGHTING BATTERY PLATE EVER BUILT,

The time is not far distant when every manufacturer of storage batteries in the world will be put to the necessity of changing from the old band-pasted plate method to the more modern and efficient "machine-pasted" plate method.
$\qquad$

## STORAGE BATTERIES

## USL Starting and Lighting Storage Batteries

## RIGHTLY BUILT AND CLOSELY INSPECTED

USL Batteries possess many points of superiority, aside from the wonderful machinepasted plates. They are the most CAREFULLY BUILT and closely inspected batteries manufactured.

The boxes are sturdily constructed. The jars are made of a SUPERIOR GRADE OF RUBBER, and before installation are tested far beyond any shock or strain they will be subjected to under the most severe service. An exclusive vent and expansion chamber prevent loss of acid solution. The terminals are strong and well made, and all metal parts, even to the handles, are lead coated to prevent corrosion.


And one of the most important features of USL construction is the wonderful method of grid casting, which ABSOLUTELY PREVENTS plate buckling under any abnormal service. Sixteen years' experience in the design and manufacture of Storage Batteries guarantees the USL as being the superior in this field.

## A POSITIVE GUARANTEE

All IISL Batteries are sold under the most generons guarantee known to the battery business, Tbey are warranted for FIFTENN MONTHS, on a definitely specified dollars and cents adjustment basis, For instance, should a USL battery fail at the end of ten months the user will be given a new battery by the factory, in excbange for bis old one and ten-fifteenths of the price of the new battery. The same proportion prevails througbout the guarantee period of tifteen months.

## SELLING FEATURES OF THE USL

Every dealer offering this battery to his trade bas a fixed assurance of satisfaction. The exceptional construction features, the exclusive "macbine-pasted" plate and the wonlerful guarantee and adjustment privilege will make this battery the most popular in America. Its use will dispose of the wajority of battery worries and wilt make a satistied instead of a disgruntled eustomer. 1F YOU EXPECT TO GET THE RATTERY BUSINESS OF YOUR DISTRICT YOU SHOULD STOCK USL BATTERIKS. YOUR WORIIFS AND THE MOTORISTS TRONRLES WILL BE REDUCED TO A MINIDUM.

## OUR SERVICE STATION PROPOSITION

We have the exclusive distribution of the ESL Eatteries within a certain district, and we have a special Service station arrangement to offer those wide-awake, energetic dealers who are looking to the enlargement of thelr profits and who wish to control the battery business of their city. If ron are in position to kive serve repair batteries and have the proper charging equipment it will make you eligible. If you do not bave this equipment we can furnish it at a nominal flgure, In any event BETTER SEND US YOUR STILL BE OPEN, A SERVICE STATION CONTRACT AT ONCE, YOUR TERRITORY MAY THE USL STORAGE BATTERY IS YEARS IN ADVANCE OF ALL OTHER STORAGE BATTERIES IN DESIGN, CONSTRUCTION, SERVICE, GUARANTEE AND LONG LIFE. IT IS THE STORAGE BATTERY YOU SHOULD RECOMMEND TO YOUR TRADE-BECAUSE-IT IS THE SUPERIOR OF EVERY OTHER MANUPACTURED.
See following pages for sizes, dimensions and prices.

$\square$
STORAGE BATTERIES
USL Starting and Lighting Storage Batteries


Type A-313-A End Assembled

When ordering be sure to specify Type Number and letters preceding and following the numbers. The first letter, which in many cases is the only letter shown, refers to the general type of construction. It stands for


07 For example, Type C-607 means that Type C plates are used in that battery; also Type C jars, Type C links, etc. The last one or two numbers represent the number of plates to each cell; for instance, Type A- 817 has three cells of seventeen plates each, while type EL- 1207 has twelve cells of seven plates each. The letter (should there be one) following the numbers refers to the type of assembly, whether side or end type; for instance, Type EL-607-C is side assembled in one row, while EL-607-E is end assembled in two rows.

Don't fail to INDICATE ALL THE LETTERS AND NUMBERS WHEN ORDERING; it is our best means of identifying what you want, and there is every assurance that your order will be filled correctly.

6-Volt, Types A, C and G Batteries
TYPE A

| Volta | Ampere Hours | Side Assembled <br> Height $=87,^{*}$ Widtb $=733^{*}$ |  |  | Fnd Assombled-1 Row <br> Height $=873^{\prime \prime} \quad$ Length $=20 \frac{1}{16}{ }^{\circ}$ |  |  | Weizhts in Pounds | Prices |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Catalog <br> Numbers | Code <br> Words | Lengths Inches | Catalog <br> Numbers | Code <br> Words | Widths Inches |  |  |
| $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \end{aligned}$ | $\begin{array}{r} 35 \\ 50 \\ 60 \\ 80 \\ 100 \\ 110 \\ 120 \\ 140 \\ 160 \end{array}$ | $\begin{aligned} & A-307 \\ & A-309 \\ & A-311 \\ & A-313 \\ & A-315 \\ & A-317 \\ & A-319 \\ & A-321 \\ & A-323 \end{aligned}$ | Cbevi <br> Cbewy <br> Cbeyl <br> Chiag <br> Chiba <br> Chici <br> Chift <br> Chihu <br> Chike |  | $\begin{aligned} & A-307-A \\ & A-309-A \\ & A-311-A \\ & A-313-A \\ & A-315-A \\ & A-317-A \\ & A-319-A \\ & A-321-A \\ & A-323-A \end{aligned}$ | Chilp <br> Chinx <br> Chiok <br> Chiry <br> Cbiso <br> Chity <br> Chiub <br> Cbiyt <br> Cbobs |  | 30 36 43 49 56 62 69 75 82 | $\begin{array}{r} \$ 15.40 \\ 17.60 \\ 19.80 \\ 22.00 \\ 24.20 \\ 26.40 \\ 23.60 \\ 30.80 \\ 33.00 \end{array}$ |
| TYPE C |  |  |  |  |  |  |  |  |  |
| Volts | Ampere <br> Hours | Side Assembled <br> Height $=91 / 2^{\circ} \quad$ Width $=73 / 6^{\circ}$ |  |  | End Assembled- 1 Row <br> Height $=91 / 2^{\circ} \quad$ Length $=201^{\circ}$ |  |  | $\begin{aligned} & \text { Wejehts } \\ & \text { in } \\ & \text { Pounds } \end{aligned}$ | Prices |
|  |  | Catalog Numbers | Code Words | Lengths Inches | Catalog <br> Numbers | Code <br> Words | Widths Inches |  |  |
| $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \end{aligned}$ | $\begin{array}{r} 35 \\ 50 \\ 60 \\ 80 \\ 100 \\ 110 \\ 120 \\ 140 \\ 160 \end{array}$ | $\mathrm{C}-307$ C 300 C 311 $\mathrm{C}-313$ C 315 $\mathrm{C}-317$ $\mathrm{C}-319$ $\mathrm{C}-321$ $\mathrm{C}-323$ | Chock <br> Chodt <br> Choex <br> Choiv <br> Choja <br> Choka <br> Cbold <br> Chomp <br> Cboug |  | $\begin{aligned} & \mathrm{C}-307-A \\ & \mathrm{C}-300-A \\ & \mathrm{C} 311-A \\ & \mathrm{C}-13-A \\ & \mathrm{C}-315-A \\ & \mathrm{C}-317-A \\ & \mathrm{C}-319-A \\ & C-321-A \\ & \mathrm{C}-323-A \end{aligned}$ | Choow <br> Chopf <br> Chore <br> Chotz <br> Chovo <br> Chowe <br> Choxi <br> Choyb <br> Chozy |  | $\begin{aligned} & 31 \\ & 39 \\ & 47 \\ & 55 \\ & 63 \\ & 71 \\ & 79 \\ & 87 \\ & 95 \end{aligned}$ | $\$ 16.50$ 18.70 20.90 33.10 25.30 27.50 29.70 31.90 34.10 |
| TYPE ${ }^{\text {G }}$ |  |  |  |  |  |  |  |  |  |
| Volts | Ampere Hours | $\begin{gathered} \text { Side Assembled } \\ \text { Height }=1112^{*} \quad \text { Width }=7 \frac{2}{3} 3^{*} \end{gathered}$ |  |  | $\begin{aligned} & \text { End Assembled-1 Row } \\ & \text { Height }=111^{*} \quad \text { Length }=200^{*}{ }^{*} \end{aligned}$ |  |  | $\begin{aligned} & \text { Weights } \\ & \text { in } \\ & \text { Pounds } \end{aligned}$ | Prices |
|  |  | Catalos Numbers | Code Words | Lengths Inches | Catalog <br> Numbers | Code <br> Words | Widths Inches |  |  |
| $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \end{aligned}$ | $\begin{array}{r} 35 \\ 60 \\ 60 \\ 80 \\ 100 \end{array}$ | $\begin{aligned} & \mathrm{G}-307 \\ & \mathrm{G}-309 \\ & \mathrm{G}-311 \\ & \mathrm{G}-313 \\ & \mathrm{G}-315 \end{aligned}$ | Chuap <br> Chuco <br> Chuej <br> Chuga <br> Chuhi | $\begin{aligned} & 63 / 4 \\ & 8 \frac{1}{16} \\ & 93 \\ & 1012 \\ & 12 \end{aligned}$ | $\begin{aligned} & \mathrm{G}-307-\mathrm{A} \\ & \mathrm{G}-309 \mathrm{~A} \\ & \mathrm{G}-311-\mathrm{A} \\ & \mathrm{G}-313 \mathrm{~A} \\ & \mathrm{G}-315-\mathrm{A} \end{aligned}$ | Chuiw Chulv Chuma Chune Chuox | $\begin{aligned} & 21 \frac{1}{2} \\ & 311 \\ & 311 \\ & 411 \\ & 4 \frac{11}{16} \end{aligned}$ | $\begin{aligned} & 44 \\ & 53 \\ & 62 \\ & 71 \\ & 80 \end{aligned}$ | $\begin{array}{r} \$ 17.90 \\ 20.40 \\ 22.85 \\ 25.30 \\ 27.80 \end{array}$ |

The batteries listed in this catalog are starting batteries. They are also adaptable to lighting service. If batteries are desired for lighting service exclusively, they will be furnished at the same prices as shown for starting batteries.

Types $C$ and $G$ have similar construction but greater heights than the type "A."




## STORAGE BATTERIES

USL Starting and Lighting Storage Batteries


Type C-coīA.
End Assembled-Two Lows.

The capacity of a battery is measured in ampere hours. The volume of current flow is measured in amperes. A current of one ampere flowing for one hour is the unit by which capacity is measured and is called an ampere hour. Some manufacturers use this method to determine or indicate a particular


Type C-bra.
side Assembled-Single Row. stance, LB68, which simply means a certain form of battery of six volts, eighty amperes. For the convenience of our dealers we show both voltage and amperage for each size and type. This will prove a guide in ordering.

I2-VOLT, TYPES A. C AND G BATTERIES

| Volts | Ampere <br> Hours | Type | Side Asocmbled-1 How |  |  | End Assembled-2 Rows |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Catalogt <br> Numbers | Widths <br> Inches | $\begin{gathered} \text { Tengtbx } \\ \text { Inches } \end{gathered}$ |  |  | leogibs Inches | Widths Inches |
| $\begin{aligned} & 12 \\ & 12 \\ & 12 \\ & 12 \\ & 12 \end{aligned}$ | $\begin{array}{r} 35 \\ 50 \\ 60 \\ 00 \\ 100 \end{array}$ | $\begin{aligned} & \mathrm{A} \\ & \text { or } \\ & \mathrm{C} \\ & \text { or } \\ & \mathrm{G} \end{aligned}$ | 607 <br> 609 <br> 611 <br> 613 <br> 615 | $\begin{aligned} & 73 \\ & 7 \\ & 73 \\ & 73 \\ & 712 \\ & 712 \end{aligned}$ | $\begin{aligned} & 124 \\ & 15 \\ & 174 \\ & 2014 \\ & 23 \end{aligned}$ | $\begin{aligned} & \text { A } \\ & \text { or } \\ & \text { C } \\ & \text { of } \\ & \text { G } \end{aligned}$ | $\begin{aligned} & 607-\mathrm{A} \\ & 605 \mathrm{~A} \\ & 611-\mathrm{A} \\ & 613-\mathrm{A} \\ & 615-\mathrm{A} \end{aligned}$ | $\begin{aligned} & 20 \frac{1}{5} \\ & 20 \sqrt{1} \\ & 20 \frac{1}{2} \\ & 20 \frac{1}{2} \\ & 20 \frac{15}{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & 4 \mathrm{~T} \\ & 5 \% \\ & 6 \frac{1}{5} \\ & 7 \frac{1}{4} \\ & 8 \frac{1}{15} \\ & \hline \end{aligned}$ |


| Volts | Ampere <br> Hours | Sote Assembled |  |  | End Astembled-2 Rows |  | Weights in Pounds | Prices |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Catalog Numbers | Code Words | Heiphts Inches | Catalog Numbers | $\begin{aligned} & \text { Code } \\ & \text { Words } \end{aligned}$ |  |  |
| 12 | 35 | A-607 | Chups | 8 T | A-607-A | Chuxy | 57 | \$27.50 |
| 12 | 50 | A-fies | Charb | 87 | A-600-A | Cbuyg | 70 | 31.90 |
| 12 | 60 | A-611 | Chush | 87 | A-611-A | Chyab | 84 | 36.30 |
| 12 | 80 | A-613 | Chave | 87 | A-613-A | Chyds | 97 | 40.70 |
|  | 100 | A-615 | Chuwk |  | A-615-A | Chyen | 110 | 45.10 |
|  | 35 | C-607 | Chyfu | $91 / 2$ | C-607-A | Chyok | 63 | 29.70 |
| 12 | 50 | C-609 | Chyix | 912 | C-600-A | Chyoj | 79 | 34.10 |
| 12 | 60 | C-611 | Chyky | $91 / 2$ | C-611-A | Chyre | 95 | 38.50 |
| 12 | 80 | C-613 | Chylz | $91 / 2$ | C-613-A | Chysm | 111 | 48.90 |
| 12 | 100 | C-615 | Chymd | 953 | C-615-A | Chyth | 127 | 47.30 |
| 12 |  |  |  | $11^{1 / 2}$ |  |  |  |  |
| 12 | 50 | C-600 | Chyva | 115 | G-600)-A | Chysi | 104 | 37.95 |
| 12 | 60 | G-611 | Chywo | 1112 | G-611-入 | Cinam | 122 | 42.90 |

18-VOLT, TYPES A AND C BATTERIES

| Volts | Ampere Hours | Type | Side Assembled |  |  | End Assembled-3 Rows |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Catalog Numbers | Widths Incbec | Lengths Inches |  |  | Leneths Incbes | Widths Inches |
| $\begin{aligned} & 18 \\ & 18 \\ & 18 \\ & \hline \end{aligned}$ | $\begin{aligned} & 35 \\ & 10 \\ & 60 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { A } \\ & \text { or } \\ & \text { C } \\ & \hline \end{aligned}$ | $\begin{aligned} & 9017 \\ & 909 \\ & 911 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 1814 \\ & 221 \\ & 201 \\ & 20 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \text { or } \\ & \mathrm{C} \end{aligned}$ | $\begin{aligned} & 907-A \\ & 900-A \\ & 911-A \end{aligned}$ | $\begin{aligned} & 20 \text { 变 } \\ & 20 \text { 1 } \\ & 20 \frac{1}{16} \\ & \hline \end{aligned}$ | $\begin{aligned} & 6{ }^{9} \\ & 8 \\ & 8 \frac{1}{6} \\ & 9 \end{aligned}$ |


| Vodts | Ampere Hours | Type | Side Asoembled |  |  | End Assemb.-3 Rows |  | Weichts in Pounds | Prices |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Catalog <br> Numbers | Code Words | Heights Inches | Catalog Numbers | Code <br> Words |  |  |
| 15 | 35 | A | A-907 | Ciabt |  | A-907-A | Ciaev | 8. | \$42.90 |
| 18 | 80 |  | A-919 | Ciach | 9 | A-900-A | Cings | 103 | 48.40 |
| 15 | 60 |  | A-911 | Ciady | 9 | A-911-A | Ciahn | 122 |  |
| 18 | 35 | C | C.907 | Ciako |  |  |  |  |  |
| 18 | 50 |  | C-309 | Cialf | 955 | C-908-A | Ciase | 114 | 49.50 |
| 18 | 60 |  | C-411 | Ciami | 35. | C-911-A | Ciard | 137 | \$5.00 |

We carry repair parts and equipment for all makes of storage batteries.
Send for complete catalog of parts and USL Batterics.
YOU SHOULD HAVE A USL SERVICE STATION. SEND FOR OUR PROPOSITION.



## STORAGE BATTERIES



Type F－313， Side Assembled．

## USL Starting and Lighting Storage Batteries

Our list of TSL Batterles will show a style and type of battery used on every car，Iby referring to the dimensions in the vurions tables and the roltage and am－ berage，it is an easy matier to stetermine the type of battery yon will reqaire for each particnlar casp．
TYPES＂F＂AND＂FL＂，SHOWN IEE－ LOW，are of a lews expensive type than those on the preceding pages，Their in－ ternal constraction is birst class．but they to not lave the donble cover of hard rub－ do not lane the dowlote cover of hira torbe sealibe compound obtainable．


Type G．315．
Side Assembled，
G－VOLT，TYPE F BATTERIES

| Volts | Ampere Hours | Side Assembled$\text { Height }-103 ; \quad \text { Width }=57 / \mathrm{s}^{*}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Catalog Numbera | Code Words | Lenpthe Inches | $\stackrel{C}{\mathrm{~N}}$ |
| 6 | 35 | F－307 | Ciase |  |  |
| 6 | 50 | P－309 | Ciatl | 816 |  |
| 6 | 60 | F－311 | Cisup | 93 \％ |  |
| 6 | 80 | P－313 | Ciavu | 10118 |  |
| 6 | 100 | F－315 | Ciaxa | 12 |  |
| 6 | 110 | F－317 | Ciayk | 13 है |  |
| 6 | 120 | P－319 | Clazm | 145 |  |
| 6 | 140 | F－321 | Cibao | 1512 |  |
| 6 | 160 | F－323 | Cibia | 174 |  |


| End Asembled－1 Row <br> Height $=10^{2} 8^{\circ}$ Length $=1516^{*}$ |  |  | Weiphts <br> in <br> Pounds | Prices |
| :---: | :---: | :---: | :---: | :---: |
| Catalor Numbers | Code <br> Words | Width－ Inches |  |  |
| F－307－A | Cibou | 218 | 30 | \＄14．30 |
| F－300－A | Cibuy | 35 | 36 | 16.50 |
| F－311－A | Cibyi | $3 \cdot 1$ | 43 | 18.70 |
| F－313－A | Ciceo | 44 | 49 | 20.90 |
| F－315－A | Cicoy | 411 | 56 | 23.10 |
| P－317－A | Cicye | 518 | 62 | 25.30 |
| F－319－A | Cidal | 5 年 | 69 | 27.50 |
| P－391－A | Cider | 6 | 75 | 29.15 |
| F－323－A | Cidfo | 6 者 | 82 | 31.35 |

19－VOLT，TYPE F BATTERIES

G－V OLT，TYPE EL BATTERIES

| Volts | Ampere Hours | Side Assembled$\text { Height }=10{ }^{2} 5^{\circ} \quad \text { Width }=5 \mathrm{~F}^{\circ}$ |  |  | End Ascumbled－1 Row <br> Height $=10$ 需 ${ }^{*}$ Leagth $-14^{3} 4^{*}$ |  |  | Weights in Pounds | Prices |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Catalog Numbers | Code Words | Lencths Incbes | Cutalog Numbers | Code Words | Widths Incbes |  |  |
| 6 | 35 | EL－307 | Ceyrf | $7^{1 / 8}$ | EL－307－A | Chacy | $3^{3} 8$ | 28 | \＄14．30 |
| 6 | 50 | EL－309 | Ceyuj | 81. | EL－300－A | Chadi | 313 | 34 | 16.25 |
| 6 | 6 | EL－311 | Canij | 10젠 | E1－311－A | Chaeb | $4 \frac{18}{15}$ | 40 | 18.15 |
| 6 | so | EL－313 | Canog | $11 \pm$ | EL－313－A | Chabe | 41. | 46 | 20.10 |
| 6 | 100 | EL－315 | Canru | 13 | EL－315－A | Chaif | 51 | 52 | 22.00 |
| 6 | 110 | EL－317 | Canuw | 143. | EL＿317－A | Chato | $5 \frac{1}{2}$ | 58 | 24.20 |
| 6 | 120 | EL－319 | Canvi | 1518 | ELA 319－A | Chalj | $6 \frac{1}{5}$ | 63 | 26.12 |
| 6 | 140 | EL－321 | Ceysu | $17 \frac{1}{16}$ | EI－321－A | Chanp | $6 \%$ | 69 | 28.05 |
| 6 | 160 | EL＿323 | Chabo | 185 ， | EL－323－A | Chaos | $71:$ | 75 | 30.00 |
| 19－VOLT，TVPE EL BATTERIES |  |  |  |  |  |  |  |  |  |
| Volts | Ampere Hours | Side Arsembled$\text { Height }=100_{16}{ }^{\circ} \quad \text { Width }=5126^{\circ}$ |  |  | End Assembled－2 Rows <br> Height $=10 \frac{1}{15}{ }^{*}$ Length $=143^{\prime \prime}$ |  |  | Weights in Pounds | Prices |
|  |  |  |  |  |  |  |  |  |  |
|  |  | Catalog Numbers | Code <br> Words | Lengths Inches | Catalog Numbers | Code Words | Widths Inches |  |  |
| 12 | 35 | EL－607－C | Chapa | 133 s | EL－b07－E | Cheax | 53 ； | 54 | \＄25．30 |
| 12 | 50 | EL－609－C | Chars | 1616 | EL－609－E | Chebs | $6 \%$ | $6{ }^{6} 6$ | 28.60 |
| 12 | 60 | RL－611－C | Chasu | 19 | EL－611－E | Chees | 75 | 77 | 33.00 |
| 12 | 80 | EL－613－C | Chauv | $\frac{21}{}{ }^{12}$ | EL－613－E | Cheda | $8 \frac{18}{15}$ | 89 | 37.40 |
| 12 | 100 | EL－615－C | Chayn | $24 \%$ | EL－615－E | Cheern | 913 | 101 | 41.80 |

24－VOLT，TYPE EL BATTERIES

| Volts | Ampere Hours | End Assembled－3 Rows$\text { Height }=10 \frac{1}{15} * \text { Length }=1944^{*}$ |  |  | Weighta in Pounds | Prices |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cstalog <br> Numbers | Code | Widths Inches |  |  |
| 24 | 35 | EL－1207 | Casur | $7^{3} 5$ | 105 | \＄42．90 |
| 24 | 50 | EL－1209 | Caowl | 835 | 127 | ${ }^{50,60}$ |
| 24 | 60 | EL－1211 | Caoyz | $10 \frac{5}{5}$ | 149 | 58.30 |
| 24 | 80 | EL－1213 | Capai | $11 \frac{5}{16}$ | 171 | 66.00 |
| 24 | 100 | EL－1215 | Capey | 13 | 193 | 73.70 |




## STORAGE BATTERIES

## Repair Parts, Tools, Supplies and Equipment

We carry a complete line of parts for USL and all other standard makes of batteries. Our stock also includes all of the necessary equipment for the installation and conduct of a servicestation, whether
of the largest or smallest type. We can furnish anything in shop equipment for the largest city or the smallest hamlet. It is impossible for us to list all the parts carried. If in need of material of this nature send for complete catalog of parts.

Positive Plate Dark Brown


| $\frac{2}{2} \frac{\pi}{2}$ | ${ }^{*}$ Type A. Positive Goups |  | *Type C. Pesitive Grouss |  |
| :---: | :---: | :---: | :---: | :---: |
| $z$ | Car. Nos | Prices | Cat Nos- | Prices |
| 7 | 76.765 | \$1.00 | 76,775 | \$1.10 |
| 1 | 76,766 | 1.30 | 76,776 | 1.45 |
| 11 | 76,763 | 1.55 | 76,773 | 1.75 |
| 13 | 76.768 | 1.85 | 76, 778 | 2.10 |
| 15 | 76,769 | 2.15 | 76,739 | 2.45 |
| 17 | 76,7,0 | 2.45 | 76,780 | 2.75 |
| 19 | 76,771 | 2.85 | 76,781 | 3.15 |
| 21 | 76,772 | 3,10 | 76,782 | 3.50 |
| 23 | 76,733 | 3.16 | 76,783 | 3.85 |

$-\frac{\frac{2}{2}}{2}$

| $\frac{\frac{\pi}{6}}{\frac{6}{2}}=$ | *Tyef F. Positive Groups |  | *Type G Positive Groups |  | *Type EL Positive Groegs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Cet Nos. | Prices | Cav. Nos. | Prices | Cat Nos | Prices |
| 7 | 76,805 | \$1.00 | 76.815 | \$1.20 | 76,210 | \$0.95 |
| 9 | 76,806 | 1.30 | 76,816 | 1.57 | 76,211 | 1.25 |
| 11 | 76,807 | 1.55 | 76,817 | 1.90 | 76,825 | 1. 30 |
| 13 | 76,808 | 1.85 | 76,818 | 2.25 | 7b, 826 | 1.80 |
| 15 | 76,809 | 2.15 | 76,819 | 2.55 | 76, 827 | $\frac{2.10}{2}$ |
| 17 | 76,810 | 2.45 |  |  | 76.823 | 2.35 |
| 19 | 76,811 | 2.80 |  |  | 76.829 | 2.70 |
| 21 | 76,812 | 3.10 |  |  | 76, 810 | 3.60 |
| 23 | 76,815 | 3.40 |  |  | 76.831 | 3.30 |



| $\frac{y}{2} \frac{3}{4}$ | *Type A. Nepative Grauss |  | ${ }^{*}$ Type C. Nezatire Groips |  |
| :---: | :---: | :---: | :---: | :---: |
| 2 | Cat. Nox | Prices | Cat. Noon | Prices |
| 9 | 76.785 | 81.30 | 76.795 | 81.45 |
| 9 | 76,786 | 1.60 | 76,796 | 1.89 |
| 11 | 76,787 | 1.90 | 76, 797 | 2.15 |
| 13 | 76,788 | 220 | 76,798 | 2.50 |
| 15 | 76.789 | 2.50 | 76.799 | 2.80 |
| 17 | 76.790 | 2.80 | 76,800 | 3.15 |
| 19 | 76,791 | 3.10 | 76,801 | 3.50 |
| 21 | 76.792 | 3.40 | 76,802 | 3.85 |
| 23 | 76.793 | 3.70 | 76.803 | 4.20 |


| $\begin{aligned} & \frac{2}{3}= \\ & \frac{3}{2} 8 \\ & \frac{1}{5}= \\ & \frac{2}{2} \end{aligned}$ |
| :---: |
| 7 |
| 11 |
| 13 |
| 15 |
| 17 |
| 19 |
| 21 |
| 23 |




Battery Jars
Separator

| ${ }^{\text {cme }}$ | pemmemotram |
| :---: | :---: |
| 000 |  |
| 009 | - End A.mbly Neural |
| -103 | - Edatamy |
| (0) | Stiont Foitive Temi <br>  |
| $0$ |  |


$-|$| Cas. Nox | Prices |
| :---: | :---: |
| 76,932 | 80.25 |
| 76,933 | .25 |
| 76,225 | .20 |
|  |  |
| 76,93 | .15 |
| 76,935 | .15 |


| Description of Paris |
| :--- |
| Terminal Bolt for Positive |
| and Negative Cable Plug- |
| Type C-thr-E. |
| Terminal Bolt for Neutral |
| Terminal. Types A, C, F, |
| G\& EL. |
| Square Joint Neuiral Ter- |
| minal for Batteries. Type |
| EL. |
| Terminal Bolt for Positive |
| and Negative Cable Plug- |
| Types A, C, F, G \& EL. |
| End Assembly Link |
| for Batteries. Types A, C. |
| \& G. |


| Cat. Nos. | Prices | Cuts |
| :---: | :---: | :---: |
| 76,943 | 90.10 |  |
| 76,201 | . 10 |  |
| 76.941 | . 35 |  |
| 76,942 | . 10 |  |
| 76,930 | . 20 |  |



## Motor-Generator <br> Sets

For Battery Charging No marage or battery service station is complete without one of these very efficient sets. We carrs them in 175, 250, 375, 500 and 750 watt sizes for chargine batteries in groups of from 1 to 12 at a time.

We have sold about 2000 of these units and they give perfect satisfaction. They are moncy makers
See electrical section for full details, prices, etc.


* Type A Compound is applied with a brush and forms a base for the finishing Com pound, Type C. Type B Compound, surrounding the jars and extending to top of pousd only, is used for sealing iars inside case.
Don't fail to get our service station proposition. Remember the storage battery business is here to stay. The first to establish in your city with a high class battery will command the better trade. Do you want it? If so-a USL station means the best to be had.


# The GIBSONCOMPANY六APOLIS 

## Storage Battery Hydrometer

A Battery Hydrometer is a gauge for determining the state of the charge in a storage battery. By its use the exact strength of batteries is known and the inconvenience by exhausted batteries is overcome.

STRENGTH AND INDICATIONS
If battery fully charged reads 1250 on hydrometer, then the various readings would indicate battery strength of the percentage shown below:

1250 indicates. . . . . . . . . . . . . . . . . 100 per cent.
1225 indicates. . . . . . . . . . . . . . . . . 80 per cent.
1200 indicates..................... 60 per cent.
1175 indicates. . . . . . . . . . . . . . . . . 40 per cent.
1150 indicates.................... 20 per cent.
1125 exhausted. . ................. 00 per cent.
See that Hydrometer floats freely in solution before taking reading. This is important.


No. 1023 Battery Hydrometer. Beaume and specific gravity scale 1100 to 1300 Specific Gravity one degree graduation. Length about $4 \frac{1}{2}$ inches over all, shot weighted. In flannel bag with test jar packed in wood box, each.
$\$ 0.50$
Each.. D.P. $\$ 0.44$ Dozen.. D.P. $\$ 4.44$

## Hydrometer Syringes



No. 4 Battery Testometer is an instrument for determining the cbarge in a storage battery. It consists of a high grade acid bydrometer fitted in a suitable glass cylinder with nozzle and rubber bulb, by which electrolyte can be drawn from the baitery to float the bydrometer. The glass cylinder is so shaped that the bydrometer flont cannot adbere to the sides no matter how careless the user is while taking the
reading. The hydrometer will always float when brought in a vertical position.
Each
80.75

Each..D.P. $\$ 1.11$


No. 10 "Break-Not" Hydrometer Syringe. This instrument is the very latest, improved type of Battery Syringe Hydrometer for use in testing storage batteries.

The advantages of this instrument and improvements over of her styles will be readily apparent by referring to the illustration.

In this Syringe Hydrometer the glass is eliminated to a considerable extent, the lower part of the jar being made of a special acid-proof composition rubber

The instrument is guaranteed accurate, the scale is very clear and plainly marked.

The outflt is put up in a blue mailing tube wbich is very strong and an ideal package.
Each
$\$ 1.00$
Eact. .D.P. 81.32


No, 20 Battery Testometer is the highest class outit made for testing storage batteries. Furnished with extra large size bulb of bigh grade red rubber. The glass tube is so designed that the bydrometer may be taken out to prevent breaking. Each instrument packed in nicely finished wooden box with full instructions for using.
Each
$\$ 2.00$ Each. D.P. $\$ 3.82$

Gasoline Hydrometer



No. 2064 Gasoline Hydrometer. Printed Scales, Beaume 60 to 80,1 degree graduation, length about 5 inches over all, shot weighted. In flannel bag with test jar in wood box, each
. $\$ 0.50$
Each.. D.P. $\$ 0.44$ Dozen.. D.P. $\$ 4.44$

## Alcohol Freez-Meter



No, 2 Freez-Meter. An instrument which shows the exact temperature at which denatured alcohol and water will freeze, each.
Each.. D.P. $\$ 0.88$ Dozen. .D.P. $\$ 9.44$


Universal Test Clips are time savers for charging automobile storage batteries; lead plated for protection against acid fumes; may be used over and over againwill carry 20 amperes without heating-the jaws have a wide spread-the spring is strong.

To charge batteries in series, provide a number of pieces of lamp cord 15 to 20 inches long and equip with clips on each end. Connect the battery by snapping the clips over the lugs.

When used with the Willard or other batteries having large terminals, remove the taper plug and apply the clip by inserting one jaw in the hole, letting the other jaw rest on the outside of the lug.

On batteries with large hexagon nuts on the terminals, unscrew the nut and apply the clip to the stud.
No. 13-A Test Clips, each
. $\$ 0.20$
Dozen. .D.P. $\$ 3.32$


No. 14-A Test Clips, same as No. 13-A but with rubber insulators which serve not only to protect the user from shock, but also prevent the clips from shortcircuiting on each other when applied to terminals which are close together
Each
.$\$ 0.25$
Dozen. . D.P. $\$ 4.00$

# Ohe GIBSON GOMPANY $\overline{\text { INPOLIS }}$ 

## CABLES

Packard Ignition Cables

## 

Packard Combination Low Tension Cable: standard for all kinds of low tension service. Color, brown. Diameter, $3 / 16$ in. Per foot
Less than 100 ft . Per foot..D.P. \$ . 11
Per 100 ft . ........................ D.P. 10.55


Packard Combination High Tension Magneto Cable; designed especially for magnetos equipped with small terminals. Diameter. $5 / 16 \mathrm{in}$.; but the quality is unexcelled. Color, brown. Per foot.
Less than 100 ft . Per foot..D.P. \$ . 22
Per 100 ft . ....................... D.P. 21.10


Packard Combination High Tension Cable; suitable for all forms of high tension service. This is easily the most popular size. Color, brown. Diameter, $\frac{1}{2}$ in. Per foot
Less than 100 ft . Per foot..D.P. \$ 22
Per 100 ft . . . . . . . . . . . . . . . . D. P. 21.10


Packard Combination Lew Tension Cable, 2 strand. Par: ticularly adapted to single and two-cylinder engines. Replaces two single cables. Diameter, $7 / 16 \mathrm{in}$. Per foot
Less than 100 ft . Per foot. D, P, $\$ .24$
Per 100 ft. . . . . . . . . . . . . . . . . . D.P. P. 23.22


Packard Combination Lew Tension Cable, 3 strand. An excellent eable for two-cylinder engines; also for wir-
ing a double set of batteries. Diameter, 1 in. Per
foot
Less than 100 ft . Per foot. D. P. \& . 38
Per 100 ft. ...................... D.P. 38.93


Tachard Combination Low Tension Cable, 4 strand. Ad-
mirably adspted to wiring 4-cylinder engines from
coll to timer. Diameter, if Fer foot engines from Less thus 100 ft . Per foot.. D.P. $\$, 48$
Per 100 ft . . ................... D.P. 46.4

## Packard Electric Lighting Cables

## 

No. 14. One-strand Packard Combination Electric Lighting Cable. Kecommended for wiring tail and side Iamps. Color, brown. Diameter, $3 / 16 \mathrm{in}$, Per foot... $\$ .10$ Less than 100 ft . $\mathrm{Pe}:$ foot.. D.P. $\$ .11$
Per 100 ft .
D.P. 10.55


No. 14. Two-strand Packard Combination Electric Lighting Cable. Kecommended for wiring tail and side
lamps. Diameter, $7 / 16$ in. Very popalar. Color, brown. Per foot
Less than 100 ft . Per foot., D.P. \$ . 24
Per 100 ft . . . . . . . . . . . . . . . . D.P. 28.22

## 

No. 12. One-strand Packard Combination Electric Light-
ing Cable. Recemmended for wiring small head
lamps. Color, brown. Diameter, $7 / 32 \mathrm{in}$. Per foot., . 11 Less than 100 ft . Per foot..D.P. \$ . 12
Per 100 ft . . . . . . . . . . . . . . . D.P. 11.66


No. 12. Two-strand Packard Combination Electrie Lighting Cable. Recommended for wiring head lamps where a two-conductor cable is desired. Color, brown. Diameter, 1 -inch. Per foot
Less than 100 ft . Per foot..D.P. 8.27
Per 100 ft ......................D.P. 25.33


No. 10. One-strand Packard Combination Electric Lighting Cable. Recommended for wiring from generator to battery and battery to switehes. Also for wiring large head lamps. Color, brown. Diameter, 1 in, Per foot


No. 10. Two-strand Packard Combination Electrie Lighting Cable, Recommended for wiring from generator to battery and from battery to controlling switches. Alse used to wire head lamps which are of large size. Color, brewn. Diameter, it in. Per foot..... Less than 100 ft . Per foot..D.P. \$ 29 Per 100 ft .

# The GIBSONGOMPANY 

## Solar Cable

Solar Cable is used by the foremost car manufacturers in America, Garage and repair men have found it the best obtainable for lighting and ignition purposes; it is also ideal for electric startiog and lighting systems.

This cable is manufactured in the largest plant in America devoted exclusively to the production of wire and wire prod ucts. None but the highest grade materials is used in its constructlon. The insulating materials are selected for their resistance to weather, moisture and chafing. The wires are of the very best electrolytic copper and bave great carrying capacity with minimum resistance.

Every dealer should carry a stock of this cable; the demand is constant, and wben overbauling cars or equipping them electrically this Solar Cable will be found the best obtainable for the purpose.

## Fachavisctis :

Solar Low Tension Braided Cover Cable, 3/16 Diameter, per foot
Less than 100 ft ., per ft. D. P . F . 052
Per 100 ft .................... P. 4.44
Solar Magneto Braided Cover Cable, $5 / 16$ Diameter, per ft. . 15 Less than 100 ft ., per ft ..D. P. \$ $15 \frac{1}{2}$

Solar High Tension Braided Cover Cable, 7/16 Dinmeter, per foot
Less than $100 \mathrm{ft} .$, Der $\mathrm{ft}, \mathrm{D} . \mathrm{P}$. o $17 \frac{1}{2}$
Per 100 ft ..................... D. P, 14.44


Solar Low Tension Braided Cover Cable, two-strand, 7/16 Diameter, per foot
Less than 100 ft ., per $\mathrm{ft}, \mathrm{D}, \mathrm{P} . \$ 15 \frac{1}{\mathrm{p}}$
Per 100 ft . . . . . . . . . . . . . . . D. P. 14.00
Solar Low Tension Braided Cover Cable, three-strand, 7/16 Diameter, per foot
Less than 100 ft ., per ft..D.P. $\$ .20$
Per $100 \mathrm{ft} . . . \mathrm{C} . . . . . . .$. D. P. 18.00
Per 100 ft Pension Braided Cover Cable, four-strand, $\frac{1}{2}$ Diameter. per foot
Less than 100 ft ., Der ft ..D.P. $\$, 22$
Per 100 ft ..................... D.P. 20.00


Solar Rubber Covered Low Tension Cable, 3/16 Diameter, per foot
Less than 100 fL , Der ft ..D.P. $\$ .051$
Per 100 ft .......................P. 5.00
Solar Rubber Covered Magneto Cable, 1 Diameter, per foot . 15 Less than 100 ft ., per ft..D.P. $\$ .11$

Solar Rubber Covered Magneto Cable, 9/39 Diameter, Der foot
.18
Less than 100 ft ., per ft.D.P. $\$ .15$;
Per 100 ft . . . . . . . . . . ..... D.P. 14.00
Solar Rubber Covered High Tension Cable, : Diameter, per foot
Less than 100 ft ., per ft...D.P. 80
Per 100 ft . ....................D.P. 18.00


Solar Lighting Braided Cover Cable, one-strand, $3 / 16$ Disameter, No. 14. per foot.
Less than 100 ft ., per ft..D.P. $\$ .06 \frac{1}{2}$
 ameter. No. 14, per foot
Less than 100 ft ., Der ft..D.P. $\$ .13$
Per $100 \mathrm{ft} . . . . . . . . . . .$. D.P. 11.00
Solar Lighting Braided Cover Cable, one-strand, 1 Diameter. No. 12, per foot.
Less than 100 ft ., per ft ...D.P. $\mathrm{P}, \mathrm{F}_{\mathrm{G}} .061$
Per 100 Lighting Braided Cover Cable, two-strand, $\frac{1}{4}$ Diameter, No. 12, per foot.
Less than 100 ft ., per ft...D.P. $\$ .16 \frac{1}{2}$
Per $100 \mathrm{ft} . . . . . . . . . . . .$. . . . . . . 15.00


## Solar Lamp Cords

No. 18. Old Code Flexible Lamp Cord, per foot.................... 8 Less than 100 ft .. per ft. . D. P. $\$ .041$ Per 100 ft . ................. D P 4.00 No. 18. New Code Flexible Lamp Cord, per foot ............ Less than 100 ft ., per ft. D. D. \$. ond Per 100 ft ................. D. P. 5.55
No. 16. New Code Flexible Lamp Cord, per foot........... . . 05 Less than 100 ft ., per ft..D.P. 30.08

No. 18. New Code Flexible Lamp Cord, Braided silk Cover, per foot................ $\$ 0.10$
ens than 100 ft.. per ft. D,
Per $100 \mathrm{ft} . . . \mathrm{C} . .$.

No. 18. Brewery Cord. Each conductor is made up of a copper wire strand insulated with code thickaens rubber, covered with a cotton braid and saturated with weatherproof compound having polished flnish: two such conductors are then twisted into pairs, forming a flexible corl Per Less than 100 ft , per ft .. D.P. $\$ .06 \mathrm{f}$



No. 18. Pucking House Cord. consists of twe conductors stranded, rubber insulated, twisted together with jute filler and finisbed with two weatherproof braids. Per
 Less than 100 ft , per ft, D. $\mathrm{P}, \$ 11$



No. 18. Canvasite Cord. This consists of regular New Code twisted cotton-covered lamp cord, braided over all with one cotton braid saturated with weatherproof compound then waxed and polished. Per foot
Less than 100 ft ., per $\mathrm{ft} ., \mathrm{D}, \mathrm{P}, \$, 00$
Fer $100 \mathrm{ft} . . . \mathrm{C}, . . . . . . \mathrm{D}, \mathrm{P}$. 8.00


No. 18. Re-enforced Portable Cord consists of two-conductor new code lamp cord with seamless rubber jacket and flnished with a weatherproof glazed cotton or silk braid. Per foot.

## Brass Armored Lighting Cable

To meet the demand for a serviceable cable for lowtension automobile lighting which is moisture-proof, oilproof and suitably protected to withstand the hard usage encountered, we pncountered, we have developed an extra flexible multi-
ple conductor cable
Connection Made to Fitting and Armor in the sizes listed. The conductors are suitably insulated, twisted togetber and finished over all with a stroog braid. The cable is then compounded and finished with a balf-round brass wire armor for mechanical protection,
No. 1. Single Conductor Lighting Cable, with brasn armor, $3 / 16$ Diameter. Per foot.

# The GIBSON COMPANY <br> CABLE, CONDUIT, CLEATS, PLUGS AND CONNECTORS 

## Solar Starter Cable



No, 0 Extra Flexible Starter Cable (19x17x. 0179 tinned copper wires), 5/64 Rubber Old Code, finished with a tape and a weatherproof braid. Per foot
Diameter 11/16 inch.
Less than 100 feet, per foot. .D.P. $\$ 0.77$
Per 100 feet.. D.P. $\$ 66.66$
No. 1 Extra Flexible Starter Cable ( $7 \times 37 x .0179$ tinned copper wires), $5 / 64$ Rubber Old Code,
Tape and Braid. Per foot.
Diameter \% inch.
Less than 100 feet, per foot. .D.P. $\$ 0.58$
Per 100 feet. .D.P. $\$ 53.32$
No. 2 Extra Flexible Starter Cable ( $7 \times 30 x .0179$ tinned copper wires), $1 / 16$ Rubber Old Code,
Tape and Braid. Per foot.
Diameter $\frac{7}{2}$ inch.
Less than 100 feet, per foot. .D.P. $\$ 0.44$
Per 100 feet.. D.P. $\$ 40.00$
No. 4 Extra Flexible Starter Cable, 1/16 Rubber
Old Code, Tape and Braid. Per foot
Diameter is inch.
Less than 100 feet, per foot. . D.P. $\$ 0.31$
Per 100 feet.. D.P. $\$ 28.88$

## Flexible Metallic Conduit



This is the best wire protector especially on cars where there is much friction.
Flexible Metal Conduit, 5/16 I. D. Per foot....... $\$ 0.12$
Per foot.. D.P. $\$ 0.09$
Flexible Metal Conduit, $\frac{1}{8}$ I. D. Per foot......... . . 15
Per foot. .D.P. $\$ 0.10$
Flexible Metal Conduit, 7/16 I. D. Per foot...... . . 18
Per foot..D.P, $\$ 0.13$
Flexible Metal Conduit, $i$ I. D Per foot.

Per foot. .D.P. \$0.15

## Blake Fibre Insulated Staples



3-inch $\quad 2$-inch E-inch
Insulated Staples

No. 1 Blake Staples, per $100 \ldots \ldots \ldots . . \$ 0.45$ Per 100..D.P. $\$ 0.44$ No. 3 Blake Staples, per 100 . $\qquad$ .45 Per 100..D.P. $\$ 0.44$ No. 6 Blake Staples, per $100 \ldots \ldots$..... Per 100 . D.P. $\$ 0.55$

## Cleats



Tubing and Wire Cleats, all sizes, per dozen...... \$0.10 Per 100.. D.P. $\$ 1.32$

## Plugs and Angle Connection


G. 117


G 118

No. G-117 Single Contact Angle Plugs as used on
Tail Lights 1915 Overland, each. Each. .D.P. $\$ 0.40$ Per Dozen. . D.P. $\$ 4.44$
No. G-118 Double Contact Angle Plugs as used on
Head Lights 1915 Overland, each.
Each. .D.P. $\$ 0.40$ Per Dozen. .D.P. $\$ 4.44$


No. 48
No. A-8 Angle Plug and Cap as used on Ford, each. $\$ 0.45$ Each. .D.P. $\$ 0.55$ Per Dozen. .D.P. $\$ 6.10$


No. 2910
No. 221-C Plug and Cap Double Contact, each.... $\$ 0.25$ Each. .D.P. $\$ 0.33$ Per Dozen. . D.P. $\$ 3.54$
No. $221 \frac{1}{2}$-C Plug and Cap Single Contact, each.... . 25 Each. .D.P. $\$ 0.33$ Per Dozen. .D.P. $\$ 3.54$
No. 321-C Plug has two terminals to take the extension cord, one terminal being grounded to the metal sleeve of the Plug and the other terminal directly connected with the center contact pin. The construction of these Plugs is mechanically perfect, and they will be found very satisfactory where one wishes to use a trouble lamp on a car that is equipped with a single wire system. Each.
Each. .D.P. $\$ 0.44$ Per Dozen. . D.P. $\$ 4.76$


No. 9
No. 9 Oil Lamp Adapter with Socket and Cap, each $\$ 0.80$ Each. . D.P. $\$ 1.10$ Per Dozen. . D.P. $\$ 12.22$

## The GIBSONGOMPANY

## SOCKETS AND CONNECTORS



No. 107 Plain Socket, nickeled, twin wire, each. $\$ 0.30$ Each. . D.P. \$0.40 Per dozen. .D.P. \$4.44
No. 121 Plain Socket, nickeled, single wire, each.. . 30 Each. .D.P. \$0.40 Per dozen. . D.P. \$4.44


No. 101-P Plain Socket, nickeled, twin wire, each. . 45 Each. .D.P. \$0.62 Per Dozen..D.P. $\$ 6.66$
No. 115-P Plain Socket, nickeled, single wire, each . 45 Each. . D.P. $\$ 0.62$ Per Dozen. . D.P. $\$ 6.66$


No. 108-C Plain Socket, nickeled, twin wire, each . 40 Each. .D.P. $\$ 0.55$ Per dozen. . D.P. $\$ 5.88$

No. 122-C Plain Socket, nickeled, single wire, each Each..D.P. $\$ 0.55$ Per dozen. . D.P. $\$ 5.88$


No 104-C Plain Socket, nickeled, twin wire, each. Each..D.P. $\$ 0.84$ Per dozen. .D.P. $\$ 9.33$


No. 5 Double End Socket, each.
Each. .D.P. $\$ 0.33$ Per dozen. .D.P. $\$ 3.55$


No. 6 Double End Socket, Switch Type, each....
Each. .D.P. $\$ 0.38$ Per dozen. . D.P. $\$ 4.00$

No. 208-C Metal Dash Connector with cap, nick-

> eled, twin wire, each.

Each. D.P. $\$ 1.00$ Per dozen. .D.P. $\$ 11.10$
No. 216-C Metal Dash Connector with cap, nickeled, single wire, each
Each..D.P. $\$ 1.00$ Per dozen. .D.P. $\$ 11.10$


No. 205-C Wood Dash Connector with cap, nickeled, twin wire, each..........................

No. 213-C Wood Dash Connector with cap, nickeled, single wire, each
Each..D.P. $\$ 0.88$ Per dozen. .D.P. $\$ 9.66$
No. 207-P Metal Dash Connector, nickeled, twin wire, each
Each. D.P. $\$ 0.88$ Per dozen. D.P. $\$ 9.66$
No. 215-P Metal Dash Connector, nickeled, single wire, each
Each. .D.P. $\$ 0.88$ Per dozen. D.P. $\$ 9.66$


No. 202-C Plain Connector with cap, nickeled, twin wire, each
Each. .D.P. $\$ 0.77$ Per dozen.. D.P. $\$ 8.00$
No. 210-C Plain Connector with cap, nickeled, single wire, each.
Each..D.P. $\$ 0.77$ Per dozen.,D.P. $\$ 8.00$


# Ohe GIBSON GMPANY 

## TUBE EXTENSIONS, SOCKETS AND ADAPTERS

## Anchor Edi-Swan Plug Extensions



No. 51
This cut shows the flexible brass tube extension used in connection with all standard Edi-Swan and Anchor types of connectors. They are made in three standard sizes. Furnished in brass, white nickel or black nickel. Prices
No. 51-10 inches over all, with $\delta$ inch plugs. . . . . $\$ 0.75$ Each. . D.P. $\$ 1.10$ Dozen. . D.P. $\$ 12.22$
No. 51-13 inches over all, with $\frac{\delta}{\delta}$ inch plugs...... . 80
Each. .D.P. $\$ 1.22$ Dozen. .D.P. $\$ 18.32$
No. 51-16 inches over all, with $\frac{5}{6}$ inch plugs...... . 85
Each.. D.P. $\$ 1.82$ Dozen. .D.P. $\$ 14.66$


No. 52
This cut shows the duplex flexible cable with Anchor Edi-Swan type Plugs on each end, for extensions with all standard Edi-Swan type Connectors. They are made in three standard sizes. Furnished in white nickel, black nickel or brass.

> Prices
> Lint Each

No. 52-10 inches over all, with $\frac{5}{8}$ inch plugs. ..... .80.66
Each. . D.P. $\$ 0.78$ Dozen. . D.P. $\$ 8.88$
No. 52-13 inches over all, with 5 inch plugs...... . . 65 Each. .D.P. $\$ 0.84$ Dozen. . D.P. $\$ 9.10$

No. 52-16 inches over all, with $\frac{5}{6}$ inch plugs. . . . . . 70 Each. .D.P. $\$ 0.88$ Dozen. . D.P. $\$ 9.77$

## Sockets



No. 20. Anchor Edi-Swan Lamp Socket, Nickel Plated Tube with 10 -inch wires, each. .$\$ 0.25$
Each. . D.P. $\$ 0.26$ Dozen. . D.P. $\$ 2.88$


No. 82. Anchor Edi-Swan Lamp Socket with Nickel
Plated Metal Cap and 10 inch wires, each. . . . $\$ \mathbf{\$ 0 . 4 0}$ Each..D.P. $\$ 0.55$ Dozen.. D.P. $\$ 6.10$

For Gas or Oil Burners



No. 302. Ntyle A for Oil Burner
No, 301 Style "A" Gil-Bo Adapter for Oil Burner with Fiber Candelabra Socket and ten inches weatherproof cord, each
. $\$ 0.30$
Each. .D.P. $\$ 0.35$ Dozen. . D.P. $\$ 3.88$
No. 302 Style "A" Gil-Bo Adapter for Oil Burner with Edi-Swan Lamp Socket and ten inches weatherproof cord, each ........................ . . .45
Each. .D.P. $\$ 0.55$ Dozen. . D.P. $\$ 6.10$


No. 303 Style "B" Gil-Bo Adapter for Gas Burner with Fiber Candelabra Socket and ten inches weatherproof cord, each
80.30

Each.. D.P. $\$ .35$ Dozen. .D.P. $\$ 3.88$
No. 304 Style "B" Gil-Bo Adapter for Gas Burner with Edi-Swan Socket and ten inches weatherproof cord, each.
Each. . D.P. $\$ 0.55$ Dozen. .D.P. $\$ 6.10$

## Electric Adapters



No. 310 Candelabra to Edi-Swan Adapter. . . . . $\$ 0.15$ Each. . D.P. $\$ 0.22$ Dozen. . D.P. $\$ 2.22$
No. 312 Miniature to Candelabra Adapter...... . 06 Each. .D.P. $\$ 0.07$ Dozen. . D.P. $\$ 0.66$

# The GIBSONGOMPANY 

switches

## Connecticut Lighting Switches

Primarily for lighting as


Three Gang Type "N" Lighting switeb pulling out the button closes an individual circuit and pushing it in opens the circuit. Multiple gang switches have a common bus bar for the battery wires.

This is a neat, simple and easily installed switch. All that is necessary is to bore a circular hole, or in case of a multiple gang switch, holes with $\frac{7}{8}$-inch centers.

The body of each unit is made of a material that will resist most intense heat, and also may be subjected to rough usage.
Type N Single Gang Lighting Switch. Size $1 \frac{1}{2}$ high by 1 inch wide, each....... $\$ 0.50$
Each. .D.P. $\$ 0.56$
Type $N$ Two Gang Lighting Switch. Size $1 \frac{4}{4}$ high by $1 \frac{1}{6}$ inches wide, each..... $\$ 1.00$
Each. . D.P. \$1.11
Type N Three Gang Lighting Switch. Size $1 \frac{1}{2}$ high by $2 \frac{1}{4}$ inches wide, each.


Single Gang Type "N" switeh.

Each. .D.P. $\$ 1.66$
Type N Four Gang Lighting Switch. Size $1 \frac{1}{2}$ high by $3 \frac{5}{5}$ inches wide, each. $\qquad$ .82 .00
Each. . D.P. $\$ 2.22$


Front View of Type " g " Switch

## Type " S "

A two gang switch where one button controls head and tail with one movement and another button controls side and tail.
Type " S " Lighting Switch, each $\qquad$
Each. .D.P. $\$ 1.66$


## Type ND Lighting Switch

The Universal Switch-as the same switch without any change can be used for series dimming, or to control head and side lights, or large and small bulbs in headlights. In both cases one button puts "on" or "off" the lights of the car, including the tail light.

In series dimming the other button throws the lights from multiple to series wiring, thereby dimming. When wired to select between two sets of lamps, the position of the second button will determine whether the head lamps or side lamps are lighted; or with two bulb headlights, whether the large or small bulbs are lighted. Wiring diagram for either form of wiring packed with each switch.
Type ND Lighting Switch, each $\$ 1.25$
Each. . D.P. $\$ 1.66$

Connecticut Dimming Switches



Type "4" Dimming switch other switches so that they may be mounted side by side.
This switch has no "Off" position, but must be used in conjunction with another switch controlling the circuit. When the button is in, the lights are in multiple and bright, while when the button is out, they are in series and dim.

Type D Dimming Switch, each.
$\$ 0.75$
Each. . D.P. $\$ 1.32$

## Connecticut Switches

## Type "L"

This is a lock type switch with removable lever. Lever made of spring bronze, insuring positive contact. Back edge protected with soft rubber gasket to prevent rype "L" Lever Switeb penetration of water.

Type L Connecticut Lever Switch, each
. 80.75
Each. . D.P. $\$ 1.82$


Type "P" Plug Switch

## Type "P"

Absolutely waterproof. Protected by soft rubber gasket fitted to the back of switch. Center plug used for holder of plug when switch is not in use.

Type P Connecticut Plug Switch, each.......... $\$ 0.75$ Each., D.P. 81.32

## MB Kick Switch

Type MB Connecticut Flush Dash Kick Switch is a four-position switch arranged for controlling two sets of ignition where a battery is used as one system and closed circuit magneto as the other. First position is off, second position throws the battery into circuit, third position throws the battery and magneto in together and the fourth position throws the magneto into circuit only.


MB Kick Switch

Type MB Connecticut Kick Switch, each........... $\$ 1.50$
Each. .D.P. $\$ 2.48$

## Cutler-Hammer Push and Pull Switch

The Push and Pull Switch, while designed primarily for automobile service, may be used on low voltages wherever a small, compact switch is desired. In spite of its small size it has a larger current-carrying capacity than any other switch of its class, being rated at $10 \mathrm{am}-$ peres at 80 volts. It operates with an absolutely quick "make and break."
No. 7160 Single Switch, com-
plete with plate, each...... $\$ 0.68$
Each.. D.P. $\$ 0.75$


No. 7172 Gang of 2 switches, complete with plate, each
Each., D.P. $\$ 1.50$
No. 7173 Gang of 3 switches, complete with plate, each
Each.. D.P. $\$ 2.26$
No. 7174 Gang of 4 switches, complete with plate, each
2.72

Each..D.P. $\$ 3.02$

## Flush Push Button Switch

Handsomely finished. An ornament to any car. Finished in nickel with black and white buttons.
No. 31. 1 Series Flush Push But-
ton Switch, each. $\$ 0.75$ Each. D.P. $\$ 0.88$
No. 32, 2 Series Flush Push Button Switch, each 1.50

Showing No. 32-2 Series

Each. . D.P. $\$ 1.76$

No. 33. 3 Series Flush Push Button Switch, each. 2.25 Each. .D.P. $\$ 2.64$
No. 34. 4 Series Flush Push Button Switch, each. 3.00 Each. D.P. $\$ 3.52$

## Acme Switch

This is a high grade, rubber lase Switcb, for any purpose where a switch is to he used for controlling electric circuits such as for automobile, motor boat, stationary engine, electrlc lighting and for innumerable other purposes. It bas a strong lase. phosphor bronze lever; heavy contacts and rubber button. $A$ classy article. Nickel-plated.
No. 1. Acme Switch, each.
 Each..D.P. $\$ 0.33$ Dozen. D, P, $\$ 3,33$ Levers for Acme Switehes, each.. . 15 Ench. D.P. $\$ 0.15$ Dozen.. D. IP. $\$ 1.44$.

## Kingston 1916 Switch

The Kiogston 1916 Switch is made of rubber comprosition, of foodly proportion. It will withstand the severe servies of a kick slath
switch if se 80 desired. The contacts swith of the knife kind-the most
are of are of the knife kind-the most
positive known to the electric trate positive known to the electric trath
today. It is constructed for lant tery und eltber bigh or low tension marneto service: in fact, may be used by any two-current sources desireal. The key is of the lock type, and notbing except the key can be used to operate it.
1916 Kinguton Switels, each.... $\$ 1.25$ Ench.. D. P. $\$ 2.00$

Splitdorf Switch
The Splitdorf is a wellknown reliable switch. By pulling the plug out when leaving the machine you stop all chances of having the current turned on and probably your car stolen.

Can be used with two sets of batteries or one set and dynamo.


No, 905 Splitdorf Switch, each. . . . . . . . . . . . . . $\$ 1.00$ Each. .D.P. $\$ 1.66$

## Enclosed Type of Splitdorf Switch



This new model Splitdorf Switch is constructed on the principle of the standard model, except all working parts are enclosed, making the switch absolutely waterproof. It can not short-circuit.
No 598. Splitdorf
Switch, each.......... $\$ 1.50$
Each. .D.P. $\$ 2.48$

## Splitdorf Kick-Off Switch

This Switch is of the double pole cut-out type and has the advantage of having all the metal parts enclosed, so that there is no possibility of a short circuit from the outside. Can be used with two sets of batteries or one set of batteries and magneto. It is fitted with a long lever which can be operated by the foot. It also includes push button feature, which enables the operator of the car to start
 his motor without cranking, providing of course the motor is properly balanced and holds compression.
No. 1928 Splitdorf Kick-Off Switch, each......... $\$ 4.00$ Each. . D.P. \$6.66


Heinze Kick-Off Switch
Price, each . . . . . . . . . $\$ 2.00$
Each. . D.P. $\$ 3.38$

# The GIBSONOMMPANY INPOLIS 

SWITCHES


Three outstanding features characterize the Benjamin Tip-Top Button: (1) Instead of having a small door bell push button which is always hard to locate, its top has a diameter of $1 \frac{1}{4}$ inches; (2) this top as a whole is the moving element, so designed that a touch on any portion causes the circuit to be closed; (3) it is practically self-cleaning, and cannot get out of order.

Tip-Top Push Button, Fore-Door type, each
$\$ 0.60$
Each. .D.P. $\$ 0.88$ Dozen. .D.P. $\$ 9.60$
Tip-Top Push Button, Flush type, each
.60
Each. . D.P. $\$ 0.88$ Dozen. . D.P. $\$ 9.60$

## Steering Wheel Type



Used on the steering wheel, the Tip-Top Button should be placed with its edge about $\frac{1}{4}$ of an inch from the rim on the right hand side, so that its top is within easy reach of the thumb. When the edge of the button is touched, its top tips downward, the contact is closed Mounting within the case, and the circuit completed to the horn. As is often necessary, e. g., in turning corners, the button must be operated when the wheel is not in a straight-ahead position. In this case all the operator has to do is to drop either hand on the button.
Tip-Top Push Button, Steering Wheel type, each... $\$ 0.60$ Each. .D.P. $\$ 0.88$ Dozen. .D.P. $\$ 9.60$

## Benjamin Presto Button



The Presto is similar in appearance to the Tip-Top Button, but is the single contact point construction. Reliable, waterproof and instantly responsive.

No. 8189-F Presto Buttons with fore door mount-
ing, each
.80 .25
Each. .D.P. $\$ 0.42$ Per dozen. .D.P. $\$ 4.44$
No. 8189-J Presto Buttons with steering spoke mounting, each.
.$\$ 0.35$
Each. .D.P. $\$ 0.60$ Per dozen. .D.P. $\$ 6.66$


No. 1179. Steering Spider Push Button, with shallow bracket for use on steering wheel spider, price, each
. 80.40
Each. .D.P. \$.0.44 Dozen. .D.P. \$5.00
No. 1178. Steering Post Push Button, with range from $1 \frac{1}{4}$ to 2 inches clasping diameter; diameter of face $2 \frac{1}{4}$ inches; height over all $2 \frac{1}{8}$ inches, price, each
Each.. D.P. $\$ 0.44$ Dozen. .D.P. $\$ 5.00$


## Oblong Push Button

No. 973. Oblong Push
Button Switch, each $\$ 0.50$
Each. . D.P. $\$ 0.77$

## Floor Switches

No. 400. Floor Horn Push
Switch, each................ $\$ 0.50$
Each. . D.P. $\$ 0.66$

No. 400

## Dash Plug Switch

No. 417. Dash Plug Switch, each . ..................... . . $\$ 0.40$
Each. .D.P. $\$ 0.44$


No. 7 Samson Horn Cable Protector


Consisting of 36 -inch Flexible Brass Tubing, 2 Spring Tension Holders, 1 Floor Bushing; neat and simple.

To install, wrap cable around spoke of wheel twice-fish through flexible tube-attach one holder at top and other near bottom around post and tube. Drill an inch hole in floor for bushing. If post is small take up some of spring in holders and cut off.

Price, outfit
Each. . D.P. $\$ 1.88$

# The GIBSON GOMPANY <br> <br> METERS, AMMETERS AND COMPRESSOMETERS 

 <br> <br> METERS, AMMETERS AND COMPRESSOMETERS}

"Eveready" Meters



No. 1003. "Eveready" Volt Ammeter for reading current in both volts and amperes; registers 0 to 35 amperes; 0 to 14 volts, each $\qquad$ D.P. $\$ 1.7$

Each...D.P. $\$ 1.76$
Dozen. .D.P. 20.00


No. 1005. "Eveready" Volt Meters for reading current in volts; registers 0 to 10 volts, each
D.P. 81.55

Each...D.P. 81.55
Dozen. .D.P. 17.32

## Connecticut Meters

Supplied to register voltage and amperage, or combination of both. Very thorough workmanship and accurate. Made on the Dead Beat Principle with jeweled bearing, fitted with etched silver dial with scale in raised black. Temperature or dampness will not interfere with accuracy.

## Volt Ammeters

No. 802. $0-30$ amp. $0-8$ volts . . . . . . . . . . . . . . . . . . . $\$ 3.00$ Each. .D.P. \$5.00
No. 0802, 0.30 amp. $0-15$ volts. . . . . . . . . . . . . . . 4.00
Each. . D.P. $\$ 6.66$
Ammeters
No. 803. $0-30 \mathrm{amp}$.
Volt Meters
No. 804. 0.3 volts in $1-10 \mathrm{div}$ 2.75

No. 805. $0-8$ volts2.75

Each. D.P. \$4.60
No, $806 . \quad 0-15$ volts
Each. . D.P. $\$ 5.82$
Leather Cases, extra
Each.. D.P. \$0.84

## Monarch Indestructible Ammeter <br> for dry celle



One dead cell in a series will quickly destroy the energy of all. By using a Monarch Ammeter you can locate the "dead one", saving expense and trouble.

Any one using dry cells, whether for bells, telephones, automobiles, or any other purpose, will find this Ammeter to be a handy asset. Tests up to 30 amperes.
Price, each
$\$ 1.00$
Each. .D.P. $\$ 1.44$
Monarch Indestructible Storage Battery Tester


This Tester accurately shows whether the battery is charged, partly charged or in need of recharging.

By having one handy all the time you can find out when the charge is running low, instead of waiting until it is so low that you can not start your motor.

Made in two sizes, for 6 and 12 volt storage batteries.

Price, each
$\$ 1.50$
Each. .D.P. $\$ 2.22$

## Compressometer

This instrument is absolutely necessary in testing cylinders for leaky valves, etc. By its use one can readily determine the exact compression in pounds in each cylinder and make comparisons.

Compressometer, Nickeled-Plated, 24 inches over
all, three bushings furnished with each one,
$\frac{4}{4}$-inch, $\frac{1}{\frac{1}{3}}$ and metric, each
$\$ 4.00$
Each. .D.P. 86.66

## TKeCIBSONCOMAY

## EVEREADY AUTOMOBILE TYPE METERS

A great many automobile starting and lighting systems are not provided with instruments, and the car operator is unable to determine whether the storage battery is properly charging and discharging. EVEREADY Automobile Type Instruments are especially recommended for this service, as they are highly accurate, not affected by vibration, and are reasonable in price. Standard finish models 63, 64 and 67 -Nickel-Dead Black Enamel, Brass, Copper or Gun Metal to order, no extra charge ; Models 69 and 70 -Dead Black Enamel, Nickel, Brass, Copper or Gun Metal to order, no extra charge.


## Duplex Volt Ammeter

Size 6x7 inches, Maximum Scale Division 30
Amp. Rng. Volt Rng. Price

## Voltmeters

Diameter, 3 inches; Scale, $11 / 16$ inches; Max. Seale Div. 30

Size 4 inches, Maximum Seale Division 00


## Eveready Charging Board

Designed for charging twenty to one hundred ampere hour storage batteries from a direct current source of supply. Not suitable for alternating current. Shipped complete ready to install with following equipment:


Two binding posts at top of board for direct current service connection.
Two binding posts at bottom for storage battery connection.
Six receptacles for either 16 or 32 candle power lamps.
Two 10 -ampere fuse plugs. One 25 -ampere switch.
One Model 50 Eveready Ammeter.
One Model 51 Eveready Voltmeter.
Board is 18 inches by 12 inches wide by one inch thick; is of slate, highly polished and is well finished throughout.
No. 1024 Charging Board, complete less lamps, each
Each., D.P. $\$ 50.00$

1015 Indicating Ammeter

An indicating Ammeter is a practical necessity for determining the condition under which a storage battery is operating. It indicates whetber the battery is being charged or is discharging and the rate of current fow. The EVEREADY 1015 indicating Ammeter is especially designed for this service.

It has accurate mechanism, not affected by vibration, one piece moisture and dust-proof case, beavy beveled plate glass front, insulated sub-base. Connections are made by means of two terminal studs which also serve to hold meter in plate. standard finishes are nickel case with white metal dial and standard finishes are nickel case with white metal dial and
black lettering or black case with black metal dial and white black lettering or black case with black metal dial and white
letteribg. Weight of motor, i\} ounces; diameter, 2.5 inches; lenstb of scale, 1.2 incbes; length of terminal studs, 1.4 inches.


1015 Surface Type


1015 Flush Type

Ne, 1015 Indicator, either Surface or Flush Type (In ordering state which you want):
Ampere Range 10-0-10, each ch
.................................. . . $\$ 1.80$ Each..D.P. $\$ 2.44$
Ampere Range 15-0-15, each ..................................... . . . . 1.50 Each. D.P. $\$ 2.4$
Ampere Range, 30-0-30, each . . . . . . . . . . . . . . . . . . . . . . . . . . 1.50 Each..D.P. \$2.44

## 1017 Voltmeter

This is n companion to the 1015 Ammeter, same sige, finlshes and apmearance. Meets the demand for a low priced accurate Voltmeter for installation on automobile ligbting systems where it is desired to read both voltage and amperage. Ranges $\mathbf{1 5 - 6 - 1 5}$, list price
.82 .00
Each.. D.P. \$3,32
Fanges 20-0-30, list price ...................................... 2.00 Each..D.P. $\$ 3.32$
Ranges 30-0-30, list price . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.00 Each., D.P. 83.32

In ordering state range desired, also finish, and wbether surface or flusb type.


To meet the demand for an indicator to show whetber a storage battery is being charged or discharged, not taking Into consideration the amount of current. the Model 1020 indicator bas bevn designed. It is especially adapted for motor car work. In sbape, size and finisbes, it is like the Model 1015, but in place of a scale indicating amneres, the dial is divided Into two parts, the one baif showing discharging, and the the other, charging. It is designed with the ohject of making a full indication from 1 to 2 amperes and capable of standing a permanent overload of approximately 1000 per cent. No. 1050, list price
Fach., D.P. $\$ 2.44$
In ordering state whether bickel or black flalsh, also surface or finsh type.

## Eveready Cigar Lighters

No need to worry about "the lost match" if you have an Eveready Cigar Lighter in your pocket. The flame is produced by the sharp, corrugated surface of the little wheel rasping against a piece of that wonderful new metal-Pyrophorer. This contact throws a stream of sparks against the wick, which instantly lights and burns with a steady flame until extinguished by closing the cap. There is no need to look for a place to strike it-one hand holds and lights it. A slight movement of the thumb and you have a strong, steady flame.


The illustrations show the exact size of the articles. No. 1823 is a very flat, thin model, and slips into the vest or change pocket unobtrusively. No. 1843 is a clever adaptation of the standard military rifle cartridge. Both are beautifully finished and nickel plated.
No. 1823
$\$ 0.25$
No. 1843 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25
Each. . D.P. $\$ 0.40$

Fuse Wire


| Safe Carrying Capacity Amperes | Beat Lengths for Use and Fusing Currents for Such Lengths |  | Length <br> Per Lb. | Mila. <br> Diam. | One Package Containa | Price <br> Per Lb. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inches | Amp. | Ft. In. |  |  |  |
| Per Lb. D.P. \$2. 22 107 1 1-lb. spool $\$ 1.00$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| $12 .$. |  | 20 | 68 | 61 | 11-lb. spool | . 80 |
| Per Lb. D.P. \$1.76 |  |  |  |  |  |  |
| Per Lb. D.P. \$1, 66 . 76 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Per Lb... | $P .81$ | $66^{43}$ | 24 | 103 | 1 1-lb. spool | . 75 |

# The GIBSON COMPANY 

HOSE CLAMPS

Wire Hose Clamps



A simple and inexpensive device. Makes an absolutely tight joint and may be instantly applied. No tool required,

No, 3 Wire Hose Clamp for hose $\frac{3}{3}$ to $1 \frac{1}{g}$ outside .50 .10 Dozen. .D.P, $\$ 1.11$ 6-Dozen Lots, Doz...D.P. $\$ 1.00$ No, 4 Wire Hose Clamp for hose 1 to 12 outside. Dozen..D.P. $\$ 1.22$ 6-Dozen Lotg, Doz...D.P. $\$ 1.11$ No. 5 Wire Hose Clamp for hose $1 \frac{1}{3}$ to $\frac{2 \pi}{4}$ outside. Dozen..D.P. $\$ 1.32$ 6-Dozen Lots, Doz...D.P. $\$ 1.22$ No. 6 Wire Hose Clamp for hose 17 to $2 \pi$ outside. Dozen..D.P. $\$ 1.55$ 6-Dozen Lots, Doz...D.P. $\$ 1.44$ No. 7 Wire Hose Clamp for hose $9 \frac{2}{2}$ to $3 \frac{1}{4}$ outside Dozen..D.P. $\$ 1.76$ 6-Dozen Lots, Doz...D.P. $\$ 1.66$

## Thompson Hose Clamps




## Assorted Thompson Clamps

No. 700 Assortment consists of 100 clamps, 18 different sixes, variety sufficient to cover all needs, per box . $\$ 10.00$ Per Box..D.P. \$8.85
No. 600 Assortment, Ford sizes only, 100 in box, per box 8.00 Per Box. . D.P. $\$ 6.66$

## Sure Grip Hose Clamps



No. 4. E inside, each. $\$ 0.05$ Dozen ".D.P. $\$ 0.55$ 6-Dozen Lots.
Dozen .. D. P, , 50
No. 5. 2 inside, each.... . 05
Dozen "..D.P. $\$ 0.55$
6-Dozen Lots.
Dozen ..D.P. . 50
No. 6. $Z$ inside, ench.... . 05
Dozen ...D.P. $\$ 0.73$
B-Dozen Lots.
Dozen ..D.P. . 66
No. 7. 1 inside, ench.... .05 Dozen ' . D.P. $\$ 0.80$
6-Dozen Lots.
Dozen .D.P. . 73

No. 8. 12 inside, each $\$ 0.05$ Dozen ..D.P. 80,80 - Dozen Lots. Dozen .D.P. . 73
No. 9. 11 inside, each... . 06 Dozen '.D.P. 90.88 6-Dozen Lots.
Dozen .D.P. . 80
No. 10. $1 \frac{1}{2}$ inside, cach. . 10 Dozen ...D.P. $\$ 1.00$
6i- Dozen Lots,
Dozen
D.
No. 11. 12 inside, each.. . 10 Dozen $\quad$. D.P. $\$ 1.32$
5-Dozen Lots.
Dogen ., D.P. 1.20
No. 12. z inside, each... . 15 Dozen …D,P, $\$ 1.60$
G-Dozen Lots.
Dozen .D. P, 1.44
No. 13. 21 inside, each., 15
Dozen …D.P. \$1.88
6-1 mozen Lots.
Dozen .D.P. 1.66
No. 14. $2 \frac{1}{2}$ inside, each.. 15 Dozen …D.P. $\$ 2.22$ 6- Jozen Lots.

Dozen .D.P. 2.00
No. 15. 3 inside, each... , z0 Dozen . ., D.P. $\$ 2,66$
6-Dozen Lots.
Dozen .D.P. 2.44

## Falcon Radiator Hose



This line of Radiator Hose has been found to be the highest grade in material of this kind. It is tested thoroughly as to materials and workmanship. It is built with a view to meeting the demands made on tbis part of the automoblle Will stand extreme heat without deterioration, and unllise most radiator hose, will not dry out and crack.

Falcon Radiator Hose is packed for the convenience of the dealer. It comes in three (3) foot lengths, six lengths to the carton. Tbis prevents waste, and at the same time keeps the hose in a convenient form.
2-inch Radiator Hose, 3 ply, outside diameter 11/16, per

Per 10 1-inch Radiator Hose, 3 ply, ontside diameter 12, per foot . 35 Per foot.. D.P. $\$ 0.33$ 6-Plece Lots, per foot..D.P. $\$ 0.30$ 1d-inch Radiator Hose, 3 ply, outside diameter 13, per foot 38 Per foot,. D, P. $\$ 0.42$ 6-Plece Lots, Der foot.. D. P. $\$ 0.38$ 12-inch Radiator Hose, 3 ply, outside diameter 18 . per foot $\boldsymbol{A}$ Per foot..D.P. $\$ 0.44$ 6-Plece Lots, per foot..D.P. $\$ 0.40$ 12-inch Radiator Hose, 3 ply, outside dinmeter 12 . per foot .50 Per foot., D.P. $\$ 0.53$ 6-Plece Lots, per foot..D.P. $\$ 0.48$ 13-inch Radiator Hose, 3 ply, outside diameter 2a. per foot . 60 Per foot..D.P. $\$ 0.60$ 6-Piece Lots, per foot..D.P. $\$ 0.55$ 2-inch Radiator Hose, 3 ply, outside diameter $\mathbf{2} 7 / \mathbf{1 6}$, per foot
 21-inch Radiator Hose, 3 ply, outside diameter z2, per foet . 80 Per foot., D.P. $\$ 0.80$ 6-Piece Lots, Der foot...D.P. $\$ 0.72$ 21-inch Radiator Hose, 3 ply , outside diameter 2 15/16, per foet
Per foot..D.P. 90.84 6-Plece Lots, per foot............................ 90 22-inch Radiator Hose, 3 ply, outside dinmeter 3 L . per foot .95 Per foot..D.P. $\$ 0.88$ 6-Plece Lots, per foot..D. $, \mathbf{P}, \$ 0.84$ 3-inch Fadiator Hose, 3 ply, outside diameter 32, per foot. 1.00 Per foot..D.P. $\$ 0.98$ 6-Plece Lots, Der foot..D.P. $\$ 0.88$

HOSE, GASOLINE SYSTEM AND TIMERS

Stewart Vacuum Gasoline System


## WHAT IT IS. AND DOES-

It is a small tank, installed under the hood on the dash or motor, and connected to the intake manifold, carburetor and rasoline supply reservolr.

The suction of the motor through the manifold draws the gasoline from the rear reservoir to the small tank under the hood, from which the gasolite falls in a positive, even flow to carburetor.

No preliminary hand-pumping air into gasoline tank before starting car, No depenting upon a motor-driven air pump to keep op the pressure after you start.
No air-gauge to wateb: no air lines to keep tight; po air-tight conbections necessary anywhere.

Saves $10 \%$ to $15 \%$ Gasoline. No Forcing Gasoline Through the Carburetor Wastefully
In a test sanctioned by the A. A. A., a Cole car, equipped with a Stewart Vacuum Gasoline System showed lietter than 15 per cent increased mileage per gallon than when using pressure feed

Another Cole car, equipped with its original forced feed gasoline system, was sent orer a measured route and consumed 13 p pints. The car was immediately equipped with a Stewart Facuum Gasoline System and sent over the same route and consumed but 11 pints, an increased mileage per gallon of over 15 per cent.

The Oakland "a7" covered 28.7 miles on one gallon of gasoline when equipped with Stewart Vacuum Gasoline system,

In the phenomenal run of the Mitchell Rellability car which made 7,518 mbles in thirty days, the Stewart Vacuum Tauk was under the sealed bonnet and required absolutely no attention. To equip this stewart Vacuun system on a car that was to undergo the most hazardous test any automobile was ever put to, slows the faith that the Mitcbell people had in it-a faith that was justified by its wonderful performance.

The Stewart Vacuum Gasoline System eliminates every single drawback and short-coming of both the pressure and gravity metbods of supplying gasoline. Supplies gasoline to carburetor unfailibgly, under all conditions, even on the steepest grades, because of its being located so close to, and above, carburetor.

The Stewart Vacuum Gasoline System ean be installed on your present car-whetber old or new-at any Service Station, or by any garage man.
Price, each
$\$ 10.00$
Each. . D.P. $\$ 14.82$

## Milwaukee Timers



Milwankee Timers are of the self-adjustable roller type. Are made dust-proof and are all-over lathe finisbed with the greatest possible care. The success with which tbese timers have met enables the manufacturers to offer them as the best electrical Ignition for jump spark system on the market. Over 50,000 of these timers are in daily use.
milwankee Timers, single-cylinder, each,
Each., D, P. \$7,00
Milwankee Timers, 2-cylinder, each . . . . . . . . . . . . . . . . . . . . . . . . 3,80) kach.. D.1. \$ \$i.5.
Nilwankee Timers, 3-eylinder, each. ............................ . 4.00
Each., D.P. \$6.6!
Milwankee Timers, 4-eylinder, each............................. . . . 4.80
Tach . D. P. $\$ 7,00$


# The GIBSONGOMPANY INPOLIS 

## PRIMERS AND RADIATOR THERMOMETERS

Lunkenheimer Gasoline Engine Primer



The purpose of the Lunkenbeitner Gasoline Entime Primer is to quickly, conveniently and simmlianeonsly prime all cylin. flers of a gasoline engine with but one device located within easy access.

Gasoline is not exposed to atmosphere. Drivers beed bot leave the seat to prime the encibe. Enaine is effectively and positively primed with practivally no trouble or loss of time, Consists of but few patts, darable and exeeptionally neat in appearance. Priming of engine requires less work of starling fevice. thencloy conserving the energy of the hattery and causing less wear. Lunkenhetmer Primer enables convenient primiag betove eacls stact
Each
36,00
Each. .D.P. $\$ 10.00$

## Imperial Prime-Ur



As necessary as the magneto itself. Is bolted to the dash and adds to its appearance. This Primer consists of a pump connected with b-inch pipe to the gasoline supply line and another small $\frac{1}{8}$-inch pipe leads to the manifold. All that is necessary to prime the motor is to open the small valve at the base of the Primer, draw the plunger upward, close the valve, push the plunger downward, and "there you go." It forces a spray of gasoline into the manifold and your motor starts on the first turn. It's essential to the hand cranked and a necessity on electric-started cars. Comes complete with pipe and fittings. Can be installed in a very short time and makes the car complete.
No. 51-D Imperial Prime-Ur, each
$\$ 5.00$
Each. . .D.P. \$4.44
Dozen. .D.P. 46.66


Each. . .D.P. \$4.44

## Boyce Motometer

(Patents Pending)
A gasoline motor is a heat motor, yet heretofore no means has been provided for indicating this heat.

To operate a heat engine without a heat gauge is like operating a steam engine without a steam gauge.

Nothing serious can possibly go wrong with a gasoline motor without first giving symptoms of excessive heat.

Costly repairs can be absolutely avoided by knowing the temperature of your radiator.

The Motometer is a specially constructed thermometer that tells you the inside temperature of your radiator while you drive-night or
 day.

With a Motometer mounted on your radiator cap you are forewarned instantly of impending trouble. It is not necessary to listen for knocks or feel for loss of power; one glance at the ever visible Motometer tells you just what is going to happen under the hood.
Motometer Standard Model. Finished in beautiful
black enamel with brass or nickel trimming; glass crystals on both sides, each
$\$ 10.00$ Each. .D.P. \$16.66


## Motometer Junior Model

Thousands of wise motorists today use a Boyce Motometer on their radiator cap. It is insurance against motor dam-age-a real check on the heat condition of the motor and a positive and accurate warning against ever operating it under unsafe conditions with consequent costly repairs.

Motometer Junior Model, finished in black and nickel, each
Each. . D.P. $\$ 8.33$

## Midget Motometer

Motometer Midget model, same type as Junior, but smaller size for Ford and other small cars, each. $\$ 2.50$
Each. . D.P. $\$ 4.18$


# The GIBSON COMPANY <br> \section*{CARBURETORS} 

Schebler Carburetors



Medel D

The Model D is the original Scbebler Carburetor, simple of adjustment and is especialIy adapted for marine motors. slogle or double opposed motors, stationary englnes, and all motors wbere extreme low throttling conditions are not required. This carburetor is made standard with the shutter air valve in the 1 -in. and $1+$-in. sizes. The $\frac{3}{3}$-in. $1 \frac{1}{2}$-in. and $2-i n$, sizes are standard with tbe flusher in the lid. If required otber than standard, special instructions should be given on the order
The air intake and throttle are interchangeable, and connections can be made to either vertical or horizontal manitolds.

Model D Schebler Carbaretor, 1-in. . . . . . . . . . . . . . . . . . . . . . . 9.75 Each..D.P. \$14.44
Model D Schebler Carburetor, i-in. ........................... 11.25 Each..D.P. $\$ 16$. 伯 $^{\text {B }}$
Model D Schebler Carburetor, 1-in. ............................ . . 12.00 Each..D.P. $\$ 17.77$
Model D Schebler Carburetor, 14-in. ........................... . 12.75 Each.. D.P. $\$ 18.88$
Hodel D Schebler Carburetor, $1 \frac{1}{2}-\mathrm{in}$. . . . . . . . . . . . . . . . . . . . 16.50 Each. . D.P. \$24. 44
Model D Scbebler Carluaretor, 2 -in. . . . . . . . . . . . . . . . . . . . . . 33.00 Eacl...D.P \$18.88


Model H

The Model H Carluretor is manufactured only in the $\hat{f}-\mathrm{in}$. and $1-\mathrm{in}$. sizes, and is designed for motorcycles and small bigh speed motors, where great flexibility and perfect control are required. The supply of gasotine is controlled by the cam, which gives an adjustment on low, intermediate and ligh speels. An air bead is so attached to the constant air opening of this carburetor that It can be turned to any convenient angle in order to draw warm air off the cylinders. This air bend will be furnished plaib, without shutter, unless specitied to the contrary. Also locking device on air valve is furuished to insure easy starting.

In ordering this carburetor or parts, specify make of motorcycle for which they are required, as the different motoreyeles require different cams, levers and bends.

Model H Schebler Carburetor, Z -inch. . . . . . . . . . . . . . . . . . . . . 811.35 Each. D.P. $\$ 1606$
Model H Schebler Carburetor, 1 -inch......................... . . . 12,00 Each.. D.P. $\$ 17.77$

## SPECIAL OUTFIT

Model H ${ }^{2}$-inch Special with Monifolid, eomplete for Indian, Twins or Singles, each................................ $\$ 12.00$ Each..D.P. \$17.77
Model H 2 -inch Speeial with Manifold, complete for Thor dian, Twins or singles, each............................... . 18.00 Fach.. ID.P. $\$ 17.77$

## Schebler Carburetors

The Model L Carburetor is designed for the exacting needs of high speed motors where low tbrottling, rapid acceleration, maximum power and speed are required. It is the most improved type of lift needle carburetor and is so designed that the amonat of fuel entering the motor is alltomatically controlled by means of a ralsed needle working automatically with the throttle. The adjustment or control of gasoline in this instrument can be adjusted Cor low, intermediate or bigh speed, each adjustment being independent and not affecting


Model L elther of the ofher adjustments.

The Model $L$ is furnished with a bend for connecting or taking warm air from around the exbaust manifold into the initial air opening of the carburetor by means of the hot air drum and tubing.

Model L. Schebter Carburetor, 1-inch . . . . . . . . . . . . . . . . . . . . . $\$ 13.50$ Each. .D.P. $\$ 20.00$,
Model L Schebler Carburetor, 11-inch....................... . . . . 15.00 Each.. D. P. $\$ 22.22$
Model L Schebler Carburetor, 1 -inch. . . . . . . . . . . . . . . . . . . . . . 18.75 Each. D.P. $\$ 27.77$
Model L Schebler Carburetor, 12-inch . . . . . . . . . . . . . . . . . . . . 22.50 Each.. D.P. $\$ 33.33$
Model L Schebler Carburetor, 2-inch.......................... . . . . 37.50 Eacb.. D.P. $\$ 50.55$
Model L Schebler Carburetor, 21-inch. . . . . . . . . . . . . . . . . . . . 60.00 Each.. D.P. $\$ 88.88$

## SPECIAL OUTFIT

Model L 1-inch, with Manifold, complete for Hupp, each. . $\$ 21.00$ Each..D.P. $\$ 35.50$

Model L Carburetor is also manufactured with a dash controlled air valve, this being operated by a lever which is controlled by a switch on the dashboard or steering post of the car. A dashboard adjuster or steering column control will be furnished witb these carburetors when flesired, and as these are separate articles they should be specified on the order. On account of cbanges required in the body casting for the carburetor with the dash control It is not possible to place the


Model L Dash Control dash control air valve on the Model L carburetor originally bullt with the plain air valve.
Model L. Schebler Carburetor Dash Control, 1-inch......... $\$ 13.50$ Eacl-D.P. $\$ 20.00$
Model L. Sehebler Carburetor Dash Control, 11-ineh....... 15.00 Each. . D.P. $\$ 22.22$
Model L. Schebler Carburetor Dash Control, 11-inch....... 18.75 Each.. D.P. 827.77
Moalel L. Sehebler Carburetor Dash Control, 12-inch...... 22.50 Each., D.P. $\$ 33.83$
Moalel I. Sehebler Carburetor Dash Control, 2-Inch......., 37.50 Ench..D.P. \$50.50
Dash or steering column control not included in prices named alove, but is supplied at an additional cost, as shown on next page.

# The CIBSONCOWAN 

## CARBURETORS AND CARBURETOR PARTS

## Schebler Carburetors

The Model $\mathbf{R}$ Schebler Carburetor is designed for use on both four and six-cylinder motors.

It is designed with an ad. Justment for low speed; as the speed of the motor increases, the air valve opens, raising the gasolline needle, thus automatically increasiog the nmount of fuel. The Morlel F Carburetor has but two adjustments - the low speed needle adjustment, which is made by turning the air valve cap, and an adjustment on the air valve spring for changing its tension.

It his an eccentric which acts on the needle valve, intended to be operated either from the steering column or from the dash, and insures easy starting, as by raising the needle from the seat an extremely rich mixture is furnished for starting, and for beating up the motor in cold weather. A choker in the alr bend is also furnished

The Dash Board Control or Steering Column Control must be used with instrument; it cannot be operated satisfactorily without them.
Model R Schebler Carburetor, 1-inch......................... $\$ 18.75$ Each. . D.P. $\$ 27.77$
Model R Schebler Carburetor, 13-ineb . . . . . . . . . . . . . . . . . . . . . 20.25 Each.. D.P. $\$ 30.00$
Model R Schebler Carbareter, 12-inch. . . . . . . . . . . . . . . . . . . . . 21.75 Each-D.P. $\$ 32.22$
Model R Schebler Carburetor, 12-inch....................... $\mathbf{2 6 . 2 5}$ Each.. D.P. $\$ 98.88$
Dash or steering column control not included In prices named above, but is supplied at an additional cost, as sbown is next column.

SPECLAL OUTFIT
Model R 1-inch, with Manifold and Controls, for Flanders, (3 speed), each. Each. . D.P. $\$ 37.77$

## Schebler Gasoline Strainer



CARBURETOR TROUBLE is largely due to particles of dirt which get into the gasoline and into the tank during its manufacture, scales and filings from the tank and piping, and to a certain percentage of water which is in all gasoline.

Type "A" Strainer is fitted with a bracket for attaching to a support and should be connected so that the gasoline flows through the strainer in the direction shown by the arrows cast on the strainer. The strainer is furnished standard with the bracket to the left. On special orders the bracket can be placed on the right side. The strainer is furnished complete with either $\frac{1}{}$-inch or $5 / 16$-inch outside diameter copper tube conneceither ind in ordering specify which size is wanted. Without the copper tube connections it will receive $\dot{t}$-inch standard iron pipe.
Type "B" Strainer is attached in the gasoline line without the use of a bracket, and is furnished with either $\frac{1}{\text {-inch or }}$ $5 / 16$-inch outside diameter copper tube connections, and in ordering specify which size is wanted.
Type A Gasoline Strainer, each.
$\$ 2.75$
Each.. D.P. $\$ 4.06$
Type B Gasoline Strainer, each.
1.25

Each,. D.P. $\$ 1.84$

Dash Board and Steering Column Controls, Dash Board Adjuster and Bell Crank



Dash Control


Dash Board Control, Steering Column Plunger Type


Control

The Dash Board Control for the air control of the carburetor should be attached in some convenient place on the dashboard of the car, and is operated by the foot. The Dash Board Control is furbished standard with three feet of tubing and wire. The Steering Column Control sbould be installed upon the steering post. As the Steering Column Control is made with different sized bands for attaching, the circumference of the steering post should be given. The Steeribg Column Control is furnisbed standard with tive feet of tubing and wire If additional length of tubing is required, same should be so spectied on the order. Additional tubing will be furnished at specified on tbe order. Additional tubing will
the rate of 25 cents per foot, or fraction thereof.

The above articles are considered to be separate and distinct from the carburetor, and if required should be ordered with the carburetor.
Dash Board Control-Standard with 3 feet tubing and
wire
82.00

Each.. D.P. $\$ 3.00$
Steering Column Control-Standard with 5 feet tubing and
wire
2.00

Each., D.P. $\$ 3.00$
Plusger Type Dash Board Control-Standard with 3 feet
tubing and wire
2.00

Each. . D.P. $\$ 3,00$
Extra Tubing for Dasb Board Control or Steering Column
Control, per foot or fraction thereof......................... . . . 2
Per toot., D.P. $\$ .33$

## Hot Air Drum and Tubing



## Hot Air Flexible Tubing

Interlocking construction consists of a continuous length of Copper or Galvanized Steel Tape, rolled in a spiral, so that the edges interlock, forming the four-wall construction shown; as the tape is rolled a groove is formed, containing an especially prepared asbestos packing, which remains fully protected from internal or external wear.
1-inch Flexible Metal Tubing, per feot
. $\$ 0.60$
Per foot., D.P. $\$ 0.48$

# The GIBSON COMPANYAPOLIS 

CARBURETOR PARTS


#### Abstract

Schebler




Price List of Parts-Model L

| Symbo | 1 NAME | $\left.1^{\prime \prime} 1\right\}^{\prime \prime}$ | $12^{\prime \prime}$ |
| :---: | :---: | :---: | :---: |
|  | Body Complete | \$15.00 | \$17.50 |
|  | Bowl Complete | 6.50 | 7.50 |
| A | Leather Air Valve | 50 | . 50 |
| B | Bowl Casting | 5.00 | 6.00 |
| c | Body Casting | 8.00 | 10.00 |
| D | Spray Nozzle | 20 | 20 |
| E | Needle Valve | 20 | 20 |
| ${ }_{F}$ | Cork Float | 50 | . 50 |
| G | Gasoline Union | . 30 | . 30 |
| H | Float Valve . | 20 | . 20 |
| 1 | Needle Valve Adj. Kno | 20 | 20 |
| J | Float Lever | 20 | 20 |
| K | Throttle Disc. | 10 | 10 |
|  | Air Valve Cap | 1.50 | 1.50 |
| M | Air Valve Adjustiog Scre | 20 | .30 |
| N | Cork Gasket for Bowl | 10 | 10 |
| O | Air Valve $\mathrm{S}_{\text {pring }}$ | 10 | 10 |
| P | Needle Valve Lift Lever | 40 | 40 |
| Q | Throttle Lever | 40 | 40 |
|  | Flange | 1.00 | 2.00 |
|  | Tbrottle Stop Screw | . 10 | . 10 |
| U | Bowl Cap | . 30 | . 30 |
|  | Flusher ...... | 50 | . 50 |
| w | Needle Valve Lift Lever Pin | 10 | .10 |
| X | Needle Valve Guide | 30 | .30 |
| Y | Needle Valve Lift Lever Spring | 10 | 10 |
| Z | Cam Complete | 1.00 | 1.00 |
| 1 | Throttle Stop Lock Screw | 10 | 10 |
|  | Air Rend | 2.00 | 2.00 |
| 3 | Air Valve Seat | 2.00 | 2.00 |
|  | Float Washer and Screw | 20 | . 20 |
| 5 | Flange Cap Screw | 10 | . 10 |
| 6 | Float Valve Retniner Nut | 10 | . 10 |
| 7 | Float Lever Screw | 10 | 10 |
| 8 | Throttle Shaft | 30 | .30 |
| 9 | Bowl Lock Nut Casting for Air | 511 | 50 |
| 10 | Air Bend Lock Nut | 10 | 10 |
| 11 | Throttle Lever Lock Screw | 10 | 10 |
| 12 | Water Jucket Plag | 10 | 10 |

Schebler


Price List of Parts-Model R

| Symbol | ol NAME | $1^{\prime \prime} 1 \frac{1}{\prime \prime}$ | $1\}^{\prime \prime}$ |
| :---: | :---: | :---: | :---: |
| D | Spray Nozzle | 8.20 | \% . 20 |
| V | Needle Valve | 20 | . 20 |
| F | Cork Float | . 50 | . 50 |
| G | Gasoline Union | . 30 | . 30 |
| H | Float Yalve | .30 | . 20 |
| 1 | Venturi Tube | 60 | . 60 |
| J | Float Lever | . 20 | .30 |
| K | Tbrottle Disc | . 10 | 10 |
| M | Air Valve Adjustiog | .30 | 30 |
| N | Bowl Gasket | . 10 | . 10 |
| 0 | Air Valve Spring | 10 | 10 |
| P | Needle Valve Lift Lever | 1.00 | 1.00 |
| Q | Throttle Lever | . 40 | . 40 |
| 1 L | Throttle Shaft Adjustiog Stop | . 40 | . 40 |
| S | Dash Control Shaft Bearing | .20 | . 20 |
| T | Drain Cock | . 40 | 40 |
| U | Bowl Cap | 80 | . 90 |
| V | Dash Control Blank Plug | . 20 | . 20 |
| W | Dash Control Sbaft | . 30 | 30 |
| X | Dash Control Lever | . 40 | . 40 |
| Y | Binding Post: Binding Post Screw ing Post Washer, Binding Post | ,20 | . 20 |
|  | Venturi Tube Lock screw ......... | . 10 | . 10 |
| 2 | Air Bend | 2.00 | 2.00 |
| 3 | Dash Pot Air Valve Seat | 2.00 | 2.50 |
| 4 | Float Wasber and Screw | . 20 | 20 |
| 5 | Flange Cap Screws ..... | . 10 | .10 |
| 6 | Float Valve Retainer Nut | . 10 | 10 |
| 7 | Float Lever Screw | . 10 | 10 |
| 8 | Throttle Shaft | . 30 | . 30 |
| 9 | Bowl Lock Nut | . 20 | , 20 |
| 10 | Throttle Shaft Collar | . 10 | , 10 |
| 11 | Throttle Shaft Gasket | . 10 | 10 |
| 12 | Dash Control Tube Lock Screw | . 10 | 10 |
| 13 | Float Lever Screw Bearing | 10 | 10 |
| 14 | Tbrottle Lever Lock Screw | 10 | 10 |
| 15 | Air Valre Friction Lever. | .20 | 20 |
| 16 | Air Valve Friction Lever Pin | . 10 | 10 |
| 17 | Dasb Control Sbaft Gasket | . 10 | . 10 |
| 18 | Air Bend Lever Shaft and Spring | . 50 | . 10 |
| 19 | Air Bend Disc.................... | . 10 | . 10 |

CARBURETOR PARTS

Schebler


Price List of Parts- Model D

| Syubol | ol NAME | $1^{\frac{1}{n}} 1 \frac{q^{\prime \prime}}{q^{\prime \prime}}$ | $12^{\prime \prime}$ |
| :---: | :---: | :---: | :---: |
|  | Air Valve Complete | \$4.00 | 85.00 |
|  | Bowl Complete | 9.00 | 12.00 |
|  | Throttle Complete | 4.00 | 6.00 |
| A I | Leather Air Valve Disc. | . 20 | . 20 |
| B | Bowl Casting .. | 6.00 | 9.00 |
| C I | Butterfly Shutter Complete | . 50 | . 50 |
| D S | Spray Nozzie . . . . . . . . . . | . 20 | . 20 |
| E | Needle Valve | . 20 | . 20 |
| $F \cdot$ | Cork Float | . 50 | . 50 |
| G | Gasoline Unlon | . 30 | . 30 |
| H F | Float Valve | . 20 | . 20 |
| $J$ F | Float Lever | . 20 | , 30 |
| K T | Tbrottle Disc | . 10 | . 10 |
| L L | Lid .......... | 2.00 | 3.00 |
| M A | Air Valve Adjusting Screw | . 20 | . 20 |
| N | Cork Gasket for Lid . . . . . | . 10 | . 10 |
| $\bigcirc \mathrm{O}$ | Air Valve Spring | . 10 | . 10 |
| $P$ T | Tbrottle Back .. | 1.50 | 2.00 |
| Q T | Tbrottle Lever | . 40 | . 40 |
| 1 F T | Throttle Front with Pipe Thread | 2.00 | 3.50 |
| S T | Throttle Stop Screw .............. | . 10 | .10 |
| T D | Drain Cock | .40 | . 40 |
| U B | Bowl Cap | . 30 | . 30 |
| $V$ F | Flusber | . 50 | . 50 |
| W I | Lock Nut for Adjusting Screw | . 10 | .10 |
| X N | Needle Valve Connection ...... | . 20 | . 20 |
| Y L | Lock Spring for Adjusting Screw | . 10 | . 10 |
| 1 T | Throttle Stop Lock Screw ....... | . 10 | . 10 |
| 2 A | Alr Valve Cap Screw ... | . 10 | . 10 |
| 3 A | Air Valve Casting ... | 3.00 | 4.00 |
| 4 F | Float Washer Screw | . 20 | . 20 |
| 5 T | Throttle Cap Screw ... | . 10 | . 10 |
| 6 F | Float Valve Retainer Nut | . 10 | . 10 |
| 7 F | Float Lever Screw ... | . 10 | . 10 |

Schebler


Price List of Parts-Model H

| Symb | ol NAME | $\hat{i}^{\prime \prime} 1^{\prime \prime}$ |
| :---: | :---: | :---: |
|  | Body Complete | \$10,00 |
|  | Bowl Complete | 6.00 |
| A | Leather Air Valve Dis | 30 |
| B | Bowl Casting | 5.00 |
| C | Body Casting | 6.00 |
| D | Spray Nozzle | . 30 |
| E | Needle Valve | . 20 |
| F | Cork Float | . 50 |
| G | Gasoline Union Parts R and S | . 20 |
| H | Float Valve | . 30 |
| I | Needle Valve Adjusting Knurl | . 0 |
| J | Float Lever ..... | . 20 |
| K | Tbrottle Disc | . 10 |
| L | Low Speed Adjusting Screw | . 10 |
| M | Air Valve Adjusting screw . | .30 |
| N | Cork Gasket for Bowl ... | . 10 |
| O | Air Valve Spring | . 10 |
| P | Needle Valve Lift Lever | . 40 |
| Q | Throt:ie Lever | . 40 |
| R | Gasollne Union Nut | . 10 |
| 8 | Gasoline Union Nipple | . 10 |
| T | Needle Valve Spring . | . 10 |
| U | Bowl Cap ........... | . 30 |
| V | Flusber | .50 |
|  | Needle Valve Lift Lever Pin | . 10 |
| X | Needle Valve Guide ....... | 30 |
| Y | Needle Valve Lift Lever Spring | . 10 |
| Z | Cam Complete ............ | 1.00 |
| 1 | Low Speed Lock Screw | . 10 |
| 2 | Air Bend, Regular Style | . 00 |
| 3 | Air Valve Casting ...... | 2.00 |
| 4 | Float Washer and Screw | . 30 |
| 5 | Throttle Lever Lock Nut | . 10 |
| 6 | Flont Yalve Retainer Nut | . 10 |
| 7 | Float Lever Screw | . 10 |
| 8 | Tbrottle Shaft | . 30 |
| 9 | Bowl Lock Nut | . 30 |
| 10 | Air Valve Spring Retainer Nut | . 10 |
| 11 | Needle Valve Lock Screw | . 10 |
| 12 | Air Valve Adjusting Knurl | . 50 |
| 13 | Lift Lever Pin Lock Screw | . 10 |
| 14 | Priction Spring .......... | . 10 |

$\mathrm{i}^{\prime \prime} 1^{\prime \prime}$
$\$ 10,00$
6.00

## CARBURETORS



Type "H"

|  | EACH |
| :---: | :---: |
| No. 1-1-inch, each. . . . . . . . . . . . . $\$ 80.00$ |  |
| Each., D.P. $\$ 33.83$ |  |
| No. 2-11-inch, eacb | 22.50 |
| Each..D.P. $\$ 37.50$ |  |
| No. 3-11-inch, each . . . . . . . . . . . . . . 25.00 Each. D.P. $\$ 41.66$ |  |
|  |  |

Each..D.P. \$11.66


Type "HB"Horizontal Type

EACH
No. 1-1-inch, each
. $\$ 20.00$
Each., D.P. $\$ 33.33$
No. 2-13-inch, each . . . . . . . . . . . . . 22.50
Each., D.P. $\$ 37.50$
No, 3-11-inch, each................. 25.00
Each..D.P. \$11.66

The two types of carburetors shown on this page are identical in lesign with the exception that the "HB" bas a borizontal outlet. These types of new stromberg Carburetors developed to take care of high-grade motors with the lowgrade fuel which is in use at the present time and are especially adapted to obtain economy for the user without any sacrifice of power or acceleration.

They have only two adjustments, bigh and low speed, both working directly on the gasoline supply. The combination of wbicb gives the best and most efficient mixture for all speeds. The air horn equipment, into which a warm air supply from around the exhaust manifold can be introduced, assures hent enough for complete vaporization from the beaviest fuels (see next page).

The casoline for low speed is taken from a spray nozzle located in the venturi tube, through which the hot air passes. This type has a sccond nozsle in the center of the air valve which is automatically regulated by the center of the air valve, thus supplying the necessary volume of gasoline for bigh speed and heavy duty work

The dast pot, with the piston riding in gasoline, obviates all fluttring of the air valve stem.

Tbis type is made with a dasb or steering post control, which regulates both the spring tension and needle opening. This insures good operation regardless of weather or different grades of gasoline.

These carburetors are further fitted with wbat is known as a strangle valve in the primary air opening, for starting in cold weather. Even though the carburetor and engine are at zero temperature, the high vacuum produced in the carburetor by closing all air inlets readily vaporizes the gasoline and starting is assured.

The glass float chamber, non-leakable metal floats and indestructible needle valve are exclusive features on the Stromberg Carburetor, Only the best of material and workmanship are used in Stromberg. Corburetors and each part is subjected to a most rigid inspection. After the carburetors are completeIy assembled and thoroughly inspected, they are sent out to the laboratory and made to operate a motor perfectly.

This careful process applies to every carburetor manufactured by the Strombery Dotor Devices Company,

As the types of cars cbange considerably from year to year, it will be necessary for us to know just what model and year your car is before we can recommend whlch new Stromberg Carburetor will be most economically proficlent.

## DASH CONTROLS

These controls enable you to change your gasoline mixture and air supply without even leaving the seat. Even though the carburetor and engine are at zero temperature, the high vacuum produced by closing all air inlets makes the engine start without trouble.


## Single Dash Control

Operates the butterfly valve in the air horn of the carburetor and is especially helpful in producing easy starting and warming up of motor.
Price-Complete with 42
inch tubing and wire,
nickel plate, each....... $\$ 1.50$
Each. .D.P. \$2. 48

## Double Dash Control

Operates the strangle valve as well as the butterfly valve, making the governing of the carburetor perfect.
Price-Complete with 84
inch tubing and wire,
nickel plate, each....... 82.00
Single Dunh Control
Each. . D.P. $\$ 3.33$


# Thecibsoncoman 



## PRICE

K Ne. 1-l-inch
$.815,50$ Each..D.P. $\$ 25.82$

## ECONOMX

The foundation of the general design of this carburetor is economy without sacriflice of power or acceleration. Official tests have proven it to be the best on the market.

## POWER

The complete vaporization of the gasoline and the automatic production of the correct mixture for every throttle position gives maximum power at every speed.

## LOW THROTTLE

The special low speed adjustment and the complete breaking up of the gasoline at low velocity permits the contibuous supply of just right throttle mixture without loading the motor,

QUICK, SNAPPY PICK-UP
The elimination of all flutter, by means of the new balanced air valve and the new high and perfectly proportloned venturi tube to carry the mixture well up to the manifold without preclpitation, assures maximum flexibility.

NON-FLOODING
The new simplifled float mechanism Introduced in this carburetor, with the Stromberg metal float and needle valve of special metal, eliminates all possibility of flooding.


Tbis steering post control operates the butterfly vaive in the air horn of the carburetor and is especially belpful in producing easy starting and warming up of the motor.

It is made of high-grade material, superior workmansbip and finished in beavy nickel plate.
Price Complete-Clamp and 60 -inch
Tubing and Wire, nickel plate,
each
Each :

Special Overland Outfit PRICE
KO-One Carburetor............... $\$ 15.50$ Steering Post Control..........................
1.00
Air Heating Housing........... Air Heating Housing.. Necessary Metallic Tubing

Complete equipment. $\qquad$ $\$ 18.80$
Complete. .D.P. $\$ 31.32$
This model "KO" is exactly the same in construction as the "K," with the exception of the flange belog turned at right angles to the carburetor body, which facilitates the installing of an Overland car.

These carburetors are designed so they can be adjusted to give exactly the correct mixture of gasoline and air at every speed, and with the gasoline broken up under the high suction and equipped with a special air beater this new Stromberg operates with absolute new Strom

## Stromberg Air Heater



The Stromberg Manifold Housing equipment introduces the warm alr from around the exbaust manifold into the carburetor. Thls beated air passes by the gasoline nozzle through the venturi tube causing a complete vaporization of the gasoline, thus creating a more homogeneous and combusting a more homogeneous and combustible mixture, particularly in cold
weather. The results are increased Weather. The results are inc
Housing, $1 \frac{1}{2}$-inch diameter, ench... $\$ 1.00$ Each. D.P. $\$ 1.66$
Housing. 2-inch diameter, each.... 1.00 Eacb. . D.P. $\$ 1.66$
Housing, 21-inch diameter, each... 1.25
Each., D.P. 2.08
Order bousing to ft outside diameter of exbaust plpe at polnt where you wish to connect. These housings can be made in nny length.
Flexible Metal Tubing, 1i-inch dlameter, per foot.
Per foot. . $\mathrm{D} . \mathrm{P}, \$ 15$
Flexible Metal Tubing, 11 -inch diameter, per foot...
Per foot..D.P. \$. 66
Flexible Metal Tubing, 12-inch di-
ameter. per foot.

New Stromberg Ford Carburetor


The New Stromberg Ford Carburetor is supplied just as is shown in the illustration-complete, ready for installation. One screw puts on the hot air housing; no change is necessary in the gasoline line and the carburetor itself groes right onto the old manifold. The adjustments are extremely simple and any one can make them-high speed and idling. The carburetor is of the plain tube type and is equipped with what is known as an economizer. It has been proven that a car can be driven with perfect smoothness of operation at a speed of seven to thirty-five miles an hour on less gasoline than it takes to run below and above this mileage. For this reason and on this principle the economizer was developed. It controls the needle valve which regulates the gasoline flow so that at all times the mixture is cut down to the minimum.
In bringing out this carburetor, one of the primary requirements was that it be made to start easier than any other one on the market. In order to obtain easy starting, it is necessary to be able to shut off all air tolets to the carburetor, By doing so the bieh vacuum wbich is in the manifold is transferped to the carburetor and this vacumm draws the gasoline off of the nozale holes, breaking it up in a very fine spray and carrying it direct to the cylinders. Witbout this high vacuum in the carturetor, the gasoline enters the manifold in heary drops but cannot reach the cylinders, This is what canses a flooded cariuretor and makes starting practically impossible,
In order to further faclitate starting when the wenther is extremely cold. this new Stromherg Ford carburetor is equipped with a priming plunger, operated br a wire running to the front of the radlator

The entire carburetor and equipment including bousing, tubing and steering post control, made with the usual Stromberg care and bigh efliciency.
Each
D.P. $\$ 30.00$


## THE RAYFIELD

 Carburetor is guaranteed to increase the efficiency of any make of car under all conditions, and at the same time save from 10 to 50 per cent. in fuel, regardless of the grade of gasoline.
## CONSTRUCTION AND OPERATION

The general construction of the Rayfield Carburetor continues in accordance with the original design. A few refining improvements have been made, but the characteristic principle of operation embodied in all Rayfield Carburetors remains the same.

The Model G is a water-jacketed carburetor with only two adjustments, which are simple and easy of access; one for low speed and one for high, both controlling the supply of gasoline.

Fuel is supplied through two nozzles. One supplies all the gasoline required when the motor is idling. The additional gasoline for higher speeds is furnished by a nozzle controlled by a tapered metering pin located under the automatic air valve. As the air valve is drawn open, admitting air, it operates the metering pin, gradually opening the nozzle, and supplying additional gasoline in correct proportion to the air.

The Rayfield has a patented dash pot construction which injects gasoline only when the motor is accelerated. This makes it possible to use an extremely economical running mixture and still have the very fast get-away for which the Rayfield is noted.

A dash or steering post control is furnished with all Rayfield Carburetors. This control raises the nozzle needle, supplying a richer mixture for starting purposes and for cold weather.

The Model L Rayfield Carburetor is non-water-jacketed. The design and construction is the same as the Model G. It should be used only on thermo-syphon and air cooled motors where the Model G cannot be used.

Heat to the carburetor is necessary to properly vaporize the low grade fuel now in use. Hot air and hot water should be used. See Rayfield hot air outfit described on another page.

| Model G Water Jacketed |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Model Size | Price | Model | Sixe | Price |
| G2 and GL2.... 1 | \$25.00 | G5 | 11 | \$40.00 |
| Each. D.P. \$37.04 |  | Each. |  |  |
| G3 and GL3 $\ldots$. $1 \frac{1}{4}$ | 30.00 |  |  |  |
| Each. D.P. \$44.44 |  | G6 |  | 45.00 |
| G4 and GL4.... 14 | 35.00 | Each. |  |  |

Each. . D.P. $\$ 51.84$

## Model L

Non-Water Jacketed
Model Size Price Model Size Price
 Each. .D.P. $\$ 29.64$

Each. D.P. 837.04
L3 and LL3..... 1 \& 22.50
Each. D.P. $\$ 33.83$
Domels $f$ and $L$ are also furnisbed in same sizes as listed with the adjustments on the opposite side of the carburetor, These mondels are hefthand and ure known of GL and LL, Always specify the make, model and year of car or motor when ordertag.

special Rayfleld Carburetor for Buick Cars
The Special Rayfield Carburetor for Buick Cars is made to meet the great demand for a carburetor particularly applicable to the Buick motor.

The carburetor is arranged to be heated by exhaust gas, using the standard Buick connections.

Installation can be made in two hours.
It is sold under our regular guarantee.
The following prices include the carburetor complete with all necessary fittings for installation:
Buick D-45 1916 Car, GL-2 Special Carburetor. . $\$ 27.35$ Each..D.P. $\$ 40.50$
Buick B-55 1914 Car, GL-3 Special Carburetor.. 32.25 Each..D.P. \$47.76
Buick C-55 1915 Car, GL-3 Special Carburetor.. 32.25
Each. .D.P. \$47.76
Buick D-55 1916 Car GL-3 Special Carburetor. . 32.25
Each. . D.P. $\$ 47.76$

## Special Rayfield Carburetor for dodge cars



The demand for Rayfield Carburetors for Dodge cars is very large, and the special Rayfield for this car is constructed to suit the Dodge motor, insuring the greatest possible efffeiency.

Hot air is used to heat the carburetor. A hot air connection and flexible tubing are provided to fit the motor without changes. Installation can be made in two hours.
Price (for Dodge cars, 1915 and 1916), model MR-3

## Carburetor

Each. .D.P. $\$ 33.48$

# The GIBSONGOMPANY 

CARBURETORS

Special Rayfield Carburetor for Ford


The Rayfield Carburetor on a Ford car gives Rayfield results, which means greater efficiency in the production of more power, more speed, greater flexibility, easier starting and less carbon than any other carburetor.

The Rayfield Carburetor does away with all carburetor trouble; with it Ford cars immediately develop greater speed, throttle down to a walk, climb hills with ease and the gasoline consumption is greatly reduced.

This complete Ford Assembly as shown in the above illustration consists of a one-inch Model "L" Rayfield Carburetor, a specially designed Ford manifold, hot air fitting, throttle control bell crank, throttle control rod, special gasoline connection and dash adjustment. Packed in a box complete ready for quick installation. It can be installed in two hours by an ordinary mechanic.
Price, with all fittings, complete. . . . . . . . . . . . . . . $\$ 23.00$ Each. .D.P. $\$ 34.00$

NoTE-When a Ford is equipped with magneto Ignition a special manifold and Raybeld Model "E" are used.

Hot Air Flexible Tubing
For All Carburetors


Interlocking con . struction consists of n continuous length of copper or galvanized steel tape, rolled in a spiral, so that the eclges interlock, forming the four-wall construction shown. As the tape is rolled a groove is formed, containing an especially prepared asbestos prepared which remains packing, wbich remains
fully protected from internal or external wear.
2-in. Flexible Metal
Tubing, per ft,.\$0.40 Per foot..D.P. $\$ 40$ Per foot, in

50 -foot
lengths..D.P. 36
g-in. Flexible Metal Tubing, per foot.
Per foot..D.P. \&.44 Per foot, in 50-ft. lengths. D.P. \& . 40
1-in. Flexible Metal Tubing, per foot.
Per foot..D.P. $\$, 48$ Per foot, in $50-\mathrm{ft}$. lengthe. D. P. \$ , 44
14-in, Flexible Metal Tubing. per foot..........................
Per foot..D.P, $\$ 50$ Per foot, in $50-\mathrm{ft}$, lengths..D.P, 46
Per foot..D.P. $\$$, 50 Per foot, in $50-\mathrm{ft}$. lengths..D.P. $\$, 46$
1i-in. Flexible Metal Tubing, per foot........................... 8
Per foot..D.P. $\$ .55$ Per foot, in $50-\mathrm{ft}$ lengths..D.P. 48 1 $\frac{1}{2}$-in. Flexible Metal Tubing, per foot.
Per foot . D.P. $\$$, 66 Per foot, in $50-\mathrm{ft}$. lengths..D.P. $\$ .60$ 1/2-in. Flexible Metal Tubing, per foot.
.50
.90


The Rayfied stratner-Trap is placed any where bet ween the tank and carburetor in the gasoline line.

The trap is furnished wirh a brace by which to fasten it to any convenient frame or other car member, und it can be placed in the most accessible position.

Always install the trap with arrow pointing toward the carburetor.

## TO CIEAN

Simply loosen the thumb screw in top, remove clamp and lift out cover and strainer, clean strainer and replace. This should be done occasionally. Trap should be drained througb cock once a month or ofteber. Trap is 5 inches birh and $2 \frac{1}{2}$ inches wide. Furnished complete is shown. with draio cock, brace and two connections, to take $\frac{1}{}$-inch, $5 / 16$-inch or $k$-inch O. D. Tubing. Five-sixteenth-inch connections furnished unless otherwise ordered. Price, in Brass ...................... $\$ 2.00$ Each...D.e. 82.98 Rayfield Hot Air Outfit


Heat must be furnished to the carburetor to properly vaporize
low-grade fuel and to secure the low-grade fuel and to secure the maximum elficiency from your motor.
The Kayfleld method of getting additional heat to the carburetor bas proved to be correct. A stove or housing is clamped around the exhaust manifold or exhaust pipe and heat is transferred by means of tlexible tubing to the inxed air totake of the carburetor, The pure beated air comes in direct contact with the gasoline at the opening of the nozzle, thereby producing perfect vaporization.
Installation of this outfit is made by locatiog the stove just back of the last cylinder in order that the bighest degree of beat be secured from all cylinders. One end of the flexible tabing is fitted into the stove and the other end into the elbow attached to the nixed air opening of the carburetor. The ends can be fastened by soldering or by using a cotter pin.

In ordering, specify outside diameter of exhaust manifold or exhaust pipe at a point where stove is to be attached. Give length of tubing required, allowing sufficient length for bends and turns. For best resuits use the Baffle Plate Stove.

## Price Lists

BAFFLE PLATE TVPE
No. $99-\mathrm{F}$. Length 6 incles, can be bored from $1 \frac{1}{2}$ to $7 ?$ inches. each
Pach. D.P. 82,4
No. 124-F, Length 6 inches, can be loored from 23 to 31
inches. each
No. 141-F. Length I inches ean be hored from is to 27 inches, vach.
Each..D.P. \$2.60 ${ }^{\text {No. 143-F, }}$ I.ength 4 inches, ean be hored frem it to
inches, earh … .......................................................... 1.5 ach. D. P. 81.71
No. ist-V, Erigith i inelies ran be bored from 17 to ef

Each., D.P. $\$ 1.93$
No. 918, lencth 4 inches, can be thoreal from of to 3?
inches. each
80.7
NAKBOW TVIE
No. 54-F. Can be bored from 1 ia to $\frac{2}{4}$ inches, earls...... $\$ 1.00$ Eacb..D.P. \$1.4R
No. 68-F, Can be bered from 21 to 38 inches, each....... 1.10 Each..D.P. 81.64
No, 131-F, Can be bored from 1i to 13 inches, each..... 1.00 Each..D.P. \$1.48
No. $302-\mathrm{F},{ }^{1} 1 / 16$-inch Tubing, per foot . . . . . . . . . . . . . . . . . . . 45 Per foot, D.P. $\$$, 66
Tubing Elbow (Standard), each................................... . . . 25 Each..ID, P. \& , 38

# The CIBSON CMPANY <br> <br> SOLDERLESS COMPRESSION COUPLINGS 

 <br> <br> SOLDERLESS COMPRESSION COUPLINGS}

## All for Copper or Brass Tubing

For connecting tubing on gasoline and oiling systems without swaging or the use of solder.

## No. 1 Union Joint



Both enda are fitted with sleeve nut for joining two tubes.
No. 1 Union Joint for $1 / 4$ inch O. D. brass or copper tubing. Doz. D.P.
...............................
82.53

No. 11 Union Joint for 5/16 inch O. D. brass or copper tubing. Doz. D.P.
No. 12 Union Joint for $\frac{1}{6}$ inch O. D. brass or copper tubing. Doz. D.P
4.55

No. 2 Spring Check Valve
No. 3 Coupling


Compression one end, thread Tapped one end, compression on other end.
 other end.

No. 2 Spring check valve for $1 / 4$ inch $\mathbf{O}$. $\mathbf{D}$. brass or copper tubing. Doz. D.P.
.82 .66
No. 21 Spring check valve for $5 / 16$ inch $O$. D. brass or copper tubing. Doz. D.P............ 2.93
No. 22 Spring check valve for $\frac{1 / 3}{}$ inch 0 . D. brass or copper tubing. Doz. D.P.
3.73

No. 3 Coupling for $1 / 4$ inch O. D. brass or copper tubing. Doz. D.P.
1.91

No. 31 Coupling for $5 / 16$ inch $O$. D. brass or copper tubing. Doz. D.P.
No. 32 Coupling for
tubing.
Doz. D.P. inch $O$. D. brass or copper

## No. 4 Nipple Union



No. 5 Elbow


Compression one end, thread Compression oue end, thread on other end.

No. 4 Nipple Union for $1 / 4$ inch O. D. brass or copper tubing. Doz. D.P.
$\$ 2.00$
No. 41 Nipple Union for $5 / 16$ inch O. D. brass or copper tubing. Doz. D.P..................... . . .
No. 42 Nipple Union for $\frac{3}{6}$ inch $O$. D. brass or copper tubing. Doz. D.P
No. 5 Elbow for $1 / 4$ inch O. D. brass or copper tubing. Doz. D.P
2.13

No. 51 Elbow for $5 / 16$ inch O. D. brass or copper tubing. Doz. D.P................................. 2.66
No. 52 Elbow for $3 / 5$ inch 0. D. brass or copper tubing. Doz. D.P

No. 6 Elbow


Compression both ends.

No. 7 Tee


Compression two opposite

No. 6 Elbow for $1 / 4$ inch O. D. brass or copper tubing. Doz. D.P
$\$ 2.80$
No. 61 Elbow for $5 / 16$ inch O. D. brass or copper tubing. Doz. D.P.3.46

No. 62 Elbow for $\frac{\lambda}{6}$ inch O. D. brass or copper tubing. Doz. D.P
No. 7 Tee for $1 / 4$ inch O. D. brass or copper tubing. Doz. D.P.
No. 71 Tee for $5 / 16$ inch $O$. D. brass or copper tubing. Doz. D.P.
3.86

No. 72 Tee for $\frac{1 / 8}{6}$ inch $O$. D. brass or copper tubing. Doz D.P.


Compression on two ends at right angle, thread on

Compression three ends. other end.

No, 8 Tee for $1 / 4$ inch 0 . D. brass or copper tubing. Doz. D.P
No. 81 Tee for $5 / 16$ inch 0 . D. brass or copper tubing. Doz. D.P3.86

No. 82 Tee for $3 / 8$ inch $O$. D. brass or copper tub
ing. Doz. D.P. ..... 5.33

No. 9 Tee for $1 / 4$ inch O. D. brass or copper tub
ing. Doz. D.P ..... 3.86

No. 91 Tee for $5 / 16$ inch 0 . D. brass or copper
tubing. Doz. D.P ..... 4.55

No. 92 Tee for $3 / 8$ inch $O$. D. brass or copper tubing. Doz. D.P.
No. 64-F Like No. 9 with Ends for $1 / 4$ inch Tubing, Center for $1 / s$ inch Tubing. Doz. D.P.
No. 164-F Like No. 9 with Ends for $5 / 16$ inch Tubing, Center for $1 / 8$ inch Tubing. Doz. D.P.... 8 .
No. 264-F Like No, 9 with Ends for $\frac{1 / 8}{}$ inch Tubing, Center for $1 / 8$ inch Tubing. Doz. D.P..... 8.

## Sleeves and Nuts

Sleeves for the foregoing couplings: 1/4

5/16
3/8
$\begin{array}{llll}\text { Per } 100 & \text { D.P. } \$ 1.32 & \text { D.P. } \$ 1.76 & \text { D.P. } \$ 2.22\end{array}$
Nuts for any of the foregoing couplings:
1/4
5/16
3/8
$\begin{array}{llll}\text { Per } & 100 & \text { D.P. } \$ 5.55 & \text { D.P. } \$ 6.66\end{array}$
D.P. $\$ 8.88$

# The GIBSONGOMPANY $\overline{\text { GPOLIS }}$ 

## SOLDERLESS COUPLINGS AND PIPE FITTINGS-UNFINISHED

## For Connecting Brass and Copper Tubing


${ }_{10} 10 \mathrm{~F}$


12 F


No. 1F Connector for $1 / 4$ inch Tubing, doz. D.P. $\$ 1.32$ No. 10F Connector for $5 / 16$ inch Tubing, doz. D.P. 1.60
No. 2F Connector for $1 / 4$ inch Tubing, doz. D.P. 1.60 No. 11F Connector for 5/16 inch Tubing, doz. D.P. 2.40
No. 3F Check Valve for $1 / 8$ inch I. P. Thread, doz.
D.P.
2.40

No. 12F Check Valve for $1 / 4$ inch I. P. Thread, doz.
D.P.
4.80


No. 4F Tee for $1 / 4$ inch Tubing, doz D.P.. 82.25 No. 13F Tee for $5 / 16$ inch Tubing, doz. D.P.. 2.95 No. 5F Elbow for $1 / 4$ inch Tubing, doz D.P. . 1.92 No. 14F Elbow for 5/16 inch Tubing, doz D.P. . 2.40


No. 6F Bushing for $1 / 8$ inch I. P. Tap, doz. D.P. . $\$ 1.65$
No. 15F Bushing for $1 / 4$ inch I. P. Tap, doz. D.P. . 2.95
No. 7F Bushing for $1 / 4$ inch I. P. Tap, doz. D.P.. 1.95
No. 16F Bushing for $3 / 8$ inch I. P. Tap, doz. D.P. . 2.95


No. 8F Connector for $1 / 3$ inch I. P. Thread, doz. D.P. 81.65 No. 17F Connector for $1 / 4$ inch I. P. Thread, doz. D.P. 2.40 No. 9F Elbow for $1 / 8$ inch I. P. Thread, doz. . D.P. 1.95 No. 19F Elbow for $1 / 4$ inch I. P. Thread, doz. . D.P. 2.40

${ }_{30}{ }_{30} \mathrm{~F}$


28 F
29

No. 27F Tee for $1 / 8$ inch I. P. Thread, doz. D.P. . $\$ 2.25$ No. 30 F Tee for $1 / 4$ inch I. P. Thread, doz. D.P.. 2.95 No. 28 F Tee for $1 / 8$ inch I. P. Thread, doz. D.P. . 2.25 No. 29F Tee for $1 / 4$ inch I. P. Thread, doz. D.P. 2.95

Directions for using: Place nut on tubing and then flare out the end of tubing, as shown by Cuts 1 F and 10 F .

For Connecting Iron Pipe Size Tubing


No. 100 Elbow
No. 100 Elbow
No. 100 Elbow
No. 100 Reducing Elbow
No. 100 Reducing Elbow
No. 101 Tee


101

No. 101 Tee
No. 101 Reducing Tee
No. 101 Reducing Tee
No. 102 Crosses
No. 102 Crosses
No. 102 Crosses
No. 102 Reducing Crosses


1/s inch, doz. D.P....s2.40
1/4 inch, doz. D.P. . . 2.95
3/s inch, doz. D.P ... 3.75
1/4 inch, doz. D.P.... 3.75
3/8 inch, doz. D.P.... 4.65
1/8 inch, doz. D.P.... 2.66
$1 / 4$ inch, doz. D.P... 3.20
1/4 inch, doz. D.P.... 4.65
$3 / 8$ inch, doz. D.P.... 5.36
1/8 inch, doz, D.P.... 3.75
$\begin{array}{lll}1 / 4 & \text { inch, doz. } & \text { D.P.... } \\ \text { 3.8.85 } \\ \text { inch, doz. } & \text { D.P.... } & 7.32\end{array}$
$\begin{array}{lll}\text { /s inch, doz. } & \text { D.P.... } & 7.32 \\ 1 / 4 \text { inch, doz. } & \text { D.P.... } & 6.92\end{array}$


No. 103 Couplings
No. 103 Couplings
No. 103 Couplings
1/s inch, doz. D.P., $\$ 1.92$
No. 103 Couplings, $R \& L \quad 1 / 4$ inch, doz. D.P.. 2.66
1/4 inch, doz. D.P.. 2.66
No. 103 Couplings, $R \& L \quad 3 / s$ inch, doz. D.P. 2.93
No. 103 Coupling Reducings $1 / 4$ inch, doz. D.P.. 2.66
No. 104 Unions, Ground Joint $1 / 5$ inch, doz. D.P. . 3.60
No. 104 Unions, Ground Joint $1 / 4$ inch, doz. D.P.. 4.00
No. 104 Unions, Ground Joint $1 / 8$ inch, doz. D.P. . 4.65
No. 105 Return Bends, Open $\frac{1 / 5}{6}$ inch, doz. D.P.. 7.33
No. 105 Return Bends, Closed $3 / 8$ inch, doz. D.P.. 5.32


No. 110 Bushings
No. 110 Bushings
No. 111 Lock Nuts
No. 111 Lock Nuts
No. 109 Plugs
No. 109 Plugs
No. 109 Plugs
No. 108 Caps
No. 108 Caps
No. 108 Caps


112
No. 112 Nipple Close
No. 112 Nipple Close
No. 116 Street Elbow
No. 116 Street Elbow

1/4 inch, doz.



1/8 inch, doz. D.P
.80 .92
$1 / 4$ inch, doz. D.P. ..... 1.46
1/s inch, doz. D.P....... . . 4.25
$\begin{array}{ll}1 / 4 \\ \text { inch, doz. D.P.......... . . . } & 5.32\end{array}$

Kingston Plain Box Coil



Four-Terminal Box Coil and are guaranteed the best possible results. On quantity orders for Plain Box Coils we can bring the different terminals out at almost any position users may require them.

Kingston single-cylinder Box Coil, each.......... . $\$ 4.50$
Each. . D.P. \$7.55
Kingston double-cylinder Box Coil, each......... 9.00
Each. .D.P. $\$ 15.00$

## Kingston Dash Coil

Kingston single-cylinder Dash Coil, with switch, each
.........
Each. .D.P. $\$ 12.50$
Kingston double-cylinder Dash Coil, with switch, each
13.50

Each. .D.P. $\$ 22.48$
Kingston quadruple-cylinder Dash Coil, with switch, each.
25.50

Each.. D.P. \$42.50

## Model "TS" Splitdorf Coil



Model "TS" Coil - the latest and most finished of all types of coils - is notable for its ideal firing qualities and general construction. Easily and quickly dissembled, it is positive in action and its durability is one of its striking features. The coil proper is mounted on the base of the switch, the face of which is designed to mount on the dashboard, where it is controlled by hand or foot, The coil is enclosed in a light waterproof case and extends through the dashboard.
T. S. A. Splitdorf Coil for use with A Magneto, each
$\$ 22.50$
Each. .D.P. $\$ 33.33$
T. S. F. Splitdorf Coil for use with models having $\quad 2$ Magnets, each...................................... 22.50

Each. .D.P. $\$ 39.39$
T. S. B. Splitdorf Coil for use with models having

3 Magnetos, each.
22.50

Each. . D.P. $\$ 33.93$
For stationary gas engine and boat use, where finish is not required, we recommend our plain Box Coils. This type of coil is made of the same high grade materials, put up in neat lock cornered boxes, polished brass trimmings,


## New York Box Coils

This coil has been produced to meet the demand for a thoroughly efficient coil that can be sold at a moderate price. Thousands of them are in use giving entire satisfaction.
Model 55 New York Box Coil, one cylinder, each. . $\$ 2.85$ Each.. D.P. $\$ 4.75$
Model 56 New York Box Coil, two cylinder, each. . 5.70
Each. . D.P. $\$ 9.50$

## Transformer Magneto Coils

For Use in Connection With Low Tension Magnetos
These coils are extremely powerful, and will give almost one inch long spark when switched to the battery side. A special form of winding is employed, positively preventing breakdown of the secondary. They are furnished with a handsome kick switch with removable plug for both battery and magneto. We can supply the instrument to be mounted in either a horizontal or vertical position. The windings and condenser are guaranteed forever.
If your magneto is not giving the proper spark, do not go to the expense of trading in or
 exchanging for a new magneto, but procure one of these coils, and if it does not do just as we claim you are at liberty to return it, providing same is in good condition, and purchase price will be refunded. Shipping weight is $8 \frac{1}{2}$ pounds.
Each
. $\$ 8.00$
Each. D.P. $\$ 13.32$


A special 1 orm of master vibrator, which when connected to a Bosch High Tension Magneto through a set of six dry cells will cause it shower of sparks to be produced in the proper cylinders for starting, regardless of bow slow magDeto is turbing. We do not recommend tbis as an auxillary ignition system to rus on continuously, however.

Tbis device has been thoronghly tried and will not dam: age the magneto in nay manner. It gives the advantage of the Dual System magnetos, which cost several times the price asked for our instrument. It may be attached withont making the sllgbtest change to the magneto in a few minutes,

With each instrument we supply a bandsome well made klek switch with wires attached. The switch may be placed on the diriver's side of dash, and the vibrator coil can be conveniently located on engine side of dash. Shipping weight, three ponnds.
Each
.$\$ 8.00$
Each. D D. $\mathrm{P}, \$ 13.3$

## бrecibsoncomax

## PLATINUM CONTACTS

Platinum Contact Screws and Interrupter Levers
99 Platinum screw, short, Eacb Mag. Breaker, DU, ZF $\$ \$ .15$ Each..D.P \& 2.37 Doxen. D.P. $\$ 25,00$
100 Platinum Serew, long,
Mas. Breaker, DU, ZK 9.15
Each. . D, P. \& 2.37
Dozen. D D, $\mathrm{P}, 825,60$
103 Platinum serew, short,
Bat. Breaker, all types 3.30 Each. D. P. \& 2. 68
Dozen D D $\$ 3955$
104 Platinunt Serew, long,
Bat. Breaker, all types 3.30 Fach. D.P. \& 2,06 Dozen. . D.P. $\$ 30.55$
348 Platinum Screw, short.
Mng, Battery, D-DR . . 3.30
Each..D.P. 88.06
Dozen..D.P. $\$ 30.65$
349 Platinum Screw, long,
Mas. IBreaker, D-DR. . 3.30 Luch..D.P. 83.66
Dozen . D. P. $\$ 39.55$
105 Platinum Serew, short,
DA, DAV, Plain B,
 Each_. D. P
Doxen.. D.P. 82.16
Dos. 59
106 Platimum Screw, long.
DA, DAV, Plain Es,
ZEI, ZRV
Each_. D.P $\$ 2.16$
107 Platinam Serew, short,
DA, DAV, Ball Bearing 1.05 Each..D.P. \& 2.16 Dach..D.P.
Doxen. D.
D.
$\$ 23,38$
Doged. D, P, $\$ 23.38$
108 Platinnm Serew, long,
InA, DAV. Ball Bearing 1.05
 Dozen , D, P, $\$ 23$,
112 Adjusting with eaure wrench Nach. . D.P. 80.18
Dozen., D, P. \&1.40
843 Magneto Interrupter
Lever, Clockwise, DU,
Plain s, DA, bAV, as Ench.D.P. \& 2.50
Dozen. . D. P. $\$ 27.00$
$\$ 13$ Magneto Interrupter Lever, Anti-Clockwise, DU, NU, ZEI, ZEV,
DA, DAV, Plain EB , a, 25 Each. . D, P \& $\$ 250$ Doxen., D.P, $\$ 27.00$
344 Magneto Interrupter
Lever, Clockwise. D-DR 2.25 Each. D.P, \& 2,50 Dozen..D.P. $\$ 27.00$

Rubber Composition Parts 350 Slip-Ring for $\mathbf{D}, \mathrm{DK}$, each .... $\$ 1.8$ Fach..D.P, $\$ 2,00$ Dozen..D.P. $\$ 21.60$ 351 Slip-King for $D U$, each Fach. D. P , 82.00 Dozen. D P. $\$ 21$. 0 232 Ellow Terminal $D, D F$ eaeh Eqch D D $\mathrm{O}, 30$ Dorn D, DR, each Wach, D,P, 80,30 Dozen..D,P. 8,24 354 Distributar Brush Molder with Each..D.P. $\$ 1.00$ Do.................. $\$ 10.80$ 555 Conductiag Bar, each
Each..D.P. so.fin Dozen. D. P. $\$ 7.20$ Each..D.P. 80.61 Dozen..D.P. $\$ 7.20$
Carbon and Metal Brushes, Switeh Keys
148 Carbon Brush for groundins interrupters, each ..............s. Each, D.P, \$0.15 Dozen.. D.P, \$1, אh 155 Carbon Hrush for Erounding Interrupters, DA, DAV, ball bearing. each



## H5 Magneto Interrupter

Lever, Anti-Clockwise.
D-R, each …
Each.. D.P. $\$ 2.50$
1hozen..D.I'. $\$ 27.00$
356 Metal Brush for srounding interrupters, each '.'.'. $\$ 0.18$ Each..D.P, $\$ 0.20$ Dozen., D.P. 82.16 148 Collector Brush at Slip-ring. DU, D, DR, each
Each..D.P, $\$ 0.15$ Dozen., D.P. $\$ 1.5$ 151 Collector Brush at silp-ring. ZR, each


Fit Herz Magnetos


919 Primary Carben Brush, each $\$ 0.15$ Each..D.P, $\$ 0.17$ Dozen..D.P. $\$ 1.50$

213 Fiber Roller, each .......... $\$ 0.15$ Each..D.P. $\$ 0.17$ Dozen..D.P. $\$ 1.80$

sach. D.P. $\$ 2.93$ Dozen. D.P. 84.60 s:1 Platinum Screw (new style Each, D,P, $\$ 2,10$ Doxen..D. $\dddot{P}, \$ 20.80$ 211 Secondary Carbon Brush, each Raeh. D.P. $\$ 0.17$ Dozen. D.P. $\$ 1.50$ \$14 Adjusting Wrench with Gauge,


145 Distributor Brush. DU, each
Each. $\$ 0$. D.P. 30.24 Dozen.. D.P. $\$ 2.64$ Each. D. P. 30.24 Dozen. . D.P. 82.64 146 Distributor Brush, D-DR, each 1 Each. D.P. 30.20 Dozen. D.P, $\$ 2.16$ 153 Distributor Brush. ZR, each. Each. D.P. 30.23 Dozen. . D, P, $\$ 2.02$ 144 Ground Brosh with cable for base plate, ench
Each. D.P. 30.24 Dozen. D.P, $\$ 2.64$ jsif Cenductor Brash, D-DR. each Each,. D.P. 80.15 Dozen.. D.P. $\$ 1.55$ 159 Brash for Connecting Plece, each
Each. D.P. 80.15 Dozen...D, P. $\$ 1.55$ 358 Commutator Brush. Duplex Moslel, earh
Mo....................
Dosen. 97 Switch Key, Dual and Duplex
 399 switeh Key, Single Ignition
 70 Platinum Screw (old style small diameter), each

# Ohe GIBSONGOMPANY 

PLATINUM CONTACTS-Continued
Fit Splitdorf Magnetos
49 Flatinum 13reaker Lev-
er, B, D, G, S, L ... $\$ 3.15$ Eacb. . D.P. \& 3.50 Iroxen, 11 I', 8:32.N8 50 Platinum Breaker Serew, 13, 1. G, 8, L, 9.35 Each Tozen, DP \$2R.?
269: steel Reller and Pin
for No. 49
Fach, D.P. 30.17
Dozen . D.P. $\$ 1.80$
863 Coiled Wire Spring
for No. 49 ............... for No, 49
Fach, D, P, $\$ 0.01$
Dozen Dozen. D.P. 80,54; 264 Eronze Main Spring
for No. 49 ............. Each. D, P. \$0.0! Dozen.. D. P. 80.94 46 Platinum Breaker Lever, T, W, X, Y, Z, I Each. D.P. $\$ 3.50$ Dozen. D. $\dot{\mathrm{P}}, \mathrm{sj7} \mathrm{ks}$ s7 Platinum Breaker
Serew, $\mathbf{T}, \mathbf{W}, \mathbf{X}, \mathbf{Y}, \mathbf{Z}, \boldsymbol{A}$ ? .35 Each, D, P, \$2.E2 Dozun . D, P, א20 21 265 Fibre Roller Serew
and Nut for $\mathrm{N}_{0}$. 86 Ench.. D,P 80,24 No. $86 \ldots .98$

Doxen..D.P. se. 84
266 Coiled Wire Main Sprins for No. 86, each .................... 80.15 Each. D.P. 80.17 Dozen.D.P. $\$ 1.80$ 111 Adjustable Wrench with Gauge for Nos, 50 and 87 only, each
Each..D.P. 80.11 Doxen..D.P. $\$ 1.20$ \$34 Platinum Breaker Lever, EU4. Each. D.P. 22.62 Dozen..D.P. $\$ 28.20$ * 25 Platinum Breaker Serew, EU4, Eacl. D.P. $\$ 2.42$ Dozen... D. P . $\$ 28.20$ 944 Fiber Roller Screw and Nut for 234, each
Encb. D.P. 80.24 Doxen...D.P. $\$ 2.64$ 245 Spring Steel Main Spring for Ench..D.P. ${ }^{\text {N0. }}{ }^{234}$ Doxen...D.P. 81.80 \$16 Adjustable Wrench vith Gauge for No, 934 only, rach
Each. D.P.80,07 Dozen . D.P. \$1.45 363 Platinum Breaker Lever. Moalel


364 Flatinam Mreaker Serew, Model 361 Platinnm 15reaker Serew, Model
 365 Platinum Breaker Lever. Model
 366 Platinum Breaker Serew, Model
 113 Carben Distributor Brush. B, 1) $F, 88, ~ Y, ~ Z, ~ e a c h ~$ Eacl. . D.P. 90.10 Dosen. D. D. $\$ 1.08$ 114 Gianze Collecter Brush. B, D, S. G. S8, each ................. 115 Gauze Giround Brush. each Each. D.P. 80.14 Dozen. D.P, $\$ 1,45$ 163 Cophite Metal Brush, A, W,
 947 Carbon Distributor Brush. Each..D.P. $\$ 0.10$ Dozen..D.P. $\$ 1.0$ is

## 電

## $\square 00000006$

114
 Bacb. D.P, \$4.15 Dosen. D , P, \& 15,00 ? 28 Platinam Breaker Xerew, ench $2.2 \pi$ Vach..D.P. $\$ 2.50$ Dozen...D.P. $\$ 27.00$


## Fit Kingston Magnetos



314 Platinum Breaker Spring, cach $\$ 8.75$ Finch, D.P, 84.15 Dozen, D.P. $\$ 15.00$ \$15 Platimam Breaker Screw, each g.95 Vach.. D.I. $\$ 2.50$ Dozen.. D,P, $\$ 27,00$

Z29 Carlon Brush, ench ........... $\$ 0.10$ Kach., D.P. 80.11 Dozen_D,P. $\$ 1,20$
230 Gauze Brash, each ............. . $1 \overline{\text { B }}$ Each. D.P. \$0.17 Dozen..D.P. $\$ 1.80$ 96 Switch Key, each ................ os Each.. D.F. $\$ 0.09$ Dozen..D.P. $\$ 0.96$
401 Wrench with Gauge, each ... . Each..D.P. $\$ 0.17$ Dozen..D.P. $\$ 1.80$ 40: Breaker Cam, each ........... 1.1 Ench., D.P. $\$ 1.22$ Dozen.. D.P. $\$ 13.00$ ses Cophite Brash with Pigtail.
vach …
Each..D.I. $\$ 0.42$ Dozen. D.P. 84.56
167 Platinum Screw, whort, each .. 82.20Each..D.P. 82.44 Doze日...D.P. $\$ 26.40$
168 Platinum screw, long, each ., 2.20 Fach..D.P. $\$ 2.44$ Dozen..D.P. $\$ 26.40$
397 Interrupter Lever with Plati-Each. D. P. \$5.16 Doxen..D.P. \$8K. 80
39K Interrupter Lever with Plati-num, Anti-Clorkwise, each $\ldots, 4.65$
166 Wreneh with Gange, enelt13
Eac145 Carhon Distritutor Brash,

## Fit Simms Magnetos



105 switch Ker 195
 as: Callecter itruwh. exach ...... 15


# G/ke GIBSONCOMPANY 

## PLATINUM CONTACTS-Continued

Fit Eisemann Magnetos


## PLATINUM CONTACTS－Continued

Fit Remy Magnetos


18 Platinum Breaker
Screw，type HE，each $\$ 2.60$ Each．．D．P．$\$ 2.85$ Dozen．D．P．\＄31．11
19 Platinum Breaker spring，type IHB，each 2．60 Each．．D，P．\＆ 2.88
Dozen D．P $\$ 31.11$
51 Platinum Breaker
screw，type S－T，each 2.80 Euch．．D．P， 83.11
Doren．I．P． 833.60
5\％Platinum Breaker
Screw，type S－T，each $2 . z 5$ Each．D．P，\＆ 2.50
65 Platinum Breaker
screw，type L ．each．． 2.80 Each．．D，P． 83.13
Doxen ．D．P．Pidatinum Breaker
917 Plat 17 Platinum RDreaker for Lever No．370，each a．zs Each．D．P．\＄ 2.51
Dozen D．P． 827.00 Blatinum Breaker serew for type RD HL．each
Each．．D．P．S 3.13
370 Platisum Breaker Lever complete，type RD．RL，each Each D．P 85.85 Dozen D．D．siz．0u
338 Platinum Breaker
serew for Ignition Dis
tributor，each ．．．．．．．．g． Eacli．D．P．\＆ 2.60 Doxen．．D．P． 325.20 339 Platinum Breaker screw for Ignition Dis－ tributor Breaker Lever each D＂户े＂＇气＇vivi
Doven．D．P．$\$ 98.20$
367 Platinum Breaker Serew for Ignition Dis－ tributor，ench
Each＿．D．P．

368 Platinum Breaker Lever for
Ignition Distributor，each ．．．$\$ 4.65$ Each，D，P， 85.15 Dozed．．D．P，$\$ 55.90$ z15 Adjustable Wrench for Magne－ to Breaker Box，each
 369 Adjustable Wrench for Igni－ tion Distrilyutor Breaker Box， each
Bacb．D．P．$\$ 0.42$ Dozen．．．D．P．$\$ 4.51$ 117 Cam Lever and Plate for type 8－T，ench
Each．D．P，$\$ 2.00$ Dosen．．D．P．$\$ 21.00$ 371 Cam Lever and Plate for type L．each
Each．．D．I，$\$ 2.00$ Dosen．．．．．．．．．．．．．．．．．．．．．．． St steel Cam for type 8 －T， 4 and 6 eylinder，each ．．．．．．．．．．．．．isio so steel Plate for Cam Levers Nos． 117 and 371．each ．．．．．．．．．．．．．．．


372 steel Cam for type S－T， 3 cyl－ inder，each ．．．．．．．．．．．．．．．．．．．．．．．．．．． Each，D，P，$\$ 2.00$ Dozen，D．P．$\$ 11.0$ 216 Steel Cam for iype L， 4 and 6 eglinder，each Ench．D．P．s1．dif Dozen．．D＂P̈，sision §74 Steel Cam for type FDD，KL，I
and 6 eylinder，fach Gach．D．P．$\$ 1.66$ Dozen．D．P．\＄18in 375 Steel Cam for type RD，RL，\＆
cylinder. each

Facb．D．P．$\$ 2.00$ Dozen．D．P．$\$ 21.81$ 3：10 Steel Brush．type HB，each Eacb．D．P． 80.83 Dozen，D，P． 89.00 381 Copper Rrush，ivpe HE，each Rach．D．P．\＄0．42 Dozen．D．P．\＆t．56 116 Distributor Carbon Brush，type 8－I，－T，each Each．D．1．so． 17 169 Distriluater Dozen．．D，P，\＄1．80 RD．TK．each


340 Distributor Carbon 13 rash ．Ig－ nition Distributor， 4 und 6 eylinder，each Do．．．．．．．．．．．．．．．．．． Each．D．P，so， 23 Dozen，D．P，$\$ 3,80$
341 Distrihutor Carbon 13rash，Ig－ nition Distributor， 6 eylinder， each
 39 Switeh Key，each
 54 Switch Key，each ．．．．．．．．．．．．．．．
 95 \＆witeh Key，each ．．．．．．．．．．．．．．．．
Fach．．D．P．$\$ 0.05$ Dozen．．．D．1．$\$ 0.36$ 161 Switch Key，each
Fnch．．D．P．spos Dozen．．D＇，邑．sol， 96 ：\％ 6 Switeh Key，ench
Each，D，P，so，gs Dozen．．．D．P．s．in 377 H．T．Termi，S－L－T，each Wach．D．P． 80.58 Dozen．D，P，sni，2 378 H T．Term．．RD，each Ench．D．P，s0 J8 Dozen D．P sin 375 H．T．Term．，RI，each ．．．．．．．．


Fit Michigan Magnetos

919 Platinum Brealeer Bar（new）， eqch
 gbo Platinam Hrenker Serew，each a， 35 Fach．．D．F．\＆2．G2 Doxen．．D．P，825，20 937 Platimum Breaker Bar（old）． each
Each．．D．ए． 4.15 Dosen．D．P．$\$ 4500$
10）Flatinum Ireaker Serev，fach g．is Kach．．D．P．\＆2．72 Dozen．D．P．\＄89．40 321 Brealeer Cam，ench ．．．．．．．．．．． 1.50 Tach．D．P．\＄1．GA Dozen．D．I．$\$ 18.00$ ase Switeh Key，ench ．．．．．．．．．．． Bach．J．P．$\$ 0.13$ Doxen．．D．P．$\$ 1.45$ 393 Aeljustable Wreneh with
 8：8 8which P＇os，casts Enclr．1，P，sul．17 I trzen，I，I \＄1 जो

－ $2 \times 200$


295 Carlven Brash，cach ．．．．．．．．．．．．．．．． 0.19 Each．．D．P．$\$ 0.13$ Dozen．．D．＇．$\$ 1.45$
tge Gauye Brash，each ．．．．．．．．．．．．．． 80.12 Each．，D．P．$\$ 0.13$ Dozen．．．D．P． 81.45

# The GIBSONCOMPANY亦 INDIANALIS 

## PLATINUM AND TUNGSTEN CONTACTS

Fit Mea Magnetos


174 Axial Collector ISrash, BH, HK 4 nad 6 eylinder, emel ....... 80.1 Each..D.P. 80.17 Dozen.. D.P. 31.80 175 H. T, Collector Brasb, 4 and 6 eylinder, each Ench. D.P. 80.17 Dozun.. D.P. 81.80 176 L. T. Ground Brush, 4 and 6 eylinder, each
 295 Radial Distributer Brush, 4 eylinder, type A, eneh
Eacb..D.P. \$0.17 Dozen..D. P. $\$ 1.80$


## $\xrightarrow{175} \mathrm{mmun}$

## 296 Axial Collector Brush, 4 cyl-

 inder, type A, each .............80.15 Eacb. D.P. \$0. 17 Dosed., D.P. $\$ 1,80$ 297 Axial Collector Brush, 6 eylinder, type BH, BK, eachEach,.D.P. $\$ 0.17$ Dozen..D.P. $\$ 1.80$ *98 Axial Collector Rrush, 6 cylinAler. type A. each
Each..D.P. $\$ 0.17$ Dozen..D.P. $\$ 1.80$ 310 Fiher Roller, ench ..............
Each..D.P. $\$ 0.17$ Dozen..D. $\$ 1.80$

## Fit Heinze Coils


 170 Platinum Screw, each ........ $2.4 \bar{\partial}$ Each..D.P. $\$ 2.72$ Dozen. .D.P. $\$ 29.20$
 294 Platinum Screw, each ....... 173 Radial Distributer Brush, BH,




PLATINUM AND TUNGSTEN CONTACTS-Continued
Fit Kingston Coils


80.95
1.15
1.5
1.15
1.15
.95
1.15
1.15
.95
89 Spring Platinom, each
Euch. D.P. \$1.2s Dozen.. D.P. \$1iz'so
88 Serew Platinum, each
Enoh D.P \&, 28 Doged. D P $\$ 13.90$

sos Bridge Tumesten, each .........


10 \&witeh Key, eath . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 15
Rach. D.I. \$0.17 Doxen.. D.P.si.si



## Fit Heinze Magnetos



ZTHMMWMY


303 Platiaum Breaker Bar, each . . . . . . . . . . . . . . . . . . . . . . . . 88.80

sel Platinum Breaker Serem, each . . . . . . . . . . . . . . . . . . . . . . 8.95
沰5 Distributor Caphon Brash, ench .......................... . . . . 30 Each. D.I' 80.:33 Dozen. . D.I', 8: tio
teal Metal Itrush for M. and IB, mach . . . . . . . . . . . . . . . . . . . . . . . . 30


105 Wremph with Gastge, rach . . . . . . . . . . . . . . . . . . . . . . . . . 15 Earli. IV.I. \$0.17 Dazen. IV.I. \$1.81

Fit Connecticut Coils


10 Platinum ©pring waels
 If Ilatinum spring, vacly
 12 Platinam kcrew, coch
 If Switch Plug, pael



243
is Switch Lever, each



Fit National Coils

: 0 Flatinau Screw, each ..... 81 .15

164 Ench. 11P, $\$ 1.8 \mathrm{~B}$ Dozen, D. P, \$13.80
i1 Jlatimem spring (German silver), vach ................. , 95
Fachafmem fprimg (German siver), euch
Wach, D. P. $\$ 1.06$ Dozen.. D.P. $\$ 11,40$
160 wwith Lever
Dach. D.I. su.17 Doxen. 'D. N'si.mi

3s1 Platimam Spring (Copper Plated), each ............. 1.05



# бRecibsoncomar Molis <br> PLATINUM CONTACTS 

Fit K-W Spark Coils


88


88 Spring Tungsten, each
Sach..D.P. 80.tio Dozen, D.P, s6, en 89 Bridge Tunsकाen, each.
Eiteb. D.P, \$0, \&i Dozen. . D. P. sci,om


.80 .05 .25
.85
as switelh Plas, each Fir-b, D.F, $\$ 0.17$ Dozen. . D. I. \$1.80

112 Adjusting Nut for No wach

Fit New York Spark Coil


98

445 Platinem Bottom spring, each
.81 .15
Each..D.P. $\$ 1.28$ Dozen..D.P. 813.80
446 Platinum Ton Spring, each
125
Each.. D.P. $\$ 1.50$ Dozen..D.P. $\$ 16.20$


Each..D.P. $\$ 0.17$ Dozell..D.P. $\$ 1.60$
Each..D.P. 80.17 Dozen. D. P. $\$ 1.80$
Fit J. \& B. Spark Coils


C6

411


Fach..D.P, $\$ 1,60$ Dozen.,D.P, $\$ 16,20$
67 Platinum Bristre, each
Each..D.P $\$ 1.10$ Dozen.. D. F. $\$ 15,01$
410 Platinum spring, each
Each...D.P. $\$ 1.50$ Dozen. . D.P. $\$ 16.20$


67

## 125


.$\$ 1.85$
1.25

Fit Americoil and Detroit Coil
411 Platisum Bridge, each
Each.. D.P. $\$ 1.40$ Dozen. . D.P. $\$ 15.40$
1 Es Switch Plug, each


410

Fit Ford Switch

334 Tungsten Contact Spring, each $\$ 1.90$ Each..D.P. $\$ 2.11$ Dozen.. D.P. $\$ 22.80$

335 Tungsten Contact Screw, each 1.90 Each..D.P. \$2. 11 Dozen..D.P. \$22.80



316 Platinum Contact Screw, each \$1. Each..D.P. 81.25 Doze日 . D.P. $\$ 18.50$ 317 Platinum Vibrator spring, each 1.35 Each. . D.P. $\$ 1.50$ Doxed.. D.P. $\$ 16.20$ 318 Platinum Screw for Bridge, each
Each..D.P. \&1.2s Dozen. D.P. \&13.80
 tem


Fit Connecticut Master Vibrators


56


57


257

56 Platinum IBridue, each
Esch., D.P. $\$ 2.11$ Dozen. D.P. sog ii)
57 Platinum Bottom Spring. each ,
Each.. D.P, $\$ 2.44$ Dozeग . . D,P, $\$ 26.40$
?5\% Platinom Bridge, each
Fach. D.P. غ2.F0 Doxen . ID.P. 22700

258

$\$ 1.90$
*. 30
*. 25

SEE THE FORD SECTION-IT CARRIES MANY ARTICLES YOU SHOULD SELL

# The GIBSON COMPANY 

## PLATINUM CONTACTS-Continued



127 Tungsten Bridge, each


Esch., D, P. \&2.11 Dozen. . D, P, $\$ 29.80$
Each. J,P. 82.44 Doxen. D.P. $\$ 26.40$


96


444
 $\mathbf{3 1 3}$ Tungsten Berew for Brialge, each . . . . . . . . . . . . . . . . . . 1.00 Rach..D.P. \$2.11 Dozen,.D.P, \$2-2,80
96 switeh Key, each .....".........
Ench..DP. sof


399 Tungsten Bridge, each
Each. D. P, \$2.50 Dozen . D.P. $\$ 27.00$ 300 Tungsten Bottom spring, each Rach. D.P, 82.11 Doxen. . D. P, 822,4$)$ sol Tungsten Bottom spring, each . Encli..D.P. \&2.62 Dozen..D... \& , 20


137
136 Tungrten screw, each
Each., D.P. \&2.11 Dozen. D, P. 82.80
137 Tungsten Sprimg, each
Each. D. P. \$2.11 Dozen . . D. …822 90

Each. D.P. \$2.11 Dozen.. D.P. \$22.80
(b) Switch Key, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 00.15

Facl...D.P. $\$ 0.17$ Dozen...D.P. $\$ 1.50$
414 Adjustable Nut for No, 2!9, each
Each..DP. \$0.09 Dozen.. D.P. $\$ 0.96$



136


140


129


130

131 Platinum Top Npring, each Each.. D.P. $\$ 2.62$ Dazen. . D.P. $\$ 27.20$ 132 Platinum Bottom sprias, cach Each..D.P. $\$ 2.62$ Dozen...D.P. $\$ 27.20$ 956 Platinum Top spring, each 188 switeh Plyg, each
Each..D.F. .17 Inozeli..., i, P. \$1.80


131

## G／ke GIBSONCOMPANY产POLIS

## PLATINUM CONTACTS－Concluded



90




98

236 Platinum Top Spring，each ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 80.87 Each．．D．P．$\$ 0,30$ Dozed．．D．P．$\$ 3.24$

412 Adjusting Nut for Nos． 91 and 236，each ．．．．．．．．．．．．．． 08 Rach．．DP．\＄0．00 Dozen．．D．P．$\$ 0.96$

Fit B．\＆S．Master Vibrators


93
92 Platinum 93 Each，D．P．$\$ 2.00$ Dozen．．D．P．\＄2s． 20 93 Platinum Screw，each Ench．．D．P．$\$ 2.11$ Dozen．D．P．$\$ 22$ so 138 Platinam spring（top），each 138 Platinom spring（top），each
Fneh．．D．P． $32 . \mathrm{m}$ Dozen．．D．P．s． 20


138
.82 .35
.12 .35
1.90
2.35


139


130 Platinum Spring，（bottom），each Each．．D．P．\＄2．60 Dozen．．D．P．$\$ 28,20$ \＄38 Platinum Spring（new），each
Each．D．P．$\$ 2.00$ Dozen．D．P．$\$ 28.20$
412 Adjusting Nut，each，
Fnch．．DP，song Dozen．．D．P．si．9f

90 Platinum Bottom Spring，each
Each．．D．P． 82.94 Dozen．．．D．P． 831 so 91 Platinum Top Spring，each
Each，．D．P．$\$ 3.00$ Dozen．．D．P．$\$ 32.40$


Fit Delco
 Each．．DP．$\$ 3.16$ Dozen．．D．P．$\$ 34.24$

Platinum Points


## Genuine Tungsten Points

30T for all Ford Vibrators，each
.80 .50
22T for Kingston Master Vibrator，each ．．．． 1.90 $23 T$ for J．\＆B，and Well＇s Master Vibrator， 95

Each．．D．P．$\$ 1.06$ Dozpr．．D．P．$\$ 11.40$ Each．．D．P．$\$ 2.11$ Dozen．．D．P．$\$ 22.80$

## Adjustable Type

Ior 1917 and 1916 Ford Cars


Model Z-15 Ford Wind Shield, with plate glass only, $39 \frac{1}{2}$ inches wide, 24 inches high, each. $\$ 10.00$ Each. .D.P. $\$ 16.66$

It is not providen with brackets or cross bar, abd was designed to fit into the brackets on the car when the non-ventilating shield was removed. The side members fit into the brackets and are drillen when in position for inserting the bolts which are furnished. This construction allows the sbield to be attached without disturbing the brackets attached to the body.
Model Z-16 Ford Wind Shield, with plate glass only, 39\} inches wide, 24 inches high, each. $\$ 10.00$ Each.. D.P. $\$ 16.66$

The persistent demand for the Alljustable Shield, complete with brackets and croxs har, bas cansed the manafacturers to produce this sbield. It will be furnished complete with lirackets and cross bar assembled, and is an improvemed and superiot to ofliets as the cross bar is fitted with a rubher filler strip which comes im contact witb the lower frame and makes the shield ahsolutely weatberproot when closed. Anotber adrantage is that the holes in the brackets are oblong so that the shied is sattached without nlime the holes in the hotly, re: drilling or otberwise marring, and is more easily atfached. Loops for top straps in proper position are provifeal The stanmhions or side mombers of this momblare are of extra heavy stanchions or kide mombers of this model are of pexta heary
sted, which prevents lireaking where inserted in the brackets.

De Luxe Cowl Type for 1914 Ford Cars


Model V-15 Ford Wind Shield, plate glass only,
$40!$ inches wide, each
$\$ 12.50$

## Each. .D.P. 820.84

The need for a shiedd and cond combined to bring the 191+ Ford cars up to date, was responsible for the designing of this model.

This shield is clear view, rain rision anal ventilatiog, and is equipend with the best quality of plate glass onty. It is casily attached and all mexsesary coptipment is formished. Loops
for top slrap sbaps are provided in proper position.
The coul is f0! inches wide innd will fit any car with straight dush which is of the same width from ontside to outsile at a point just in tront of the fore doors
 of the cars and gives the ofder Vords the stream-1ine effect of the late modlel.


Model 10-C Wind Shield, 42 inches wide, $27 \frac{1}{2}$ inches high, with coach glass, each.
$\$ 10.00$ Each., D.P. \$16.66
Model 74-C Wind Shield, 38 inches wide, $25!$ inches high, with coach glass, each.
$\$ 10.00$ Each. . D.P. \$16.66
Model 75-C Wind Shield, 42 inches wide, $27 \frac{1}{2}$ inches
high, with coach glass, each
10.00

Each. . D.P. \$16.66
Molel No. 10 is the regular eqnipment furnished the Ford Motor Company for their 1911 and 1912 cars. We do not fur"ish filler board with model No, 10, but all necessary parts for attaching are furnished.

The No. 74 and No. 75 models are furnished with $6 \times 36$-ineh ebony tinisbell tiller boards ubless otherwise specifled, as well as all other necessary eqmipment for attaching, including straight stay rods 5 feet long. Rubber filler strips will be supphied in lien of filler boards when specified.


Model 12-C Wind Shield, 42 inches wide, $27!$ inches high, with coach glass, each.
$\$ 10.00$ Each. . D.P. $\$ 16.66$
Model 77-C Wind Shie!d, 38 inches wide, $25!$ inches high, with coach glass, each. Each. .D.P. \$16.66
Model 78-C Wind Shield, 42 inches wide, $27!$ inches high, with ceach glass, each
10.00

Each. . D.P. $\$ 16.66$
Model No. 12 is an exact duplicate of shields furnished for the Regulat 1913 smi 1914 Ford cars, it is made with the diviting bars used on the $191+$ shicha and folds toward the driver. We slo wot furnish filler loarals with Monlel No, 12 but all becessary parts for attaching are supplied, including 18-inct turxed rots for attaching to body.

With Mostels No. 77 and No, is we furnish ebony finisbed filler boards which are 36 inches long anal 6 inches wide, and all othor necessary parts for aftaching, including stay roils
ath
 iz inches follg, Wheke filler hoard
it rabler filler strip whon specified.

# The GIBSONGOMPANY立POLIS 

## WIND SHIELDS, CLEANERS AND STEER WARMS

## RAIN VISION AND VENTILATING TYPE



Model A-14 Wind Shield, 42 inches wide, 24 inches high, plate glass (may also be had 38 inches wide), each
. $\$ 25.00$ Each. .D.P. $\$ 41.66$

This is the Vanguard General Utility Shield. It is the rain vision, clear view and ventilating type. The upper section is designed to fold down in different positions as desired. The shield is fitted with a sub-frame which clamps firmly to the dash and is securely braced with stay rods. The sub-frame is fitted with rubber insert which effectively weatherproofs the lower zection when closed.

## ONE-PIECE TORPEDO TYPE



Model B-30 Wind Shield, 40 inches wide, 17! inches high, plate glass, each
$\$ 15.00$
Each. . D.P. $\$ 25.00$
This shield is 40 inches wide and $17 \frac{1}{2}$ inches high. When specified we can furnish it 36 inches wide and 171 inches high. It can be inclined toward the driver at an angle of about 15 degrees. This will allow circulation of air throughout the car. It is very popular for use upon cars of the speedster type. When not needed it can be folded forward parallel with the hood. We ship 40 -inch unless 36 -inch is specified.

It is finished in plate glass only and all necessary parts for attaching, including $8 \times 40$-inch ebony finished filler board are furnished.

Security Wind Shield Cleaner
The Security Cleaner is an adaptation of the rubber squeegee used for cleaning show windows. It is automatically attached on the upper frame of the shield. A rubber strip presses firmly against the outside surface of the glass and a guiding arm inside prevents rattling.

When your vision is blurred, the Security obviates the necessity of lowering the shield and exposing yourself to the storm, or leaving your
 seat, or removing both hands from the wheel for the purpose of wiping the glass. Draw the cleaner once across the glass and every particle of dust, every drop of rain or every flake of snow will be instantaneously removed. It is so compact that it will not interfere with the folding of operation of the shleld and it is so inconspicuous that it mar be kept on the shield as a permanedt Exture. Security Wind shield Cleaner, nickeled finish, each........ $\$$ s. 00 Each., D.P. 8,

## Outlook Wind Shield Cleaner



Tbe Outlook Cleaner fits any wind shield, attached is two minutes; fastened to top or side of shield; left on car the year round; has an adjustable wiper: wefight about 12 ounces: best grade of rubber used ; black or nickel tinish: cleans witbout leaviug seat.

Either finish. each
$\$ 1.50$ Each..D.P. $\$ 2.48$

## Steer Warms

This Illustration shows a pair of Steer Warms installed on an Overland Car
Ieco Steer Warms consist of two neat leather covered grips, one for each hand, which lace on the steering wheel at convenient places for driving. The inventor of Steer Warms has very cleverly placed
 special resistance wires between two copper plates in such a way that a very small current is sufficient to keep the grip warm. Furthermore, after the grips reach a certain temperature, they will get no hotter, but will retain this same heat as long as the current is turned on.

Steer Warms can be attached to any make of car in ten minutes. There are no bolts or screws; no holes to bore. Lace on; wire up-that's all.
Ieco steer Warms for Ford, pair Per Pair. .D.P. $\$ 7 . \pi 7$
Ieco Steer Warms for other cars, pair. . . . . . . . . . . . . . . . . . . . . 7.50 Per Pair..D.P. $\$ 11.66$

# The GIBSON GOMPANY $\overline{\bar{P}}$ 

STEERING WHEELS AND COVERS

The Ford Steering Wheel


16 -inch Ford Steering Wheel, black enameled, malleable iron spider on walnut stained maple corrugated rim, each.
Each. D.P. $\$ 5.00$
17 -inch Ford Steering Wheel, black enameled, malleable iron spider on walnut stained maple corrugated rim, each. .
Each. D.P. $\$ 5.55$
18 -inch Steering Wheel, black enameled, malleable
iron spider with $\frac{3}{\text {-inch hole in hub, walnut }}$ stained maple corrugated rim, each.

## Each. D.P. $\$ 8.82$

It is impossible to carry steering wheels to fit all cars, but the 18 -inch wheel described above has a 4 -inch hole in the hub that any mechanic with proper tools can enlarge to any desired size.

## The Gemco Tilting Steering Wheel

## The Gemco <br> Tilting

 Steering Wheel for Ford fits the steering column without any mechanical changes, as the spiders are machined to fit. The standard steering wheel supplied by Ford is only 15 inches and, as the larger wheel means greater leverage, this 17inch wheel ha3 proven very popular with Ford owners. The tilting feature has met with great favor.No. 3 Gemco Ford Tilting Steering Wheel, 17 -inch, with plain rim, each.
Each..D.P. \$6.33
No. 4 Gemco Ford Tilting Steering Wheel, 17 -inch, with corrugated rim, each.
5.25

Each..D.P. $\$ 7.77$
No. 18 Gemco Overland Tilting Steering Wheel,
with 18 -inch black corrugated rim, each...... 10.00
Each. . D.P. $\$ 14.82$
No. 19 Gemco Dodge Tilting Steering Wheel, with 17 -inch black corrugated rim, each. 5.50

## Each. D.P. $\$ 8.15$

No. 20 Gemco Reo Tilting Steering Wheel, with 17 -inch black corrugated rim, each.

No. 21 Gemco Maxwell Tilting Steering Wheel, with 17 -inch black corrugated rim, each.

## The Neville More-Room Steering Wheel

Neville's "More-room" Steering Wheel
TOP VIIW

The Neville More-Room Steering Wheel appeals to every one because it gives eight inches more clearance under steering wheel in getting in or out of car; it makes entering or leaving the driver's seat a pleasure, even when wearing a heavy overcoat; it makes the closed car as roomy as a touring car with top down; it allows room for the use of robe and arranging same easily, and on account of the simplicity of operation, which is as follows: Touch the button to release the lock catch. Slide the wheel up out of the way until the catch holds. Driver enters or leaves car easily with eight inches more room between wheel and seat. Touch the button and the wheel slides back into driving position and locks the catch. Prices as follows:
17 -inch Ford Type, corrugated rim, walnut finish, each …..... Each.. D.P. $\$ 10.00$
17 -inch Ford Type, corrugated rim, walnut finish,
with thief-proof steering post lock, each..... $\$ 8.00$ Each.. D.P. $\$ 12.77$
18 -inch Regular Type, corrugated rim, walnut finish, each
Each..D.P. \$15.84
We carry the Neville Wheels in stock for Ford (17inch) and for Overland 83 ( 18 -inch), bored ready for attaching, also in 18 -inch with blank center that any mechanic with proper tools can drill out to size desired.

## Rubber Steering Wheel Covers

These covers lace over the steering wheel. They give a positive gripping surface and relieve the hands from all vibration. They are made from high grade red rubber.


Rubber Steering Wheel Covers for 17 -inch or less, each .
$\$ 2.00$
Each. . D.P. $\$ 3.32$
Rubber Steering Wheel Covers for 18 -inch or larger, each
Each. . D.P. $\$ 3.66$

# The GIBSONGOMPANY 

## LICENSE BRACKETS

Neverout License Brackets for front and rear license tags. Hold license tags firmly in position and illuminate rear numbers as required by law. Made for every style of car. Furnished in black enamel.


Front License Bracket No. $36-$ For cars with round fllers, attaches directly to water filler tube, each . . . . . . . . . . . . . . . . . . . . . . $\$ 0,35$ Each., D.P. 80.48


Combination Rear Lamp and License Tag Holder
No, 62-Interchangeable type, fits majority of brackets on rear of cars. each ........................... 80,35
Each., D. P. $\$ 0,18$


Front License Bracket
No. 77 -For all carn with oval nilers, attaches directly to water filler tube, each Each, D.P. 80.40


Ford Front License Bracket
No. 871-Attaches to Ford beadilght
bracket when tag is not over is
inches long, each ................. 80.2 s
Each.. D.P. $\$ 0.33$


Rod License Bracket
No. 178-For attaching to any rod between headlights. Because of sibsle grip can be used on curved or st raight rods, each ........... $\$ 0.25$ Each. .D.P, $\$ 0,83$


Combination Ford Rear Lamp and License Tag Holder
No. 62I-Interchangeable type for Ford cars. Flat prop, made for lamps that do not have combina-
tion socket- and rentire flot prep.
Rach. Di.

joteveicut
PATENT LICENSE BRACKET N 976 PATENT INTERCHANGEABLESYSTEM
No. 76-For all cars with oval fllers, nttaches directly to water filer tube, each ............. $\$ 0.3$ Each..D.P. 80.40


No. 78 Por atheching
. 28-For attaching to any rod between headights. Because of single grip can be used on curveal or straight rods. each
Each. $\overline{\mathrm{D}}, \stackrel{\mathrm{P}}{ }, \$ 0$

## W678

No. 90-License Brackets to hold plate suspended from rod between headlights. This type admits of many positions, per pair . .............................................. 80.25 Per Pair..D.P. 80.27


No. 92-8mall size for all cars with fillers of less sliameter than 8 inches. Same style as Ne, 9 , each
., 50.50 Fach. D, $\dot{\mathrm{P}} .80 .5$


No. 19-Special prop. adapted for cars havisg large fenders, where lamp will not flt when placed on regniar bracket, each ........... $\$ 0.00$ Ench..D.P. 80.65

No. 8-Large sixe for all cars with extra large llers. Attaches direct-

Is to water flller fabe, each . . . . . . . . . . . . . . . . $\$ 0.50$ Each. D.P, $\$ 055$


Puctit it U. S. at Prodpal Forvo Courle


No, $0-21$ - Flat prop. made for lamps that do not bave combination noekets and require flat prop, each ${ }^{2}$ Each. D.P. 80 立它


No. 97 -Ford License Brackets, to be held by front spring
bolts, as shewn in illastration, per pair.................... $\$ 0,93$ Per Pair.. D.P, 30.27

## Gemco Exhaust Horns <br> THE MELODY



Due to careful workmanship and exhaustive tests the tone of this horn is far richer and more melodious than any similar horn on the market. A very weak exhaust will easily blow it. All horns are tapped to fit 1 -inch standard pipe. Attached and operated by means of various valves shown on page 18 .

The large No. 1 Horn is intended for large motors, and the small size, No. 2, for cars such as the Ford, Studebaker, Overland, Empire, etc.

No. 1 Gemco Exhaust Horn, $2!\times 14$ inches, each. . $\$ 3.50$ Each. .D.P. 84.77

No. 2 Gemco Exhaust Horn, $2 \times 10$ inches, each. . 2.50 Each.. D.P. $\$ 3.55$

Maxim-The Perfect Buzzer Horn



The Maxim Vibrator Horn is a wonderful warning signal, excelling in its class for its sound and for its permanent and efficient service. Is neat in appearance, simple in construction and has a loud and pleasing tone.

Maxim Hern, black and brass, each............. . . 83.50
Maxim Horn, black, each . . . . . . . . . . . . . . . . . . . . . 3.50
Each. D.P. $\$ 4.66$ Per Dozen. . D.P. $\$ 53.33$


No. 8. Horn Bulb, size $3 \frac{1}{3} \times 5$, with brass mountings, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 80.75
Each. .D.P. $\$ 0.80$ Per Dozen. .D.P. $\$ 8.88$
No. 18. Horn Bulb, size $3 \frac{1}{3} \times 5$, with nickel mountings, each
.80
Each.. D.P. $\$ 0.88$ Per Dozen. .D.P. $\$ 9.66$
No. 12. Horn Bulb, size $3 \frac{2}{8} \times 5 \frac{7}{6}$, with brass mount-
ings, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
.90
Each. .D.P. $\$ 1.11$ Per Dozen. .D.P. $\$ 12.00$
No. 112. Horn Bulb, size $3 \frac{1}{2} \times 5$ ? with nickel mount-
$\qquad$
Each..D.P. \$1.22 Per Dozen.. D.P. \$13.32
No. 15. Horn Bulb, size $4 \times 6 \frac{1}{5}$, with brass mountings, each .............................................
1.00

Each.. D.P. \$1.32 Per Dozen. .D.P. \$14.66
No. 115. Horn Bulb, size $4 \times 6 \frac{1}{5}$, with nickel mountings, each .
1.10

Each. .D.P. $\$ 1.44$ Per Dozen. .D.P. $\$ 16.00$
Ford Horn Bulbs, each
Each..D.P. $\$ 1.00$ Dozen. .D.P. $\$ 11.10$

## Reeds



No, 20. Horn Reeds, tapered, each . . . . . . . . . . . . $\$ 0.20$ Per Dozen. . D.P. \$2.22


No. 25 Horn Reed soldered with nipple, one end fits horn, other tube. Brass mounting; guaranteed; put up in separate boxes, each
Per Dozen. . D.P. $\$ 3.77$
No. 26. Same as No. 25, only nickeled finish, each. . 35 Per Dozen. .D.P. $\$ 4.00$
No. 27. Same as No. 25, only black finish, each...
Per Dozen. .D.P. $\$ 4.00$
No. 28. Horn Reed with double end bushing for use in center of tube, brass finish, each.
Per Dozen. . D.P. \$3.77
No. 29. Same as No. 28, only nickeled finish, each. .35
Per Dozen. . D.P. $\$ 4.00$
No, 30. Same as No. 28, only black finish, each.... . 35 Per Dozen. . D.P. $\$ 4.00$

# The GIBSONGOMPANY <br> KLAXON HORNS 

There is a Klaxon for every kind and size of automobile-for trucks, motorcycles, motor boats.


Klaxen Type L, each . . . . . . $\$ 20.00$ (Long projector)


Klaxon Type S, each....... $\$ 20.00$
(Short projector)


Klaxonet, each
. $\$ 15.00$


Underhood Klaxet, each..... $£ 6.00$ (Black only)

The Type L Klaxon is the largest of the Klaxons. It is the one you see on all high priced cars. You can always tell it.

The right angle construction distinguishes it from all other signals. No other signal even looks like it; no other signal sounds like it.

## Smaller Klaxons

The Klaxonet at $\$ 15.00$ and the Underhood Klaxet at $\$ 6.00$ are smaller Klaxons operating on the same principle. And for cars like the Ford that do not have electricity, there is the Hand Klaxon at $\$ 7.50$ and the Hand Klaxonet at \$4.00.

## Klaxons for Motorcycles

The Klaxet, the Hand Klaxon and Hand Klaxonet are supplied with short projectors and handle bar, frame or tank brackets.

## Klaxon Finishes

The smart finish is "Klaxon black"-black enamel throughout. It is not only the fashionable finish, but also the most practical finishrequires no polishing or attention. Unless otherwise specified, instruments are supplied in this finish. To meet special requirements they can be had in black enamel and nickel or black enamel and brass. The electric Klaxons are supplied complete with push button and 10 feet of double insulated wire. They are regularly wound for six volts. For special voltages up to 21 volts no extra charge is mde.


Underhood Klaxon, each.... $\$ 12.00$ (Black only)


Hand Klaxon, each.
$\$ 7.50$


Hand Klaxonet, each........ $\$ 4.00$


Hand Klaxonet, each . . . . . . $\$ 4.00$
(Motorcycle type)

## GAS LAMPS

Gas Searchlight


No. 176-Deck Base


No. 98-Dash Base

This lamp is made of very heavy gauge brass finished in black and nickel, short coupled and in one piece equipped with genuine Mangin mirror and silver front reflector. Has solid brass fork brackets, black enameled, which allow vertical and lateral movements, and is provided with thumb nuts to lock in any position desired.
No. 176 Gas Searchlight, $8 \frac{1}{4}$-in. front, black and nickel finish, with deck base, each. $\qquad$ .89 .50 Each...D.P. \$13.88
No. 276 Same as above with dash base for use on commercial trucks or motor cars, each........ Each...D.P. $\$ 13.88$
No. 177 Gas Searchlight, $9 \frac{1}{2}$-in. front, black and nickel finish, with deck base, each........... Each....D.P. \$14.44
No. 277 Same as above with dash base for use on commercial trucks or motor cars, each........ Each...D.P. \$14.44
No. 98 Gas Searchlight, diameter 11 in., with 7 -in. Mangin mirror, made of heavy gauge brass and heavy malleable iron; swivel brackets. Specially for use on trucks. Will stand the most severe road tests. Finish black and nickel; dash base. $\qquad$
Each...D.P. $\$ 20.00$


## Electric Searchlight

This lamp is made of extra heavy gauge brass, finished in black and nickel, with genuine silver-plated parabolic reflector and Ediswan base. Has solid brass black enameled fork brackets which allow vertical and lateral movements and can be locked in any position desired.

No. 166 Electric Searchlight, $8 \frac{1}{2}$-in. front, black and nickel finish, with deck base, each........ 88.75 Each ...D.P. \$12.77
No. 266 Same as above with dash bracket, each... 8.75 Each D.P. $\$ 12.77$
No. 167 Electric Searchlight, $9 \frac{1}{2}$-in. front, black and nickel finish, with deck base, each. Each. D.P. $\$ 13.33$
No, 267 Same as above with dash bracket, each. . 9.00 Each....D.P. \$13.93


8-ineb Gas
Lights both sides of the road by means of the beveled silvered reflector in addition to the spotlight which is thrown far ahead by the large ground glass Mangin mirror.

Front glass is heavy gauge and held in place by beveled silvered reflector.

The large Mangin mirror is held in place by three screws and lugs, instantly removable.
No. 8 Gas Headlight, $8-\mathrm{in}$. front, 5-in. Mangin
mirror, 7 -inch prop center, finish black and
brass, per pair
. $\$ 7.00$
Per pair.. D.P. $\$ 10.00$
No. 80 Same as No. 8, black and nickel, per pair... 8.50
Per pair. .D.P. $\$ 10.00$


10-Inch Gas
Latest model of gas headlight, close coupled typefar superior to anything on the market, in the way of medium priced lamp. It is compact, large in diameter and short in length. One-piece body, made of heavy gauge material throughout, and will stand all kinds of hard usage. Easy to clean and will give a most brilliant light.

Genuine ground glass mirror and silvered front reflector. All parts interchangeable and easily removed for cleaning or repairs. This lamp will appeal to manufacturer, dealer and consumer.
No. 10 Gas Headlight, $10-\mathrm{in}$. front, $6-\mathrm{in}$. Mangin mirror, $8 \frac{1}{4}$-in. prop center, finish black and brass, per pair r........

Per pair., D.P. $\$ 14.44$
No. 100 Same as No. 10, black and nickel, per pair 10.00 Per pair., D.P. $\$ 14.44$

# The CIBSONOMAY 

LAMPS

Oil, Side and Tail Lamps


Nos, 426 and 126


Nos, 526 and $3: 6$

This new type lamp is beautiful in design, die work construction tbroughout, all parts intercbangeable and fittog per. fectly.

Oil pot locks with a simple turn of the wrist. Semaphore lense used, retained by a snap ring; door fastened by a spring catch and a knorled nut.

No. 496 Oil Side Lamp, height $8 \frac{1}{2}$ inches, bod $74 \times 48$, fitted with red jewel in rear, finished all black, per pair. .... $\$ 4.00$ Per pair., 1).P. $\mathbf{\beta}^{6} . \mathrm{B}_{\mathrm{K}}$

No. 526, same as No. 426 only combination oll and electric,
per pair
5.00

Per pair, 1, P. $\$ 8.33$
No, $1260 i l$ side Lamp, height 81 inches, body $4 x 43$, fltted with red jowel in rear, finish black and nickel, per pair
Per pair..D. P. \$6.6t
No. 326, same as No, 126 only combination oll and clec-
tric, per pair
5.00

Per pair..D.P. $\$ 8.13$


Nos, 424 and 124


Nos. 534 and 324

This lamp is vibration proof. It is almost indestructible -made of beavy steel, tin-coated to prevent rusting.
No. 494 Oil Tail Lamp, height 82 inches, body $4 x 43$, botb erystal anal ruby lens of the semaphere fype. flnish all black, each
Each. D. P. \$3.is
No. $\overline{2} 44$, same as No. 424 only combination oil and electric, each

No. 124 Oil Tail Lamp, height 82 inches, body $4 \times 48$, both crystal and ruby lens of the semaphore type. finish black and nickel, each .............................................. 2 . Each. .D.P. $\$ 3.39$

No. 324, same a* No. 124 only combination oil and electric, each .. Each..D.户, \&


Square Side Oll Lamp-Suitable for all typeg of cars and Las a very attractive appearance. Prop riveted through beavy steel plates on the inside. The strongest possible construction. Will not leak oil and has many other exclusive features.

Square Tail Oil Lamp-An absolutely dependable tail lamp suitable for large or small cars. Fitted with Red Semaphore Green semaphore and White Semaphore lenses Cold blast method of draft. Extra beavy gauge. The most attractive tall lamp on the market. The door swings outward and when the match is inserted it is on a parallel line with the wick. A vertical ball of fire on the rear of any car.

No. 29 Oil side Lamp, height 11] inches, body 4!x42, finish
all black, per pair Per pair. D.P. $\$$

No. 122, same as No, 29, black and nickel finish, per pair 5.00 Per pair., D.P. $\$ 7 . \pi 7$
No. 23 Oil Tail Lamp, height 111 mehes, body $43 \times 44$, finish black, each Each.. D. P. $\$ 3.88$

No. 123, same as No. 23, black and nickel flnish, each . . . . 2.50 Each..D.P. \$3.88


No. 624 Oil Tail Lamp, all black finish, with speeial stud bolt and nut on back to fit 1915 and 1916 Ford, each... $\$ t .00$ Fach..D,P, $\$ 3,33$

No. 224, same as 624 only combination oil and electric, each D. P. \&\% \%2

No. 696 Oil Side Lamp, all black finish, with special stud bolt and nut on back to 5 it 1915 and 1916 Ford, per er pair..D.P. \$6. 6

No. 726. same as 626 only combination oil and electric, per pair

## The GIBSON COMPANY $\overline{+(1 N O L I S}$

## ELECTRIC HEAD AND SIDE LIGHTS

## The Bullet Type



Our Bullet lamps are made of the very best material and workmanship, quality being the watchword all along the line.
No. 410 Electric Headiight, $10-\mathrm{in}$. front, 7 -in. prop centers, finish all black, per pair
.86 .50
Per pair, .D.P. \$9.44
No. 310 Same as 410, black and nickel finish, per pair.
Per pair., D.P. $\$ 9.44$

These lamps supplied with extra dimmer bulb at $\$ 1.50$ per pair extra.
Per pair. .D.P. \$2.22 extra.

These new electric lamps are the last word in electric lamp equipment. The very best material used in their construction and the finish, as usual, is extremely high grade. Furnished in all black or black and nickel. Ediswan Bayonet sockets and plugs are used.


No. 1116 Electric Headlight, 11 -inch front, $8 \frac{1}{2}$ prop centers, all black finish, convex glass, per pair. $\$ 11.00$ Per pair. .D.P. $\$ 16.10$
No. 2116 Same as 1116, black and nickel finish, per pair
11.00 Per pair. .D.P. $\$ 16.10$

These lamps supplied with extra dimmer bulb at $\$ 1.50$ per pair extra.
Per pair.. D.P. \$2.22 extra.


No. 1216 Electric Headlight, 12 -inch front, $9 \frac{1}{4}$ prop centers, all black finish, convex glass, per pair.
$\$ 13.25$
Per pair. . D.P. $\$ 19.44$
No. 2216 Same as 1216, black and nickel finish, per pair 13.25

Per pair. . D.P. $\$ 19.44$
These lamps supplied with extra dimmer bulb at $\$ 1.50$ per pair extra.
Per pair. .D.P. $\$ 2.22$ extra.
All electric head lamps have focusing sockets, either single or double pole furnished. Double pole standard unless otharwise specified. Standard equipment includes 6-7 volt bulbs. Other voltages furnished at usual advances.

The Bullet Type



No, $204 \frac{1}{4}$ Electric Side Light, $4 \frac{1}{2}$ inch front, finish all black, per pair
.83 .50
Per pair. .D.P. $\$ 5.55$
No. $104 \frac{1}{2}$ Electric Side Light, $4 \frac{1}{2}$ inch front, finish black and nickel, per pair..
3.50

Per pair. .D.P. $\$ 5.55$

No. 306 Electric Side Light, 6 -inch front, finish all black, per pair
$\$ 5.00$
Per pair. .D.P. $\$ 7.77$
No. 206 Electric Side Light, 6 -inch front, finish black and nickel, per pair. $\qquad$ 5.00

Per pair.. D.P. $\$ 7.77$


Dash Lamp



Convex Flange Dash Lamp. Furnished with white semaphore, plain white or frosted with rosette glass as shown in cut. No screws visible when placed on dash. Ediswan socket. Door at rear of lamp.

No, 30 Dash Lamp, $4 \frac{1}{2}$-in. front, nickeled finish, per pair
$\$ 3.25$
Per pair, .D.P. \$4.44

# The GIBSONGOMPANY $\overline{\overline{A P O L I S}}$ 

TAIL AND DOME LAMPS AND REFLECTORS

## Electric Tail Lamps



Made from heavy gauge material and fitted with Ediswan Switch Socket. This lamp is the very latest design in a high grade tail lamp. Convex Semaphore Glass.
No. 32. Electric Tail Lamp, each
. 81,25
Each. . D.P. $\$ 1.66$


Same as No. 32 with License Tag Attachment. No. 32-L. Electric Tail Lamp, each
. $\$ 2.00$
Each.. D.P. 81.88


No. 33
Designed to be screwed to number bracket or back of car. Light thrown down on license number. Length 63 inches. Size of Ruby Semaphore lens, 23 inches diameter, Ediswan Switch Socket used. Small white jewel in end of lamp. A very handsome and essential lamp for city use where legal requirements demand lighting of license.
No. 33. Electric Tail Lamp, each
$\$ 2.25$
Each.. D.P. $\$ 3.55$

## Tail Lamp

Neverout Telescopic Tail Lamps are made with all parts interchangeable. In case of breakage by accident, parts can be instantly supplied and replaced by the motorist without the necessity of sending to a lamp repairer. There is no solder in the entire construction and the lamp is practically in-


No. 70 destructible. Dust and weather proof. Has a combination socket that fits any lamp bracket, adjustable for either right or left hand side. The window is exceptionally large, clearly illuminating the license tag. Fitted with special Neverout Reflector. Each
.82 .00 Each. D.P. $\$ 2.88$


Dome Lamp
No. 31 Dome Light, Diameter $4 \frac{1}{2}$ inches, Frosted Cut Glass, Ediswan Socket, each $\qquad$
Each. . D.P. $\$ 3.00$

No. 31 Dome Light

## Reflectors

These reflectors are made of extra heavy gauge brass, sterling silver finish. Bulbs not included in price.
Parabola Reflectors,
6-inch, per pair. . 82.50
Per pair. .D.P. $\$ 2.66$
Parabola Reflectors,
7 -inch, per pair.. 2.75
Per pair. .D.P. $\$ 3.10$
Parabola Reflectors,
8 -inch, per pair.. 3.40
Per pair, .D.P. $\$ 3.77$
Parabola Reflectors, 9-inch, per pair.. 3.50 Per pair. .D.P. $\$ 4.00$

## Parabola Reflectors,

10 -inch, per pair. 5.00
Per pair. .D.P. $\$ 6.66$



Front View No. 76 illustrating Searchlight Bulb


## "Old Sol" No. 76

No. 76 Old Sol Spot Light has 6-inch door and body. All parts enameled. Swivel bracket attaches to wind shieli-switch at rear of bandle. Silvered reflector. Hole with eyelet for insertion of wire in lamp and copper terminals at end of Gfoot cable. Equipped with 3inch mirror. 6 volt $15 \mathrm{C} . \mathrm{P}$ bulb supplied as regular equipment.

Each . . . . . . . . . . . . . . . . . . . . . 81.50
Each . .D.P. $\$ 7.22$

Rear View No, 76 , illustrating Mirror
"Old Sol" No. 70
Attach tal either sille of Wind shield
No. 70 Old Sol is a large, handsome Spot Lamp which adds a touch of refined equipment to any car at a rery reasonable price. 7 inch door and body all ebameled. Mirror 3 inch size on lamp. Focusing device at rear of handle integral with switch. 6 volt 15 c. D. bulb supplied as regular equipment. Special voltage bulbs on request. Ef feet of cable witb copper terminals.
Each … . . . , \$0.00 Each. D. P $\$ 10.00$


Front View No. 70, Illustrating


Side View No, \%0, illuntrating Mirror for daytime use and Focusing Device


Front View, No. 79, Illustrating

"Old Sol" No. 79 "De Luxe"

No. To Old Sol TwinBull, Spot Light with Pilot Light Bull, sev-eo-inch door and body, All parts black enamel tinish, 3 -inch diminishing mirror and focus. ing device integral with bandle. 6 volt 15 c. P. Searehlight and 6 volt 2 c. p, Pilot light bultas; 6 feet Duplex Cable with Terminals.
Each ................ 87.00
Sach., D.P. \$11.66

Side View, No, 29 , Illantrating Diminishine Mirrar, for Daytime Use

Spot Light 62


When Ordering Specify for Square or Round Fittings
No. 62 Spot Light with focusing device in back.
Throws a straight beam 300 feet. Finish black and nickel, diameter 7 inches, each. $\qquad$
Each. .D.P. 86.66
Supplied with either round or square fittings.
Spot Light 63-A


No. 63-A Spot Light with special fittings for 83
Overland, finish black and nickel, diameter 7
inches, each
. $\$ 5.00$
Each. .D.P. \$7.76
Spot Light 616


No. 616 Spot Light fitted with small diminishing mirror which shows all the road to the rear in daytime, finish black and nickel, diameter $6 \frac{1}{2}$ inches, each
$\$ 4.50$
Each. . D.P. \$6.66

# The GIBSONGOMPANY 

## REFLECTORS AND LAMP GLASS



## Lancaster Mounted Mangin Mirror Lens



$1 \frac{1}{4}$-inch Flanged Ruby Jewels, per dozen, D.P...... $\$ 1.20$
$1 \frac{1}{2}$-inch Flanged Ruby Jewels, per dozen, D.P...... 1.35

## Plain Flat Glass

FOR AUTOMOBLLE LAMPS
We can furnish front glasses any size. In ordering, state diameter required, not name of lamp.


| Lamop | Glasces, | 3 | inch, | eachs. | D.P. | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lamp | Glasses, | 32 | inch, | each, | 19,1. | 15 |
| Lamp | Glasses. | 1 | inch, | each, | 13.15. | 15 |
| Lamp | Glasses, | 13 | inch, | each. | 1).15. | 15 |
| Lamp | Glasses, | 5 | inch. | each. | 19,1. | 15 |
| Lamp | Glanses, | 51 | inchr, | each. | D.P. | 15 |
| Lamip | Glasses, | 9 | inch, | each. | 1.15. | 0 |
| Lambip | Glasses. | 65 | inch, | each. | D.I. | 0 |
| Lamp | Glasses. | 7 | inch. | each, | 1). F , | 95 |
| Lamp | Glanses, | 71 | inch, | each, | 1. IP, | \%5 |
| Lamp | Glansen. | 35 | inch, | each, | 1). F , | .85 |
| Lamp | Gilasses. | 72 | inch, | each, | D.15. | .95 |
| Lamp | Glaswes. | 8 | inch. | each, | 13.15, | 5 |
| Lamp | Glasses, | \$1 | inch. | each, | IV.F. | . 25 |
| Lamp | Classes, | 81 | incla, | each. | D.P. | 3 |
| Lamby | Glasses, | $\times 2$ | inch. | each. | 1. 1\% | 85 |
| Lamp | Gilasses. | 9 | inch. | each. | 1.P. | 95 |
| Lamp | Glasmes. | $9 \frac{1}{4}$ | incls, | each, | 17.I', | ,25 |
| Lamp | Glassen. | 98 | insh, | each, | 1).E. | . 30 |
| Iamp | Glasces. | 92 | Inch. | each. | D.I. | 30 |
| Lamp | Glasses. | 10 | inch. | each. | 1).P. | . 30 |
| Lamp | Gilasses, | $10 \frac{1}{2}$ | incls, | each. | D.P, | . 30 |
| Lampl | Glasses, | 101 | incls. | each, | D.P. | . 39 |
| Lamıp | Glasses. | 11 | inch, | each. | D.IF. | . 40 |



## Convex Front Lamp Glasses

| vex | Lamp | Glasbes, | \% | inch, each, | D.P. | 9 | . 80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Convex | Lamp | Glasser. | 71 | inch. each, | D.P. |  | . 30 |
| Convex | Lamp | Glas | 74 | inch, each | D.P. |  | . 30 |
| Convex | Lamp | Glasses. | 8 | inch, ea | D.P. |  | . 35 |
| Convex | Lamp | Glasses, | 81 | inch, each, | D.P. |  | . 35 |
| Convex | Lamp | Glasses, | 9 | inch, each, | D.F. |  | . 50 |
| Convex | Lamp | Glasses, | 91 | inch, each. | D.P. |  | . 50 |
| Convex | Lamp | Glasses. | 92 | inch, each. | D.P. |  | . 30 |
| Con | Lamp | Glasses, | 93 | Inch, each. | D.P |  | S |
| Convex | Lamp | Glasses. | 10 | inch, each, |  |  | . 55 |
| Convex | Lamp | Glasses. | 103 | inch, each, | D P. |  | . 53 |
| Convex | Lamp | Glasses. | 10\% | inch. | D.P. |  | 55 |
| Lamp G1 | asses, | 101 inch, |  | D. |  |  | . 55 |
| Lamp GI | asses. | 11 inch. | ea | D.P. |  |  | .065 |
| Lamp | asces, | 113 inch. |  | D.P. |  |  |  |


|  |  | dison I | Mazda mobile | Lam <br> SERVI |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Veds | Amperes | $\begin{aligned} & \text { Candle } \\ & \text { Power } \end{aligned}$ | $\begin{aligned} & \text { Type } \\ & \text { and Siuze } \end{aligned}$ Bulb | Dism Bulb. inclocs | $\begin{aligned} & \text { Quantity } \\ & \text { Package } \end{aligned}$ | Priec Each |
| 3-4 | 0.84 | 2 | G-6 | ${ }^{8}$ | 10 | \$0.21 |
| $6-8$ | 0.42 | 2 | G-6 | 8. | 10 | . 21 |
| 6-8 | 0.84 | 4 | G-8 | 1 | 10 | . 21 |
| 6-8 | 1.25 | 6 | G-10 | $11 / 4$ | 10 | . 24 |
| 6i- 8 | 2.00 | 12 | G-12 | 11/2 | 5 | .27 |
| 6-8 | 2.50 | 15 | G-161/2 | $2 \frac{1}{16}$ | 5 | . 27 |
| 6-8 | 3.00 | 18 | G-161/2 | 2316 | 5 | . 27 |
| 6-8 | 3.50 | 21 | G-161/2 | $2 \frac{1}{16}$ | 5 | .30 |
| 12-16 | 0.26 | 2 | G-6 | 1/4 | 10 | .21 |
| 12-16 | 0.42 | 4 | G-8 | 1. | 10 | . 24 |
| 12-16 | 1.00 | 15 | G-161/2 | $2 \frac{1}{16}$ | 5 | . 30 |
| 12-16 | 1.25 | 18 | G-1612 | 21 | 5 | . 30 |
| 12-16 | 1.50 | 21 | G-1612 | $2 \frac{1}{16}$ | 5 | . 30 |
| 18-24 | 0.17 | 2 | G-6 | ${ }_{4}^{18}$ | 10 | . 35 |
| 18-24 | 0.26 | 4 | G-8 | 1. | 10 | 40 |
| 18-24 | 1.00 | 21 | G-161/2 | $2 \frac{1}{16}$ | 5 | . 50 |
| 9 <br> 9 | 0.32 | 2 | G-6 | ${ }_{1}{ }^{1}$ | 10 | . 21 |
| 9 | 0.64 2.00 | 4 15 | $\mathrm{Ci}_{\mathrm{G}-16^{1 / 2}}$ | $\stackrel{1}{2} \frac{1}{16}$ | 10 5 | . 21 |



Edison Mazda C Automobile Headlight Lamps (GAS-FILLED)


## Edison Mazda C Nitrogen Lamps

Brilliant white light such as we have so successfully obtained in the Edison Mazda C Lamps for standard lighting service is now available in the regular voltages.

Brighten the roadbed and make automobiling at night a pleasure by using these daylight lamps; they will also add to the general appearance and attractiveness of your car.

Forty per cent. more service for the same current is possible with the Edison Mazda C Headlight Lamp over any previous type of illuminant.

| Volts | Amperes | $\begin{aligned} & \text { Candle } \\ & \text { Power } \end{aligned}$ | $\begin{aligned} & \text { Type } \\ & \text { and size } \\ & \text { Bulb } \end{aligned}$ | Diam Bulb, inches | $\begin{aligned} & \text { Quantity } \\ & \text { Package } \end{aligned}$ | Price Esch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6-8 | $11 / 2$ | 12 | Gi-8 | 1 | 10 | \$0.40 |
| 6-8 | 212 | 21 | G-12 | $11 / 2$ | 5 | . 35 |
| 6-8 | 3 | 24 | G-12 | 112 | 5 | . 50 |
| 6-8 | 4 | 36 | G-161/2 | $2 \frac{1}{16}$ | 5 | . 75 |
| 12-16 | $11 / 2$ | 24 | C-12 | $11 / 2$ | 5 | . 37 |
| 12-16 | 2 | 40 | G-161/2 | $2 \frac{1}{16}$ | 5 | . 75 |

# Ohc GIBSON COMPANY 

## EDISON MAZDA AUTOMOBILE LAMP ASSORTMENT

For the convenience of the trade we offer Edison Mazda Lamps in assortments which include the types and sizes that are in general use. Assortment No. 1, in addition to the regular Mazda, has four sizes gas filled or Nitrogen Lamps.

## Assortment No. 1

REPRESENTATIVE STOCK SUITABLE FOR AUTO SUPPLY DEALERS, ELECTRICAL SUPPLY DEALERS, HARDWARE DEALERS AND GARAGES


LAMPS FOR 3 CELL (LEAD TYPE) STORAGE BATTERY GENERATOR LIGHTING SYSTEMS (6-7 VOLTS)

## 

| $\$ 5$ | Headight |
| ---: | :--- |
| $* 5$ | Headilight |
| 5 | Headlight |
| 5 | Heallight |
| 5 | Headlight |
| 5 | Headight |
| 10 | Headight |
| 10 | Side light |
| 10 | Side light |
| 10 | Rear \& meter |
| 10 | Rear \& meter |
| 10 | Rear \& meter |
| 10 | Rear \& meter |

$\left.\begin{array}{|l|l|l}21 & 6-7 & \mathrm{G}-12 \\ 21 & 6-7 & \mathrm{G}-12 \\ 21 & 6-7 & \mathrm{G}-1612 \\ 21 & 6-7 & \mathrm{G}-1612 \\ 15 & 6-7 & \mathrm{G}-1612 \\ 15 & 6-7 & \mathrm{G}-1612 \\ 12 & 6-7 & \mathrm{G}-12 \\ 4 & 6-7 & \mathrm{G}-8 \\ 4 & 6-7 & \mathrm{G}-4 \\ 2 & 6-7 & \mathrm{G}-6 \\ 2 & 6-7 & \mathrm{G}-6 \\ 2 & 3-31 & \mathrm{G}-6 \\ 2 & 3-312 & \mathrm{G}-6\end{array}\right\}$

| $\begin{aligned} & 11 / 2 \\ & 11 / 2 \end{aligned}$ | Do |
| :---: | :---: |
|  | Single contact |
|  | Double contact |
| 215 | Single contact |
|  | Double |
| $11 / 2$ | Din |
|  | Double contac |
| 1 | Single conta |
|  | Dot |
| ${ }_{4}$ | Sin |
|  | Do |
|  | Single cont |

$\begin{array}{ll}c & \\ 33 & \$ 1.75 \\ 35 & 1.75 \\ 30 & 1.50 \\ 30 & 1.50 \\ 27 & 1.35 \\ 27 & 1.35 \\ 27 & 2.70 \\ 21 & 2.10 \\ 21 & 2.10 \\ 21 & 2.10 \\ 21 & 2.10 \\ 21 & 2.10 \\ 21 & 2.10\end{array}$
LAMPS FOR 6 CELL (LEAD TYPE) STORAGE BATTERY GENERATOR LIGHTING SYSTEMS (12-14 VOLTS)


$\qquad$ | 24 | $12-14$ | $\mathrm{G}-12$ |
| ---: | :--- | :--- |
| 24 | $12-14$ | $\mathrm{G}-12$ |
| 15 | $12-14$ | $\mathrm{G}-1612$ |
| 15 | $12-14$ | $\mathrm{G}-1612$ |
| 4 | $12-14$ | $\mathrm{G}-5$ |
| 4 | $12-14$ | $\mathrm{G}-8$ |
| 2 | $12-14$ | $\mathrm{G}-6$ |
| 2 | $12-14$ | $\mathrm{G}-6$ |



LAMPS FOR 9 CELL (LEAD TYPE) STORAGE BATTERY GENERATOR LIGHTING SYSTEMS (15-21 VOLTS)

| 5 | H |
| ---: | ---: |
| 10 | Si |
|  |  |

Headlight Side \& rear

21 18-21 G-161.

$2 \frac{1}{16}$ Double contaet $50 / \mathbf{\$ 2 . 5 0}$ †LAMPS FOR MAGNETO TYPE LIGHTING SYSTEMS | 10 | Headight | 15 | 9 | $\mathrm{G}-16 \frac{1}{2}$ | $2 \frac{1}{16}$ | Double contact | 27 | $\mathbf{\$ 2 . 7 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Total list price $\mathbf{\$ 4 9 . 5 0}$
This assortment will enable you to supply renewals for 90 per cent. of all. cars.

## Assortment No. 2

STOCK SUITABLE FOR ALTO SUPPLY DEALERS, ELECTRICAL SUPPLY DEALERX, HARDWARE

STORES AND GARAGES
LAMPS FOR 3 CELL (LEAD TYPE) STORAGE BATTERY
GENERATOR LIGHTING SYSTEMS (E-7 VOLTS)
$\left.\begin{array}{l|c|c|c|c|c|c|c|}\begin{array}{l}\text { Headlight } \\ \text { Headlight }\end{array} & 15 & 6-7 & \mathrm{G}-161 / 2 \\ \text { H-7 } & \text { G-161/2 }\end{array}\right\}$

EDISON NAZZDAK
Ensonwispu AUTOMOBILE gen iveluaze

LAMPS


| Assortment |  |  |  |  |  |  |  | No. 2-Continued |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

LAMPS FOR 6 CELL (LEAD TYPEI STORAGE BATTERY GENERATOR LIGHTING SYSTEMS ( $12-14$ VOLTs)

| 5 | Headlicht | 15 | 12-14 | G-161/2 |  | Doable contact | 30 | \$1.50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | Headlight | 15 | 12-14 | G-1612 |  | Single contart | 30 | 1.60 |
| 10 | Sidelight | , | 12-14 | G-8 | 1 | Doable contact | 24 | 2.40 |
| 10 | Sidelinht | 4 | 12-14 | G-8 | 1 | Single contact | 24 | 2.40 |
| 10 | Rear \& meter | 2 | 12-14 | G-6 |  | Double contact | 24 | 2.40 |
| 10 | Rear \& meter | 2 | 12-14 | G-6 | 4 | Single contact | 24 | 2.40 |

†LAMPS FOR MAGNETO TYPE LIGHTING SYSTEMS

| 10 | Headlicht | 15 | 9 | $\mathrm{G}-161 / 2$ | $2 \frac{1}{15}$ | Double contact | 27 | $\mathbf{3 2} .70$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Total list price $\$ 30.60$
This assortment will enable you to supply renewals for 80 per cent. of all cara.

## Assortment No. 3

STOCK SUITABLE FOR AUTO SUPPLY DEPOTS AND GARAGEX
LAMPS FOR 3 CELL (LEAD TYPE) STORAGE BATTERY GENERATOR LIGHTING SY STEMS (6-7 VOLTS)

†LAMPS FOR MAGNETO TYPE LIGHTING SYSTEMS
10 $\square$
Headlight $\square$
G-161/2
$2 \frac{1}{16}$ Double contact 27 $7 \mathbf{\$ 2 . 7 0}$

Total list price $\$ \mathbf{\$ 1 8 . 0 0}$
This assortment will exable you to supply renewals for 70 per cent. of all cars.

Perrin No Glare



Tbe Perrin "No Glare" is made of metal, nickel plated, in two pieces, to fit snugly around the headlight bulb. It gives plenty of driving light in front of the machine, and a long, low powerful ligbt far abead on the road. Approaching drivers and pedestrians are not blinded by the light. Always ready to use. After once put on the bulb they need do further attention. Pui on hy simply opening headlight, placing "No Glare" on bulb, and then closing headight, No vibration and nothing to break or wear out. Better than a dimmer as the "No Glare" requires no operation. Made for standard 2 ibeb headlight bulb.
Per pair
.81 .00 Per Pair. , D. P. $\$ 1.66$

## The Monarch Adjustable Auto Lamp Dimmer

Monarch Adustable Auto Lamp Dimmers are made of dult finished enameled cloth, fitting over half of lamp front and beld in position by coll spring. Can be attached to lower or top part of lamp, just as ordinance requires. Can be put on or taken off in a second. Coll spring grins the lamp securely, so that constant jarring will bot allow the Dimmer to slide to either side of lamp. arade out of blgh class material. Five sizes:


8 inch to fit Motorcycle Lamps,
5 inch to fit Ford Eleetric Lamps.
10 loch to fit Buick and Overland Lamps.
12 inch will fit any medium size Lamps. 13 inch will fit any large size Lamps.

Glare Dimmer


Rveryone who has driven on country roads at night real. leses the danger due to suddenly encountering the rays of light from the beadlights of an oncoming car. Tbe EverGood Glare Dimmer is a Grotection neminst the protection against the
binding glare. Also indispensable for relieving the eyes while driving against the glare of the son. The device clamps on the windshield and consists of an oval-shaped, amher-colored gluss mounted in a metal frame. The dimmer can be adjusted to any position desired and swung out of position instantly by loosening a wing nut. The oval frame and binding nut are nickel plated; all other parts black onameled. Bach glare dimmor packed in a cariboard carton, Welight, 1\} lhe.
No. G185 Giare Dimmer, eacts
Fach...D. $\mathrm{F}, 81.85$

## The Staude Glare Stopper



Each. .D.P. $\$ 4.18$

The Staude Glare Stopper consists of a disc of pure amber glass easily attached to the windshield of any make of automobile. It protects the eyes of the driver from bright and blinding lights, making driving at night a pleasure.
The nickel-plated clamp will fit on the windshield of any make of car. The heavy clear amber-colored crystal lens glass, $6 \pi$ inches in diameter, dissects the light rays and makes driving at night a constant pleasure instead of a constant fear. Each
. $\$ 2.50$

Howard Auto Light Deflector


Howard Improved Auto Light Deflector is a dark green celluloid shield attaching to the rim of windshield, effectively protecting the driver from the glaring light of an approaching automobile; size $5 \times 5$ inches.
Price, each
. $\$ 0.25$
Per dozen. . D.P. \$4.44

Bulb Case


Bulbs are securely held in place by brass springs and a new locking device.

No. 1 Dover Electric Light Bulb Case, for Ediswan base lamps, holds two headlights, two side lights, tail and speedometer lights. Made of pressed steel, each
.$\$ 0.75$
Each. . D.P. \$1.11

# Ohe GIBSON COMPANY 

HAND LAMPS

## For Use in Connection with Dry Batteries.

We list on this page a line of Hand Lamps, to be used in connection with dry batteries. While simple, this type of lamp has proven one of the greatest discoveries of the age. It replaces the old style oil lantern, which was both dangerous and cumbersome. With the oil lantern there was constant liability of fire or explosion, and there is no question but many fires had their origin in the lantern with the open flame. The styles shown below are selected for their popularity and efficiency. They are all guaranteed by the manufacturer and will give excellent service. These lamps are indispensable to the motorist, garage owner, farmer, railroad men, store-keepers, mechanics, watchmen, electricians, milkmen, miners, hunters, physicians and most every one who has occasion to work at night or in dark places. Any standard dry battery, No. 6 size, will operate these lamps.


## Vaco-Lite Electric Hand Lantern

A well-made, high-grade Inntern in which elther round or square dry batterles may be used. Give forty hours continuous service from one cell. Used an hour every day, six weeks service from one battery is not unusual. Made from bigh-grade sheet steel, evameled in black. Ball is of strong wire. Has special reflector and bulb.

## Each

.81 .50
Without battery. eacb. .D.P. $\$ 1.66$ Without battery, dozen. . D. P, \$18.66 Extra bulb. eacb..D.P. $\$ 0.33$

## "Dad's" Electric Hand Lantern

For extra long service and a very bright ligbt "Dad's" lantern is recommended. This lantern uses two No. 6 round dry batteries and has a very strong electric bulb. The case is of pressed steel, with easily removable Itd. Enameled is red.
Price each. .
.82 .50
Without battery, ench.. D.P. $\$ 3.32$ Witbout battery, dozen..D.P. $\$ 36.50$

Famous Delta Electric Hand Lamp
No. 7 Throws Shaft of Light 250 to 300 Feet


Just the thing for sportsmen to spot game at night, deliverymen to spot house numbers, for use by inspectors, watchmen. etc. Has triple silver-plated parabolic retlector.
Also sbeds a subdued wide-nagle of light, which illuminates a wide area of space in front of the lamp from 10 to 25 feet.

Uses one ordinary dry battery and has hand-made tungsten wire nud lat

Handsomely finisbed in semigloss black enamel and polished atekel-plate.
Square batteries can be used by removing the paper covers, Lamp removing the paper covers, inamp cartons, twelre to the case, weighing 14 pounds.
Price each (without battery)
.81 .25
Ench. .D.P. $\$ 1,76$

## No. 1 Delta Two-Cell Electric Lantern <br> THE L.ANTERN OF 1.000 USRS

## These Specifications $8_{\text {peak }}$ for Themselves

HEIGHT-7 inches.
MATERIAL-Cold Rolled Steel .019 inch thick throughout BATTERY CASE-Provided to re-
ceive two standard No, $f$ dry batteries, either square or round cases, with eitber style of battery cases, wit
HANDLES-Extra large bail handte slips over the arm of a big man with a big overcoat and gloves. The grip bandles can be folded flush with the back of the lamp. BASE-Formed into a llange, preventing the lamp from upsetting. BULB-Three volts, drawn fungsten wire, band made and thorougbly tested.
REPLECTOR-Drawn out of sheet phosphor bronse and triple silverplated with an extra high polish. Dlated with an extra hifh polish. Width $3+$ in., and ribbed in such
shape as to give a diffused light extending for 180 degrees in ever. direction. Spotlight redector supplied when specified.
LENS - Concave convex double strength glass with a big radius, throwing light 180 degrees. Dímoter 38 in .
swITCH-Kelf-contained and absolutely reliable.
FINISH-Handsomely finished in baked semi-gloss black enamel trimmed in polished nickel-plate. THE BIG DELTA will alosolutely replace the use of the oil lantern. It gives a broad spreading light. straight ont. straight up. 8traiglit down, and straigbt out at both sides. Hang it up on the wal room.

and it ligbts the whole

Price each (less batteries)

# The GIBSON COMPANY 

## EVEREADY TUNGSTEN FLASHLIGHTS

Eveready Lights are made by the largest and oldest makers of batteries and battery lighting devices. They are built according to the latest ideas in portable light construction and are equipped with guaranteed longest service Eveready Tungsten Batteries and highest efficiency, greatest durability, Eveready Mazda Lamps. Metal parts are heavily nickel plated and only the best of materials are used throughout.

All Eveready Nickel Plated Tubular Cases are non-short-circuiting. That is, they can be placed in contact with metal surfaces without exhausting the battery. This is particularly advantageous where flashlights are placed in a tool box, in a pocket containing keys, or a metal running board, and in many other locations which would exhaust the battery in other than a non-short-circuiting type of case.

## TUBULAR FLASHLIGHTS

## Vulcanized Fiber Tubular Lights


9602. $11^{\prime \prime} \times 5^{\prime \prime}$, each

Renewal Tungsten Battery Na. 7!1, each
Each. D.P 80.4 Dazen..D.P \$t.mi
Kenewal Mazela Ebib, \&, volt. No, 118\%, each .13

9604, $12^{\prime \prime} \times 65^{\omega}$, each

Reneval Tungsten Fattery No, ว20, each 30
Each.. D.P. 80.44 Dozen. D.P. 84.80
Renewal Mazda Bulb, g. volt, No. 1198, each ............ . . 13
Ench. D.P. 80.29 Dosen. D.P. $\$ 2.24$
9619, $1 \frac{2^{\prime \prime}}{} \times 8 \frac{1^{\prime \prime}}{}$, each
Each. D. P. $\$ 2.06$ Dozen. . D, P sag 2e
Renewal Tungsten Battery No. 7os, each
Fach. D, P, $\$ 0,60$ Dozen, I. P, $\$ 6,40$
Renewal Mazda 1Halb, 3.8 velt, No, 1193 , each .13
Each.. D.P. 80.22 Dozen.. D.P.82.21

## Leatherette Covered Tubular Lights


9606. $1 \frac{1^{\prime \prime}}{} \times 8 \frac{1}{\frac{1}{2}^{\prime \prime}}$, ench

Fach . D, P, \$1.77 Dozen. i) P, \$19,20
Kenewal Tungeten Battery No. 705, eneh
Fach.. D, P, 80,100 Itaden . I, P, $\$ 6,40$
Rebeval Mazia 15ulh, 8.8 volt, No. 119s, each
Fach . [. P, \&0.22 Doxen . I.P. s2,21

## Enameled Metal Tubular Lights


Each. D. P, $\$ 1.11$ Dozen. D.P, 812,00
Renewal Tungsten Batfery No. 790, each Each. D.P. 80.44 Dozen...D.P, 34.30 Kenewal Mazria Bulb, ?.9 volt, Ne. 1198 eaeh Bach. D. F. 80.22 Doren.. D.P, $\$ 2.24$
26\%7. $13^{\prime \prime} \times 82^{\prime \prime}$, earh
Ench..D.P. $\$ 1,32$ Dozen. .D.P, $\$ 14.40$
Renewal Tungsten Battery No. 205, each
Fenewal Maxala Bulls, 3.8 volt, No. 1193, each
Each. . D.P. $\$ 0,60$ Dozen...D.P. st. 46
Ench. D.P, so.22 Dozen. . D.P. 22.24

## Nickel-Plated Tubular Lights



## MINERS' FLASHLIGHTS

## Vulcanized Fiber Tubular Miners' Lights



6616, $13^{\prime \prime} \times 6 \frac{1}{2 \prime}$, ench
Eacb. D.I. $\$ 2.22$ Dozen.. I), P. s24.00
Kenewal Tungnten Battery No. 290 , each .......................... (3)
Cach, , D.P. 80.44 Dozen..D.P. $\$ 4.80$
I6enewal Mazala Ebalb, 2.9 velt, No, 1198, each ............. . . . . 3
Ench. D.P. 80.22 Dozen.. D.P. 82,24
$\left.2619,13^{\prime \prime} \times 8\right)^{\prime \prime}$ each .....................
Each. D, P. 82.50 Dozen. D. $\$ 27.20$
1.20

Renewal Tungeten Battery No, zo5, each
Euch.. D.P. 80,66 Dozen. D. P, 86,40
Kenewal Mazda Bulb, 8.8 volt, No. 1193 , each
Each., D,P. 80.22 Dozen.. D.P. 82,24

## Nickel-Plated Tubular Miners' Lights


2634. $13^{\prime \prime} \times 63^{\prime \prime}$, ench

Enci, . D, P, \$2.55 Dozen.. D, P, \$32.00
Eenewal Tungsten Battery No, 250 , each
Each. D.P. 80.41 Duget . D.P. \& 1.80
Renewal Mazda Bulb, 3.9 volt, No. 1198, each . . . . . . . . . . . . . 13
Cach. D.P. \$0.22 Doxen. ID.P, \$2.24


Renewal Tungsten Battery No. 705, each .................. . . . 40
Renewal Tungsten Battery No. 200
Ench..D, P. $\$ 0.66$ Dozen..D.P. $\$ 6.40$
Senewal Maxda Fulb, 3.8 volt, No, 1192, ench
Henewal Maxda Fulb, 3.8 volt, No, 1193, ench
Each.. D.P. 80.22 Dozen. D.P. $\$ 2.24$
Corrugated Fiber Tubular Searchlights


The most powerfal and penetrating flashlights obtainable. Have bigh efliciency, silvered parabolic reflectors, necurately \&ronnd lensus, knurled ther cases-throw a long penctrating beam of light. Particularly recommended for severe service. 3659, $1 \frac{3}{1 "}^{\prime \prime} \times 82^{\prime \prime}$, ench
Kacb. .D.T, $\$ 4.44$ Dozen. . D, $\mathrm{P}, \$ 48,00$
Racl. . D.P. \$1.4t Dozen. .D.P. \$48.40
Kenewal Tungsten Battery No, 20., each . . . . . . . . . . . . . . . , , 4 Fach.. D.I, \$0.66 Dozen..D.P. $86,+4$
Kenewa! Mazda Bulh, 3.8 volt, No, 1193 , each . . . . . . . . . . . . . . 13
Rach_D.P, \$0,22 Dozen. D. P. \$2.24
9853, $13^{\prime \prime} \times 13^{\circ}$, ench

Kenewal Tungnten Battery No, z15, each
Ench, Is, P, 8104 Dozen. D.P. $\$ 11.20$
Kenewal Maxda 13alb, 6.2 volt, No. 1195 each


# Ghe GIBSONCOMPANY広POLIS <br> 125 

## EVEREADY TUNGSTEN FLASHLIGHTS— vest pocket flashlights

## Nickel-Plated Pocket Lights hinged bottom type



6962


6900-6954-6961

Hinged Bottom Type Niekel Plated Pocket Lights Nos. 6000, 6iti, 6902 and te6t bave combination push and slide contact. are enuipped with linged bottom, battery being insertel at the bottom,
No. 6000, size $11 / 10 \mathrm{x} 14 \mathrm{x}$ ? 1 inclues (complete), each . . . . . . 80.25 Each.. D.P. $\$ 1.11$ Dozen., D.P. $\$ 12.00$
Renewal Tungsten Battery No. 700, each .................. 30
Each.. D.P. 80.14 Dozen.. D.P. St \&n
Henewal Mazda Bulb, 8.5 volts. No. 1179, each ............ . . 13 Ench..D.P. \$0.22 Dozeia..D.P. $\$ 2.24$
 Each.. D.P. $\$ 1.11$ Dozen.. D.P. $\$ 12.00$
Renewal Tungsten Battery No, 750, each ................... , 30 Bach. . D.P. $\$ 0.44$ Dozes..D.P. $\$ 4.80$
Renewal Mazda Bulb, 2.5 volts. No, 1180, each ........... . 33 Bach..D.P. 80.22 Dozen..D.P. $\$ 2.21$
No. 696?. size $9 x 2 x 915 / 16$ inches (complete), each ........ 1.00 Each..D.P. $\$ 1.48$ Dozen.. D.P. $\$ 16,00$
Renewal Tungsten Battery No, 751, each
.35
Each.. D.P. $\$ 0.51$ Dozen.. D.P, 85,121
Renewal Muzila Buib, 3.8 volts. No. 1181, each
.13 Each..D.P, \$0:22 Dozen. .D.P. $\$ 2.24$

Cost of renewals considered, more service can be obtained from No, 6a5l than irom any other sige nickel plated pocketlight. The service from this light is the same as from the smaliest tubular lights Nos, 2002 and 2680.
No, 6954, size $1 \times 12 \times 35$ inches, Hinged Bettom Type, each ., $\$ 1,00$ Each..D.P. $\$ 1.48$ Dozen.. D.P. $\$ 16.00$
Renewal Tungsten Battery No. 792, each ................... . 30 Each.. D.P. 80.44 Dozen., D.P. 84.80
Renewal Mazila Bulb, 2.7 volts, No. 1189, each ............ . 13 Eacb..D.P. 80.22 Dozen..D.P. 82,24

## Eveready Penlites



Duplicates in size and appearance to Ranker's type fountain pens. No. 2681 has black enamel finish. Contact ean be made permanent and penlite fastebed to lapel of coat-parficularly advantageous wbere light is required at the same time when it is necessary to bave botb bands free. The top of tube taking lamp receptacle is threaded to take lamp base threads, making a secure fit. No. $26 \% 2$ is the same as 26 s 1 except nickel plated finish, No. 2ts3 has black enamel finish, is similar in appearance to 2asi but has flash contact only. No. 2084 is simplar to 268? excepting tbat it has flash contact only.
Vo. 3681 black enamel finish, each
Each..D.P. $\$ 1.48$ Dozen..D.P. $\$ 16.00$
No, 2682 nickel plated, each
Each.. D.P. $\$ 1.48$ Dozen... D.P. $\$ 16.00$
No, 2683 black enamel finish, each
Each..D.P. $\$ 1.48$ Dozen. D.P. $\$ 16.00$
No. 3681 niekel plated, each
Dach.D.P. 81.48 Dozen..D.P. $\$ 16.00$

Nickel-Plated Pocket Lights
CIGARETTE CANE TYFE


The Cigarette Cuse Type offers a novel and at the same time very practical type of nickel plated pocket IIsht. Verv similar in appearance to a cigaretie case. Reing hinged on one side, it is easily opened for withdrawal or insertion of battery or bulb.
No. 6990, size Ex 12 x 2 Z inches (complete), each . . . . . . . . . . $\$ 1.00$
Each., D.P. $\$ 1.48$ Dozen..D.P, $\$ 14.60$
Kenewal Tangsten Battery No. 700, each ..................... 30
Each..D.P. $\$ 0.44$ Dozen. .D.P. $\$ 4.81$
Renewal Mazda Bulb, 2.5 volts. No. 1179, each ........... . 13 Each, D.P. 30.22 Dozen., D, P. $\$ 2.24$

Each.. D, P, 81 , 8 Dozeh.. D.P. $\$ 16.40$
Renewal Tungsten Battery No. 750, each .................... . . . 30
Each.. D.P. $\$ 0.44$ Dozen., D.P. $\$ 4.80$
Renewal Maxia Bulb, each
Rach D. P 80.20
Doxen D.P
ace p.P.
Rach. D.P. $\$ 1,8 t$ Dozen. D. P. $\$ 20.00$
, Mevn T, $2,80.00$
Renewai Tungsten Battery No, 781, each ................... . . . 35
Each..D.P. Mo.s1 Dozen. D.P
Renewal Mazda Butb, 3.8 volts. No, 1181, each ........... . 13 Bach., D.P. $\$ 0.22$ Dosen..D.P. $\$ 2.24$

## Pistol Light Eveready Electric Candle



No. 2615
The Pistol Light appeals to those who wish to combine novelty with utility. It is an exact duplicate of an antomatic pistol. Has two piece tun metal tibish case, which is openeal for witbdrawal or insertion of battery or lamp by dhpressing the sight. which prossing the xirlit whach
releases a cateh in the interior of the harrel.

terior of the harrel.
No. 2675 , Pistol Light, size $35 \times 3 \times 2$ inehes, 1657
No. 2675, Pistol Light, size $3 \frac{2}{2} \times 3 \times 2$ inches, each Fach.. D.P. $\$ 2.22$ Dozet. . D. P. $\$ 24.100$
Renewal Tungsten Battery No. z50, each
Facl. . D, P. 80, 44 Dozen,. D. P. 84.80
Kenewni Mazda Bulb, q, volts. No, 1180, each .............. . 13 Each. D.P. 80,20 Doxen. . D,P \& 2,24

A novel and practical form of flashlight, Uses a very popular size battery (7a1). Entire candlo nicleel plated, equipped with a switeb providing permanent contact. Diameter of base, 4 inches. Heisht, 5 ! incbes.
No. 1657. Electric Candle Light, eacl
Ench. D.P, \$1,18 Demzen.. D, P, $\$ 16.60$
Renewal Tungsten Battery No. 791, each . . . . . . . . . . . . . . . . . 30
Ench. D.P. $\$ 0.14$ Dozen, D.P, $\$ 4.80$
Renewni Mazela Bulb, 2.7 volts, No, 1199, each ............. . . . 13
Fach. Ir.P. 80.22 Dozen, D.P.82.24

# Ohe GIBSONGOMPANY 

## EVEREADY BATTERIES, TESTERS, BULBS AND LAMPS



Eveready Bulb and Battery Tester

Eveready Bulb and Battery Tester permits the testing of flashlight batteries without placing a short circuit on themwhich is the case when a pocket ammeter is used. It provides the only satisfactory means of testing flashlight lamps. There are three receptacles for the insertion of lamps of proper voltage for two-, three- and five-cell batteries. Liberal leads are provided, which permit easy access to sealed batteries.
No. 6291 Bulb and Battery
Tester, without lamps... $\$ 0.75$ Each..D.P. $\$ 1.11$

## Eveready Tungsten Batteries

Each Eveready Tungsten Battery is absolutely guaranteed. This guarantee is printed on the battery and carton. It covers a definite period, both of service and shelf life. We secure batteries at frequent intervals, direct from the factory, insuring your receiving fresh stock. Batteries should be tested with bulb and battery tester (shown above) on receipt and before
 breaking the seals for insertion in a flashlight. For complete information on batteries see data below.

## Pocketlight

Battery

| For Flashlight Numbers | Battery <br> No. Height | Widtb | Deptls | List Price | Guar. <br> Period |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8000-6970-6980-6990 | ) 70012 | 13 | f-16 | \$0.30 | 3 |
| Rach. . D, P, \$0.44 | Doxen. . D. P. $\$$ |  |  |  |  |
| 4706 | 20:5 98 | \% \%-16 | 2 | . 35 | 4 |
| Macto. . D.P. 50.53 | Dozera. D. P. \& |  |  |  |  |
| 1606-9612-9619-9696 |  |  |  |  |  |
| 2697-2682-2633-2654 | 3705 \% | 13 |  | . 40 | 6 |
| Rach. D.P, \$0,60 | Dozet, , D. P, \& | 6,50 |  |  |  |
| 9681-3659-3683-2684 | 7064 |  |  | . 95 | 3 |
| Each. D.I. 80.38 | Dozen. . D.P. 8 | 4.00 |  |  |  |
| 4701-1209 | 710 3 | :19 |  | .75 | 6 |
| Ench, D.P. \$1.11 | Doxen. D, P, \% | 12,00 |  |  |  |
| 9653 | 715117 | 12 |  | . 70 | 6 |
| Eacb, D. P. \$1.04 | Dozen. D.P. ${ }^{\text {P }}$ | 11.20 |  |  |  |
| 4703-1767-1709 | 731 |  | $11^{18}$ | . 45 | 6 |
| Fach, , I3, P, 80,665 | Dozed.. D.P. ${ }^{\text {s }}$ | .28 |  |  |  |
| $2675-6961-6921-6981$ |  |  |  |  |  |
| 6991 | $250-31$ | $13-16$ | 11-16 | .30 | 3 |
| Kach. . TV.P. 80.44 | Dozen. . D. F. \& |  |  |  |  |
| 609 $09-697 \geqslant-6983-699 \%$ | 751 ? |  | 11-16 | , 35 | 3 |
| Each, , D,P, 80.03 | Dozen. . ${ }^{\text {I P P }}$ \& | (b) |  |  |  |
| 470 s | 725 82 |  | 25 | . 45 | 6 |
| Each. . D. P. 80.66 | Doxen. . D.P. 3 |  |  |  |  |
| 260 $-2616-2681-9695$ |  |  |  |  |  |
| 26 $28-36351-3034$ | 2964 | 12 |  | . 30 | 6 |
| Ench. . D, P, 80,44 | Doxen . . D, P, \% |  |  |  |  |
| 2602-26:50 | 791 38 | 1 |  | . 30 | 4 |
| Each. . D. P. 80.44 | Dozen. . D.P. ${ }^{\text {P }}$ | 4.81) |  |  |  |
| 1067 | 791 31 |  |  | . 30 | 4 |
| Farth. D.1', 80.44 | Dozen. . D. P. ${ }^{\text {P }}$ | 1.50 |  |  |  |
| 6955 | 792 ${ }^{23}$ | 12 | 12-16 | . 20 | 4 |
| Emeln. T, P, 80.4 | Dozell. D.P. 8 | (1.4) |  |  |  |

[^5] withoth theprefiatimg more than 14 ger eent,


## Lamps for Dry Cell Lanterns

No. 1451, $9 / 16^{\prime \prime}$ diameter, clear, 1.5 velts, Miniature base, for Evereatly Handy Lamps and Beers Lantern ..... 80.15 Each., D.P. $\$ 0.26$ Dosen..D.P. $\$ 2.00$
No. 016, 11/16" diameter, clear. 1.5 volts, Miniature base, for Delta Hand Lamp, Heers and Lightning Bag Lanterns, Redseatite, Handy Andy, Bright Eye Attachferns,
Each., D.P. $\$ 0.26$ Dozen...D.E. $\$ 2.60$
No. 005, 11/16 ${ }^{\circ}$ diameter. opal back, 1.5 volts, Miniature luse, for Delta Hand Lamp. Ench.. D.P. 80.33 Dozen.. D.P. $\$ 3.11$
No. 017, 1t/16" diameter, clear, \& 8 volts, Miniature base. for Dad's Lantern
Eacb.. D.P. $\$ 0.26$ Dozen., D.P. $\$ 2.60$

$$
\text { Note-No, } 1198 \text { can be used with Dad's or }
$$ with two cell Ligbtning Bug Lantern.

No. 039, $11 / 10^{\prime \prime}$ dimmeter, clear, 1.5 volts, double contact,
baze for Prento Hand Lamp and Victer Lantern .... Eacb.. D.P. \$0.36 Dozen., D,P, \$3.64
No. 040, $1^{\prime \prime}$ diliameter, 2.8 volts, single contact, for Old Nol No. 30
Each..D.P. $\$ 0.36$ Dozen. D.P. $\$ 3.64$
No. 049, $1^{\prime \prime}$ diameter, 2.8 velts, double contact, for Old Sol No. $5: 1$
Each. D. P, \$0.36 Dozen..D.P. $\$ 3.44$

# G/ke GIBSONCOMPANY言POLIS 

TROUBLE LAMPS, CIGAR AND PIPE LIGHTERS


No, 200 Combination Presto Cigar Lighter and Lamp. New design, handle of rosewood finisb, nickel plated cigar lighter tip and reflector. Polished Ivory finish push buttons. Furnished with ten feet of sllk cord, complete with regular terminals, each ........................ $\$ 3$.
Each. .D.P. $\$ 5.44$


No. 202 Presto Cigar Lighter wilth ten feet silk cord, regular terminals nnd platinum tip, each .\$2,50 Each. . D.P. $\$ 3.88$

## Presto Cigar and Pipe Lighters

hoLDER


Presto Cigar and Pipelighter


No. 190-Pipe and Cigar Lighter
The latest addition to our popular line. The heating element is made of "Tungstenite" Chromium nickel. Lights a pipe as well as a cigar or cigarette.
No. 199 Presto Cigar and Pipe Lighter, complete
with plug, each.
$\$ 1.50$
Each. . D.P. $\$ 2.32$

## EXTRA PLATINUM CIGAR LIGHTER TIPS

6, 7 and 8 volt tips, each. . . . . . . . . . . . . . . . . . . . . . . $\$ 1.00$
Each. .D.P. $\$ 1.76$
10 volt tips, each. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.25
Each. . D.P. $\$ 2.22$
12 volt tips, each. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.50
Each. . D.P. $\$ 2.66$
18 volt tips, each.................................... . . . . . 2.00
Each. D.P. $\$ 3.55$
21 and 24 volt tips, each. . . . . . . . . . . . . . . . . . . . . . 2.50
Each..D.P. $\$ 4.44$

## EXTRA PIPE LIGHTER TIPS

6, 7 and 8 volt tips, each. . . . . . . . . . . . . . . . . . . . . . 80.75
Each. . D.P. \$1.32
10, 12 and 14 volt tips, each. . . . . . . . . . . . . . . . . . . . 1.00
Each. . D.P. $\$ 1.76$
16, 18 and 21 volt tips, each . . . . . . . . . . . . . . . . . . . 1.25
Each. .D.P. $\$ 2.22$

Presto Automatic Cord Winder



No. 25? Complete Combination Consisting of Cord Winder, Cigar Lighter No. 202 and Holder

The Automatic Cord Winder takes up the cord and can be placed under the seat or at the side of car, or behind the dash; can be used to wind up the cord on any Presto cigar lighter.

No. 240 Presto Automatic Cord Winder (only), black rub-
ber finisb
.83.50
Each..D.P. $\$ 3.88$
No. 252 Complete combination, Automatie Cord Winder
and Presto Cigar Lighter No. 202 and Holder as
IIlustrated
Each. D.P. 87.77
No. 254 Automatic Cord Winder. Presto Ford Cigar
Ligbter, complete . .................................................. . 8.00
Each.. D. P. $\$ 7.77$
No. 250 Automatic Cord Winder, with No. 200 Presto Com-
bination Cigar Lighter and Lamp and Holder ......... 6.00
Eacb. .D.P. $\$ 9.33$

## Ford and Star



No. 204 Presto Ford Cigar Lighter. Designed especially for the Ford Car, get their power direct from the magneto. Equipped with a lighter tip which is especially suited to the Ford Magneto and is marked "Ford Special." Equipped with 10 feet silk cord.

Nickel plated holder is furnished with each cigar lighter, which can be attached anywhere in the car. The cigar lighter case is made of polished wood, ebony flnish. All metal parts are heavily niekel plated.
Each
.82 .50
Each. .D.P. $\$ 3.88$
No. 205 Presto Star Cigar Lighter. Constructed exactly like the Presto Ford, except that they are designed to be used on all other makes of cars and are furnished with 6 -volt cigar lighter tips unless otherwise specified.
Ench
.............
.32 .50
Each. .D.P. $\$ 3.88$
Prices on Cigar Lighters are based on the use of 6 -volt tips. If tips of higher voltage are used, an additional price will be charged according to the value of the tip as shown on this page.

# Ohe GIBSON COMPANY $\overline{\text { OTPOLIS }}$ 

## DASH AND TROUBLE LAMPS



Style H Dash Lamp, with Switch, Nickeled, with
Bulb, each
$\$ 1.00$
Each. .D.P. $\$ 1.44$
Can be had in either single or double contact.


Style S Dash Lamp, specially designed for use on wood dash, Nickeled, with Bulb, each. . $\$ 1.00$
Each. . D.P. $\$ 1.44$
Can be had either double or single contact.

Style G Dash Lamp for use on metal dash, Nickeled, with Bulb, each
81.00

Each.. D.P. $\$ 1.44$
Can be had either double or
 single contact.

Style J Dash Lamp with
 Switch, Nickeled, with Bulb, each
.81 .00
Each. .D.P. \$1.44
Can be had either double or single contact.


Style D Combination Dash and Trouble Lamp, Complete with Bulb, each.
$\$ 2.50$
Each. D.P. $\$ 8.55$
Can be quickly disconnected from dash and converted into an ideal trouble lamp; ten feet of cord furnished.

Folding Lamp


No. 50 Tubular Folding Lamp is designed for use where lamp must be covered and is provided with shutter to protect bulb. Nickeled, with Bulb, each ... $\$ 1.50$ Each. D.P. $\$ 2.22$

## Cowl Lamp

Width of reflector, 13 in, Length over all, $4 \frac{1}{4}$ in. This Cowl Lamp is especially designed to be used in the cowl of an automobile, on an angle of 45 de-
 grees.
No. 502 Cowl Lamp Reflector, fitted with Ediswan
Socket, Screw, Terminals, Metal Cap, Nickeled, each $\qquad$
Each.. D.P. 81.44


No, 152-E Cowl Gauge Lamp, Nickeled, Ediswan Fitting, with Bulb ........... $\$ 1.00$
Each. .D.P. $\$ 1.33$

## Connecticut Trouble Lamps

Type R W Connecticut Trouble Lamp made in a substantial a $n$ d neat manner with solid brass reflector, nickeled and polished, with protecting wire
 guard, so arranged that it can be collapsed for removal or insertion of lamp. Has rubberoid handle and 10 feet black rubber covered duplex cable with Ediswan attachment plug to fit standard sockets.
Type R W Trouble Lamp, Double Contact, each.... $\$ 1.75$ Each. .D.P. $\$ 2.66$

Culver-Stearns Style "C"


Style C Trouble Lamp, furnished with 6 c. p. Bulb and ten feet flexible extension cord and Bayonet Locking Attachment Plug. Each.

Can be had either double or single contact.

## The GIBSON OOMPANY <br> (aitgoi (amalio

## GARAGE LAMPS AND LAMP GUARDS



No. 260VP Vapor Proof Hand Portable Lamp has strong wooden handle, porcelain receptacle with Benjamin lamp grip, vapor proof globe, reflector and metal guard with hinged hook. The portable measures $13 \frac{1}{2} \mathrm{x}$ 33 inches, and takes a 6 -inch 25 to 60 -watt tubular lamp. Back connections and strain relief means are provided. With one foot cable and swivel plug. Each $\qquad$ $\$ 3.15$
Each.. D.P. \$4.77
Price does not include lamp.

## No. 72 110-Volt Garage Lamp



Many of the most disastrous fires have been caused by dropping incandescent lamps and igniting gasoline on garage floors. The importance of properly guarding extension lamps is frequently overlooked.
Price complete, ready for use, as shown, each............. . $\$ 1.50$ Each. . D.P. \$2.33


Complete with 110 volt buib, 15 feet reinforced cord and detachable plug. price, each................. . . . . . . . . . . . . . . $\$ 8.00$ Ench.. D.P. $\$ 3.64$

## Lamp Guards



[^6]
## Automatic Reel Light

The Heim Automatic Reel Light is an absolute necessity to every mechanic who requires a portable light.

Simple in construction, positive and effective in operation.

Designed especially for garages, blacksmiths, factories, stores, or any business requiring an extension light. This reel is equipped with thirty feet of lamp cord, easily secured by fastening the arms of the swivel joint to ceiling or beam, as illustrated in diagram.

This swivel joint enables one to walk in any direction with the lamp. Has an automatic lock ingeniously arranged to lock and hold the lamp any distance from the reel. A slight pull forward unlocks the rachet, the wheel revolves, winding the cord back as you advance toward the reel with lamp in hand.

The adjustable stop-plug on cord (see diagram) renders the height of lamp optional with the one using same.


Each $\qquad$ $\$ 13.32$
Carbon and Metalyte Tungsten Lamps


Carbon Lamps


Metalyte Tungsten Lamps

16 C. P. New Class A Carbon Lamps, 105 to 130 volts, each
Each. . D.P. $\$ 0.27$
The Metalyte Nitrogen Type G. The lamp with a mission. Turns darkness into daylight with the least possible cost for current consumption.
15 Watt Metalyte Tungrten Lamps, each........ $\$ 0.40$
25 Watt Metalyte Tungsten Lamps, each........ . . 40
40 Watt Metalyte Tungsten Lamps, each....... . . 40 Each. . D.P. $\$ 0.55$
60 Watt Metalyte Tungsten Lamps, each........ . . 54
Each.. D.P. $\$ 0.71$
100 Watt Metalyte Type G Nitrogen Lamps, each 1.60 Each. . D.P. $\$ 2.10$
200 Watt Metalyte Type G Nitrogen Lamps, each. 3.10 Each. . D.P. $\$ 4.10$
250 Watt Metalyte Type G Nitrogen Lamps, each. 3.90 Each. . D.P. 85.10

PREST-O-LITE ACCESSORIES AND TUBING


No. 4 Flat Gas Tank Bands, for B or E tanks, per pair
$\$ 1.00$
Per Pair. . D.P. $\$ 0.88$
No. 4 Flat Gas Tank Bands, for A tanks, per pair. . 1.25 Per Pair. D.P. \$1.11

## F. G. Gas Tank Bands



Tank can be fastened to the side of car, runningboard or on the rear, or suspended anywhere.

Almost a necessity on roadsters where runningboard space is limited; and an improvement and convenience on any car.

Made of malleable steel, and so constructed that tank is securely held in place by a screw clamping a spring over the tank beyond the center.

Neat, quickly detached, secure and classy.
Price, black enameled, per pair
81.04

Per Pair. . D.P. $\$ 0.88$


Prest-O-Lite Union, each
Per Dozen. .D.P. $\$ 2.66$

## Gas Tank Key



No. 3 Regular Gas Tank Key, each.
Per Dozen. . D.P. $\$ 0.53$ Per 100.. D.P. $\$ 2.77$


No. 10 Gas Tank Key, each
80.10

Per Dozen. . D.P. $\$ 0.80$ Per 100. .D.P. $\$ 4.44$

Rubber Generating Tubing



Pare Gum Genernior Tubing, $\quad$ / $16 \times 1 / 16$ wall. Dacked 50 feet in box. per foot......s0.10 Per foot.. D.P. $\$ 0.09$ In $50-\mathrm{ft}$. Rolls, per foot....D.P. \$0.0K

Pare Gum Genernior Tubing, $3 \times 1 / 16$ wall, packed 50 feet is packed so feet in Per foot. . D. P. g 0,11 In 50-ft. Rolls, per foot... . D.P. $\$ 0.05$

Pure Gum Generater Tubing, 3/16x! wall, packed 50 feet
 Per foot. D.P. $\$ 0.15$ In $50-\mathrm{ft}$. Rolls, per foot..D.P. $\$ 0.13 \frac{1}{2}$ Fure Gum Generator Tabing, $7 / 32 \times 3$ wall, packed 50 feet
in bux, per foet . . . . . . ............................................... Per foot..D.P. \$0.18 In 50-ft. Rolls, per foot..D.P. \$0.16 Fure Gum Generater Tubing, $4 x \frac{1}{6}$ wall, pasked 60 feet in


## Braidoid Gas Tubing

A slagle ply tuling of braided construction, designed especlally for automobiles. Surrounding the tube. which is

selected stock and gasr(not wrapped) a cover constructed of Fery gtrong, IIght thread The oulside cover and inver tnbes are made of stocks guar anteed not to dry out or crack in any ellmate. Cured undet pressure.

An lifal tublag for gas lamp connections and gas tanks No bipples or rolled ends mecesisary. WIII last for years No bipples or rolled ends necensary. Will last for years
Practically indestructible. Very fexible. Will not kink or Practi
erack.

Braidoid Gas Tubisg. 3/16, packed 50 feet in box, per foot. $\$ 0.18$ Per foot. D.P. 80.15 In $50-\mathrm{ft}$. Folls, per foot. D.P. $\$ 0.14$
Braidoid Gas Tubing. A, packed 50 feet in box, per foot.... is Per foot, . D.P. $\$ 0.17$ In $50-\mathrm{ft}$. Rolls, Der foot.. D.P, $\$ 0.16$

## Copper Tubing



Made of annealed, seamless tublog. Can be bent in any direction without fear of breaking. Cut to any length

Copper Tubing, 1-inch outside diameter. per foot
.80 .18 Per foot., D.P. $\$ 0.18$ In $100-\mathrm{ft}$. lots. . D.P. $\$ 10.50$
Copper Tublag, $3 / 16$-inch outside diameter, per font Per foot., D.P. 80.22 In $100-\mathrm{ft}$, lots. . D.P. $\$ 20.00$
Copper Tubing. 1-Inch outnide diameter, per foot.
Per foot . D.P. $\$ 0,26$ In $100-\mathrm{ft}$, lots. . D.P, $\$ 22.22$
Copper Tubing, $5 / 16$-inch outside diameter, price, per foot , it Per foot., D.P. $\$ 0.31$ In 100 -ft. lots..D.P. $\$ 27.00$
Copper Tubing, E-Inch outside diameter, price, per foot.. . 25 Per foot. D.P. $\$ 0,25$ In 100 -ft, lots..D.P. $\$ 31.00$

## Brass Tubing

Soft drawn seamless brass tubing for gas Ilnes; also suitable for oil and gasoline


Brasn Tublag, D-inch outside diameter, Der foet. . . . . . . . . 80,22 Per foot., D.P. $\$ 0.26$ In 100-ft. lots.. D.P. $\$ 20.00$

# The CIBSONOMAN 

## LAMP BURNERS, BRACKETS, CARBIDE, WICKS AND CLEANERS



Dozen. .D.P. $\$ 3.33$
Gross., D.P. $\$ 33.33$
Crescent Victory Burners with hex pillar; each.... \$0.25
Dozen. . D.P. $\$ 3.88$ Gross.. D.P. $\$ 40.00$


Von Schwarz
"Perfection"
Perfection Burners are the acknowledged standard of merit; the burner with a worldwide reputation; $\frac{1}{2}$, 8 , $\frac{2}{2}$ and 1 foot. Specify size desired.
Von Schwarz Per-
fection Burners
with knurled
pillar; each..... $\$ 0.35$
Dozen. .D.P. $\$ 5.55$
Gross. . D.P. $\$ 60.00$
Von Schwarz Perfection Burners with hexapost; each


Dozen..D.P. $\$ 5.55$ Gross. .D.P. $\$ 60.00$

## Von Schwarz "Koro"



A single jet slot burner which has no equal.
Von Schwarz Koro Burners; each. . $\$ 0.25$
A highly satisfactory metal arm burner; guaranteed.
Dozen. . D.P. $\$ 3.33$
Gross., D.P. $\$ 33.33$
Von Schwarz Mata-
dor Burners;
each .......... $\$ 0.25$
1, $8, \frac{1}{4}$ and $i$ foot.
Specify size desired.
Dozen. .D.P. $\$ 3.33$
Gross. . D.P. $\$ 33.33$


No. 321. Adjustable Lamp Bracket, malleable iron, japanned finish, per pair $\qquad$ Per pair., D.P. \$1.88

No. 323. Adjustable Lamp Bracket, malleable iron, japanned finish, per pair. 82.50
Per pair. .D.P. $\$ 1.88$


## Calcium Carbide

2-lb. Cans, $\frac{1}{\frac{1}{-i n} . ~ C a r b i d e, ~}$ each .................... 80.25
Each. .D.P. \$0.35
Per case, containing $242-\mathrm{lb}$. cans
Per case. .D.P. $\$ 8.00$
$10-\mathrm{lb}$. Cans, $\frac{1}{2}$ or $1-\mathrm{in}$. Carbide, each
.90
Each. D.P. $\$ 1.55$
Per case, containing $610-\mathrm{lb}$.
cans .................... 5.
Per case. .D.P. $\$ 8.66$
$100-\mathrm{lb}$. Drums, size $1 \frac{1}{4} \times \frac{1}{2} \ldots 6.00$
Each. . D.P. $\$ 7.77$
Economy Burner Cleaner


High grade burner cleaner. Carefully made.
Price, each
$\$ 0.10$
Dozen. .D.P. \$1.06
Lamp Wicks


These are the finest wicks for use in oil lamps; are very closely woven and are made in all sizes.

Lamp Wick, $\frac{1}{\frac{1}{2}}$ or $\frac{1}{4}$ inch, per doz \$0,20 Dozen. . D.P. $\$ 0.22$

# Ohe GIBSON COMPANY 

GAS TUBING NIPPLES, BAGS AND LAMP CONNECTIONS


## Flexible Lamp Connection



Made of $\frac{1}{4}$-inch polished brass with rubber ends to fit lamp and pipe connection.

Not only adds to the appearance of the car but will last many years, thereby eliminating the usual trouble of rubber hose.

Cannot become porous and therefore saves

Flexible $L$ a m p Connections, brass, each. $\$ 0.25$
Doz. .D.P. $\$ 3.33$
Flexible Lamp Connections, nickel, each $\qquad$ Dozen. . D.P. $\$ 4.00$
$\$ 0.30$

Gas Bags
Gas Bags, each........ \$0.25
Dozen. .D.P. \$4.52

Gas Tubing Nipples


No. 15

## Gas Tubing Nipples



No, 1 Gas Tubing Nipples, per dozen...... D.P. $\$ 0.88$
No. 2 Gas Tubing Nipples, per dozen.......D.P. 1.11
No. 3 Gas Tubing Nipples, per dozen.......D.P. 1.54
No. 4 Gas Tubing Nipples, per dozen. ..... D.P. 1.11
No. 5 Gas Tubing Nipples, per dozen.......D.P. 2.00
No. 6 Gas Tubing Nipples, per dozen......D.P. 2.00
No. 9 Gas Tubing Nipples, per dozen.......D.P. 4.88
No. 15 Gas Tubing Nipples, per dozen.......D.P. 2.44
No. 16 Gas Tubing Nipples, per dozen.......D.P. 4.66
No. 17 Gas Tubing Nipples, per dozen.......D.P. 4.66
Nos. 1, 2, 3 and 4 are made of solid brass castings and are about $\frac{1}{\frac{1}{2}}$ inch in diameter, and are for rubber tubing with A-inch hole.

Nos. 5 and 6 are made from smooth brass and will fit $\frac{1}{4}$-inch brass or copper tubing.

No. 9 Brass Unions turned from solid heavy brass. One end threaded regular $t$-inch gas pipe thread. Other end drilled $\frac{1}{4}$-inch hole to take $\frac{1}{4}$-inch $O$. D, tubing. Ground taper joint.

Unions Nos. 15, 16 and 17 are made from tubing, are brazed so that tubing can be soldered in without any injury to the unions. Are $\frac{1}{2}$ inch inside diameter to take $\frac{3}{4}$-inch outside diameter tubing. Ground taper joint,

# The GIBSONGOMPANY 

ROAD GUIDES


Ilexible Leather Bound
THE AUTOMOBILE BLUE BOOKS
OFFICLAL GUIDE OF THE A. A. A-KNOWN EVERYWHERE BY MOTORISTS
Standard Read Guide of America
Volume 1-New York State and Adjacent Canada
Including Long Island, and adjacent States as far as New Haven, Danbury and Waterbury, Conn., Pittsfield, Mass., Rutland and Burlington, Vt.; and extension routes to Cleveland, Ohio; Pittsburgh, Wilkes-Barre, Scranton and Delaware Water Gap, Pa.; Trenton, Asbury Park and Atlantic City, N. J.
Volume 2-New England and Maritime Provinces
Including Long Island, New York City and extension routes into eastern New York State, as far west as the eastern shore of the Hudson, Albany, Lake George, Lake Champlain and Montreal and Quebec.
Volume 3-New Jersey, Pennsylvania, Delaware, Mary-
land, District of Columbia and West Virginia
Including also all main highways out of New York City, the main highways into northern Virginia and West Virginia, and eastern Ohio to Canton and Cleveland.
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Illinois, Indiana, Ohio, Michigan, Wisconsin and Kentucky; with extension routes to Buffalo, N. Y.; Pittsburgh, Pa.; Wheeling and Charleston, W. Va.; Nashville, Tenn.; St. Louis, Mo.; Burlington and Davenport, Iowa; St, Paul and Minneapolis, Minn.; London, Hamilton and Niagara Falls, Ont., Can.
Volume 5-Mississippi River to the Pacific Coast
With connecting highways from Chicago. This volume features particularly the main transcontinental routes to the Pacific Coast, covering in addition, all main highways throughout the intervening States.
Volume 6-The Southeastern States
Including Virginia, West Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana and Tennessee, with extension routes into Kentucky and the main highway south from Washington and Hagerstown.
Per volume
$\$ 2.50$
Each. .D.P. $\$ 3.88$

Scarborough's Road Maps and Tour Books


## Description of Volumes-CENTRAL STATES

This new Tour Book comblaes in one volume all the roud data formerly contained in our Indiana, Oblo, Michlgad. Illi. nois and Wisconslo Motor Guides, to which bave been added trunk line trips to Kansas City. Omaha. Minneapolls, Dulath. Buffalo and New York City, and the Dixie Highwny south to Miami. Fla. Also our pathtinders this year have clarted over 15,000 miles of new roads, and checked over and revlsed where necessary practically all of the old road data. Thls work brings our Central States Tour Book entirely up to date, making it the most dependable and complete touring guide for tbla territory.

New maps have been made of all the leading cities, showing the location of the principal streets and the ways of entertog and leaving. Also brand new road maps have been made of the entire Central States, giving all the turns, railroad cross logs, cross roads, spurs, etc., of the charted trips.

This data bas been arranged in logical order and is conventently and completely indexed, It is the official tour book of the Hoosler State Automobile Assoclation and its aftilated clubs, Wolveribe Automobile Club and the Columbus and Cin cinnati Automobile Clubs.
Price, bound in best grade Fabrikoid leather.
$\$ 1.50$

## NEW YORK, CANADA AND THE EAST

The most complete and up-to-date tour book of New York. Canada and the Eastern Stntes ever compiled. Mnde under the direction of the New York State Automoblle Association and Its aftllated clubs, and recogulzed by them as thelr oftcial gulde. The road data, all gatbered in 1914 and revised in 1915, in co-operation witb the local assoclation clubs, assure the tourist of new and up-to-date rontes, A total of over 50,000 miles chartenl roads in this one rolvme, 5,000 miles of roads in Canada. Contains twice the charted mileage, in New York State alone, of its nearest competitor, The Catskill and Adirondack sections wonderfnlly complete. Contains all the leading trips as far east as Newport, R. I.; Worcester, Mass.; Springtleld, Mass; the Berkshires and Boston; the leading routes through Vermont and New Hampshire to the White Mountains; the principal routes as far north as Montreal and Quebee, Canadn; as far northwest ns Ottawa and North Bag, Ont.; as far west as Detroit and Port Huron, Mich.; Cleveland Ohio, and Chicago, III., and as far south as Pittsburgh and Philadelphla, Pa_, and Atlantic City, N. J., with all the main routes across that state.

In addition to the road information, this book contains a complete road map of New York State, showing every road. as appears on the plat books of the varlous county commis sioners, with the charted trips in red. Bound in best grade Fabrikoid leather and fully indexed and cross-indexed for the convenient use of the tourist.
Each
.$\$ 1.50$
Each. D.P. \$1.66

# ØKe GIBSONOMPANY <br> CLOCKS 

## Keyless Auto Clocks

## KIM WIND-RIM SET. EIGHT-DA)



Made by the largest Manufacturers and Distributers of Automobile Clocks is the World.
Keyless Auto Clocks are the most practical auto clocks made. The unique way of winding and setting by the rim, thus eliminating the use of a key or a projecting stem, has made them very popular with the trade. They run eight days with one winding, are fully guaranteed, and are without doubt the handsomest auto clocks on the market. They are built especially for automobiles and will stand the hardest vibration, and keep time under the most trying conditions. Popular style cowl clocks for all the new model cars.
No. 7-Eight-Day Rim Wind and Set Auto Clock, 24 -inch dial, each......... $\$ 9.50$ Each. . D.P. $\$ 18.88$
No. 12-Eight-Day Rim Wind and Set Auto Clock, $2 \boldsymbol{1}$-inch dial, each. . . . . . . . 9.00 Each. . D.P. $\$ 18.32$

## New Haven One-Day Stem Wind



No. 1

These clocks are very neat in appearance, accurate timekeepers and are the most popular clocks of the lower-priced models.
No. 1-One-Day Small Offset Model Auto Clock with winding stem
 Each. D.P. $\$ 3.10$

No, 4-One-Day Cowl Model, $2 \frac{1}{2}$-inch dial, concealed winding, will fit any cowl dash, each.
........................................ 2.75

Each. D.P. $\$ 3.88$

## New Haven Eight-Day Clocks

New Haven Automobile Clocks are guaranteed to keep perfest time under the most trying conditions. The movements have been greatly simplified, and all parts are made of hard brass and highly tempered steel, insuring greater stability and better timekeeping. All clocks are closely tested in the factory under conditions similar to those encountered in actual service.
No. 2-Eight-Day Offset Model Auto Clock, $2 \frac{1}{4}$-inch dial, each. 84.50 Each. . D.P. $\$ 6.66$
No. 3-Eight-Day Cowl Model Auto Clock, 27-inch dial, each . . 4.50 Each. D.P. $\$ 6.66$

## Lewis Nojar Rubber Retained Auto Clock



The Nojar is entirely encased in heavy highest quality red rubber, eliminating the possibility of shock, jar, jolt or vibration. As rubber is non-conducting, electrical disturbance positively has no effect upon this rubber-retained clock.

No. 10 Lewis Nojar Rubber-Retained Clock for Ford or Dodge cars. Attached quickly to steering post by removing nut at top of steering wheel, each.... $\$ 2.50$ Each. D.P. $\$ 3.88$

No. 20 Lewis Nojar Rubber-Retained Clock for use on dash of any car, each. 3.00

Each. D.P. 84.66


## CLOCKS

## Waltham Automobile Clocks

## ACCURATE AND RELIABLE

Waltham Clocks are the best and highest priced clocks that are offered to the trade and are sought by those who insist on having a thoroughly reliable and correct timepiece.

Waltham Automobile Clocks are stem wind and stem set-the winding crown is always accessible. Movement need never be exposed to elements in any model. Adjusted to temperature. Will run eleven days with one winding, two extra long main springs making this possible. Fifteen jewels. Winding Indicator feature shows red spot on face of dial three days before clock runs down.


Above price includes choice of finish on cases and dials as follows:

Cases-<br>Black Enamel<br>Brass<br>Nickel<br>Oxidized Silver

Dials-
Black

RADIATOR ORNAMENTS


No. 8430 Doctor's Cross helght $\frac{1}{}$ Inches, width it Inches, each . 81.30 Ench . D.P. $\$ 2.22$


No. 6420 Masonle Emblem, beight 4 inches, width 8) inches, each ...... $\$ 1.5$

Ench. D. P, $\mathbf{\$ 2 . 2 2}$


No. 8005 Bhriner Emblem. with Tiger Cisw, belght 4 isches, width
3 Incles, each
$\$ 1.75$
Each. . D.P. \$2.66


No. 3061 Bhriner Fez, belght is inches, width
3 Inchea, each
.81 .75
Bach . . D. P. $\$ 2.06$


No. 8063 Doctor's Cross, helght 4 taches, width 31 inches, each ......s1.7s Esch. D.P. $\mathbf{y}_{2} .66$


No. 5421 Shriner Emblem, lielght 21 Inches, width 41 inches, each ....... $\$ 1.60$ Each. . D.P. $\$ 2.22$


No. 8079 Eagle, with $V$, S. Shield, height 4 inches, width 21 Inch-
es, each
Fach. D.P. \$2.60


No. 3004 Knights of Fythian Emblem. trelght 42 inches, whith 3 inches, vach …....81.70 Eincli. . D. P. \$2..64


No. 5273 Elk Emblem, height 5 inches, width 42 inches, each ........81.76 Eacb..D.P. $\$ 2.66$


Ne, 8066 Red Men Emblem, helgbt 41 Inches width 3 isches, each $\$ 1.75$ Ench..D.P. \$2.68


No. 8113 Whirling Cop
lieight 81 inches, width
43 inches, each ...... $\$ 1,25$
Each.. D.P. $\$ 1.88$


No, 5419 Eagle, helght 4
inches, width 7 Incls-
es, each … ........... $\$ 1,25$
Ench.. D.P. 81.88
No. 6311 Engle height 0 inches, width 11 inches, ench
Each..D.P. 84.44


No. B059 E1k Emblem, height 4I Inches, width 31 inchee, each
$\$ 1.75$ Ench. . D.P. $\$ 2.68$


No. 8088 Oddfellow Ornament, helght 4 Inches,
width 3 Inches, each. . $\$ 1.75$ Each. . D.P. \$2,68


No. 5177 Gobbo, height 4) inches. widith 24 inches, esch . . . . . . . . $\$ 1.78$ Each. . D, P. \$2.66


No. 6935 Winged Wheel,
beight 33 inches, width
43 Inches, each
Each. .D.P. \$2.68

# OKC GIBSON COMPANY 

GOGGLES

## Willson Goggles In Display Case

Largely increased sales follow the proper display of any line. A handsome mahogany case $111 / 2 \times 14 \times 121 / 2$ is supplied free to the purchaser of either of the three assortments described below.

Assortments consist of twelve styles, all good sellers. There is an increasing demand for goggles which dealers should be prepared to meet, and in no way can this be done as satisfactorily as with these assortments.

The line is comprehensive, popular, distinctive, with many exclusive features. Goods American-made. Deliveries dependable. Wide range of prices and styles to meet every need. High standard of quality.


# The GIBSON COMPANY 

## GOGGLES

## Z1W Zylbex Eye Protector



No. Z1W Zylbex Eye Protector. Attractive shell frame with comfortable ventilated leather side guards and easy cable temples of white metal. Amber color, particularly useful for motoring. Each pair in a handsome steel case.
Per Pair
$\$ 1.50$
Per Dozen Pairs. .D.P. $\$ 16.66$


Nu. Zol Zylliex Protection Glabs. A novel and distimetive style-hew in every way. Combines high quality, comfort, distinction, and great value at a reasonable price, Very desir: able fur golgig. Bbootios, wotoriagion from wlad and clare They cnn be worn over other glasses. The construction and They can be worn over other glasaes. The construction and
appearance of thls glass will appeal to buyers who want reappearance of this glass will appal to buyerd who want re-
anement and quality. The value of this protection plass needs duement and quality. The value of this protection mass needs
no comment to wille awake dealers. Fine quality sylonite no comment to wille awake dealers, rine quality gylonite
(Imitation tortolse shell) frames; git alloy or white metal cable rlding bow temples. High-grade ml-coquille lenses in smber, feuznl, smoke or white. $1 \% / 8$ in diameter Ruch palr supplied in a neat lux
Per Pair.
$\$ 1.00$
Per Dozen Pairs. D.P. 811.65

## ZF1W Zylbex Self-Adjusting Goggle



No. ZF1W Zylbex Self-Adjusting Goggle. Positively the last word in comfort for the motorist. Owing to the use of a flexible pure silk bridge the goggle perfectly adjusts itself to the shape of any face, thus combining complete protection with unusual comfort. The frames surrounding the eyes are imitation tortoise shell, the ventilated side guards are leather and the casy cable temples are made of white metal-an ideal combination of materials. Each pair in a handsome leather-covered metal case. You may confidently recommend this style to your fastidious customers as being the best motoring glass on the market, regardless of price.
Per Pair
$\$ 1.50$
Per Dozen Pairs. . D.P. $\$ 20.00$

Universal Goggle


This style represents a remarkable value and will appeul to those who wish to pay only 50 cents for a goggle. Made of rust-proof white metal, riding bow temples, saddle brlage. Amber, smoke or blue lenses $17 / 4$-incb diameter. Each pair furnished in an attractive, hloged cover, black hox.
Per Pair.
$\$ 0.50$
Per Dozen Pairs. . D.P. \$6.66

Albex Eye Protector


No. As Alties Goggle is without doubt one of the muat propular styles Light as a featber, compact, adjustable and perfectly complete to its protection. Solld white metal frame. easy cable temples, well reatilated, leather sides and the exclusive Wilson adjustable brace bridge
Per Pair. $\$ 1.00$
Per Dozen Pairs. D.P. $\$ 13.32$

Gilt Alloy Eye Glass


No. 8759 Gilt Alloy Eye Glass, with black offset guards and large round lenses, amber and smoke.
Per Pair
50.25

Per Dozen Pairs. . D.P. $\$ 2.66$

## The GIBSONGOMPANY



No. Z9659 Zyl-Edge Eye Glass. A neat eye glass with round colored lenses edged with shell. A large seller because of its appearance and value, notwithstanding low price. Amber lenses. Each pair in a neat carton.
Per Pair
$\$ 0.50$
Per Dozen Pairs. . D.P. $\$ 5.32$

## Zylbex Eye Glass



No. Z5 Zylbex Eye Glass. An unusually distinctive imitation tortoise shell eye glass with black metal guards and gilt alloy spring, particularly well adapted for ladies who may want eye protection and yet who prefer an eye glass to the ordinary kind of goggle. Amber coior. Each pair in a neat carton.
Per Pair
$\$ 1.00$
Per Dozen Pairs, . D.P. $\$ 13.32$

## Eye Protector Spectacle



No. 72594 Eye Protector Spectacle, with white metal frame and easy cable temples. Large, round lenses, 17 inches in diameter, assorted amber, smoke and white colors. A useful but inexpensive style for driving, motoring and industrial purposes, such as grinding.
Per Pair
$\$ 0.25$
Per Dozen Pairs, . D.P. $\$ 3.32$

Eye Protector Spectacle


No. Z79594. An attractive Eye Protector Spectacle, with neat shell rims around the lenses. Gilt mountings, easy cable temples and large round lenses 18 inches in diameter, assorted amber and smoke. This is our new Zyl-Edge Protection Glass style, very popular where protection against sun and snow glare is desirable. Each pair in a neat carton.
Per Pair
$\$ 0.50$
Per Dozen Pairs. . D.P. $\$ 8.39$

## Imitation Tortoise Shell Spectacle



No. K7 Imitation Tortoise Shell Spectacle. Large, round lenses, amber and smoke. Will sell at sight because of excellent finish and superior design. Each pair in a neat carton.
Per Pair
Per Dozen Pairs. . D.P. $\$ 10.00$
Imitation Tortoise Shell Goggle
5


No. K1 Imitation Tortoise Shell Goggle with Side Shields. Owing to the unique construction, this goggle differs from other shell goggles with side shields in being neat and light in weight. Amber color. Each pair in a handsome case.
Per Pair
$\$ 1.00$
Per Dozen Pairs. .D.P. $\$ 13.32$

Yale Padlocks


No, 810—standard

No. 701Ins- 12 inches; cast bronze case; nickel-plated steel shackle; four pintumblers; two paracentric keys; changes practically unlimited, each ….......................81.10 Mozen . D. P. $\$ 21.10$

No. D1201BS-13 Inches; cast bronze case, nickel-plated eteel shackle; four pin-tumblers; two paracentric keys: changee practically unlimited. With sust guard, each .....................................................................
Dozen. . D.P. $\$ 25,00$

So. 815-1 inch; bronze case, fine wheel finish; bronze wire shackle, wheel flaish; three lever-tumblers; two filuted keys. forty-elght changes, each.................................. \$1,20 IhoxeIt . D. P. $\$ 20.22$


No. $8 \geq 3-3 t u m d a r d$


No, 823-11 inches: bronze case and shackle, fine wheel finIsh; three lever-tumblers; twe fluted keys, forty-eight



No. 833-9 inclies; bronze case and shackle, Gne wheel faisb; four lever-tumblers; tveo fluted keys, 144 cbanges. earh
[hozen , D, P, \&22.00


Na. R33

Dozen D.P. $\$ 22.22$


No. 8114-Manitwr
Nis. 830-12 iached; cast bronze case; steel shackle; five pin-tumblers; two paracentrie keys, changes practicalif unlimited, each ................. . . . . . . . . . . . . . . . . . . . . . . 81.60 Doxen.. D.P. $\$ 29.10$


No. 8414-1 Inch; Bower boffed steel case and shackie; three lever-tumblers; two flat ateel keys, forty-elglit cbanges, each
Dozen . . D. P. \$13.32

[^7]

No, 61ts-Terror



No. 6815


Ne. 8434V-18 Inches; sand blasted brass case; polished brass shackle; three lever-tumblers? two corragated nteel keyn. forty-eight changes, each................................ 0 Hozen.. D. P. $\$ 21.77$

No. 6IZS- 14 inches: Ivory black steel case; nickel-plated steel shackle; twe lever-fumblers; two flat steel keys, twelve changes, each

Dozen.. D.P. \$5.55

No. 6S1V-1 inch; dippeal bright brass case and shackle:
four lever-famblery; twa flat steel keys, twelve
four lever-fambiers; iva hat steel keys, iweive so. so
Dozen. . D. P. $\$ 8.10$

# Ohc GIBSON GOMPANY $\overline{\text { EINOLIS }}$ <br> PADLOCKS 

No. $830: 2-11$ inches; cast bronze case; steel shackle with 23-inch clearance; five pin-tumblers; two paracentric keys: changes practically unlimited, each.............. $\$ 1.50$

No. 61589-2 inches; ivory black steel case; nickel-plated steel shackle with 23 -inch clearance; two levertumblers; two flat steel keys; twelve changes, each... . 40


No, 830?3 Dozen. . D. P, $\$ 31.10$ Dozen. D. P. $\$ 7.55$




## No. 2115.

No, $5639 \frac{3}{2} \mathrm{UX}-1 \frac{1}{2}$ Inches; buffed brass case; nickel-plated steel shackle with $2 \frac{1}{2}$-inch clearance; three levertumblers; two flat steel keys, forty-eight changes. fumblers; two hat steel keyn, forty-eight changen
Lozen. D. $\mathrm{P}, \$ 17,32$
No. 2115J-2 inches: black Japanned ivery case; niekelplated steel shackle with 6 -inch clearance; two corrugated stepl keys. six changes, each..........................
Dozen. D.P. $\$ 8.32$

Padlock Cards


No. N5 Padlock Card Size $13 \frac{1}{4} \times 15 \frac{2}{4}$ Inches

The padlocks on this card are specially adapted for use on automoblles and garages. The locks are as follows:

|  | No, | Size | Case |
| :---: | :---: | :---: | :---: |
| 2 | 853 | 2 Inch | Bronze |
| 2 | 815 | 1 inch | Bronze |
| 2 | D17018S | 1tincb | Bronze |
| 2 | D701BS | 1t Inch | Bronze |
| 2 | 1701BS | $1 \frac{1}{5}$ Inch | Bronze |
| 2 | 70188 | 18finch | Bronze |
| Price, each | rd. |  | . 815.75 |



No. N16 Fadlock Card
Size 131x152 Inches
This assortment is the same as N5 except that one each of Nos. 815, 701BS, D701BS, 1701BS and D1701BS are buffed nickel flutgh.


LOCKS

## Padlock



No. 223 Yale Padlock. $1 \frac{1}{2}$-inch, 2 flat steel nickeled keys, case iron bower-barffed, panels wrought steel, brass plated, shackle steel brass plated, each
80.35

Doz. .D.P. $\$ 6.22$
The Improved Keyless Wonder Padlock


Labyrinth System Padloek

Simple and convenient. Eight parts. No numbers to look for, no tumblers or springs to stick or jump out of place. Always responds to correct combination.

Not affected by climate, water, dust or oil. Guaranteed.
No. 5 Keyless Padlock, dull
black enamel finish, each $\$ 0.75$
Each....D.P. $\$ 1.10$

## Special Information

To open, simply turn knob a few times to left and rightcounting number of clicks-it opens at once. Can be operated with gloves on, at night. Cannot be opened unless combination is known. Every padlock is put up in individual carton with complete instructions for operating.
All locks are secretly numbered and combinations recorded at factory for information of proper parties only. Can furnish any number of locks set on different combinations, or all set on the same number.

## Evans Auto Lock



The Evans Auto Lock is a polished cast brass case, adjustable tempered steel shackle, double locking bolts, multiple changes, furnished with two corrugated steel keys. The entire lock is strongly built of finest material by experienced workmen and will last a lifetime.

Will positively lock practically every make of car on the market. Simply slip the steel shackle around one or both of the levers and one spoke of the steering wheel or a part of the steering post frame, then slip on the brass lock. Your car is now securely locked and you have the assurance that it will be where you left it when you want it. Most simple and easiest locking device on the market. Nothing can get out of order.
Each
$\$ 1.00$
Each. D.P. \$1.66

## American Chain Lock

## American Chain

 Automobile and Tire Locks are made of the flat link American type steel chain. They offer many advantages over the ordinary chain lock because of the flat links, which give the chain a straplike action, and permit its being drawn closely around shoes and running board or through a wheel and spring or frame, making the only real protection against automobile thieves. They are simple, strong, noiseless and when not in use take up small space in the tool box.

Chain covered with best grade genuine oil-tanned leather, complete with lock.
No. 50 Automobile Lock with 36 -in. chain, each.... $\$ 1.25$ Each....D.P. \$1.66
No. 501 Automobile Lock with 42 -in. chain, each. 1.50 Each. D.P. $\$ 2.00$

## Chain For Auto Locks



No. 12 Bright Chain (without lock), 36 -in., each.... $\$ 0.40$ Each...D.P. \$0.55
No. 121 Bright Chain (without lock), 42 -in., each.. 50 Each...D.P. \$0.66
No. 52 Bright Chain, covered with best grade oiltanned leather (without lock), 36 -in., each....... .80 Each....D.P. $\$ 1.22$
No. 521 Bright Chain, covered with best grade oiltanned leather (without lock), 42-in., each... .95 Each...D.P. \$1.44

Pagel Combination Gasoline Lock


The Pagel Combination dasoline Lock is a gafety device operated from the dasle, giving absolute control of the fuel sopply, The incrensing number of automobile thefts bas created a demanal for a safety lock that is effective agalnat thieves. Iasily installed and simple in construction, neat and ittractive innd rensonnble in price. The Pagel fils every reanifirement.
Guch
Cach. . D. P. \$8.8s

# The GIBSONGOMPANY $\overline{\overline{A P O L I S}}$ 

## FOLDING BUCKETS, BASKETS, TRUNKS, ETC.

The Duplex Folding Canvas Pail

 other. Made of heavy brown canvas, water-proofed. Metal parts are spring steel ${ }_{3}$ rust-proofed. They are water-tight in any climate and will not become brittle or decay through use or disuse. No. Capaclity Dinm. Depth Folds Into Each
 Each....D.P. $\$ 1.66$ 1210 gts. 11 in.

91 i in.
$13 \frac{1}{4} \times 6 \times 2 \frac{1}{2}$ in.
1.50

Each....D.P. $\$ 2.48$


The Duplex Automobile Pails have splash guard, strainer and spout, which allows water to be secured from any lake or stream, and the radiator, tea kettle or glass filled with water strained clean
 enough to drink. The
quick, easy way of opening and folding appeals to every one, and the fact that they can be carried folded flat under seat cushion, or folded double in tool box, makes them handy and not cumbersome when not in use. The ideal outing pails.
No. Capacty Diam. Depth Folds Inty Each Each....D.P. $\$ 2.48$
 Each...D.P. $\$ 3.32$

The Duplex A Folding Refrigerator Basket Hendy Baskets carry liquids or solids equally well and will keep ice or water cool. They can be washed or you can wash dishes in them. Made of brown canvas, waterproofed. Metal parts are spring steel, rust-proofed.
 All have double handles and covers fasten with pulldown snap hooks. For campers, excursions, fishermen, pienics or marketing they are ideal, as when empty they can be folded and packed away in a very little space.

| No. | Length | Width | Depth | Folds Into | Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 316 | 16 in . | $9 \frac{1}{2} \mathrm{in}$. | $7 \frac{1}{2} \mathrm{in}$. | $10 \frac{1}{2} \times 8 \frac{1}{4} 3 \mathrm{in}$. | \$2.00 |
| Each | D.P. \$ |  |  |  |  |
| 316 | 18 in | 11 in. | 92 in . | $12 \times 9 \times 3 \mathrm{in}$. | 2.50 |

## BOKO BUCKET



The Boko is a two-gallon rubber bucket for either gasoline or water. As you will see by the illustration, a flexible tube fastens over the end when the bucket is full of fluid. This tube not only takes the place of a funnel, but also eliminates the use of any valves. There is, consequently, nothing to get out of order. It is always ready. Simply unhook the tube, place it in the opening in the gasoline or water tank, and a slight pressure with the finger on the tube gives perfect control of the flow.
Each
$\$ 1.25$
Each. D.P. 82.08

## Trunks



No. 12 Auto Case. Made of heavy black enameled duck and best quality trunk board, with steel frames, top and bottom. Edges leather bound and stitched, hinges and handles hand riveted. Solid leather corners with brass-ball-head rivets and extra large studs on bottom. Linen lined. Fitted with 24 -in. trays and heavy harness leather straps. With three leather trunk handles, one in front and one on each end. Size, $28 \times 12 \times 14-\mathrm{in}$., each Each....D.P. \$14.44
No. 112 Same as No. 12, only larger. Size, $30 \times 12 \times 14-\mathrm{in}$., each
Each....D.P. \$16.66

## Wilcox Folding Trunk Carrier



For tranks 28,30 and 32 inches in leagth. Width open, 18 inches; width folded, it inches. In ordering state length of tronk
No. 244 Wilcox Folding Trunk Carrier, each
Each....D.P. $\$ 2.77$

## Ohc GIBSON COMPANY

## VACUUM BOTTLES AND FOOD JARS

Universal Vacuum Bottles



Popular priced bottle. Heavy cold rolled metal with fine baked black enamel finish. Heavily tinned seamless cap. Patented shock absorber. No paper or pads to become foul. Made in pints and quarts only.

No. 61 Pint $\$ 1.00$
Each....D.P. $\$ 1.66$
No. 62 Quart $\qquad$
Each...D.P. $\$ 3.32$

Black enamel body and nickel plated shoulder and cap, an attractive combination. Rubber gasket in shoulder. Patented spring retainer and shock absorber.

Each
No. 70 Half Pint
$\$ 1.25$
Each....D.P. $\$ 2.08$
No. 71 Pint 1.25

Each....D.P. $\$ 2.08$
No. 72 Quart
2.25

Each...D.P. $\$ 3.75$

"Universal" standard full nickeled bottle, made of seamless nickel plated brass. Simple and artistic in its lines. Perfectly smooth and beautifully finished. Rubber gasket in shoulder. Patented spring retainer and shock absorber.
No. 80 Half pint.................... $\$ 1.50$ Each....D.P. $\$ 2.50$
$\begin{array}{cc}\text { No. } 81 & \text { Pint } \\ \text { Each.... } \\ \text { D.P. } \$ 2.50\end{array}$
No. 82 Quart
Each.... D.P. $\$ 4.18$
Extra Glass Fillers for these Bottles
No. 00 Half pint.................... $\$ 0.85$ Each...D.P. \$1.42
No. 01 Pint
Each....D.P \$1.42
No. 02 Quart 1.50
Each...D.P. $\$ 2.48$

## Universal Vacuum Food Jars



Will carry and maintain temperature of hot baked beans, meat stews, etc., or
 cold salads, ice cream and ices.

These "Universal" Vacuum Jars bave a heavy cold rolled metal case with baked black enamel finlsb. The cap is seamless drawn steel heavily tinned. Bayonet clasps. Full width less drawn steel heavily timbed. mouth. highest quallty fller, protected from breakage by patmouth, highest quality fller, protected from breakage by pat-
ented spring retainer. An efficlent inexpenslve jar. Made in ented spring retainer,
pints and quarts only.

Eacl
Each. D.P. $\$ 2.4$
No. 011 Extra Filler $\qquad$
Ench..D.P. 32.08
No. 712 One Quart
Each. D, P. $\$ 4.18$
No. 012 Extra Filler
Ench. .D.P. $\$ 3.33$


Half Pint Nickel Butter Jar



Full Nickel Jars. Excel in simplicity of construction and deaign. Casses are seamless drawn brass, smooth and benutifully finished In beavy bickel plate. Have drawn brass alcke plated shoulder and patented metal spring retainer to protect gllers. Higbest grade full width mouth fillers. Med in quarts, pints and half-pints. Each
No. 800 One-half Pint. $\$ 2.00$ Each..D.I. $\$ 3.32$
No. 010 Extra Filler ... 1.25
Ench.D. P. 82.08
811 One Pint
Each..D.P. $\$ 3.32$

No. 011 Extra Filler Each
011 Extra Filler $\ldots, 1.25$
Gach. D.P, $\$ 2.08$
-. M12 One Qunrt $\ldots . .3 .00$ Eacb. D.P. $\$ 5.00$
No. EIT Extra Filler ... 2.00
Bach..D.P. $\$ 3.32$

## The GIBSONGOMPANY

CARAFES AND CARRYING CASES


Heavy Nickel Plated Case ity.

## Universal

 Vacuum CarafesUniversal Carafes are all of one-quart capacNo. 882 With Metal and Cork 8topper ...................... 88.50 Each..D.P. 85.82
No. 8828 With Glans 8topper and Chain..................... 4.00 Each., D.P. $\$ 6.66$
No, 022 Extre F
 Wach., D.P, $\$ 4.18$
No. 0422 Extra
 Nach..D.P. $\$ 5.00$
No. 1829 With Metal and Cork Stopper...................... 4.50 Each..D.P. $\$ 7.50$
No. 2822 With Glass stopper and Cbain.................... 5.00 Each. D. P. $\$ 8.32$
No. 01z2 Extra Filler for No. 1898........................... . . . . . 50 Nach..D.P. $\$ 4.18$
 Facb.. D.P. $\$ 5.00$


Fits any quart alze carafe. Made of solld brass, heavily alckel plated
No. 5829 Whth Metal and Cork Stopper
Each., D.P. $\$ 9.15$
No. 6822 With Glass Stopper and Chain.
Each. D. P. $\$ 10,00$
No, ..D, $\mathbf{\text { E }} 810,00$. 6.00
No. 0122 Extri Filler for No, bs22.
Each. D.P. $\$ 4.18$
No. 0382 Extra Filler for No. 6822. ............................... 3.00
Each..D.P. $\$ 5.00$
No. sg Carrler and Glasses, withont bottle.................... 3.00
Each. D. P. 85.00

Nacb..D.P. $\$ 12.48$

## Fiber Carrying Cases

Made of black hard fiber; serviceable, sightly and inexpensive. Pint and quart sizes for one bottle only.
No. 401 Pint.
$\$ 0.75$
Each....D.P. $\$ 1.26$
No. 402 Quart.
1.00

Each....D.P. \$1.66


Leatherol Carrying Cases


Black leatherol with green lining. Thoroughly well made, attractive and durable cases.
No. 501 Pint. $\$ 1.00$ Each....D.P. $\$ 1.66$
No. 502 Quart....
Each....D.P. \$2.08
No. 521 Pint...
Each....D.P. $\$ 2.90$
No. 522 Quart....
2.25

Each....D.P. $\$ 3.75$
Genuine Cow Hide Carrying Cases


For One Bottle


For Two Bottles

Saddle sown throughout. Made of selected stock; finest hand workmanship. Lined with green leatherol.
No. 601 Pint. . .83 .50

No. 611 Pint......... $\$ 5.00$
Each....D.P. $\$ 8.33$
No. 612 Quart ......... 7.00
$\$ 5.00$
Each....D.P. $\$ 5.82$
No. 602 Quart
4.50

Each....D.P. \$11.66

## CUPS, LUNCH KITS AND DINNER SETS

## Nested Drinking Cups <br> 

Finely made metal drinking cups, all of one size, nested in sets of two, four and six cups. Heavy drawn brass, nickel-plated and highly polished. Each cup has detachable handle that can be quickly and firmly attached to cup. Very compact package, at the extreme left, where as illustrated, the complete set is nested with the handles inside and cover holding cups together. A desirable addition to picnic or camping equipment.
No. 362 Set of two cups with handle...................... $\$ 0.75$ Per Set....D.P. $\$ 1.24$
No. 364 Set of four cups with handle 1.00

Per Set....D.P. $\$ 1.66$
No. 366 Set of six cups with handle..................... 1.25
Per Set D.P. $\$ 2.08$
Universal Lunch Kit


With Vacuum Bottle and Drinking Cup
Appeals to all who lunch away from home. Unquestionably the strongest and best made lunch kit on the market. Already has thousands of satisfied users. Metal throughout with roomy compartment for food. Equipped with pint Universal Vacuum Bottle serving any drink one may choose as hot or cold as desired and with original taste and freshness unimpaired.
No. 10 Tan with brass trimmings.
$\$ 2.25$
Each....D.P. $\$ 3.75$
No. 310 Black with nickeled trimmings
Each...D.P. $\$ 3.75$


Witb Vacuam Bottle, Drinking Cap and Aluminum Trays No. 20 Tan, brass trimmings .................................. $\$ 2.50$ Each...D.P. \$4.18
No. 320 Black, nickeled trimmings
Each...D.P. \$4.18
No. 01 Extra Filler for "Universal" Lunch Kits . 85 Each...D.P. $\$ 1.42$

## Universal Motor Luncheon Sets

For the most critical trade. Completely equipped for two, four or six persens. High grade in every particular. Light, strong cases, dust and rain proof. Covered with fine black grained enameled duck, lined with green leatherol. Nickel-plated brass locks.

Equipped with Universal vacuum bottles, Universal vacuum butter jar, food boxes, plates, knives, forks, spoons, napkins, sugar or preserve jars, salt and pepper shakers, nested Crinking cups.


No. 232 For two persons $\quad \$ 27.04$
Each....D.P. $\$ 46.10$
No. 242 For four persons $\quad 38.50$
Each....D.P. \$64.18
No. 262 For six persons .................................. 45.00
Each...D.P. $\$ 75.00$

## Running Board Set

Most complete, compact outfit. Exceptionally strong and handsome trunk covered with duli black grained enamel duck. All outside trimmings nickel-plated. Has improved flat key lock. Furnished with straps for fastening to running board or trunk rack, and handles for carrying. Completely equipped for four or six persons.


Equipped with Universal vacuum bottles, Universal vacuum buttcr jar, food boxes, plates, knives, forks, spoons, napkins, sugar or preserve jars, salt and pepper shakers, nested drinking cups.
No. 442 For four persons $\$ 47.50$ Each....D.P. $\$ 79.15$
No. 462 For six persons
Each....D.P. $\$ 91.66$

## The GIBSONGOMPANY

AUXILIARY SEATS


No. 55 Child's Seat, Japanned, brown duck, each. . $\$ 2.00$ Each. . D.P. $\$ 3.00$
Size of above: Seat, $9 x 93-\mathrm{in}$.; height to seat, 9 -in.
No. 105 Japanned, brown duck, each............ 2.30
Each. . D.P. $\$ 3.46$
No. 116 Oxidized art leather, each. . . . . . . . . . . . 2.80
Each. .D.P. \$4.22
Size of above: Seat, $10 \frac{1}{2} \times 11-\mathrm{in}$; height to seat, $16-\mathrm{in}$.
No. 205 Japanned, brown duck, each. . . . . . . . . . . 2.60
Each. . D.P. $\$ 3.90$
No. 216 Oxidized, art leather, each . . . . . . . . . . . . . 3.30
Each. . D.P. $\$ 5.00$
Size of above: Seat, $12 \times 12$-in.; height to seat, $17-\mathrm{in}$.


No. 300 Child's Seat. Hangs back of either automobile seat or doors. Holds child securely and comfortably. Folds up when not in use. Art leather seat $9 \times 10-\mathrm{in}$. Frame round steel, finely oxidized, each
Each. . D.P. $\$ 3.77$

## Imperial Auto Folding Steel Chair



The Imperial Steel Chair is built for strength and safety as well as convenience and comfort. Designed for an auxiliary seat in automobiles, an ideal seat for the camp, launch and many other places. The frame is made of the very best oval steel and finished in rich black japan. The seat and back rest are upholstered in black waterproof art leather. Dimensions of seat $11 \times$ 12 inches, back $121 \times 31$ inches; height of seat 16 inches, folded $12 \frac{1}{3} \times 20 \times 2$ inches.
Each
82.00

Each. . D.P. $\$ 3.00$

## Defiance Folding Steel Camp Stool



The Defiance Folding Steel Camp Stool has an allsteel frame 15 inches high, seat 10 -ounce army khaki, weighs only 2 pounds, folds flat in a space $7 \frac{1}{2} \times 10$ inches. Indispensable to campers, fishermen, automobile owners, boat owners, etc. Whenever an extra seat is needed, this strong, durable and comfortable folding stool is ideal. It is one of those handy little articles that cost practically nothing, yet pay for themselves every time you use them, in comfort and satisfaction.

## Each

.80 .75
Each. . D.P. \$1.11

# OKC GIBSON MINANY 

 <br> \section*{\title{SPEEDOMETERS AND ODOMETERS
}} <br> \section*{\title{
SPEEDOMETERS AND ODOMETERS
}}


A Stewart Speedometer designed specially for Ford cars, completed with all regular Ste wart equipment, including flexible shaft and the famous Stewart swivel joint, ready to install on any Ford car. Of the same magnetic type and built of the same high-grade materials as in instruments that go on highest price automobiles.
The Stewart Model 100 has Rotating Speed Dial, 60 -mile capacity-Stewart Odometer, consisting of 10,000 -mile Season Register and 100 -mile Trip Register. Mile numbers of Trip Register are black on white; tenths, red on white. Mile numbers of Season Register are black on white. Trip Register can be rapidly reset to any tenth of a mile, and without disturbing the record of the Season Register. Speedometer has jeweled bearings, polished steel magnet, silver etched dial face, French plate dial glass. Case finished in deep jet lacquer and polished brass trim.
Model 100 Special Stewart Speedometer for Ford cars, each
$\$ 10.00$
Each. .D.P. \$13.32
No. 100 Stewart Speedometer for cars other than Ford, each
12.00

Each. .D.P. $\$ 17.76$
In ordering state for what car, size of wheel and length of shaft.
No. 101-A Motorcycle Speedometer, front wheel drive, each..
$\$ 10.00$
Each..D.P. $\$ 14.82$
No. 101-A Motorcycle Speedometer, rear wheel drive, each.
10.00 Each. D.P. $\$ 14.82$

Stewart Hub Odometer


Madel H, Hub Odometer
The Stewart Hub Odometer is operated by a positive drive that cannot possibly fail. This drive consists, not of thin metal discs, but of steel pinions with worm and spiral gears, each pinion being machined from a single piece of steel, heat treated and hardened, to resist wear. With this positive drive there can be no failure of the Odometer to record; every turn of the car wheel is registered with absolute accuracy. Through an ingenious application of the "Geneva Stop" mechanism the dials are locked, excepting at the instant of registering. Those not registering remain locked. Thus it is impossible for the dials to fail to register or to register incorrectly, as they cannot make a single false movement.
Model H (including hub cap), each
$\$ 10.00$ Each. D.P. $\$ 14.82$

Pointer Type Models



Model 26. Hand Indicator, 60 -mile capacity. Stewart Odometer, consisting of 100,000 -mile Season Register, and 100 -mile Trip Register. Mile numbers of Trip Register are black on white; tenths, red on white. Mile numbers of Season Register are black on white. Trip Register can be rapidly reset to any tenth of a mile, and without disturbing the record of the Season Register. 3 -in. dial face.
Each
$\$ 20.00$
Each . D.P. $\$ 29.63$

## JOHNS-MANVILLE SPEEDOMETER for ford cars



In creating the Johns-Manville Speedometer the makers produced a ceatrifugal speed fadicator of modern construction. the accuracy of which is unaffected by electrical Intluences. climate, beat or cold.

Actual tests have conclusively proved that speedometera actuated by means of a centrifugal governor are nearer to absolute accuracy than speedometers actuated by any other means. The Johns-Manville Speedometer is actuated by a three-weight centrifugal governor, so perfectly balanced as to render it unfniling in accuracy and positive in rellability unfer all conditions of service.

DFSCRIPTION-Standard White Dial, 3 inches In diam eter. Speed Scale, 5 to 50 miles. The speed band cannot in terfere with the trip or scason odometer readings; the speed of the car can be read at a glance by noting the angle of the hand, just as your watch.

Self-enclosed odometer registers cumulative seagon's mileage up to $\mathbf{1 0 0 , 0 0 0}$ miles, and trip mileage (miles and tentbs up to 10 miles -tenths in red figures.

Trip mileage may be reset to any figure desired by revolv ing the reset knob on the side of the instrument

This featnre enables the determination of trip runs with out distarblag the total mileage; a most desirable feature when touring with Blue Book or road map.

Ench Johns-Manville Speedometer is calibrated to its own dial, thoroughty tested, and must be absolutely correct before leaving our factory
Each
$\$ 10.00$
Each. D.P, $\$ 13.32$

STEWART SPEEDOMETER PARTS


Stewart Road Wheel Gears, any size or type, each $\$ 1.00$ Each....D.P. $\$ 1.77$

## Drive Pinions



Cotter Pin Type


Lock Nut Type

Drive Pinions, either fibre or steel, either type, each $\$ 0.25$ Each....D.P. \$0.44

## Swivel Joint



Stewart Swivel Joints, either type, each. $\$ 2.50$
Each....D.P. \$4.44

## Rubber and Metal Washers



No. 1996 Rubber Fender Washer, each. $\$ 0.15$
Each....D.P. $\$ 0.27$
No. 2199 Brass Foot Board Collar, each15

Each....D.P. $\$ 0.27$

Shaft Hanger


No. 1998 Strap or Hanger for Flexible Shaft, each $\$ 0.15$ Each....D.P. $\$ 0.27$

## Steering Knuckle Clamp Parts

Order these parts by number, if only a part is required; or if the complete clamp is wanted, give number of clamp (as shown in illustration).


512


4003

.4007

No. 512 Clamp for Steering Arm, complete, each . $\$ 1.25$ Each....D.P. $\$ 2.22$
No. 4003 Clamp Part (upright), each........................ . . 50
Each....D.P. \$0.88
No. 4007 Clamp Part (cross-bar and straight link, one piece), each
Each....D.P. $\$ 0.53$


Shaft Fittings


No. 617 Sliding Bar and Lower End Clutch of chain, each
Each....D.P. $\$ 0.35$
No. 1880 Uprer End Clutch of Chain, each

Flexible Shaft and Chain


No. 1902 Flexible Shaft Chain, per ft
Per foot....D.P. $\$ 0.44$
No. 1799 Flexible Shaft, complete without leather covering, each
Each....D.P. $\$ 5.33$
No. 1911 Flexible Shaft Casing, without leather covering, each 1.75

Each...D.P. $\$ 3.11$
In ordering flexible shafts, state length wanted. These may be had from 48 to $72-\mathrm{in}$.

## OKC GIBSON COMPANY

## SPEEDOMETERS

## Sears-Cross, Absolutely Accurate, <br> Spedindicators <br> CONSTRUCTION

Sears-Cross instruments were standard equipment on Ford cars last year and were designed especially for Ford cars by the Sears-Cross engineers. Sears-Cross Spedindicators are purely mechanical in construction, and as such, changes in temperature have no effect whatever on the indicating mechanism. It is impossible to make the indicating hand jump or vibrate at any speed. Sears-Cross Spedindicators are of the hand and dial type and therefore can be read at a glance. SearsCross instruments are made wholly in an exclusive Spedindicator factory by manufacturers who make nothing else.

Model F 15


Sears-Cross Spedindicator Model F 15, is the same instrument as was standard on the Ford car during 1915 and is installed in exactly the same manner.
Price, each.
$\$ 12.00$
Each. D.P. $\$ 12.77$
Model F F 16


Complete Ready to Attach
This instrument was designed for the more discriminating Ford owner, and at a slightly higher cost is made to give satisfaction long after the price is forgotten.

It fits on the wind shield frame flush with the cowl dash where a spedindicator should be, and where it may be easily read.
Price, each
$\$ 15.00$
Each. D.P. \$14.44

Model F. C. N. B.

A flush type Instrument such as is now universally used on all the latest models. of automobiles.
Is installed dush with the flller board of the cowl dash.
Sneclally adapted to Chevrolet 490 , which bas dash cut ready to recetve it
Frice, each . . . . . . . . . . . $\$ 25.00$ Each. D.P. $\$ 16.10$


Complete Ready to Attach
Parts for Sears-Cross Speedometer


Part Nos
Part Nos
1976-D Heals, Moalel F 15, each..................................... 87.00
Each. D.P, $\$ 9.33$
1976-F Meads, Medel I F 16, each. . . . . . . . . . . . . . . . . . . . . . . . . 8.50
Fach. D.P. $\$ 11,33$
6241 Casings, Model F 15, 42 feet, ench, ........................ 2.00
6241 Casings, Mo
Each. D.P, $\$ 2.66$
Each, D.F, $\$ 2.66$
$6241-\mathrm{F}$ Casings, Moalel F F 16, 53 feet, ench................... 2.50
20
6241-1 Casings,
Ench D.P $\$ 3.32$
Each. D.P, $\$ 2.32$
6848 Sbifts, Model F 15, 44 feet, each. ....................... . . . . 90
E242 Sbafts, Mod
Each. D.P. $\$ 1.20$
6849-1 Sharts, Moalel F F 16, 53 feet, ench...................... 1,00
Ench, D,P, \$1.32
6962 Drives, each
Each . D. P. $\$ 2.96$
6826 Pinions, euch.
Each. D. P. 80.16
6235 Lock Nuts, each.
8 Leck Nuts, each
Each, D.P, 80.07
e2z7 Posts. each
Each. D.P. $\$ 0.06$
0925 Sprockets, ench.
Each, D.P. $\$ 0.46$
6\$61 Tube Kupport straps, each................................. . . . . 20
Euch, . D, P, \$0,27
$\mathrm{F}=14$ Post fer arm without taper hole, complete, each..... 60
Eacb. D.P. \$0.80
T-318 Ford Post Bracket for steering arm, complete, each Se
Tach D.P. 80.66
X-7s Ferd Fost Clip, rach.......................................... . . . . . . . . . .
Fonch.. D.1. $\$ 0,20$

# Thecibsoncomar 

Crank Boots


Made of highest grade harness leather. Japanned double tongue buckle sewed on.
No. 1 Rebound Strap, size 1$\} \times 33$ inches, each....... $\$ 0.80$ Each....D.P. \$1.33
No. 2 Rebound Strap, size 1$\} \times 36$ inches, each........ 1.00 Each....D.P. \$1.66

## Double and Stitched Harness Leather



Made of two layers of heavy harness leather and stitched on Union Lock Stitch Machine. Japanned Double Tongue Buckle.
No. 3 Rebound Strap, size $1 \frac{1}{2} \times 36$ inches, each....... 81.50 Each....D.P. \$2.44
No. 4 Rebound Strap, size $1 \frac{1}{4} \times 36$ inches, each....... 1.75 Each....D.P. \$2.77

## Spring Hood Straps

## 

The special spring used on these straps completely eliminates the usual rattle about the hood.
No. 5 Spring Hood Strap, $1 \frac{1}{} \times 58$ inches, each....... $\$ 2.25$ Each...D.P. 83.55
No. 6 Spring Hood Strap, $1 \frac{1}{4} \times 65$ inches, each....... 2.75 Each....D.P. $\$ 4.44$

Ford Spring Hood Strap


Maken the Hood Look Longer
Made especially for Ford cars.
Loop each end for fastening to frame, one spring, japanned buckle. Lock buckle if desired.
No. 7 Ford Spring Hood Strap, each
$\$ 1.25$
Each D. P. $\$ 1.88$

## Single Front Straps



Made of heavy harness leather, with imitation rubber trimming. Roller buckle and an 8 -finch billet on upper end. Roller buckle near center. Snap on the lower end.
Roller buckle near center. Snap on
No 10 Front Strap, $1 \times 72$, per palr.
No. 10 Front Strap.
Per pair,.,D.P. $\$ 2.77$.
 No. 12 Front Strap.
Per pair..D. P. 83.55.

Double and Stitched Front Strap


Made of heavy barneas leather, raised in the center, and stitched on Union Lock Stiteh Marhine. Imitation rubber trimming. Loop at the upper end. Ikoller bisckie in the center. Snap on the lower end
No, 14 Front 8trap. $1 \times 79$, per pair
. 82.75
Per palr.. D.I. \$4.40
No. 16 Front Etrap, $11 / 4 \times 72$, per pair. ......................... 3.00
Her paip. 0.5 . $\$ 5.00$. 1'er palr. D. P. $\$ 5.00$

## Round Front Straps

## CSung

No. 30 Found Front Strapn, black leather, with brass foot man loopa, Ix72 inches, per pair. ..................................89.8s Per pair., TMP, \&3.ít.
No. 31 Roand Front straps, fair leather, with brank foot-
 Per pair.. ID, P. $\$ 3.58$.

## Miscellaneous Straps

## Mate of Elack IIargeng Luather

Black Leather Strapk $1 / 2 \times 15$, each.
Dozen. D, P, \$1.86.
Black Leather Straps Fix24, each
Black Lenther Straps 5/6x30, each
Dozed., D.P, $\$ 3.73$.
Black Leather Straps $\% / 4 \times 24$, each
Iozen. D.P. $\$ 400$.
Hack Leather Straps $9 / 4 \times 30$, pach

## Trunk Straps


Black Leather Trunk Straps $1 \times 46$, rach
Dozen .. D.P. $\% 12.85$.

## Magneto Covers

Leather Magneto Cover, made in blank so holes can be punched according to location of wires.
Each $\qquad$
Ea...D.P. $\$ 2.00$


# The GIBSON COMANY <br> BOXES 

Ford Style Boxes



No. B-1586 Battery or Tool Box, size inside $15 \times$ $7 \frac{1}{4} \times \frac{4}{4}$, black enamel finish, each. $\$ 2.15$
Each. D.P. $\$ 2.88$ Per Dozen. .D.P. $\$ 32.00$
No. R-1886 Battery or Tool Box, size inside $17 \frac{7}{8} \times$
$7 \pm 5 \times 69$, black enamel finish, each.
2.00

Each. D.P. $\$ 2.66$ Per Dozen. .D.P. $\$ 28.88$
No. R-2296 Battery or Tool Box, size inside $22 \times 9$ $x 6 \frac{2}{5}$, black enamel finish, each.
Each. .D.P. \$2.66 Per Dozen. . D.P. $\$ 28.88$
No. R-2416 Battery or Tool Box, size inside 2313 $\times 9 \nmid \exists \times 6 z$, black enamel finish, each.
Each. .D.P. \$4.22 Per Dozen. . D.P. $\$ 46.66$

Battery or Tool Boxes, B Style


B style boxes have corners of 1 inch radius
No. B-148 Battery or Tool Box, size inside 13 in $^{\frac{1}{6}}$ $x 714 \times 91$, black enamel finish, each.
Each. . D.P. $\$ 3.10$ Per Dozen. .D.P. $\$ 33.32$
No. B-179 Battery or Tool Box, size inside $16 \frac{x}{x}$ $9 k \times 10 \mathrm{f}$, black enamel finish, each.
Each. . D.P. $\$ 4.00$ Per Dozen.. D.P. $\$ 44.00$
No. B-329 Battery or Tool Box, size inside $22 \times 9$ $x 10 \mathrm{f}$, black enamel finish, each. .
Each.. D.P. \$4.66 Per Dozen. . D.P. \$50.66
No. B-2410 Battery or Tool Box, size inside 23 ty $\times 978 \times 10$, black enamel finish, each
Each.. D.P. \$5.10 Per Dozen. . D.P. \$56.00
No. B-2810 Battery or Tool Box, size inside 281 x $101 \times 10 \mathrm{f}$, black enamel finish, each........... 5.7 Each. .D.P. $\$ 7.77$ Per Dozen. .D.P. $\$ 86.66$

Battery or Tool Boxes, C Style



C style boxes have corners of if inch radias
No. C-108 Battery or Tool Box, size inside $9 \frac{1}{8} \times$ $7 \frac{1}{8} \times 12$, black enamel finish, each............. $\$ 2.61$ Each,. D.P. $\$ 3.55$ Per Dozen..D.P. $\$ 38.66$
No. C-119 Battery or Tool Box, size inside $11_{10}^{76}$
$\times 8 \frac{4}{x} \times 10 \frac{1}{4}$, black enamel finish, each....
Each..D.P. $\$ 3.00$ Per Dozen..D.P. $\$ 33.32$
No. C-168 Battery or Tool Box, size inside $16 \times 8$ 光
x 97, black enamel finish, each
2.40

Each. .D.P. $\$ 3.32$ Per Dozen. .D.P. $\$ 36.00$
No. C-208 Battery or Tool Box, size inside $19 \frac{7}{8} \times 81$
$x 9 \frac{1}{6}$, black enamel finish, each.
Each. .D.P. $\$ 3.76$ Per Dozen. .D.P. $\$ 41.83$
No. C-217 $\ddagger$ Battery or Tool Box, size inside $207 \times$
65 5 94, black enamel finish, each.....
Special Battery Boxes of Extra Depth


No. B-1812 Battery Box, size inside $17+8 \times 9+t \times$ 12, black enamel finish, each
Each..D.P. \$5.77 Per Dozen..D.P. \$64.00
No. C-1412 Battery Box, size inside $13 \ddagger \times 10 \frac{1}{4} \times 12$, black enamel finish, each.
Each. D.P. $\$ 5.55$ Per Dozen..D.P. $\$ 60.00$
No. C-1612 Battery Box, size inside $16 \times 8$ r $^{2} \times 12$,
black enamel finish, each.
Each. D.P. $\$ 4.44$ Per Dozen. .D.P. $\$ 49.33$
No. C-1112 Battery Box, size inside $11^{\frac{2}{1}} \times 88 \times 12$,
black enamel finish, each.
Each..D.P. $\$ 4.00$ Per Dozen..D.P. $\$ 45.33$
No. C-2292 Battery Box, size inside $22 \times 9 \times 12$,
black enamel finish, each.
Each..D.P. $\$ 6.66$ Per Dozen.. D.P. $\$ 74.66$

# Trecibsoncomar 



Can be attached to running board by two tee-bolts or carrled at back of car. All metal. gtiffened by ralsed heads, nickeled corner pleces. Togile loek pleces. ach end. lock at each end.
Weight 40 pounds. Welght 40 pounds.
Holds two $30 \times 15 \times 7$ Holds two $30 x 15 \times 7$
suiteases, which are suiteases, which are
not included in the ont included in the price.
Trunk Box,
$311 \frac{1}{3} \times 11 \mathrm{x}$
$163 / 16 \mathrm{high}$.
each ......... $\$ 10,00$
Each. . D.P. $\$ 16.66$

## Refrigerators

Cut shows heavy galvanized ining. Center compartment holds 25 pounds of loe. The galvanized lce. The galvanized
food compartment food compartment
sets over the ice on sets over the 1ce on
the ledge of the Ice compartment. Style A bas bottle compartment at each end, Style B, one compartment only. Compartments hold six plat bottles with rack or nine bottles without


The cover bas a toggle lock at each end and is remov able so that it may be used as a tray. The box is attached to running board by tee-bolts. It bas bandles at each end so that It may be carried from the car to the lunch place.
8tyle A Refrigerator, ${ }^{27}{ }^{3} \times 11 \times 13 \mathrm{~s} / 8$ inches high, each.... $\$ 25.00$ Each. .D.P. $\$ 31.66$
Style B Refrigerator, $203 \times 11 \times 135 / 8$ Inches high, each.... 20.00 Farb. .D.P. $\$ 33.32$


Food compartment is porcelain enameled.
Bottle, or end, compartments are tinned.
A stmpler style of touring refrigerator is shown above Two end compartments hold six pint bottles ench. Food compartment rests on lugs, on the sides of the end compartments Cover, which may be used as a tray, bas lock at each end, box has strong carrying handles and is attacked to running board by tee-bolta, so that it may be removed and taken to the luncb place.
Style C Refrigerater Box, $22 x 9 \times 13$, each.................... . $\$ 10.00$ Ench. D.P. $\$ 16.66$

## The Kennedy Kit



Closed
The Keonedy Kit. an all steel grip that will not wear out size 16x!3x11. For carrylag tools. clothing or equip. ment. Looks like travellog bag and is travellog bag and 16 no beavier, with
tray divided finto tray divided into
small partitions for carrying Arilis, bits, small parts, etc 'Iray is made of light werght ateel af inches deep and
 rests on ledges at top of case Contents cannot spill out if hag is loaded as flat bottom will prevent overturnlng. Each Fach. D.P, 87.23

## Cotton Waste



Red Roll Auto Waste, a specially selected long fibre clean cotton waste in pound packages.

## Each <br> Dozen........P. $\$ 4.22$

Double Extra, a special quality long fibre waste, in $100-\mathrm{lb}$. bales, per pound
Per pound.. D.P. \$0.35
Double Extra Waste, in 25 or $50-\mathrm{lb}$. bales. per pound
Per pound. .D.P. $\$ 0.37$
B. White Waste, a very satisfactory grade, in $100-\mathrm{lb}$. bales, per pound.
Per pound...D.P. $\$ 0.83$
B. White Waste, in 25 or $50-\mathrm{lb}$. bales, per pound.... . 32 Per pound. . D.P. $\$ 0.31$

## Marathon Brand Sanitary Wipers



[^8]Marathon Brand Cheese-cloth Wiping Rags, per pound
Put up in 25,50 and 100 pound bales.

# SHOCK ABSORBERS AND CUSHION SPRINGS 



The Pioneer Shock Absorber. Recognized by automobile engineers as indispensable for comfortable motoring. Positively absorbs jolt, jar and vibration. Not only makes for comfort, but prolongs the life of the car by saving it from road racking.

The Hartford Shock Absorber controls the springs of an automobile so that violent action is impossible even on the roughest roads, tires tread the ground and are saved from bouncing and excessive wear; there is less skidding; the car glides smoothly, undulatingly; there is no sidesway, no spring breakage, but there is maximum riding comfort.

Every-day service affords the best proof of the merits of the Hartford Shock Absorber. It has influenced over 350,000 car owners to use it; over twentyfive leading factories to adopt it as standard equipment; more than 95 per cent. of racing drivers to have it on their cars in every race.

## COMPLETE FITTINGS

Each set of the six models is complete and ready to apply, including the special fittings and the necessary bolts, nuts, spring washers, etc., with a detailed blue print showing the application. Mention make, model and year of car when ordering.

## PRICES-SIX MODELS-\$16 TO \$60

Heavy Car Types, for cars over 4,000 pounds, three-degree automatic, per set of four ..... $\$ 60.00$ Per Set. D.P. \$106.66
Heavy Car special, per set of four 60.00

Per Set. .D.P. \$106.66
Average Car Type, for cars over 3,000 pounds, Regular Standard, per set of four............. 50.00
Per Set. .D.P. 888.88
Medium Car Type, for cars over 2,000 pounds, Intermediate, per set of four. 40.00

Per Set. . D.P. $\$ 71.10$
Light Car Type, for cars up to 2,000 pounds, Junior, per set of four
25.00

Per Set. D.P. $\$ 44.44$
Special Ford Set of three Shock Absorbers, one front and two rear, complete with fittings.... 16.00 Per Set. .D.P. \$26.66

Hartford Cushion Springs


Many an automobile is fitted with springs designed only for maximum load and road conditions. Such springs "ride hard" over smooth or moderately rough road and their stiffness is very discomforting to the occupants of the car. The addition of Hartford Cushion Springs will impart the resiliency necessary to make such cars "ride easy."

The Hartford Cushion Spring is applied only to the rear springs of the car. It is double-acting. Its influence upon an automobile spring encompasses both movements-contraction and recoil. It causes these movements to become soft and cushionlike to such an extent that all minor inequalities of a road are traversed without their presence being made known to the occu. pants of the car.

Only the very finest materials are used in the manufacture of Hartford Cushion Springs. This is not only a guarantee of efficiency, but of service, as well. Handsomely finished. Easily attached.

## PRICES-FOUR MODELS <br> $\$ 25.00,892.50, \$ 20.00, \$ 12.00$

No. 1-For cars over 3,000 pounds, per pair . . . . $\$ 25.00$ Per Set. . D.P. $\$ 44.44$
No. 2-For cars from 2,400 to 3,000 pounds, per pair
Per Set., D.P. $\$ 40.00$
No. 3-For cars up to 2,400 pounds, per pair.
20.00

Per Set. . D.P. $\$ 35.60$


Special Ford Set, consisting of two Hartford Cushion Springs for the rear and one friction type Hartford Shock Absorber for the front. Price complete
12.00

Per Set. .D.P. \$21.32

## The GIBSONGOMPANY

SHOCK ABSORBERS

Stone Shock Absorbers


Stone Shock Absorbers are of Double Spring Construction. Adjustment for rond and load conditions with range of 1500 pounds. Double Bearlag for moving parts. Coll sprlags have 2 inches of action which gives 25 per cent, greater cushion effect than otber makes. Absorbs jolts and jars of rougb roads, absolutely prevents snappy rebound.
Per Pair
.810 .00 Per Palr..D.P. $\$ 12.22$

In orderlng glve make, morlel and year of car, and state whether roadster or touring on ocder.

## Adco Shock Absorbers



Adec Sbock Absorbers are a late and highly improved spring type, desicned by engineers whose experience dinters back from the originatlon of these devices. They will increase the riding qualitieg of the car a hundred per cent Automobile sprimes are desligned to carry the maximum lond and are consequeutly too stiff to give full reslliencs aud corresponding comfort when light or intermediate loads are carried. Adco shock absorbers take care of this condition, hesides elminating a very large fiercentage of the uncomfortable reoil, giving 100 per cent. comfort when riding.

In addition to the increased comfort, a saving of orer 35 per cent. Is effected in cost of tire maintenance. Spring breakn"e is reduced to a mintmam as well as general cost of repatrs for up-keep. Adco Shock Absorbers are oullt with from three to elght times the life of otber slmilar devices. This is Iue to the enormous wearing surfaces of the operating parts. Adco Shock Absorbers will not rattle, they are water and dust-proof, and will not pump and throw grease when in operation. They are instantly aljustable to extreme road and load conditions, a couple of turns to the right or left of the alljustment bolt found at the bottom of the absorber glves a permanent adfustment to suit the partleular desires of the car owner. Adco Shock Ahsorbers are bullt for all makes and models of cars except those equipped witb Cantllever Springs.
Adeo Shock Absorbers for cars weighing under 3500 pounds, per set
Per Set. . D.P. $\$ 2500$
Adeo Shock Absorbers for cars welghing 3500 pounds and

## over, per set

Per Set..D.P. $\$ 33.32$
In ordering give the following information :
Make, model and welght of car. empty
Width of rear springs.
Diameter of spring bolts.
Type of body-Touring, roadster, coupe, etc
Type of body-Touring, roadster, exupe, etc.

## Velvet Shock Absorbers



New Model "E" Velvet Shock Absorbers for light cars Complying with the requests of Gealers and friends in the trade, the manufacturers have designed and produced this special model for light cars to sell at a popular price. It cmbodies the exclusive Velvet Multiple Coll Princlple and bas all of the well-known Velvet quality and efliclency. It is made for alt cars welghing less than 3500 pounds, having three quarters seml-elliptic or platform sprlags. These include the Overland, Buick, Studebaker, Reo, Chandler, Maxwell and other cars of simflar weight.

Description-Highest quality of coils obtainable, covers of drawn steel, black enamelen. Top and sliding blocks of malleable tron. black enameled. Thoroughly serviceable in every particular, candot rattle or allow atde sway. Prlce includes all neecssary fittlacs for attaching
Per Pair
395.00

Per Pair. D.P. $8+4.44$

## Sager Twin Shock Absorbers

The Sager Twin is the Universal Shock Absorber. No recoll. No bumping. Drop forgings, beat treated. Springs, cruclble steel a6 made by Sager Company for twenty-tive yenrs, Steel shells. locked on with holt, mut and cotter. Impossible to loogen. Length of spring, 6 inches, with full $2 \frac{1}{\text { faches action; }}$ resillent and prevent recoll. Bolts high erade steel, product of screw machine. The same shackle bolts on car are used with Suger Twis, which fit all widths of springs. No extra busbings, washers or otber parts required. Attachment made in a few minutes witbout machine work. Onl cuns-exclusive đesign-lubrlcate four bolt bearings, ench $2 \frac{1}{2}$ tnches long. Cotters used on all muts to prevent their loss.
Price for full rear set . . $\$ 10.00$ Price for full rear set.

D.P...................... $816 . \mathrm{GG}$

Fitsall Bumper


Cleannel Bar

Derives its name
from the fact that it is made to tit the leading cars, whethel constructed with channel or filled rrame. Its design follows the streamline principle-neat compact construction witbont sacrifice of strength. Cas be attached to any posi. tion on top of the curved front end of the frame by means of ndjustable clips and yoke. Can also be attached to cars where mud-apron olintructs the front end of the frame, by pierclog the apron for the clips.

The Fitsall Bumper arms, male in two sections and conbected by a tooth and ratchet joint, can be raised or lowered for the propor elevation of the bar. Shock is taken up by heary coil springs in the tubular section of the arm. Fittings are high-grade malleable iron castings, ground and baked black Japanned.
No. G20s-N Fitsall Bumper, ; inch, nickel channel bar, each
. $8:$. 80
Each. D.P. $\mathbf{k}, 77$ Lots of 6 , each., D.P. $\$ 8.88$
No. 6203-1S Fitsall Bumper, 2 inch, black channel bar. each
Facb. D.P. $\$ 9.10$ Lots of 6, earh., D.P. $\$ 8.33$


No. 6204-N Fitsall Bumper, 25 inch, nickel chan-
nel bar, each
8.00

Each ., D.P. $\$ 12,00$
Lets of 6 each. .D.P. $\$ 11.10$
No. 6204-B Fitsall Bump-
er. 21 inch, black chan-
nel bar, each
7.50

Earh. . D.P. \$11.10
Lots of th, ench. . D.P. $\$ 10,00$

## Dlamond Far

No. 6tu6-N Fitsall Bumper, 11 inch, Diamond nickeled rail, each ..................................................... Each..D.P. $\$ 11.10$ Lots of 6 , each..D.P. $\$ 10.00$
No. G206-B Fitsall Bumper, $1 \frac{14}{}$ inch, Diamond black rail, with nickeled clamp and bolt head, each ........... 7.00 Each..D.P. $\$ 9.10$ Lots of E. each..D.P. $\$ 8.33$
No. 6soj-N Fitsall Bumper, 13 Inch, Dlamond aickeled rail, each
Ench. D.P, \$12.77 Lots of if, eacb, D, P. \$1i.66
No. 6307 - 18 Fitsall Bumper, $1 \frac{1}{1}$ inch, Diamond black rail, with nickeled clamp and bolt head, each ............ S.a0
No. $6200-\mathrm{N}$ Fitsall Bumper,' 2 inch, Dlamond niekeled rail.
 Each..D.P. $\$ 14.66$ Lots of 6. each..D.P. $\$ 13.32$
No. 6308-B Fitsall Bumper, ${ }^{2}$ Inch. Diamond black rail. with nickeled clamp and bolt head, each
Each..D.P. $\$ 12.77$ Lots of E each..D.P. $\$ 11.06$


## Round Bar

No. g20g-N Fitaall Humper, $z$ inch, nickeled round rail,

No. $680 z-13$ Fitnall Humper, 2 inch, black round rail, with Each, D.P. $\$ 11.10$ Lots of E, ench. .D. P. $\$ 10,00$

## Cadillac, Chevrolet and Saxon Bumpers

This bumper was designed especially
for the 1916 Cadillac, for the 1916 Cadillac, Lut is also suitable
for all previous models.

The fittings clamp on the butt end of the frame-no holes to drill in frame or mud apron. To attacb, remove nut and wasber from spring bolt, adjust bumber fitting on frame and
over spring bolt, re-


Dlace Cadillac Channel Bar clips furnished wastier, and clamp fitting down with special Comprestio
rms. rms, Ratcbet anfustment in arms for loweridg or elevating the position of the bar. The fittings are bigh grade malleable iron castings, ground and baked black enameled,
No. 6286-N Cadillac Bumper, 2 Inch, Channel nickeled bar, each
Each., D.P. 89.77 Lots of 6, each.. D.P. $\$ 8.89$
No. 6286-B Cadillac Bumper, 2 inch, Channel black bar.
each.. .10 Lots of 6 , each, D. P. $\$ 8.33$
Each..D.P. $\quad 10$ Lots of 6, each, D.P. \$2.
rail, each
ch., D.P. $\$ 14.66$ Lots of 6, each., D. P. $\$ 13.32$
Ench, D.P. $\$ 14.66$ Lots of 6, each, D.P, $\$ 13.32$
No. 6 组-B Cadillae Bumper, 2 inch, Dlamond black rail.
with mickeled clamp and bolt head, each
Ench..D.P. $\$ 13.32$ Lots of $G$ each..D.P. $\$ 12.00$
This bumper is
 designed especially "490." the Cherrolet forms are attached to arms are attached to the side members of the frame by removigg two bolta that hold the fender rod, and substituting two long bolts furnished with the bumper. No holes to drill-bo machine the bumper look like

## Chevrolet Channel

 the bumper look like extensions of the frame, and improve the appearance of the car sbock-absorblag springs enclosed in telescopic tubes. The fittings are baked black-japanned.No. $6135-\mathrm{N}$ Clamp-on Bumper for Chevrolet "490," 11 inch.
round nlekel bar, eacl
Each, D.P. 88.88 Lots of 6, each..D.P. $\$ 8.00$
No. 6135-B Clamp-on Bumper for Chevrolet " 490, " 12 lach. round black bar with nickeled clamps and bolt heads. each
Each, D.P. $\$ 7.76$ Lots of 6, each..D.P. $\$ 7,22$
No. $6136-\mathrm{N}$ Clamp-on Bumper for Cbevrolet "490." with
Inch nickeled Channel bar, each
Each..D.P. 89.77 Lots of 6 , each..D.P. $\$ 88$
No. 6134-N Clamp-on Bumper for Chevrolet " 490, " 12 inch $\times .00$ bickeled Diamond bar, each
Each. .D.P. $\$ 11.66$ Lots of G, ench, D.P. $\$ 10.58$
No. 6134-B Clamp-on Bumper for Chevrolet "490," 11 inch
black Diamond bar with nickeled clamps and bolt heads. each
$\div 30$
Each. D.P. $\$ 1055$ Lots of et, ench..D.P. 89.7
In thls bumper the
streamine deslgn of the Saxon Four is car.
rled out-the curved rled out-the curved
bumper arms seem to lengthen the wheel hase and give the car a sturdier appentunce.

Can be installed in twenty minutes - no drilling; no machine work. The holts that attach the fender roul to the frame are re-
moved and the arm moved and the arm
castings attached with longer bolts supplled with the bumper.


The arms are malleable ivon castings, ground and baked black japanned. Springs to take up the shocks are enclosed in black enameled telesconic tubes,
No. 6171-N Bamper for Saxon 8lx, 2 Ineh niekel Channel bar, each

No. $6160-\mathrm{N}$ Bumper for Saxon Six, 11 ineh nickel Diamond bar. each

No. 6169-B Bumper for Snxon Six, 11 inch black Diamond
rail with nickel clampu and bolt licads, pach ......... 7.50

# The GIBSONOOMPANY $\overline{\overline{A P O L I S}}$ 

## BUMPERS



Thls is the neatest, IIghtest and atrongest Ford bumper on the market. Note the original deslign of the curved arms wblch give the Ford the desirable appearance of a car with a drop frame.

The arms clamp over the base flange of the radintor and under the frame. The top flange of the bumper takes the same bolt that fastens the radiator to the frame. For attaching the under flange of the arm, the regular boit which fastens the sill to the frame is not long enough, therefore, a bolt of the required length is supplied,

No. 5806-N Clamp-on Bumper for Ford, 13 Inch sickel Channel bar, each
86.50

Each. . D.P. 89.11 Lots of 6, each. D.P. $\$ 8.33$
No. 6900-N Clamp-on Bumper for Ford, 2 inch niekel Channel bar, each
Each.. D.P. 89.77 Lots of 6, eacb. D.P. $\$ 8.88$
No. 5805-N Clamp-on Bumper for Ford, 11 Inch round nickel bar, each
Eacb..D.P. $\$ 8.33$ Lots of 6, each, .D.P. $\$ 7.77$
No. 5805-B Clamp-on Bumper for Ford, 1i inch round black bar. ench
3.50

Fach..D.P $\$ 7.22$ Lots of 6, each. . D.P. $\$ 6.66$

Bumper Display Stand


Bumpers are no longer an nccessory but a necessity, and car agents can bulld up a profitable business by properly displaying our line of bumpers on tbis stand. With an initial order for six assorted bumpers, a dealer can secure one of these stands without charge. It is made from steel tubing and the parts to which the bumpers are attached are the same as tbe front end of an automobile, showing that the bumper can be installed without drilling the frame. These outfits save pulling bumpers out of stock and attacbing them to cars for demonstration purposes.

"Buckeye" Rear End Bumpers



Buckeye Rear End Bamper can be fitted to the rear of practically any car. Tluese fittings are substantially built and arranged with $n$ swivel-allowing for placing same at any angle desired. Note that the bodies that clamp directiy to the car springs are designed so as to either straddle or set directly behind the car spring clips.

No, 949 Buckeye Rear End Bumper, $1 \frac{1}{2}$ Inch nickeled Diamond rail. each . ......................................... . 810.50 Eacb., D.P. \$15.55 Lots of 6, each., D.P. $\$ 14.44$
No. 1940 Buckeye Rear End Bumper, 2 inch nickeled Channel rail, each
9.80

Rach..D.P. $\$ 13.32$ Lots of 6, eacb. D.P. $\$ 12.22$
No. 9940 Buckeye Rear End Bumper, 2 inch nickeled Round rail each
Each. . D.P. \$13.88 Lots of 6, each.. D.P. $\$ 12.76$


Buckeye Special Rear End Bumper arranged for rear of Buick models D-44, 45, 46 and 47. They are interchangeable on these particular Buick models and will ft no other car. Attached in a short time by simply taking out the four cap screws that support the gas tank and using the four longer bolts which we furnlsh.
No, 3940 Buckeye Special Buick Rear End Bumper, 12 inch nickeled Diamond rall, each ........................ $\$ 10 . \mathrm{s}$ Each..D.P. $\$ 15.55$ Lots of E, each.. D.P. $\$ 14.44$
No. 4940 Buckeye Special Buick Rear End Bumper, z inch nickeled Channel rail, each
9.00

Each..D.P. $\$ 13.32$ Lots of 6, each..D.P. 812.22
No. 5940 Buckeye Special Bulck Rear End Bumper, $\stackrel{2}{2}$ Inch
Round niekeled rail, each
9.30

Each..D.P. $\$ 13.88$ Lots of 6, each..D.P. $\$ 12,76$
All of our Rear End Bumpers are furnisbed with extra length rails-thus protectiog the rear fenders.

# Ohe GIBSON COMPANY 

BUMPERS

## Buckeye Champion Bumpers

Round Rail


No. 112 Buckeye Champion Bumper, 2-in. round black rail, black side fittings, each............. \& 9.00

Each. .D.P. $\$ 11.00$ Lots of 6, each. .D.P. $\$ 10.00$
No. 113 Buckeye Champion Bumper, 2-in. round nickeled rail, black side fittings, each.......... 11.50
Each.. D.P. $\$ 18.88$ Lots of 6, each.. D.P. $\$ 12.77$


No. 114 Buckeye Champion Bumper, $1 \frac{1}{4}-\mathrm{in}$. diamond nickeled rail, black side fittings, each... $\$ 11.00$
Each. . D.P. $\$ 13.32$ Lots of 6, each. .D.P. $\$ 12.22$
No. 115 Buckeye Champion Bumper, $1 \frac{1}{2}$-in. diamond nickeled rail, black side fittings, each .. 13.00 Each. D.P. \$15.54 Lots of 6, each. .D.P. \$14.44


No. 116 Buckeye Champion Bumper, 14-in. channel black rail, black side fittings, each.
Each. D.P. $\$ 8.33$ Lots of 6, each.. D.P. $\$ 7.51$
No. 117 Buckeye Champion Bumper, $14-\mathrm{in}$. channel nickeled rail, black side fittings, each....... 9.0
Each. .D.P. $\$ 11.11$ Lots of 6, each. .D.P. $\$ 10.00$
No. 118 Buckeye Champion Bumper, 2-in. channel black rail, black side fittings, each......... . 8.25
Each. D.P. $\$ 10.00$ Lots of 6, each. . D.P. $\$ 9.18$
No. 119 Buckeye Champion Bumper, 2-in. channel nickeled rail, black side fittings, each...... 11.00 Each. .D.P. $\$ 13.32$ Lots of 6, each. .D.P. $\$ 12.22$

## Buckeye Special Bumpers



No. 218 Buckeye Special Overland Bumper, 2-inch channel black rail, black side fittings, each... $\$ 9.00$ Each. D.P. $\$ 11.11$ Lots of 6, each. D.P. $\$ 10.00$
No. 219 Buckeye Special Overland Bumper, 2-inch channel nickeled rail, black side fittings, each. . $\mathbf{1 0 . 0 0}$ Each. . D.P. $\$ 12.22$ Lots of 6, each.. D.P. $\$ 11.11$


No. 318 Buckeye Special Dodge Bumper, 2-inch channel black rail, black side fittings, each... 89.00
Each..D.P. $\$ 11.11$ Lots of 6, each. .D.P. $\$ 10.00$
No. 319 Buckeye Special Dodge Bumper, 2-inch channel nickeled rail, black side fittings, each 10.00
Each..D.P. $\$ 12.22$ Lots of 6, each. D.P. $\$ 11.11$

CADILLAC


No. 418 Buckeye Special Cadillac Bumper, 2-inch channel black rail, black side fittings, each.... \$13.00 Each. D.P. $\$ 14.44$ Lots of 6, each. D.P. $\$ 18.32$
No. 419 Buckeye Special Cadillac Bumper, 2 -inch channel nickeled rail, black side fittings, each.. 15.00 Each..D.P. $\$ 16.10$ Lots of 6, each. D.P. $\$ 15.00$
No. 415 Buckeye Special Cadillac Bumper, $1 \frac{1}{2}$-inch diamond nickeled rail, black side fittings, each 17.00 Each. D.P. $\$ 18.33$ Lots of 6, each. .D.P. $\$ 17.22$
No. 515 Buckeye Special Cadillac Bumper, $1 \frac{1}{4}$-inch diamond nickeled rail, black side fittings, each 19.00 Each. D.P. $\$ 20.55$ Lots of 6, each. D.P. $\$ 19.44$

# The GIBSONOOMPANY 

BUMPERS AND DISPLAY STAND


Buckeye Special Bumper

No. 618 Buckeye Special Studebaker Bumper, 2 inch channel black rail, black side fittings.
Each ........................................... $\$ 9.00$
Each., D.P. $\$ 11.11$ Lots of 6, each. D.P. $\$ 10.00$
No. 619 Buckeye Special Studebaker Bumper, 2inch channel nickeled rail, black side fittings. Each
10.00

Each.,D.P. $\$ 12.22$ Lots of 6, each. D.P. $\$ 11.11$


The Buckeye Spring Leaf Bumper is manufactured of the best material throughout. The main and front leaves are two inches across the face and of 80 -point carbon steel and carefully tempered.

Note the front leaf which gives double resiliency and at the same time adds to the appearance of the entire fitting.

The sleeves of each side fitting carry a spiral spring, which reduces the strain on the car frame when the bumper comes in contact with an object.

The eye bolts are pivoted at their connection with the main bodies and give an almost direct pressure against the side fittings, irrespective of the point of collision.
No. 500 Buckeye Spring Leaf Bumper, nickeled
front leaf, balance black enamel. Each........\$12.00 Each..D.P. \$14.44 Lots of 6, each. .D.P. \$13.32
No. 501 Buckeye Spring Leaf Bumper, all black
enamel, each .................................... 13.00
Each. D.P. $\$ 15.54$ Lots of 6, each..D.P. $\$ 14.44$


## The Lyon Resilient Indestructible Spring Bumper



Actually tested in collision at twelve miles per hour without damage to bumper or car. The shock is absorbed by its flexibility.

This is a double front bumper, much stronger than were it of one continuous spring, and extends fully back to the car, thereby giving a resiliency that cannot be obtained when attachments are made in connection with cast parts.

Below will be found lists and general information necessary in ordering.

## MEDIUM SIZE CARS

Face, 2 inches; 55- to 64 -inch adjustment, tip to tip.
No. 1 Black enamel, nickel clips, each........... $\$ 7.50$
Each. .D.P. $\$ 12.48$ Lots of 6, each. . D.P. $\$ 11.10$
No. 2 Nickel Plated, Black Clips, each . . . . . . . . . . 8.50
Each. .D.P. $\$ 14.18$ Lots of 6, each. . D.P. $\$ 12.60$

## LARGE SIZE CARS

Face, 21 inches; 58- to 66 -inch adjustment, tip to tip. No. 4 Black Enamel, Nickel Clips, each......... \$ 9.50 Each. . D.P. $\$ 15.82$ Lots of 6, each. . D.P. $\$ 14.06$
No. 5 Nickel Plated, Black Clips, each. . . . . . . . . 10.50
Each. .D.P. $\$ 17.48$ Lots of 6, each. .D.P. $\$ 15.54$

## "1916 CADILLAC" CARS

No. 14 Black Enamel, Nickel Clips, each........ $\$ 15.00$ Each. .D.P. $\$ 25.00$ Lots of 6, each. . D.P. $\$ 22.22$
No. 15 Nickel Plated, Black Clips, each......... 17.50
Each. . D.P. $\$ 29.15$ Lots of 6, each. . D.P. $\$ 25.93$
(All of above are made of g-inch steel.)

## FORD CARS

Clamp-on attachment. Face, 12 -inches; 54- to 60 inch adjustment, tip to tip.
No. 7 Black Enamel, Nickel Clips, each . . . . . . . . . $\$ 6.00$
Each. .D.P. $\$ 10.00$ Lots of 6, each. D.P. $\$ 8.88$
No. 8 Nickel Plated, Black Clips, each.
Each. .D.P. $\$ 13.32$ Lots of 6, each. D.P. $\$ 11.84$

## TIRE HOLDERS

"Badger" Standard Running Board



Our Tire Holders are all finished in our famous black rubber. Bolts, washers and straps are furnished for attaching. Each set is shipped in a strong box so they can be sent by parcel post or express without repacking.

No. 0 and No. 1 are especially adapted for Ford cars. No. 2 will carry tires in sizes up to 4 b in . No. 3 is especially adapted for heavy demountables. All our holders will carry two demountables or casings, with the exception of No. 0 , which carries one only.
No. 0 Badger Running Board Tire Holder, black, for one tire, per set.
$\$ 1.90$
Per Set. .D.P. $\$ 2.77$
No. 1 Badger Running Board Tire Holder, black,
for two tires, per set
2.10

Per Set. .D.P. $\$ 3.00$
No. 2 Badger Running Board Tire Holder, black,
for two tires, per set.
3.25

Per Set. .D.P. $\$ 4.66$
No. 3 Badger Running Board Tire Holder, black,
for two tires, per set........................... 3.7
Per Set. . D.P. $\$ 5.55$

## Tire Lock



The cut represents lock for tires on the WillysOverland Car.
This lock takes the place of the upper strap that holds the tires on rear. To attach same, remove the two cap screws which hold the bracket that the strap passes through with a socket wrench, then bolt on the Perfect Tire Lock in place of the Overland bracket, using the same cap screws that were removed. All lined with cloth belting to deaden any rattle.

For other cars above, the Tire Lock is fastened to the rear demountable rim-tire holder by easily drilling two small holes and riveting.

These locks have two keys, all different in each dozen, and snap lock your tires safely from thieves.
No. 1 Tire Lock, for one tire, each.............. . $\$ 1.50$ Each. . D.P. $\$ 2.44$
No. 2 Tire Lock, for two tires, each . . . . . . . . . . . . . 1.75 Each. D.P. \$2.66

Running Board Tire Holder


A light-weight Running Board Tire Holder for all light-weight cars carrying 3 -inch or 3 h -inch tires. It is contained entirely on the running board, which obviates the necessity of drilling holes in the frame or otherwise marring the car. Is finely finished and one of the best designed holders on the market.

No. 86 Tire Holder, black hard rubber finish, for one or two tires, 3 -inch or $3 \frac{1}{2}$-inch, per set... $\$ 2.00$ Per Set.. D.P. $\$ 3.00$

## Rear Tire Holder



No. 540 Tire Holder, with two Side Arms and 9 inch Hook, Black Enamel Finish, complete with straps, per set
$\$ 3.00$
Per Set. .D.P. \$4.44
No. 544 Tire Holder, with two Side Arms and 12 . inch Hook. Black, complete with straps, per set 3.00 Per Set. .D.P. $\$ 4.44$

Fer Other Types of Tire Melders See Ferd Section

# The GIBSONGOMPANY 

## FOOT WARMERS, BUMPERS AND COVERS



No. 3D Clark Heater
Our No. 3D Heater is one of the most popular sellers, being very strong and durable. It is 14 inches long and weighs 7 pounds. Has fine asbestos lining and is covered with Brussels carpet; has braid lining. Ends are of triple strength white metal.
Each $\$ 2.00$
Each....D.P. $\$ 3,33$

## Peerless Assortment



This assortment contains two each of the three best selling Clark Heaters and six dozen Clark Carbon Bricks, best grade.

THE CONTENTS ARE:
2-5B Clark Heaters at \$1.50...................................... $\$ 3.00$
2-3D Clark Heaters at \$2.00...................................... 4.00
2-7D Clark Heaters at \$2.25...................................... 4.50
6 dozen Clark Carbon Bricks at $\$ 0.75$....................... 4.50
Total List.
$\$ 16.00$
5B Each....D.P. $\$ 2.48$
3D Each....D.P. 3.33
7D Each....D.P. 3.75
Assortment....D.P. $\$ 26.66$
Coal for Heaters


One cake will last sixteen hours with proper adjustment of drafts and keep up a steady heat; size $7 \frac{1}{2} \times 2 \frac{1}{2} x$ $1 \frac{1}{4}$ inches.
Per dozen
Doz....D.P. \$1.32

## Rubber Spring Bumpers

Round
Round Rubber Bumpers, made of an excellent quality of rubber, size $3 \frac{1}{4}$ inches, $1 \frac{1}{2}$-inch hole.
Each $\qquad$ 80.60

Each....D.P. $\$ 0.66$


Rubber Bumpers, made of good grade stock and mechanically perfect in every detail. Three sizes.

| Height <br> Incbes | wiath Inches | Length | Each |
| :---: | :---: | :---: | :---: |
| .$^{-} 3$ | $1 \frac{1}{6}$ | $6 \frac{1}{2}$ | \$0.60 |
| $3 \frac{1}{4}$ | 14 | $7 \frac{1}{4}$ | . 90 |
| 4 | 13 | $8 \frac{1}{4}$ | 1.20 |

Rubber Bumpers, small........ $33^{1 \frac{1}{6}} \quad 6 \frac{1}{2} \quad \$ 0.60$ Each....D.P. $\$ 0.77$
Rubber Bumpers, medium.... $3 \frac{1}{2} \quad 1 \frac{1}{2} \quad 7 \frac{3}{4} \quad .90$
 $\begin{aligned} & \text { Rubber Bumpers, large........ } \\ & \text { Each....D.P. } \$ 1.55\end{aligned}$
E. G. Spring Bumpers

o relieve and prevent strains on the springs when the car is lieavily loaded. E. G. Spring Bumpers are superior to ordinary rubber bumpers, because the coil spring and telescopic housing offer greater resiliency and there is no disintegration.

A rubber plug acts as a cushiod when the springs come into contact with the spring bumper. Light. medivm and beavy compression springs furnished according to model of car.

Per pair.. . $\$ 1.00$
Per Pair.D.P. \$1.44


5-Passenger Size.
2.00

Each. D.P. \$1.98
Five passenger covers will cover the popular priced touring car and roadster with wheel base up to 115 inches. For larger cars the seven passenger size is preferable, Ford covers are for cars with short wheel base.

## GORDON SEAT COVERS



THE MATERIAL

Number
1046-A single texture material, gray mixture; a fast color that will not fade or spot.
$1000-$ A double texture, waterproof material, tan color. The sun has a tendency to fade this material out in spots after a time, and to any one wanting the $\tan$ colored material we recommend the No. 1074.

1032-A double texture, waterproof material, of a neat gray pattern; fast color that will not fade or spot; very handsome pattern; will give very satisfactory wear.

1074-A double texture, waterproof material, tan color, that will not fade or spot, and we recommend this cover highly, as it makes a very handsome seat covering and will give satisfactory wear, at a very modest price.
1050-A double texture, waterproof material of a gray mixture, fast color that will not fade or spot; very rich looking and will give satisfactory wear, and we recommend it to those who prefer the gray color to the tan.
1027-A double texture, waterproof material of a gray mixture, fast color that will not fade or spot; an excellent wearing fabric of splendid appearance; perfect match for inside lining of tops on cars such as Hudson, Cole, etc.
1070-A single texture material, fancy black and white weave, fast color that will not fade or spot, and will wear well.

1028-A single texture material, fancy mixture, handsome fabric of good wearing qualities, similar to regular Cadillac fabric; will not fade or spot.
1029-A double texture waterproof material, of a gray mixture, fast color that will not fade or spot; a very handsome and serviceable fabric.

1080 -A double texture, waterproof fabric, of a brown and $\tan$ mixture; something new and different; fast color that will not fade or spot, and a very good wearing material.

Number
1031-Double texture, waterproof material of a blue shade. This gives a blue cover at a very modest price; fast color and very serviceable.

1021-A double texture, waterproof material, handsome gray Bedford cord; will not fade or spot. Extra good wearing material with special fine trimmings, making a very serviceable and handsome cover.

1022-A double texture, waterproof material, beautiful olive tan mixture, will not fade or spot. Wears extra well and made with special extra fine trimmings. Makes a very serviceable and handsome cover.
1033-Special fabric with a special waterproof treatment, similar to regular Cadillac fabric; will not fade or spot. This treatment makes the cover water and dust proof, but permits its being cleaned in gasoline, which makes it different from the other double texture materials.

1034-Special fabric with a special waterproof treatment; gray and tan mixture, with a small pin stripe; an altogether new design; very handsome pattern; will not fade or spot. This treatment makes the cover water and dust proof, but permits its being cleaned in gasoline, which makes it different from the other double texture materials.
1085-Special fabric with a special waterproof treatment; brown and $\tan$ mixture, with a small, narrow brown stripe; an altogether new design; a very pretty cover. This treatment makes the cover water and dust proof, but permits its being cleaned in gasoline, which makes it different from the other double texture materials.

1088-A double texture, waterproof material, beautiful gray wool, will wear indefinitely, and with special fine trimmings; is one of the finest seat coverings ever offered.

GORDON SEAT COVER PRICES

|  | 1046 | 1000 | $\begin{aligned} & 1032 \\ & 1050 \\ & 1074 \end{aligned}$ | $\begin{aligned} & 1027 \\ & 1070 \end{aligned}$ | $\begin{aligned} & 1028 \\ & 1029 \\ & 1030 \\ & 1031 \end{aligned}$ | 1021 1022 | 1033 | $\begin{aligned} & 1034 \\ & 1485 \end{aligned}$ | $\begin{aligned} & 1036 \\ & 1037 \end{aligned}$ | 1088 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apperson. . . . . . . . . . . "6-45". . 6 -p. 1915 | 818.00 | 8220.00 | 825.00 | \$28, 00 | 830.00 | \$35.00 | \$37.00 | \$39.00 | \$13.00 | \$52.00 |
| Appersob. . . . . . . . . . . . "6-48"*. " $^{\text {c/p. }} 1915$ | 21.00 | 24.00 | 29.00 | \%39.00 | 35.00 | 40.00 | 42.00 | 41.00 | 48.00 | 57.00 |
| Apperson . . . . . . . . . . "8-16" 4 " 4 -p. 1916 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39,00 | 43.00 | 52.00 |
| Apperson . . . . . . . . . "6-16", 4-p. 1916 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 52.00 |
|  | 18.00 | 20.00 | 25.00 <br> 9.00 | 28.00 | 30.00 | 35.00 | 37.00 | 31.00 | 43.00 | 52.00 |
|  | 21.00 21.00 | 24.00 | 29.00 | 33.00 | 35.00 35.00 | 40.00 40.00 | 42.00 42.00 | 14.00 44.00 | 48.00 48.00 | 57.00 |
| Apperson. . . . . . . . . . . . 8 8-16".. 7-p. 1916 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 48.00 | 57.00 |
|  | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 62,00 |
| Auburn . . . . . . . . . A $_{4}$-36*. . 5-p. 1915 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 48.00 |
| Auburn. . . . . . . . . . . . '*'G-40", 6-p. 1915 | 21.00 | 24.00 | 2900 | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 48.00 | 57.00 |
| Auburn. . . . . . . . . . . "4-38"*. 2 -p. 1916 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 24.00 | 28.00 |
| Auburs. . . . . . . . . . . . $66-40 A^{\prime \prime}$ ", 2-p. 1916 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 24.00 | 28.00 |
|  | 15,50 | 17,50 | 20.50 | 23.60 | 25.50 | 30.50 | 32.50 | 34.50 | 39.00 | 45.00 |
| Auburn. . . . . . . . . . "6-40A" . 7-p. 1916 | 18.00 | 20.00 | 24.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 52.00 |
| Briscoe. . . . . . . . . . . . . . . . . . . . 2 2-p. 1915 | 9.00 15.00 | 10.00 | 12.00 30.00 | 14.00 | 15.00 | 20.00 30.00 | 21.00 32 | 23.00 34.00 | 24.00 37.00 | 25.00 44.00 |
| Briвсое. . . . . . . . . . . . . . . . . . . . . 5-p. 1915 | 15.00 | 17.00 | 20.00 | 23.00 | 25.00 | 30.00 19.90 | 32.00 | 34.00 <br> 1.00 | 37.00 93 | 44,00 28.00 |
|  | 8.00 8.00 | 9.00 9.00 | 11.00 | 13.00 13.00 | $14.00^{\circ}$ 14.00 | 19.00 19.00 | 20.00 20.00 | 21.00 21.00 | 23.00 23.00 | 26.00 26.00 |
|  | 8.00 14.00 | 9.00 16.00 | 11.00 19.00 | 13.00 21.00 | 14.00 24.00 | 19.00 30.00 | 20.00 32.00 | 21.00 34.00 | 37.00 | 44.00 |
| Briscoe. ... . . . . . . . . ."8-eyl." . .5-p. 1916 | 14.00 | 16.00 | 19.00 | 21.00 | 24.00 | 30.00 | 32.00 | 34.00 | 37.00 | 44.00 |
| Buick. . . . . . . . . . . . . . . ."29" ${ }^{\text {", . 5-p. } 1912}$ | 17.00 | 19.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 38.00 | 46.00 |
|  | 8.00 | 9.00 | 11.00 | 13.00 | 14.00 | 19.00 | 20.00 | 21.00 | 22,00 | 27.00 |
| Buick.... . . . . . . . . . . . ${ }^{20} 30^{\prime \prime}$. 2 -p. 1913 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 24.00 | 28.00 |
| Baick.... . . . . . . . . . 25 "", .5-p. 1913 | 15.00 | 17.00 | 30.00 | 23.00 | 25.00 | 30.00 | 32.00 | 34.00 | 37.00 | 44,00 |
| Buick. . . . . . . . . . . . . . . . "31", 5-p. 1913 | 17.00 | 19.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 38.00 | 45.00 |
| Buick ..... . . . . . . . . . " $40^{\prime \prime}$ " .5-p. 1913 | 19.00 | 21.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 41.00 | 49.00 |
| Buick.............. B24 $^{\prime \prime}$ ". 2 -p. 1914 | 7.50 | 8.50 | 10.00 | 11.00 | 12.00 | 17.00 | 18.00 | 19,00 | 21.00 | 25.00 |
| Buick. . . . . . . . . . . . . . "B36" 2-p. 1914 | 9.00 | 10.00 | 12.00 | 13.00 | 14.00 | 18.00 | 19.00 | 20.00 | 22.00 | 26.00 |
| Buick . . . . . . . . . . . ."B25", .5-p. 1914 | 13.50 | 15.50 | 18.50 | 21.00 | 23.00 | 28.00 | 30.00 | 32.00 | 34.00 | 41.00 |
| Buick.............. "B37"', 5-p. 1914 | 15.00 | 17.00 | 20.00 | 22.00 | 24.00 | 30.00 | 32.00 | 34.00 | 37.00 | 44.00 |
|  | 20.00 | 22.00 | 36.00 | 29.00 | 31.00 | 36.00 | 38.00 | 40.00 | 43.00 | 52.00 |
| Buick. . . . . . . . . . . . . "C24", 2-D. 1915 | 7.00 | 8.00 | 10.00 | 11.00 | 12.00 | 17.00 | 18.00 | 19.00 | 21.00 | 25.00 |
| Buick.... . . . . . . . . . "C36". "-p. $1915^{\text {che }}$ | 8.00 | 9.00 | 11.00 | 12.00 | 13.00 | 18.00 | 19.00 | 30.00 | 22.00 | 26.00 |
| Buick . . . . . . . . . . . . . "C54". 2-p. 1915 | 10.00 | 11.00 | 13.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 24.00 | 25.00 |
|  | 13.00 | 15.00 | 18.00 | 20.00 | 22.00 | 28.00 | 30.00 | 32.00 | 34.00 | 41.00 |
| Buick . . . . . . . . . . . . ."C37" - 5 "p. 1915 | $1+.00$ | 16.00 | 19.00 | 21.00 | 23.00 | 30.00 | 32.00 | 34.00 | 37.00 | 4.00 |
| Buick . . . . . . . . . . . . . "Cs5" ${ }^{\text {che }}$ /-p. 1915 | 18.00 | 20.00 | 24.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 43.00 | 52.00 |
| Buick. . . . . . . . . . . . . "D44", 2-p. 1916 | 7.50 | 8.50 | 10.50 | 12.00 | 13.00 | 18.00 | 19.00 | 20.00 | 22.00 | 26.00 |
| Buick................ "D54", 2-p. 1916 | 8.00 | 9,00 | 11.00 | 13.00 | 14.00 | 19.00 | 30.00 | 21.00 | 24.00 | 28.00 |
| Buick. . . . . . . . . . . . "D46" . 2 -p. 1916 | 8.00 | 9.00 | 11.00 | 13.00 | 14.00 | 19.00 | 20.00 | 21.00 | 24.00 | 28.00 44.00 |
| Buick ... . . . . . . . . . . . "D47"' ${ }^{\text {a }}$-p-p 1916 | 14.00 | 16.00 | 19.00 | 22.00 | 24.00 23.00 | 30.00 30.00 | 32.00 3200 | 34.00 34.00 | 37.00 37.00 | 44.00 44.00 |
| Buick . . . . . . . . . . . . . "D45" "D5 $^{\text {c }}$ / 5 -p. 1916 | 13.00 17.00 | 15.00 19.00 | 18.00 23.00 | 21.00 26.00 | 23.00 29.00 | 30.00 34.00 | 32.00 36.00 | 34.00 38.00 | 37.00 42.00 | 44.00 50.00 |
| Buick. . . . . . . . . . . . . . . . ${ }^{\text {D D }} 55$ " . . 7-p. 1916 | 17.00 | 19.00 | 23.00 | 26.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Cadillac. . . . . . . . . . . . . . . Tor...4-p. 1912 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 51.00 |
| Cadillac. .............T, C. . 5-p, 1912 | 18,00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 51.00 |
| Cadillac. . . . . . . . . . . . . Tor. . 4-p. 1913 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 51.00 |
| Cadillac. ............. Pbse.. 4 -p. 1913 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 51.00 |
| Cadillae. . . . . . . . . . . . . . T. C., 5-p. 1913 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 51.00 |
| Cadillao.............. T. C.. 6-p. 1913 | 22.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 48.00 | 57.00 51.00 |
| Cadillac. . . . . . . . . . . Phae. . 4-p. 1914 | 18.00 | 20.00 | 25.00 | 28.00 | 33.00 | 35.00 | 37.00 | 39.00 |  | 51.00 |
| Cadillac. . . . . . . . . . . . T. C. .5-p. 1914 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 51.00 |
| Cadillac. . . . . . . . . . . . . C. .7-p. 1914 | 22,00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44,00 | 48.00 | ${ }^{59} .00$ |
| Cadillae....... . . . . . . . ${ }^{\text {a }}$. 2 -p. 1915 | 10.00 | 11.00 | 13.50 | 15.00 | $\begin{array}{r}16.00 \\ \\ \hline 8\end{array}$ | $\frac{21.00}{23.00}$ | $\frac{22.00}{35.00}$ | 23.00 37.00 | 25.00 40.00 | 29.00 48.00 |
| Cadillav. . . . . . . . . . . . T. T. C. . 5-p. 1915 | 17.00 | 19.00 22.00 | 23.00 26.00 | 26.00 29.00 | 28.00 31.00 |  |  |  | 40.00 47.00 | 48.00 56.00 |
| Cadillac. . . . . . . . . . . . T. C... 7-p. 1915 | 20.00 9.00 | 22.00 10.00 | 26.00 12.50 2. | 29.00 14.00 | 31.00 16.00 | 36.00 21.00 | 39.00 22.00 | 42.00 23.00 | 47.00 25.00 | 56.00 29.00 |
| Cadillas. . . . . . . . . . . . . . . . . . . . ${ }^{\text {2-p.p. }} 1916$ | 9.00 15.00 | 10.00 17.00 | 12.50 21.00 | 14.00 25.00 | 16.00 37.00 | 32,00 | 34.00 | 36.00 | 40.00 | 45.00 |
|  | 18.00 | 20.00 | 24.00 | 28.00 | 30.00 | 35.00 | 38.00 | 41.00 | 47.00 | 56.00 |
| Chalmers. . . . . . . . . . . . . . . . . . . 2-p. 1913 | 11.00 | 12.00 | 14.00 | 16.00 | 17.00 | 22,00 | 23.00 | 24.00 | 26.00 | 30.00 |
| Chalmerd.............. ${ }^{\text {c }} 36$ ", 4-p. 1913 | 18,00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 52.00 |
| Cbalmers. . . . . . . . . . " $_{\text {Six }}$ " . 4 -p. 1913 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 39 | 43.00 43.00 | 52.00 52.00 |
| Chalmers...... . . . . . . "36". .5-p. 1913 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 35.00 | 37.00 37 | 39.00 39.00 | 43.00 43.00 | 52.00 52.00 |
| Chalmers . . . . . . . . . . . . . "Six", -5-p. 1913 | 18,00 | 20.00 | 25.00 29.00 | 28,00 33.00 | 30,00 35.00 | 35.00 40.00 | 37.00 42.00 | + 44.00 | 48.00 | 57.00 |
| Cbalmers............. "36" "Six" $^{\text {Chalmers }}$ /-p. 1913 | 21.00 21.00 | 24.00 24.00 | 29.00 29.00 | 33.00 33.00 | 35.00 35.00 | 40.00 40.00 | 42.00 42.00 | 44.00 44.00 | 48.00 48.00 | 57.00 |
| Chammers. . . . . . . . . . . . $366^{\prime \prime} 19$. 4 .p.p. 1914 | 18.00 <br> 1.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 52.00 |
|  | 19.00 | 21.00 | 26.00 | 29.00 | 31.00 | 36.00 | 38.00 | 40.00 | 43.00 | 52.00 |
| Chalmers.......... . . . $36^{\prime \prime} 19$. $5-\mathrm{p} .1914$ | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43,00 | 52.00 |
| Chalmerg . ... . . . . . . 6 " 6 ", 26, 5-p. 1914 | 18.00 | 20.00 | 25,00 | 28.00 | 30.00 | 35.00 | 37.00 <br> 38.00 | 39.00 40.00 | 43.00 | 52.00 |
| Chalmers..... . . . . . . ' '6"' 24. .5-p. 1914 | 19.00 | 21.00 | 26.00 | 29.00 | 31.00 | 36.00 | 38.00 40.00 | 40.00 42.00 | 43.00 | 52,00 |
| Chalmera, . . . . . . . . . . . . "6"' 24 . 6-p. 1914 | 20.00 | 22.00 | 27.00 | 31.00 | 33.00 | 38.00 36.00 | 40.00 38.00 | 42,00 40.00 | 46.00 43.00 | 51.00 52.00 |
| Chalmers............. ${ }^{\prime \prime}$ "29", 4-p. 1915 | 19.00 | 21.00 | 36.00 | $\begin{array}{r}29.00 \\ \hline 27.00\end{array}$ | 31.00 <br> 39.00 | 36.00 34.00 | 38.00 36.00 | 30.00 | 43,00 43.00 | 52.00 52.00 |
| Chalmers . . . . . . . . . . "268" $32,{ }^{\text {che }}$ - 5-p. 1915 | 17.00 17.00 | 19.00 19.00 | 24.00 24.00 | 27.00 27.00 | 29.00 29.00 | 34.00 34.00 | 36.00 36.00 | 38.00 | 43.00 43.00 | 52.00 |
|  | 17.00 19.00 | 19.00 21.00 | 24.00 26.00 | 27.00 29.00 | 29.00 31.00 | 34.00 36.00 | 38.00 | 40.00 | 43.00 | 52.00 |
| Chammers. . . . . . . . . . . 4 '6 26B. 6-p. 1915 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 52.00 |
| Chalmers . . . . . . .incin $290^{\prime \prime}$. 7 -p. 1915 | 20.00 | 22,00 | 27.00 | 31.00 | 33.00 | 38.00 32.00 | 40.00 34.00 | 44.00 36.00 | 48.00 40 | 57.00 48.00 |
| Chalmers...... "32 ${ }^{\text {a }}$ \% 6 -40" . 5 -p. 1916 | 15.00 | 17.00 | 21.00 21.00 | 25.00 27.00 | 27.00 29.00 | 32.00 34.00 | 34.00 36.00 | 36.00 38.00 | 40.00 42.00 | 48.00 50.00 |
| Chalmers . . . . . "29" "Mas, 6". . 5 -p. 1916 | 17.00 17.00 | 19.00 19.00 | 24.00 24.00 | 27.00 28.00 | 29.00 | 34.00 35.00 | 36.00 37.00 | 38.00 39.00 | 12.00 43.00 | 52.00 |
|  | 17.00 18.00 18.00 | 19.00 20.00 | 24.00 25.00 | 28.00 28.00 | 30.00 30.00 | 35.00 35.00 | 37.00 | 39.00 | 43.00 | 52.00 52.00 |
|  | 18.00 18.00 | 20.00 20.00 | 25.00 25.00 | 28.00 28.00 | 30.00 30.00 | 35.00 | 37,00 | 39.00 | 43.00 | 52.00 |
|  | 18.00 20.00 | 20.00 22.00 | 25.00 27.00 | 31.00 | 33.00 | 38.00 | 40.00 | 42.00 | 46.00 | 54.00 |
| Chalmers.... . ."29* "Mas. 6"..7-p. 1916 | 20.00 | 22.00 | 27.00 | 31.00 |  | 38,00 |  |  |  |  |
| Chevrolet . . . . . . . . . . . . "H-2", . 2-p. 1914 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 29.00 |
|  | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 48.00 |
| Chevrolet. . . . . . . . . . . . . . "6" L . .5-p. 1914 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 52.00 |
| Chevrolet. . . . . . . . . . Mon. 2 -p. 1915 | 7.00 | 8.00 | 10.00 | 12.00 | 13.00 | 18.00 | 19.00 | 20.00 | 23.00 | 27.00 |
| Chevrolet. . . . . . . . . . . "H-2" ${ }^{\text {/ }}$ " . $2-\mathrm{p}$, 1915 | 9.00 | 10,00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 34.00 | 22.00 36.00 | 25.00 40.00 | - 99.00 |
| Chevrolet. . . . . . . . . . . . "H-4" . 5 -p-p. 1915 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 32.00 35 | 34.00 | 36.00 39.00 | + 43.00 | 58.00 |
| Chevrolet. . . . . . . . . . . . "6" $6^{\prime \prime}$ L. . 5-p. 1915 | 18.00 | 20.00 | 25.00 10.00 | 28.00 | 30.00 13.00 | 35.00 18.00 | 19.00 |  |  | 52.00 27.00 |
| Chevrolet . . . . . . . . . . . . . Mon. . . 2-p. 1916 | 7.00 | 8.00 | 10.00 | 12.00 | 13.00 | 18.00 |  | 20.00 | 23.00 | 27.00 |

GORDON SEAT COVER PRICES-Continued

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& \& \& 1046 \& 1000 \& \[
\begin{aligned}
\& 1032 \\
\& 1050 \\
\& 1074 \\
\& 1074
\end{aligned}
\] \& 1027
1070 \& \[
\begin{aligned}
\& 1028 \\
\& 1029 \\
\& 1030 \\
\& 1031
\end{aligned}
\] \& 1021
1022 \& 1033 \& 1034
1035 \& \begin{tabular}{l}
1036 \\
1037 \\
\hline
\end{tabular} \& 1088 \\
\hline Cbevrolet. \& "H-2" \& 2-p. 1916 \& 8.8 .00
12 \&  \& \begin{tabular}{l}
\(\$ 11.00\) \\
1800 \\
\hline 0.00
\end{tabular} \& 813.00
21
200 \& \(\$ 14.00\)
2300
230 \& \begin{tabular}{l}
819.00 \\
29 \\
\hline 00
\end{tabular} \& 820.00
3000 \& \({ }^{821.00}\) \& \$24.00 \& \$28.00 \\
\hline Cbevrolet. \& "H-4" \& \%-p. 1916 \& 12.00
14.00 \& 14.00
16.00 \& 18.00
20.00 \& 21.00
23.00 \& 23.00
25.00 \& 25.00
30.00 \& 30.00
32.00 \& 34.00 \& 36.00
38.00 \& 44.00
46.00 \\
\hline Cole \& '40T" \& .5-p. 1913 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline \& "501" \& 7-D. 1913 \& \({ }^{21.00}\) \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Cole \& "+0, \({ }^{\text {co }}\) \& \%-p. 1913 \& 21.00
11.00 \& 24.00
12.00 \& 29.00
14.00 \& 33.00
16.00 \& 35.00
17.00
10, \& 40.00
22.00 \& 42.00
23.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Cole \& "50G" \& 5-p. 1914 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& \({ }^{237} .00\) \& 39.00 \& 26.00
43.00 \& 32.00
52.00 \\
\hline Cole \& "60G" \& 5-p. 1914 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Cole \& "60G" \& 7-p. 1914 \& 21.00 \& 24.00 \& \({ }^{29.00}\) \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Cole \& "40" \& 2-p. 1915 \& 11.00 \& 12.00 \& 14.00 \& \({ }_{88}^{18.00}\) \& 17.00 \& 22.00 \& 23.00 \& 24,00 \& 26.00 \& \({ }^{30.00}\) \\
\hline Cole \& Lit. 10-6-G \& 5-p. 1915 \& 18.00 \& 20.00 \& \({ }_{25.00}^{25}\) \& 28.00 \& 30.00
30.00 \& \({ }_{35} 500\) \& \begin{tabular}{l}
37.00 \\
37.00 \\
\hline
\end{tabular} \& \begin{tabular}{l}
39.00 \\
39.00 \\
\hline
\end{tabular} \& 43.00
43.00 \& 52.00
52.00 \\
\hline Cole \& "8-50' \& 6-p. 1915 \& 21.00 \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Cole \& Biz 10-6-G \& 7-p. 1915 \& 21.00 \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Cole \& Seasible Six \& 7-p. 1915 \& 21.00 \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Cole \& "40.]" \& \%-p. 1915 \& \({ }_{1} 1.00\) \& 12.00 \& 19.00 \& 33.00
16.00 \& 35.00 \& 40.00 \& \({ }^{42} 2.00\) \& \({ }_{24}^{4.00}\) \& 48.00
25.00 \& \begin{tabular}{l}
57.00 \\
\hline 3000
\end{tabular} \\
\hline Cole \& 850-J" \& 2-p. 1916 \& 11:00 \& 12.00 \& 14.00 \& 16.00 \& 17.00 \& 22.00 \& 23.00 \& 24.00 \& 26.00 \& 30.00
30.00 \\
\hline \& "40-G" \& 7-p. 1916 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Cole \& " \& 7-p. 1916 \& 18,00 \& 20.00 \& \({ }^{25} .00\) \& \({ }^{28.00}\) \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Cole \& "666" \& .7-p. 1916 \& 21.00 \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Dodge \& \& .2-p. 1915 \& 5.00 \& 9.00 \& 11.00 \& 13.00 \& 14.00 \& 19.00 \& 20.00 \& 21.00 \& 24.00 \& 28.00 \\
\hline Dod \& \& -5-p. 1918 \& 13.00 \& 15.00 \& 18.00 \& 21.00 \& 23.00 \& 28.00 \& 30.00 \& 32.00 \& 36.00 \& 44.00 \\
\hline Dodge \& \& - \({ }^{\text {2-p.p. } 1916}\) \& \({ }^{12} 8.50\) \& 8.50
14.00 \& 10.50
17.00 \& 12.50
20.00 \& 13.50
22.00 \& 18.50
27 \& 19.50 \& 20.50 \& 23.00 \& 27.00 \\
\hline Dort \& \& 2-p. 1916 \& 8.00 \& 9.00 \& 11.00 \& 13.00 \& \& 19.00 \& \& \& \& \\
\hline \& \& 5-p. 1916 \& 15.00 \& 17.00 \& 21.00 \& 24.00 \& 26.00 \& 31.00 \& 33.00 \& 35.00 \& 39.00 \& 47.00 \\
\hline Empire \& \(1{ }^{\prime \prime}\) \& 5-p. 1913 \& 16.00 \& 18.00 \& 22.00 \& 25.00 \& 27.00 \& 32.00 \& 34.00 \& 36.00 \& 40.00 \& 48.00 \\
\hline Empire \& "31". \& 5-p. 1914 \& 16.00 \& 18.00 \& 22.00 \& 25.00 \& 27.00 \& 32.00 \& 34.00 \& 36.00 \& 40.00 \& 48.00 \\
\hline Empire \& \(31{ }^{\text {31 }}\) \& 2-p. 1915 \& 8.00 \& 9.00 \& 11.00 \& 13.00 \& 14.00 \& 19.00 \& 20.00 \& 21.00 \& 24.00 \& 28.00 \\
\hline Empire \& "3" \& 2-p. 1916 \& 13.00 \& 1.00 \& 11.00 \& 13.00 \& 14.00 \& 11.00 \& \({ }^{33} \mathbf{3} 500\) \& \({ }^{35.00}\) \& 39.00 \& 47.00 \\
\hline Empire \& 13A" \& 5-p. 1916 \& 15.00 \& 17.00 \& 21.00 \& 24.00 \& \({ }_{26.00}\) \& \({ }_{31.00}^{19.00}\) \& 23.00 \& 12.00
35.00 \& \({ }_{39} 24.00\) \& \({ }^{28.00}\) \\
\hline Empire \& \(4{ }^{4}\) \& 5-p. 1916 \& 16.00 \& 18.00 \& 22.00 \& 25.00 \& 27.00 \& 32.00 \& 34.00 \& 36.00 \& 40.00 \& 48.00 \\
\hline Empire \& "6" \& s-p. 1916 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 32.00 \\
\hline Ford \& Touring \& 5-p. 1911 \& 10.00 \& 12.00 \& 14.00 \& 16.00 \& 18.00 \& 19.00 \& 22.00 \& 23.00 \& 26.00 \& 32.00 \\
\hline Ford \& Touring \& 5-p. 1912 \& 10.00 \& \& 14.00 \& 16.00 \& 18.00 \& 19.00 \& 22.00 \& 23.00 \& 26.00 \& 32.00 \\
\hline Ford \& Touring \& .5-p. 1913 \& 9.00 \& 10.50 \& 13.00 \& 15.00 \& 17.00 \& 19.00 \& 22.00 \& 23.00 \& 26.00 \& 32.00 \\
\hline Ford \& Touring \& 5-p. 1914 \& 8.00 \& 9.30 \& 12.50 \& \({ }^{14.50}\) \& 16.00 \& 19.00 \& 22.00 \& 23.00 \& 26.00 \& 32.00 \\
\hline Ford \& Touring \& 5-p. 1915 \& 8.00 \& 9.30 \& 12.50 \& 14.50 \& 18.00 \& 19.00 \& 22.00 \& 23.00 \& 26.00 \& 32.00 \\
\hline Ford \& Runatout \& 2-p. 1911 \& 6.00 \& 7.00 \& 12.50 \& 10.50 \& 16.00
10.50 \& 19.00 \& 14.00 \& 23.00 \& 26.00 \& 32.00 \\
\hline Ford \& Ruanbout \& 2-p. 1912 \& 5.50 \& 6.50 \& 9.00 \& 9.50 \& 10.00 \& 13.00 \& 14.00 \& 15.00 \& 16.00 \& 20.00 \\
\hline Ford \& Runabout \& \({ }^{2}\)-p. 1913 \& 5.50 \& 6.50 \& 9.00 \& 9.50 \& 10.00 \& 13.00 \& 14.00 \& 15.00 \& 16.00 \& 20.00 \\
\hline Ford \& Runabout \& 2-D. 1914 \& 4.50 \& 5.50 \& 7.50 \& 8.00 \& 9.50 \& 13.00 \& 14.00 \& 15.00 \& 16.00 \& 20.00 \\
\hline Ford \& Runabout \& \({ }_{\text {2-p. }}^{\text {2-p. } 1915}\) \& 4.50 \& S. 50
5.50 \& 7.50
7.50 \& 8.00
8.00 \& 9.50
9.50 \& 13.00
13.00 \& 14.00
14.00 \& 15.00
15.00 \& \({ }_{16.00}^{16.00}\) \& 20.00
20.00 \\
\hline Grant. \& -cyl. \& -p. 1915 \& 16.00 \& 18.00 \& 22.00 \& 25.00 \& 27.00 \& 32.00 \& \& 36.00 \& \& \\
\hline Grant \& "beyl" \& -p. 1916 \& 8.00 \& 9.00 \& 11.00 \& 13.00 \& 14.00 \& 19,00 \& 20.00 \& \({ }_{21.00}\) \& 24.00 \& 48.00
28.00 \\
\hline Grant \& "b-cyL" \& s-p. 1916 \& 16.00 \& 18.00 \& 22.00 \& 25.00 \& 27.00 \& 32.00 \& 34.00 \& 36.00 \& 40.00 \& 48.00 \\
\hline Haynes \& 36 \& 5-p. 1914 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Haynes \& 28 \& 5-p. 1914 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Haynes. \& \(\mathrm{C}^{-7}\) \& 7-p. 1914 \& 21.00 \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Haynes \& L- 31 \& \({ }_{\text {s-p. }}^{5} \mathrm{~s}\)-p. 1915 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Haynes \& 33 \& 7-p. 1915 \& \({ }_{21.00}^{18.00}\) \& 24.00 \& 25.00
29.00 \& 28.00
33.00 \& 30.00 \& 35.00
40.00 \& 37.00 \& 39.00 \& \({ }^{43.00}\) \& 52.00 \\
\hline Haynes \& 34" \& . 5 -p. 1916 \& 17.00 \& 19.00 \& 23.00 \& 26.00 \& 23.00 \& 33.00 \& \({ }_{35.00}\) \& \({ }^{47} 000\) \& 48.00 \& \begin{tabular}{l}
57.00 \\
49.00 \\
\hline
\end{tabular} \\
\hline Haymes \& \(35^{\prime \prime}\) \& 7-p. 1916 \& 20.00 \& 23.00 \& 28.00 \& 31.00 \& 33.00 \& 38.00 \& 40.00 \& 42.00 \& 46.00 \& 49.00
54.00 \\
\hline Hudson \& 33" T \& 5-p. 1912 \& 18.00 \& 20.00 \& 25.00 \& 25.00 \& 30.00 \& 35,00 \& 37.00 \& 39.00 \& 43.00 \& \\
\hline Hudson. \& \({ }^{\prime \prime}\) T. C \& S-p. 1913 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00
43.00 \& -52.00 \\
\hline Hudson \& 37" Tor. \& .5-p. 1913 \& 18.00 \& 20.00 \& 25.00 \& 23.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& \\
\hline Hudson \& 37" Phat. \& T-p. 1913 \& 18.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Hudson. \& +.'T \& 5-p. 1913 \& 18.00 \& \({ }^{20,00}\) \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Hudson \& -35 Tor. \& -5-p. 1913 \& 18.00 \& 20.00 \& 23.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Huyson \& - 4 T. P \& - \(\frac{5-\text { p. }{ }^{\text {P/ }} 1913}{}\) \& 15.00
21.00 \& 20,00 \& 25.00 \& \begin{tabular}{l}
28.00 \\
33.00 \\
\hline 18.00
\end{tabular} \& 30,00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline Hudson \& \({ }^{-6-40}{ }^{\text {" }}\) \& 2-p. 1914 \& 10.00 \& 11.00 \& 13.00 \& \({ }_{15.00}^{33.00}\) \& 35.00
16.00 \& - \& 42.00 \& 44.00
23.00 \& 48.00 \& \({ }^{57,00}\) \\
\hline Hudson \& " \(6-440\) \& 5-p. 1914 \& 18.00 \& 20.00 \& 25,00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 23.00
39.00 \& 26.00 \& \({ }_{5} 30.00\) \\
\hline Hudson. \& 6-40" \& 6-p. 1914 \& 20,00 \& 22.00 \& 27.00 \& 31.00 \& 33.00 \& 38.00 \& 40.00 \& 42.00 \& 46.00 \& 54.00 \\
\hline Hudson. \& \& 7-p. 1914 \& 21.00 \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57,00 \\
\hline Huasou. \& "6-60" \& -2-p. 1915 \& 10.00
30.00 \& 11.00 \& 13.00
\({ }_{27} .00\) \& 15.00 \& 16.00 \& 21.00 \& 22.00 \& 23.00 \& 26.00 \& 30.00 \\
\hline Hudson \& "6-64" \& /-p.p. 1915 \& 21.00 \& 24.00
24.00 \& 29.00 \& \(\begin{array}{r}30.00 \\ 33.00 \\ \hline\end{array}\) \& 32.00
35.00 \& 37.00
40.00 \& \begin{tabular}{l}
39.00 \\
42.00 \\
\hline
\end{tabular} \& 41.00
44.00 \& 45.00
48.00 \& \({ }_{5}^{54.00}\) \\
\hline Hudzon. \& 6-10". \& .3-p. 1916 \& 10.00 \& 11.00 \& 13.00 \& 15.00 \& 16.00 \& 21.00 \& 22.00 \& 23.00 \& 26.00 \& 30.00 \\
\hline Hudson.
Hudzon. \& (0) Cah \& - 3 -p.p. 1916 \& \begin{tabular}{l}
11.00 \\
18.00 \\
\\
\hline 18.00
\end{tabular} \& \({ }^{12} \mathbf{1 2}\). 00 \& 14.00
55.00 \& \({ }^{16.00}\) \& 17.00 \& 22.00 \& 23.00 \& 24.00 \& 26.00 \& 30.00 \\
\hline Hulson \& (-40) \& 7-p 1916 \& 18.00
21.00 \& 20.00 \& 25.00 \& 28.00 \& 30.00 \& 35.00 \& 37.00 \& 39.00 \& 43.00 \& 52.00 \\
\hline \& 6-50" \& 7-D. 1916 \& 21.00 \& 24.00 \& 29.00 \& 33.00 \& 35.00 \& 40.00 \& 42.00 \& 44.00 \& 48.00 \& 57.00 \\
\hline Hupmobile \& \& 5-p. 1912 \& 14.00 \& 16.00 \& 20.00 \& 22.00 \& 24.00 \& 30.00 \& 32.00 \& \& 38.00 \& \\
\hline Hupmobile \& "32" \& . \({ }_{\text {2-p. }}^{\text {5-p. }} 1913\) \& 8.00
14.00 \& 9.00 \& 11.00

20.00 \& 13.00
22.00 \& 14.00 \& $\begin{array}{r}19.00 \\ 80.00 \\ \hline 8 .\end{array}$ \& 20.00 \& 21.00 \& 24.00 \& 28.00 <br>
\hline Hupmobile \& 32" \& 6-p. 1913 \& 18.00 \& 20.00 \& 24.00 \& 22.00
27.00 \& 29.00 \& 30.00
34.09 \& 32.00

36.00 \& | 34.00 |
| :--- |
| 3800 |
| 1000 | \& 35.00

43.00 \& 46,00
51.00 <br>
\hline Hupmobile \& "2z" \& 2-p. 1914 \& 8.00 \& 9.00 \& 11.00 \& 13.00 \& 14,00 \& 19.00 \& 20.00 \& 21.00 \& 24.00 \& 28.00 <br>
\hline Hupmobile \& "R2". \& S-p. 1914 \& 14.00 \& 16.00 \& 20.00 \& 22.00 \& 24.00 \& 30.00 \& 32.00 \& 34.00 \& 38.00 \& 46.00 <br>
\hline Hupmobile \& 12" \& c-p. 1914 \& 18.00
800 \& 20.00
9.00 \& 24.00

11.00 \& | 27.00 |
| :--- |
| 13.00 | \& 29.00

14.00 \& | 31.00 |
| :--- |
| 19.00 | \& 36.00

80.00 \& 38,00 \& 42.00 \& 50.00 <br>
\hline Hupmobilo \& "K" \& 2-p. 1915 \& $8 .(0)$ \& 9.00 \& 11.00 \& 13,00 \& 14.00 \& 19.00 \& 20.00 \& ${ }_{21.00}^{21.00}$ \& 24,00 \& 28,00 <br>
\hline Hupmobile \& 2" \& (5-1) 1915 \& 14.00 \& 16.00 \& 20.00 \& 22.00 \& 29.00 \& 30.00 \& 32.00 \& 34.00 \& 38.00 \& 46.00 <br>
\hline
\end{tabular}

# ØKC Cibsonowninepolis 

GORDON SEAT COVER PRICES-Continued

|  |  | 1046 | 1000 | $\begin{aligned} & 1032 \\ & 1050 \\ & 1074 \end{aligned}$ | 1027 1070 | $\begin{aligned} & 1028 \\ & 1029 \\ & 1030 \\ & 1031 \end{aligned}$ | $\begin{aligned} & 1021 \\ & 1022 \end{aligned}$ | 1033 | 1034 1035 | $\begin{aligned} & 1036 \\ & 1037 \end{aligned}$ | 1088 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hupmobile | $\mathrm{K}^{\prime \prime}$, . 5-p. 1915 | \$14.00 | \$16.00 | \$20.00 | \$22,00 | \$24.00 | \$30.00 | \$32.00 | \$34.00 | 838.00 | \$46.00 |
| Hupmobile | "N"1-2-p. 1916 | 8.00 | 9.00 | 11.00 | 13.00 | 14.00 | 19.00 | 20.00 | 21.00 | 24.00 | 28,00 |
| Hupmobile | "N"' ${ }^{\text {N/p-p. } 1916}$ | 13,00 | 15.00 | 18.30 | 21.00 | 23.00 | 30.00 | 32.00 | 3400 | 38.00 | 45.00 |
| Hupmobile. | 'N"'. 7-p. 1916 | 17.00 | 19.00 | 23.00 | 26.00 | 28.00 | 34.00 | 36.00 | 38.00 | 43.00 | 52.00 |
| Interatate | "45" . 5-p. 1913 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Interstate | " 45 " . 7 -D. 1914 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 14.00 | 48.00 | 37.00 |
| Interstate | 30-T" 2-p. 1915 | 8.00 | 9.00 | 11.00 | 18.00 | 14.00 | 19.00 | 20.00 | 21.00 | 23.00 | 25.00 |
| Interstate | $30-\mathrm{T}$ " 5 -p. 1915 | 14.00 | 16.00 | 20.00 | 22.00 | 24.00 | 30.00 | 32.00 | 34.00 | 38, 00 | 46.00 |
| Interstate. | $30-\mathrm{T}$ ", . 2-p. 1916 | 8.00 | 9.00 | 11.00 | 13.00 | 14.00 | 19.00 | 20.00 | 21.00 | 25.00 | 36.00 |
| Interstate. | $30-\mathrm{T}$ ", 5-p. 1916 | 14.00 | 16.00 | 20.00 | 22.00 | 24.00 | 30.00 | 32.00 | 34.00 | 38.00 | 46.00 |
| Jacknon | "44", ,5-p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Jackson. | "46"-.5-p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Jackson. | "48" . .5-p. 1915 | 20.00 | 22.00 | $\frac{27.00}{}$ | 31.00 | 33.00 | 38.00 | 40.00 | 42.00 | 46.00 | 54.00 |
| Jackson | 348" ${ }^{\text {" }}$ - 5 -p. 1916 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Jackson | "34"-5-p. 1916 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Jackson | "68". . 7-D. 1916 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 48.00 | 57.00 |
| Jeffrey | '4", 5-p, 1914 | 18.00 | 20.00 | 25,00 | 27.00 | 29.00 | 34.00 | 36.00 | 35.00 | 42.00 | 50.00 |
| Jeffrey | "6" 5-p. 1914 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Jeffrey | "4". 5-p. 1915 | 18.00 | 30.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Jeffrey | "6", 5-p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Jeffrey | 6-48", 5-p. 1915 | 20.00 | 22.00 | 27.00 | 31.00 | 33.00 | 38.00 | 40.00 | 42.00 | 46.00 | 54.00 |
| Jeffrey. | ' "6", 5-p. 1916 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 35.00 | 34.00 40.00 | 36.00 42.00 | 38.00 44.00 | 42.00 +8.00 | 50.00 57.01 |
| Jeffrey | "4").7-p. 1916 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 |  | 48.00 |  |
|  | 2-p. 1914 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 29.00 |
|  | 5-p. 1914 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
|  | --p. 1915 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 29.60 |
| King | 5-p. 1915 | 15.50 | 17.50 | 20.50 | 23.50 | 25.50 | 30.50 | 32.50 | 34.50 | 39.00 | 45.00 |
| King | S-cyL. .5-p. 1915 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 48.00 |
| King | "8" 2-0.1916 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 29.00 |
| King | S', .5-p. 1916 | 16.00 | 18.00 | 20.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 48.00 |
| Krit | KR" - 2-p. 1912 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22,00 | 25.00 | 29.00 |
|  | N...5-p. 1912 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Krit | KR" . 2-p. 1913 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 29.00 |
| Krit | 5-p. 1913 | 1800 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.05 |
| Krit | R. 2-p. 1914 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 29.00 |
| Krit | . . 5-p. 1914 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50,00 |
| Krit | 2-p, 1915 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25,00 | 29.00 |
|  | 5-p. 1915 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 48.00 |
| Kissell | 4-36", -5-p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Kissell | "6-12". .5-p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38,00 | 42.00 | 50.00 |
| Kissell | 36" 2 d . j -p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Kissel! | 42" 2 d. 5 -p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 | 29,00 | 34,00 | 36.00 | 38.00 | 42.00 | 50.00 50.00 |
| Kissell | $48^{\prime \prime} 2$ d . 5 b-p. 1915 | 18.00 | 20.00 | 25.00 | 27.00 33.00 | 29.00 <br> 5.00 | 34.00 40.00 | 36.00 42.00 | 38.001 $4+00$ | 42.00 48.00 | 50.00 67.00 |
| Kissell. | 36" 3 d. 7-p. 1915 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40,00 | 42.00 | 4.00 | 48.00 | 67.00 |
| Kissell | $12^{\prime \prime} 3 \mathrm{~d} .7-\mathrm{d} .1915$ | 21.00 | 24.00 | 29.00 | 33,00 | 35,00 | 40.00 | 42.00 | 4.00 38.00 | 48.00 42.00 | 57.00 8000 |
| Kissell | $6-42^{\prime \prime}$, $\quad$-p-p. 1916 | 18.00 | 20.00 | 25.00 25.00 | 27.00 27.00 | 29.00 29.00 | 34.00 34.00 | 36.00 36.00 | 38.00 | 42.00 42.00 | 50.00 50.00 |
| Kissell | 4-32". . 5-p. 1916 | 18.00 | 20.00 | 25.00 | 27.00 | 29,00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
|  |  | 18.00 | 20.00 | 25.00 | 27.00 | 29,00 | 34.00 | 36.00 | 38.00 | 12.00 | 50.00 |
| Madison | $\begin{array}{r} 1916 \\ 7-p-1910 \end{array}$ | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 45.00 | 57.00 |
| Marion | t, B5 , 5-p. 1914 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 30.00 |
| Marion | 6, G. S-p. 1914 | 18.00 | 20.00 | 25.00 | 27.00 | 29,00 | 34.00 | 36.00 | 38.00 | ${ }^{42} .00$ | 50.00 |
| Marion | 6 -yl. . 3-p 1916 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 29.00 |
| Marion | 6-cyl. . b-p 1916 | 16.00 | 18.00 | 22,00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 45.00 |
|  | " 41 " , 2-p. 1915 | 11.00 | 12.00 | 14,00 | 16.00 | 17.00 | 22.00 | 23.00 | 24.00 | 26.00 | 30.00 |
| Marmon | "41" - 4 -p. 1915 | 18.00 | 20.00 | 25.00 | 27,00 | 29,00 | 34.00 | 36.00 | 38.00 | 42.00 | 50. 00 |
| Marmon | " 41 " ${ }^{\text {c }}$ - $5-\mathrm{p} .1915$ | 18.00 | 20.00 | 25.00 | 27.00 | 20.00 | 34.00 40.00 | 36.00 42.00 | 38.00 | 42.00 48.00 | 50.60 |
| Marmon | " 41 ", 7-p, 1915 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44,00 | 48.00 | 57.00 |
| Mathiso | 7-p. 1911 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 45.00 | 57.00 |
|  | s. 36. .5-p. 1912 | 16.00 | 18.00 | 22,00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 48.00 |
| Maxwell | "25", 5 -p. 1914 | 14.00 | 16.00 | 19.00 | 22.00 | 24.00 | 30.00 | 32.00 | 36.00 | 40.00 41.00 | 48.00 49.00 |
| Maxwell | $35^{\prime \prime} \quad 5-$ p. 1914 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 35 15 | 33.00 <br> 40.00 <br> 10.00 | 35.00 42.00 | 37.00 15.00 | 41.00 +8.00 | 49.00 77.00 |
| Maxwell | -50" $7-$ p. 1914 | 21.00 8.00 | 24.00 9.00 | 29.00 11.00 | 33.00 <br> 13.00 <br> 12.00 | 35.00 $1+.00$ | 40.00 19.00 | 42.00 20.00 | 41.00 21.00 | 48.00 24.00 | 37.00 28.00 |
| Maxwell | Cab, -p. 1915 | 8.00 700 | 9.00 8.00 | 11.00 10.00 | 13.00 12.00 | 14.00 13.00 | 19.00 15.00 | 20.00 19.00 | 21.00 20.00 | 23.00 | 27.00 |
| Maxwell | 25, ${ }^{2}$ | 7.00 12.00 | 8.00 14.00 | 10.00 17.00 | 12.00 20.00 | 22.00 | 27.00 | 29.00 | 31.00 | 35.00 | 43.00 |
| Maxwell. | Cab. 2-p. 1916 | 12.00 8.00 | 14.00 9.00 | 11,00 | 13.00 | 14.00 | 19.00 | 20.00 | 21.00 | 24.00 | 28.00 |
| Maxwell | 25: 2-p 1916 | 7.00 | 8.00 | 10.00 | 12.00 | 13.00 | 18.00 | 19.00 | 20.00 | 23.00 | 27,00 |
| Maxwell | $\cdots 2{ }^{\text {a }}$ " 5 -p. 1916 | 12.00 | 14.00 | 17.00 | 20.00 | 22.00 | 27.00 | 29.00 | 31.00 | 35.00 | 43.00 |
|  | 4-cyl. . 5-p. 1911 | 18.00 | 20.00 | 25.00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 |
| Mitebell | 4-cyl 5 -p. 1913 | 18.00 | 20.00 | 25,00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | 42.00 | 50.00 50.00 |
| Mitchell | Lit. 6" . .5-p. 1913 | 15.00 | 20.00 | 25.00 | 27,00 | 29.00 | 34.00 | 36.00 | 38.00 | +2,00 | 50.00 |
| Mitchell | Big 6". .5-p. 1913 | 15.00 | 20.00 | 25,00 | 27.00 | 29.00 | 34.00 | 36.00 | 38.00 | +2,00 | 50.00 |
| Mitebell | Lit, 6", 5 -p. 1914 | 17.00 | 19.00 | 24.00 | 27.00 27.00 | 29.00 | 34.00 | 36.00 36.00 | 38.00 | +3.00 | 52.00 62.00 |
| Mitebell | Big 6". .5-p. 1914 | 17.00 | 19.00 | 24.00 | 27.00 27.00 | 29.00 <br> 9.00 | 34.00 | 36.00 | 38.00 | 43.00 | 52.00 |
| Mitchell | 4-cyl, 5 -p. 1914 | 17,00 20.00 | 19.00 22.00 | 27.00 | $\begin{array}{r}27.00 \\ 31.00 \\ \hline\end{array}$ | 33.00 | 38.00 | 40.00 | 42.00 | 46.00 | 54.00 |
| Mitchell | Lit. 6". 6-p. 1914 | 20.00 10.00 | 11.00 | 13,00 | 14.00 | 15.00 | 20,00 | 21.00 | 22.00 | 24.00 | 28.00 |
| Mitchell. | "B35" . 5 -p. 1915 | 17.00 | 19.00 | 23.00 | 27.00 | $\stackrel{29.00}{ }$ | 34.00 | 36.00 | 38.00 | 43.00 | 52.00 |
| Mitchell | 'B45"'. 5-p. 1915 | 17.00 | 19.00 | 23.00 | 27.00 | 29.00 | 34.00 | 36.00 | 35.00 | 43.00 | 59.00 |
| Mitchell | 'B35"', 6-p. 1915 | 20.00 | 22.00 | 27.00 | 31.00 | 33.00 | 38.00 | 40.00 | 42.00 | 46.00 46.00 | 54.00 |
| Mitchell. | 'B45', .6-p. 1915 | 20.00 | 22,00 | 27.00 | 31.00 | 33.00 35.00 | 38.00 | 40.00 | +8.00 +4.00 | 46.00 48.00 | 54.00 |
| Mitchell | pec. $6^{\prime \prime}$. 6-p. 1915 | 21.00 9.00 | 24.00 | 29.00 | 38.00 | 35.00 | 20.00 | $\stackrel{42}{21.00}$ | 22.00 | 25.00 | 57.00 29.00 |
| Mitchell. | C-2-42, 2-p. 1916 | 9.00 | 10.00 | 12.00 | 14.00 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25,00 | 29.00 |
| Mitchell | C-2-48. ${ }^{\text {C-p }}$ - ${ }^{\text {cop. }} 1916$ |  |  |  | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | 48.00 |
| Mitchell. | C-5-42. .5-p. 1916 | 15.00 | 17.00 | 21.00 | -0.00 |  |  |  |  |  |  |

GORDON SEAT COVER PRICES-Continued


# The GIBSONGOMPANY APOLIS 

GORDON SEAT COVER PRICES-Concluded

|  | 1046 | 1000 | $\begin{aligned} & 1032 \\ & 1000 \\ & 1074 \end{aligned}$ | 1027 1070 | $\begin{aligned} & 1028 \\ & 1029 \\ & 1030 \\ & 1031 \end{aligned}$ | 1021 1022 | 1033 | 1034 | 1036 1037 | 1058 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reo...................-6-c-cyl.'...7-p. 1916 | 815.00 18.00 | $\$ 17.00$ 20.00 | $\$ 21.00$ 25.00 | $\begin{array}{r} 323.00 \\ 28.00 \end{array}$ | $\begin{array}{r} 825.00 \\ 30.00 \end{array}$ | $\begin{array}{r} 830.00 \\ 35.00 \end{array}$ | $\begin{array}{r} 832.00 \\ 37.00 \end{array}$ | $\begin{array}{r} 8.34 .00 \\ 39.00 \end{array}$ | 838.00 43.00 | $\begin{array}{r} 85.00 \\ 52.00 \end{array}$ |
| Saxon........................ 2-p. 1914 | 6.50 | 7.50 | 9.50 | 11.50 | 12.50 | 17.50) | 18.50 | 19.50 | 22.00 | 25.00 |
|  | ${ }^{6.50}$ | 7.50 | 9. 50 | 11.50 | 12.50 | 17.50 | 18.50 | 19.50 | 22.00 | 25.00 |
|  | 15.00 6.50 | 17.00 7.50 | 21.00 9.50 | 24.00 11.50 | 36.00 12.50 | 31.00 17.60 | 33.00 | 35.00 <br> 19.50 <br> 8.0 | 38.00 <br> 2200 | ${ }^{45} 500$ |
| Saxon.............. "B" 6-cyl. . 5-p. 1916 | 15.00 | 17.00 | 21.00 | 24.00 | 26.00 | 31.00 | 33.00 | 35.00 | 38.00 | 45.00 |
| Seripps-Booth........................-..... 1915 Scripps-Booth. 1916 | 8.00 8.00 | 9.00 9.00 | $\begin{aligned} & 11.00 \\ & 11.00 \end{aligned}$ | $13.00$ | 14.00 14.00 | 19.00 19.00 | 30.00 30.00 | 21.00 21.00 | 24.00 24.00 | 28.00 28.00 |
| Studebaker. . . . . . . . . . . . "20" . .5-p. 1912 | 14.00 | 16.00 | 20.00 | 23.00 | 25.00 | 30.00 | 32.00 | 3.00 | 38.00 |  |
| Studebaker. . . . . . . . . . . 30 " . .5-p. 1912 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34,00 | 30.00 | 40.00 | 4.00 |
| Studebaker.... . . . . . . . -25.". . 2 -p. 1913 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 28.00 |
| Studebaker. . . . . . . . . . . . "25" . . 5 -p. $1913^{\text {a }}$ | 14.00 | 16.00 | 20.00 | 23.00 | 25.00 | 30.00 | 32.00 | 34.00 | 38.00 | 45.00 |
| Studebaker. . . . . . . . . . ."35" . 6-p. 1913 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 33.00 | 34.00 | 36.00 | 40,00 | is. 00 |
| Studebaker. . . . . . . . . . . "6" . .6-p. 1913 | 16.00 | 18.00 | 22.00 | 25.00 | 27.00 | 32.00 | 34.00 | 36.00 | 40.00 | is. 00 |
| Studebaker, . . . . . . . . " 25 " . 2-p. 1914 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22,00 | 25.00 | 28.00 |
| 8tudebaker. . . . . . . . . . ."4". .j-p. 1914 | 14.00 | 16.00 | 19.00 | 22.00 | 24.00 | 30.00 | 32.00 | 34.00 | 38.00 | 45.00 |
|  | 18.00 | 20.00 | 25.00 | 28.00 | 30,00 | 35.00 | 37.00 | 39.00 | 43.00 | 52.00 |
| Studebaker. . . . . . . . . . . ."4". . 3-p. 1915 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 25.00 | 28.00 |
| Stulebaker. . . . . . . . . . . ."4". . 5 -p. 1915 | 12.00 | ${ }^{14.00}$ | 18.00 | 21.00 | 23.00 | 29.00 | 31.00 | 33.00 | 36.00 | 43.00 |
|  | 13.00 | 15.00 | 19.00 | ${ }^{22.00}$ | 24.00 | 30.00 | 32.00 | 34.00 | 38.00 | 45.00 |
|  | 17.50 <br> 16.00 | 18.50 | ${ }_{22}^{22.00}$ | 25.00 | ${ }^{27.00}$ | 32.00 | 34.00 | 36.00 | ${ }^{40.00}$ | 48.00 |
|  | 16.00 | 18.00 | ${ }_{22.00}^{22.00}$ | 25.00 25.00 | 27.00 27.00 | 32.00 32.00 | 34.00 34.00 | 36,00 36.00 | 40.00 40.00 | 48.00 48.00 |
| Stutz. ................ 4-cyl. . .2-p. 1915 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 |  |  | 24.00 |  |
| Statz.................. 4-cy1...5-p. 1915 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 57.00 |
| Statz................ 6-cyL. . 6-p. 1915 | 20.00 | 22.00 | 27.00 | 31.00 | 33.00 | 38.00 | 40.00 | 42.00 | 46.00 | 34.00 |
| Stutz . . . . . . . . . . . Series C. 2-p. 1916 | 9.00 | 10.00 | 12.00 | 14.00 | 15.00 | 20.00 | 21.00 | 22.00 | 24.00 | 28.00 |
| Stutz . . . . . . . . . . . . . Series C..5-p. 1916 | 18.00 | 20.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39,00 | 43.00 | 37.00 |
| Thomas . . . . . . . . . . . . . . . . . 7 7-p. 1911 | 20.00 | 22.00 | 27.00 | 31.00 | 33.00 | 38.00 | 40.00 | 42,00 | 46.00 | 4, 00 |
| Westeots. . . . . . 0 O-30" Ser. 10. .5-p. 1914 | 18.00 | 20.00 | 25.00 | 25.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 37.00 |
| Weatcots. . . . . . . . . . "0-35". . 5 -p. 1915 | 18.00 | 30.00 | 25.00 | 28.00 | 30.00 | 35.00 | 37.00 | 39.00 | 43.00 | 57.00 |
| Westcott.... . . . . . . -"U-50". - $^{\text {/-p.p. } 1915}$ | ${ }^{21.00}$ | 24.00 | ${ }^{29.00}$ | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 48.00 | 57.00 |
|  | 18.00 21.00 | 20.00 24.00 | 25.00 29.00 | 28.00 33.00 | 30.00 35.00 | 35.00 40.00 | 37.00 42.00 | 39.00 | 43.00 48.00 | 57.00 |
| Westcott. . . . . . . . . . . "6-51" ..7-p. 1916 | 21.00 | 24.00 | 29.00 | 33.00 | 35.00 | 40.00 | 42.00 | 44.00 | 48.00 | 57.00 |
| Willys-Knicht. . . . . . "84", R ${ }^{\text {P }}$ - 2 -p. 1916 | 7.50 | 8.50 | 10.50 | ${ }^{12.00}$ | 13.00 | 18.00 | 19.00 | 20.00 | 22.00 | 26.00 |
| Willys-Knight. . . . . . . "84" T. . 5 -p. 1916 | 13.00 | 15.00 | 18.00 | 21.00 | 23.00 | 30.00 | 32.00 | 34.00 | 37.00 | 44.00 |



We furnish a cover for the back of the front seat, with a large pocket. For this an extra charge is made.


We can furnish a top slip cover to match seat covers, and for this an extra charge is made.

| Piece to cover back of front seat with pocket for any car. | 31.30 | \$1.40 | \$2,00 | \$2.75 | \$3.00 | 33.25 | 83.50 | \$1.00 | 81.50 | 85,00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nos. | 5029 | 5018 | $\begin{aligned} & 5062 \\ & 5042 \\ & 5035 \end{aligned}$ | 5057 | $\begin{aligned} & 5058 \\ & 5059 \\ & 5060 \\ & 5061 \end{aligned}$ | $\begin{aligned} & 5051 \\ & 5052 \end{aligned}$ | 5063 | $\begin{aligned} & 3064 \\ & 5065 \end{aligned}$ | $\begin{aligned} & 5066 \\ & 5067 \end{aligned}$ | 5036 |
| Top Slip Cover, match Ford only ..... Top Slip Cover, match any car except Ford . | $\begin{array}{r} 82.70 \\ 3.20 \end{array}$ | $\begin{array}{r} 33.00 \\ 3.50 \end{array}$ | $\begin{array}{r} \$ 4.00 \\ 8.00 \end{array}$ | $\begin{array}{r} 84.25 \\ 5.80 \end{array}$ | $\begin{array}{r} \$ 4.50 \\ 6.00 \end{array}$ | $\$ 5.00$ 6.50 | $\begin{array}{r} \$ 6.00 \\ 7.00 \end{array}$ | 87.00 8.00 | 88.00 9.00 | $\begin{array}{r} 89.00 \\ 10.00 \end{array}$ |

5029 matebes 1046 Seat Cover. B018 matches 1000 Seat Cover. 5062 matchet 1032 Seat Cover. 5062 matche 1052 matches 1050 Seat Cover. 5042 matches 1050 Seat Cover.
5035 matches 1074 Seat Cover.

5057 matches 1027 Seat Cover. 5058 matches 1028 Seat Cover. 5059 matebes 1029 Seat Cover. 5060 matches 1030 Beat Cover. 5061 matebes 1031 Seat Cover.

5063 matches 1033 Seat Cover. 5064 matches 1034 Seat Cover. 5065 matches 1035 Seat Cover. 5066 matchea 1036 Seat Cover.

5007 matchea 1037 Seat Cover. 5056 matches 1058 Seat Cover. 5051 matches 1021 Seat Cover. 5052 matehes 1022 Seat Cover.

## STYLE AND FIT

Every Gordon Seat Cover is designed and made up with the same careful attention to detail as the finest garment.

## TRIMMINGS

Trimmings are the best that money can buy; all seams and edges are bound with black upholstery leather; the arm rests are made of the same upholstery leather. The trimmings should not be confused with the cheaper enameled goods bindings frequently used and which will peel off and crack in a short time, thus destroying the appearance of the covers.

## FASTENINGS

Gordon Seat Covers are attached with glove fasten-ers-these come put in-any one can attach them to his car in half an hour's time-all you have to do is to screw in the studs-this is done with an ordinary screwdriver without injuring or marring the body in any way.

We use "celluloid-covered" glove fasteners, made "extra strong"-so that they will not fade, rust or wear out, even when exposed to the weather as they constantly are on seat coverings.

## TIRE COVERS



## Spiral Spring Tire Covers

This is an adjustable one-piece tire cover held in position by two endless spiral springs, and slips on smooth and perfect fitting, without the use of any other fastening device. Made of best quality black enamel duck.

## No. 1296 Spiral Spring Tire Covers to fit tires not

 on demountable rims-Be sure and specify size of tire.
No. 1296

Each.. D.P. $\$ 2.40$
31-32, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.85
Each. . D.P. $\$ 2.68$
33-34, each .................... . . . . . . . . . . . . . . . . . . . 2.00
Each. .D.P. $\$ 2.86$
35-36, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.15
Each. . D.P. $\$ 3.12$

Each. D.P. 83.38
Over 38, each ......................................... . . . . . 2.85
Over 38, each
Each..D.P. \$4.10
No. 1292 Spiral Spring Tire Covers to fit tires on demountable rims-

No. 1292
Be sure and specify size of tire.
28-30, each
.81 .75
Each.. D.P. $\$ 2.40$
31-32, each ........... . . . . . . . . . . . . . . . . . . . . . . . . . 1.85
Each.. D.P. $\$ 2.68$
33-34, each … . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.00
Each. .D.P. $\$ 2.86$
35-36, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.15
Each. D.P. $\$ 3.12$
$37-38$, each.....................................................$~$
2.35
Each. . D.P. $\$ 3.38$
Over 38, each 2.85

Each. D.P. \$4. 10

## Gordon Special Holder Tire Cover

This tire cover is made to fit tires on demountable rims carried on special holders, such as on 1916 Buick, Hupmobile, Chandler, Patterson, Haynes, Maxwell, Chevrolet, Dodge, Briscoe, Paige, Interstate, etc.
This is the only tire


Made of heavy black enamel duck and will fit all makes of tires regardless of style of tread. Can be easily and quickly applied without injury to one's fingers. Buttons inside and is held to a close fit by the flat steel spring that runs close to the edge around the entire circumference of the cover.
No. 970 Spring and Button Duck Tire Covers, Ford sizes, $30 \times 3,30 \times 3 \frac{1}{2}$ and $31 \times 4$, each.
$\$ 1.50$
Each. . D.P. $\$ 2.10$ Dozen. .D.P. $\$ 24.00$
No. 971 Spring and Button Duck Tire Covers, sizes
$32 \times 3 \frac{1}{5}$ to $37 \times 5 \frac{1}{2}$, each................................. 2.00
Each. D.P. $\$ 2.66$ Dozen. . D.P. $\$ 29.32$
No. 980 Spring and Button Duck Demountable Tire Covers, Ford size, 30x $3 \frac{1}{2}$ and $31 \times 4$, each...... 1.50
Each. . D.P. $\$ 2.10$ Dozen. . D.P. $\$ 24.00$
No. 981 Spring and Button Duck Demountable Tire Covers, sizes $32 \times 3 \frac{1}{2}$ to $37 \times 5 \frac{1}{2}$, each
Each. . D.P. $\$ 2.66$ Dozen. . D.P. $\$ 29.32$
cover made that will fit
tires carried on special holder, that is sightly in appearance and waterproof.

No. 1221 for tires on demountable rims carried on special holder.

Be sure and specify size of tire.
No. 1221
28-30, each $\$ 1.75$
Each. . D.P. $\$ 2.40$
31-32, each
Each.. D.P. $\$ 2.68$
33-34, each ............ . . . . . . . . . . . . . . . . . . . . . . 2.00
Each. .D.P. $\$ 2.86$
$35-36$, each $\$ 3.12$
Each. D.P. $\$ 3.12$
Each. . D.P. $\$ 3.12$
$37-38$, each

Over 38, each
Each. D.P. $\$ 4.10$
2.35

# The GIBSONGOMPANY 

## GREASE BOOTS, CUSHIONS AND WORK SUITS

## Universal Joint Boot



No. 1 Universal Joint Boot, small, each.
Each....D.P. $\$ 1.33$
No. 2 Universal Joint Boot, large, each.
Each....D.P. $\$ 1.66$

Knuckle Boot
End Thrust Boot


No. 1 Knuckle Boot, small, each.. $\qquad$ $\$ 0.40$
Each ....D.P. $\$ 0.66$
No. 2 Knuckle Boot, large, each............. 50
Each ....D.P. $\$ 0.84$


No. 1 End Thrust
Boots, 7 -inch, each.. $\$ 0.50$ Each...D.P. $\$ 0.80$ No. 2 End Thrust
Boots, 8 -inch, each.. . 60 Each ...D.P. $\$ 0.88$

## Overland



Makes it possible to pack the joints of the steering gear with grease, thereby eliminating rattle and wear. Overland Grease Boots in set of 4, per set. $\qquad$ $\$ 1.10$ Per set ....D.P. $\$ 1.80$


Made from a special tanned soft leather having unusual wearing qualities.

The special construction allows free action of the joint without the wear on the boot so troublesome and expensive in other boots.

Can be attached in ten to twenty minutes, whereas the old style cone shaped boot requires about three hours to install.

Any one who has taken down a universal joint shaft in order to install a new boot will readily recognize the advantage in the construction of this boot.

Furnished complete with leather lace and clamp wire inserted in each end ready to install.

Made in pairs for front and rear end of universal joint.

A time saver, a money maker for every Overland dealer, repairman or owner.

Give number of model wanted for when ordering.
Price, per pair
.$\$ 3.00$
Per Pair., D.P. 84.44

## Cushions

Made of best quality Spanish roan skins, stuffed with genuine curled hair.
No. 1 Plain Leather, size $15 \times 15$, Driver's Back Cushion, curved to fit back, each
. $\$ 4.50$
Each. .D.P. $\$ 7.50$
No. 11 Fancy Leather, size $15 \times 15$, Driver's Back Cushion, curved to fit back, each ............... $\$ 4.70$


Each. .D.P. $\$ 7.76$

No. 13 Plain Leathen Pillows, size $20 \times 20$, made from Spanish roan skins stuffed with elastic
felt, each. $\$ 5.00$
Each.. D.P. $\$ 8.32$
No. 14 Fancy Leathen Pillows, size 20 x 20 , colors harmoniously blended and designed by leather experts. Stuffed with best quality elastic felt,
each ..... 5.20
Each. D.P. $\$ 8.66$

## Work Suit

No. 4025 Gordon Automobile Work Suit, made in one piece, close buttoned at neck. Tabs at wrists and bottoms of trousers, so can be closed, protecting undergarments. Openings at sides to get at trousers pockets. A man wearing one of these suits can crawl around under automobiles, over the dirty, greasy floors, and not soil the regular clothes. Made in all sizes. To determine size required, measure over the vest the same as when maesuring for a sack coat. Great care must be exercised to not take measure too tight. Material is heavy, strong, serviceable khaki.


## Each

Each. . D.P.. . 3.10

## Curtain Fasteners



No. 202 Curtain Fasteners, double, black finish, per doz. black
.$\$ 0.85$ Doz. .D.P. $\$ 1.32$

No. 203 Curtain Fasteners, double, nickel finish, per doz... Doz..D.P. $\$ 1.32$

No. 200 Curtain Fasteners, single, black finish, per doz. $\qquad$ Doz. D.P. $\$ 1.11$
No. 201 Curtain Fasteners, single, nickel finish, per doz.
.85 Doz., D.P. \$1.11


No. 204 Clinch Curtain Fasteners, black, per doz.. $\$ 0.75$
Doz. . D.P. \$1.11
No. 205 Clinch Curtain Fasteners, nickel, per doz.. 1.00 Doz.. D.P. \$1.11


Adams Automobile Top Holder
No other holder compares with the Adams in neatness, efficiency, ease of operation or durability. Can be installed in two minutes and will be the last thing on your car to wear outin fact, it cannot wear out or even get out of order or rust.

The chain used is steel, sherardized and eletroplated. The tensile strength of chain is 465 lbs .-three times as strong as a strap holder.

An ornament to any car-no unsightly, projecting arms nor dangling straps.

Adjustable every sixteenth of an inch, and the leverage is such that with a slight turn you can draw the chain as tight as a cable or loosen it instantly. You cannot do that with a strap holder-because the holes in the strap cannot be set close enough to-gether-hence in spite of your strap holder, your top rattles.

The saddle and hook of the Adams Top Holder are lined with leather-they cannot mar or mark the bows of your car.

The holders are made with $\frac{5}{8}$ and $\$$-inch holes. All small cars take the $\frac{\pi}{8}$ size and the large cars take the $q$ inch.

Be particular to specify size. Black enamel finishneatly boxed in pairs. One dozen and 3 dozen to case. Price, per pair. $\qquad$
Gemco
Bow


No. G-1 Gemco Bow Rest, $\frac{s}{8}-\mathrm{in}$. hole, black, per pair $\$ 0.50$ Per Doz. Pr. . D.P. $\$ 6.60$
No. G-2 Gemco Bow Rest, $\frac{1}{2}$-in. hole, black, per pair .50 Per Doz. Pr. .D.P. $\$ 6.60$
"Ever Tight" Clamp Bow Holder


This Bow Holder consists of a long perch fastened to a hanger with a set screw. The securing anchor, which has a spring washer under it, is placed through a hole in a lug on the inside of the perch.

When the top is up the thumb nut is screwed up firmly against the upper nut so it can not rattle. When the top is let down the securing anchor draws the bows tightly together by the use of the thumb nut.

No, 1 for three and four bow tops.

No. 2 for five bow tops.
Finish: Hard rubber, black enamel.
No. 1 Ever Tight Clamp Bow Holders, f -in. hole $\$ 1.25$ No. 1 Ever Tight Clamp Bow Holders, $\frac{2}{4}$-in. hole 1.25
No. 2 Ever Tight Clamp Bow Holders, 负in. hole 1.25 No. 2 Ever Tight Clamp Bow Holders, $\frac{\lambda}{4}$-in. hole 1.25 Per Pair, , D.P, \$1.76

Per pair. . D.P. $\$ 2.22$

$\underset{\text { Motel A }}{\text { Standard }}$


Car Equipped with Bair

Black rubber enamel finish. Has lug for attaching to body iron socket with $\overline{5}$-inch iron. Can be attached to any car.
Model A Bair Top Holders, 3-bow, per pair............ $\$ 3.25$
Per Pair....D.P. \$4.66
Model A Bair Top Holders, 4-bow, per pair............ 3.50
Per Pair....D.P. $\$ 5.00$
Model A Bair Top Holders, 5-bow, per pair............ 3.75
Per Pair....D.P. \$5.8\%


Sheet Celluloid for Storm Fronts and Curtains. Sheets 20 x 50 inches.
Each
. $\$ 1.50$
Each. .D.P. $\$ 1.67$

## The GIBSONGOMPANY

## HOOD HARDWARE AND BODY TRIMMINGS



Style M Hood Fasteners, no spring used, for all cars, black enamel finish, each. $\$ 0.30$ Dozen....D.P. $\$ 5.33$
Style A Hood Fasteners, small size, black enamel finish, each
Dozen....D.P. $\$ 10.66$

## Hood Handles



No. 6
No. 6 Hood Handle. A highly polished, nicely finished casting, black enamel finish, each.$\$ 0.18$

Dozen....D.P. $\$ 3.20$


No. 7
No. 7 Hood Handle. Made from $\frac{50}{18}-\mathrm{in}$. steel rod, black enamel finish, each.
$\$ 0.25$
Dozen....D.P. \$4.44


No. 440
No. 440 Nickeled Door Handles, $3 \frac{1}{4}$-in. opening, per pair
Per pair....D.P. $\$ 2.22$


No. 480
No. 430 Nickeled Door Handles, $3 \frac{1}{4}$-in. opening,
per pair $\qquad$ $\$ 2.00$
Per pair....D.P. $\$ 2.22$


No. 450 Nickeled Door Handles, $3 \frac{1}{2}$ in. opening, per pair
Per pair....D.P. $\$ 2.22$


No. 506
No. C-506 Japanned Footman Loops for 1- and $1 \frac{1}{4}$-in. straps, each
Dozen....D.P. $\$ 0.55$

# Ohe CIBSONOMANY <br> MIRRORS 

## Diminishing Mirrors



Separable frame and back permits replacement of reflector. Brass frame, polished and nickel plated; stamped steel back and clamp; tubular steel arm; baked black enameled finish. Reflector adjustable to any angle; swivel clamp for adjustment of arm.

No. 6100 Diminishing Mirror, 4-inch, black with nickel trimmings, each
$\$ 1.15$
Each. .D.P. $\$ 1.70$ Dozen. .D.P. $\$ 19.44$
No. 6019 Diminishing Mirror, $5 \frac{1}{2}$-inch, black with nickel trimmings, each
1.40

Each. D.P. \$2.06 Dozen. .D.P. \$23.88

## Oval Mirror



French plate beveled mirror, $4 \times 6$ inches oval. Same construction as No. 6113, described below.

No. 6112 Oval Mirror, $4 \times 6$ inches, black with nickel trimmings, each
$\$ 2.60$
Each. . D.P. $\$ 3.84$ Dozen. .D.P. $\$ 44.44$

## Square Mirror



French plate bevel mirror; stamped steel back and clamps, steel arms, baked black enameled finish; brass frame, polished and nickel plated.

The diamond-shaped adjustable clamp will fit on the windshield frame or support of the leading cars. Ball and socket joint in back permits adjustment of reflector to any angle.

No. 6113 Square Mirror, 4x6 inches, black with nickel trimmings, each
$\$ 2.60$
Each. .D.P. $\$ 3.84$ Dozen. .D.P. $\$ 44.44$

## Round Mirror



French beveled mirror; A Aras brass frame, polished and nickel plated; steel tubular arm, baked black enameled finish. Swivel adjustable joint in back; heavy hand screw. Fits any round windshield.
No. 6181 French Beveled
Glass Round Mirror, $5 \frac{1}{2}$-inch, black with nickel trimmings, each
$\$ 2.00$
Each. .D.P. $\$ 2.95$ Dozen. .D.P. $\$ 38.88$

## Limousine Mirror

Is indispensable for limousines coupes and other closed cars. It is a convenience for the ladies in arranging their toilets. The mirror is attached to any suitable point in the interior of the car by two wood bolts and is adjustable by means of a ballsocket joint.

Brass frame, polished and nickel
 plated; stamped steel back, malleable iron base, baked hard enamel finish.

No. 6064 Limousine Mirror, $3 \frac{1}{2} \times 7$-inch, black with nickel trimmings, each. 83.00

Each. .D.P. $\$ 4.44$ Dozen. .D.P. $\$ 50.66$

## Fender Mirror



Mounted on either of the forward mud guards, the wide angle diminishing mirror gives the driver a great range of vision.

Attached to fender by means of socket base; adjustable swivel joint in back. Brass frame, polished and nickel plated. Stamped steel back, baked black enamel finish. Length of rod, 3⿺ inches.
No. 6180 Fender Mirror, $5 \frac{1}{2}$-inch, black and nickel
finish, each
\$1.40
Each. .D.P. $\$ 2.06$ Dozen. . D.P. $\$ 23.88$

## Truck Mirror

Designed especially for motor trucks and delivery wagons. Its use required in several states. Frame made of brass, nickel plated and polished; back made of stamped steel; arm is cold rolled steel tubing; baked black enamel finish. Adjustable for angle of reflector and length of arm.
No. 5842 Truck Mirror, 6 -inch, black and nickel fin-
ish, each
$\$ 2.00$
Each., D.P. $\$ 2.95$ Dozen. .D.P. $\$ 33.88$

# The GIBSON GOMPANY INDIANAPOLIS 

## RAILS, MOULDING, ALCOHOL, SONOSCOPE AND PUMPS



No. 332 S Handle Robe Rail Brass Tube with black enameled handles, each.
\$1.50
Each..D.P. \$1.11 Per Dozen. .D.P. \$12.33
No. 1332 S Handle Robe Rail Nickeled Tube with black enameled handles, each
Each. .D.P. \$1.11 Per Dozen. .D.P. \$12.33


No. 60 All Brass Foot Rail, each
$\$ 1.75$

## Each.. D.P. \$1.88

Per Dozen..D.P. $\$ 21.33$
No. 61 Foot Rail Black Enamel Ends, nickeled rail, each
Each..D.P. $\$ 2.00$ Per Dozen. .D.P. $\$ 22.22$

## Alite Moulding



Alite Metal Running Board and Floor Board Moulding is an all white, rustless metal moulding that can be supplied in all the patterns illustrated above. All sizes come in 10 -foot lengths.
No. 1 Alite Moulding, per foot . . . . . . . . . . . . . . . . . . . . . . . . 80.18
Per Foot, D.P. 90.22
No. 2 Alite Moulding
.18
Per Foot. D. P, $\$ 0.22$
Per Foot. D. P, 80.22
No. 8 Alite Mouldisg, per foot . . . . . . . . . . . . . . . . . . . . . . . . . . 0
Per Foot. .D.P. \$0.2t
Per Foot. 7 Alite Moulding, per foot
Nor Foot D. P. 80.24
Vo. 10 Alite Monlding, per foot . . . . . . . . . . . . . . . . . . . . . . . 30
Per Foot..D.P, $\$ 0.24$
Vo, 23 Alite Monlding, per foot . . . . . . . . . . . . . . . . . . . . . . . . . . 20
Per Foot. . D.P. $\$ 0.24$

Pyro Denatured Alcohol



An anti-freeaing solution that defies the action of Snow King. This inexpensire and very efficient liquid in solutions as indicated below will belp to keep that car running in the severest weather. This Pyro has the approval of the society of Automobile Engincers and is recommended by that body.

Its superiority over salt-solution, glycerine or wood alcobol bas long been known. It has no harmful effects and requires Do skill in mixing.

## MIXTURES

20 per cent. Solution- $(1$ quart of Pyro-Alcohol to 1 gallon of water) freeses at about 10 degrees above zero.

30 per cent. Solution- (1) quarts of Pyro-Alcohol added to 1 gallon of water) freezes at about 5 degrees below zero.

40 per cent. Solution- $\left(2 \frac{1}{2}\right.$ quarts of Pyro-Alcobol added to 1 gallon of water) freezes at about 20 degrees below zero. Pyro-Alcohol, per gallon can ................................................. Pyro-alcohol per gallon can on application. Pyro-Alcohol, 5-gallon can, per gallon.
Per gallon can..D.P. Price on application. Pyro-Alcohel, half-harrel, per gallon .......
Per gallon can..D.P. Price on application. Pyro-Alcohol, barrel, per gallon............... Per gallon can..D.P. Price on appllcation.


Taking a motor apart is a costly piece of work and often much labor and expense could be saved if the cause could be accurately located before the parts are disturbed: in fact the knock is not always in the motor itself, although it may sound so, but may be found in some of its attachments or fittings, and could perhaps be easily remedied by the operator if he only had the means of locating it.

The "American" Sonoscope is an instrument which has been designed expressly for locating these knocks and pounds, and to say it does its work well does not begin to express it. Every click, knock or pound can be instantly traced to its source, and positively located without any mistake.
Sonoscope, each.
$\$ 1.50$ Each....D.P. \$1.67

## Water Circulating Pumps

The Lobee Pumps have a train of satisfied users everywhereare the most universally endorsed of any pump made. If you want good circulation on your automobile, launch or motor boat, use a Lobee Pump. There are more Lobee Circulating Pumps in use
 than all other makes combined, which demonstrates their efficiency and durability. These gear pumps will make as good as 100 revolutions per minute.
Lobee Pumps, $\frac{1}{2}$ inch, each
Each. . D.P. $\$ 9.44$
Lobee Pumps, $\frac{1}{4}$ inch, each. . . . . . . . . . . . . . . . . . . . . 7.00
Each. .D.P. \$11.66

## TIRE CHAINS

## Weed Anti-Skid Chain

Weed Anti-Skid Chains represent the highest development of an anti-skid device. They are made as carefully as the automobile on which they are used, and, as you probably have often heard said, "Every Weed is Guaranteed." The cross chains are made of special stock and the links are smoothly welded. They are hardened in our own furnaces under pyrometer readings and are then heavily brass plated. They are diamond hard, yet not brittle, combining great strength
 and wearing quality. The Weed side chain is made of heavy wire of high tensile strength and is heavily galvanized to prevent rusting.

Price List of Weed Anti-Skid Chains


Price List of Weed Cross Chains


| Size | Each | Size | Enct |
| :---: | :---: | :---: | :---: |
|  | \$0.05 | 41/2 | 50.1 |
| 31 | .08 |  |  |

## Weed Chain Adjusters <br> Patented March 29, 1910



Weed Chain Adjusters are four springs, radiating from a center chain surrounding the hub; are attached by simple hooks to the side chain. The adjuster draws the chains evenly to the tires-holds them right, fairly taut, but not tight. Allows the chains to "creep,", and that's the essential thing. When the chains "creep" there isn't a ghost of a chance to cause injury to the tires. Price List of Weed Chain Adjusters $28-30,32-34,36$, per pair....................... $\$ 1.00$ $37-38,40-42$, per pair. 1.50

Rid-O-Skid Tire Chains



Rid-O-Skid Tire Chains are offered as an anti-skid device to meet the requirements of those to whom initial cheapness is the chief consideration. They are necessarily of inferior quality-are not made as carefully or of diamond-hard material as are Weed Tire Chains. If you ignore the maxim "Initial Cheapness is False Economy" and purchase Rid-O-Skid Chains instead of Weed Chains, you will at least be much wiser than the motorist who insists upon taking chances by "depending on rubber alone," and later experience will show you that Weed chains give much greater mileage and are, therefore, cheaper in the end.

Price List of Rid-o-Skid Tire Chains

|  | $\begin{gathered} \text { Price } \\ \substack{81.15 \\ 2.10} \\ \hline \end{gathered}$ | size $30 \times 41$ $30 \times 41 / 2$ $32 \times 4 \%$ | $\begin{aligned} & \text { recice } \\ & \$ 3.05 \\ & 3.05 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| ${ }^{28 \times 3}$ | 2.40 |  |  |
| 30x 3 | ${ }^{2} .50$ | $36 \times$ | 3.60 |
| 3\%x | ${ }_{2}^{2.69}$ | ${ }^{37 \times 4}$ | 3785 |
| 36x3 | 2.90 | 込 | (125 |
| 28x31 | 2.50 | $42 \times 4$ | . 50 |
| ${ }_{32 \mathrm{x}}$ |  | $3+55$ | 10 |
| 343 31 | 295 |  |  |
| 36x3 | 3.10 | ${ }_{3}^{3 \times 15}$ | (.90 |
| $\underbrace{30 \times 4}_{3} 4$ | - 2.80 | ${ }_{40 \times 5}^{39 \times 5}$ | 5.10 5.25 |
| - | 年3.10 | $36 \times 51 / 2$ | 5.20 |
| ${ }^{14}$ | 3.20 | 37x51/2 | 5.40 |
|  | 3.30 | 38x51/2 | 5.ce |
| 37 x 4 | 350 | $38 \times 6$ | 6.50 |
| 40x4 | 4.00 | 40 | 6.75 |

## Weed Chains

 forMotorcycles


Patented March 24 , 1913: Aug. 23, 1904

Weed Chains for Motorcycles are just as perfect in principle, construction and workmanship as Weed Anti-Skid Chains for automobiles. They are light in weight and easily carried. Packed one chain in a small canvas bag, which can be easily carried in a tool box or coat pocket when not in use, without inconvenience. They are easily attached.


# The GIBSONGOMPANY 

## TIRE CHAINS, MUD HOOKS AND QUICK REPAIR LINKS

Weed Chains for Solid Tires


Patented March 24, 1903; Aug. 23, 1904
An efficient traction and anti-skid device for single and dual solid truck tires.

They are made especially strong and so constructed that they satisfactorily meet the requirements of heavy truck service when the clearance between rim and drive chain is not less than $1 \frac{1}{2}$ inches on large sizes, or 1 inch on small sizes. When there is less than this clearance our Lyon Grips should be used.


| Cross Chains, Made of Special Stock <br> For Single Solid Tires <br> Per 100 |  |  |  | Size | Per 100 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Size |  |  |  |  |  |

[^9]Emergency Mud Hooks



One on each wheel, we guarantee, will get you out of the mud, sand or snow when everything else fails. They can be put on when the wheel is in deep mud, but chains can not; and they are sure to get you out, while chains will dig deeper. When you are out take them off. The farmer will charge the price of two sets to pull you out of one hole.

For long stretches of mud or deep sand two or three sets can be used to good advantage. Every tourist should carry a set. They are malleable iron; can not break; weight, 5 pounds per set.

No. 1 Emergency Mud Hooks for 3 to $4 \frac{1}{2}$ tires, per pair
$\$ 1.25$
Per pair. .D.P. $\$ 1.76$

No. 2 Emergency Mud Hooks for 5 and 6 tires,
per pair . ....................................... 1.25
Per pair. .D.P. $\$ 1.76$

## Quick Repair Link



Quick Repair Link-Rapid, efficient, durable. Cuts show actual size.

100 in box, price.
$\$ 1.00$
Per box....D.P. $\$ 0.88$

JACKS


## Badger Jacks

No. 1 Badger Jack is recommended for light and medium weight cars. The base is large, standard well ribbed; the steel working parts and steel rack strong and durable. Weight $6 \frac{1}{2}$ pounds, height 11 inches, raise 6 inches, capacity 1,500 pounds.

Each . . . . . . . . . . . . . . . . . . . . . $\$ 1.75$
Each. . D.P. \$2.76
Dozen. .D.P. $\$ 30.00$

No. 3 Badger Jack is the most powerful and reliable one-ton jack made. No better material or workmanship could be put into any jack. There are no complicated or loosefitting parts to get out of order. The pawls automatically lock, preventing the rack from dropping with a load and reverse is simple and positive. Weight 9 pounds, height 11 inches, raise 6 inches, capacity one ton.
Each
. $\$ 2.50$
Each. .D.P. $\$ 3.88$
Dozen..D.P. $\$ 42.22$


No. 5 Badger Jack is designed for heavy trucks. The usual Badger construction, drop forge pawls and steel reversing parts. All parts are extra heavy throughout. The bearings are heavy, the leverage great, making the lift easy even when the jack is loaded to its capacity. This jack has an extra large base and 18 -inch handle. Weight 14 pounds, height $11 \frac{1}{2}$ inches, raise $5 \frac{1}{2}$ inches, capacity three tons.
Each . . . .................. $\$ 6.00$
Each. . D.P. $\$ 8.88$
Dozen. . D.P. $\$ 97.76$

No. 6 Badger Foot Lift Jack is designed to be used on cars with different height front and rear axles, also to meet conditions when touring. Even if a car goes off the road, a jack with only one height is useless; but with adjustable foot lift the foot can be set at any height that the axle may be from the ground. Weight 12 pounds, height 11 inches, raise 6 inches, capacity one ton.
Each . . . . . . . . . . . . . . . . . . . . $\$ 3.50$
Each. . D.P. \$4.77
Dozen. D.P. $\$ 51.76$


## Badger Jacks



No. 7 Badger Foot Lift Jack is constructed exactly like No. 3 Badger except a foot lift and larger base are added. Many cars are now built with different height front and rear axles. This construction saves carrying two jacks in one tool box. Weight 10 pounds, height 11 inches, base 6 inches, capacity one ton.
Each
.$\$ 3.00$
Each..D.P. $\$ 4.44$
Dozen. D.P. $\$ 48.00$

No. 8 Badger Foot Lift Jack is the same as No. 1 with the foot lift added. Weight 8 pounds, height 11 inches, raise 6 inches, capacity 号-ton.
Each
$\$ 2.25$

Each. .D.P. \$3.32
Dozen. . D.P. $\$ 36.00$


No. 10 All Steel Badger Jack is a light, strong, compact ratchet jack for cars weighing 2,000 pounds or under. It has no competition for light cars. This jack will easily lift a thousand pounds dead weight, having more lifting capacity for its weight than is found in any other jack. Weight 24 pounds, height 11 inches, raise 5 inches, capacity 1,000 pounds.
Each . ................................ $\$ 1.00$
Each. .D.P. $\$ 1.10$
Dozen. .D.P. $\$ 12.00$

The No, 15 Victor Jack is solid and substantially made of malleable iron throughout. It has a strong lifting foot cast on the rack and a large base. Parts are carefully machined and assembled. Finish, black japan. The handle stroke is very short with great leverage, making an easy lift. Height 10 inches, raise 6 inches, capacity one ton, weight $5 \frac{1}{2}$ pounds.

Each
.81 .25
Each..D.P. \$1.76
Dozen. . D.P. $\$ 20.00$

# The GIBSONGOMPANY 

Reliable Jacks



No. 1
Each. . D.P. $\$ 8.10$

The Reliable Jacks are constructed entirely of malleable iron and steel; are strong, safe, compact and durable. The design is such that the lever does not interfere with the springs, truss-rods or body of the car. It can be operated under any car. No. 00 Reliable Auto Jack, weight $4 \frac{1}{2}$ pounds, capacity 2 tons, adjustment $8 \frac{1}{2}$ to 14 inches, each
$\$ 2.00$
Each. D.P. $\$ 2.44$
Dozen. .D.P. $\$ 25.66$
No. 1 Reliable Auto Jack, weight 5 pounds, capacity 2 tons, adjustment $10 \frac{1}{2}$ to 18 inches, each.....
Each. . D.P. 82.44
Dozen. . D.P. \$26.66
No. 2 Reliable Auto Jack, weight 8 pounds, capacity 3 tons, adjustment 12 to 20 inches, each.
2.50

This is one of the most attractive propositions in the way of a light weight, compact, durable low-priced jack that has yet been placed before the automobile buying public. No loose parts to get lost; self-locking, quickly adjusted, with a 1,500 -pound capacity. The large side gear makes it very speedy in its operation. It is a very durable jack and takes up very little space in the tool box.
No. 31 Reliable Auto Jack, weight $4 \& \mathrm{lbs} .$, capacity 1,500 pounds, adjustment 8 to 12 inches, each.. $\$ 1.00$
Each. .D.P. $\$ 1.44$
Dozen. . D.P. $\$ 15.54$


The best Auto Jack, strong, efficient, reliable, easy working.

Here's the jack that actually does what every motorist wants a jack to do-lift the heaviest car in the shortest time with the least effort and the greatest ease.

Regular equipment with Oldsmobile, Autocar, Marmon, PopeHartford Six, etc.

Each
$\$ 6.50$
Each. .D.P. \$11.54

## Reliable Tire Saver

The Reliable Tire Saver and Garage Jack is quickly adjusted to any height of axle or hub without removing bolts or cotters. Has a raise of $2 \frac{1}{2}$ inches. It has a swivel top and leather-faced saddle. Is constructed entirely of malleable iron.
No. 52 Reliable Tire Saver Jack, weight per set 40 lbs., capacity 1,800 lbs., adjustment $11 \frac{1}{f}$ to 21 inches, per set of four. $\$ 8.00$
Per set of four. . D.P. $\$ 10.88$


No. 52

No. 32 Reliable Auto Jack, weight 5 No. lbs., capacity 1,500 lbs., adjustment 10 to 16 inches, each... $\$ 1.00$ Each..D.P. $\$ 1.44$ Dozen..D.P. $\$ 15.54$

## Hartford Red Rack Jack

Its Exceptional Convenience
The 26 -inch handle enables you to put the Red Rack Jack in place-under the car-ready for action from a startitg position. The liftiog and lowering movements are regulated by gush rod-right under your hand heck with the greatest comfort and convenience.

Its Exceptional Strength
The Red Rack Jack is sturdily built. It is strong, with the strengtb that correct design and good material impart. Therefore there 18 no pleasure car too beavy for it. Its metal base is broad and ribbed, to give stability and strength. Each Each..D.P. $\$ 4.4$

# Ohe GIBSON COMPANY INDIAPOLIS 

## JACKS AND AMBULANCES



The Weaver Auto Twin-Jack meets every requirement. As a lifting jack it is preferable to the ordinary type of jack as the 34 -Ibeb wheel base offers an absolutely safe and dependable support for dismantled cars. Brakes can be safely and quickly tested with the rear axle supported upon one of these jacks. The long extension bandle is also a great convenience. Economizes floor space. Cars can be moved sideways, "cut in" at right angles, of turbed completely around within their own leagth, thus effecting a great saving in door space in the shop or garage. Also a great convenience in unloading sutos from freight cars.

No treacherous ratchets, The screw holsting principle is a great factor for safety as there are no treacberous ratchets to jar loose or become dislodged and allow the car to fall.

Ball and Roller-Bearing Throughout. The gear nuts which ralse the screws each revolve upon ball-bearings. The caster yokes nlso turn upon ball-bearings and the wheels are equipped with rollers, Lifting leverage 400 to $1 ; 34$-inch wheel base; length of handle 26 Inches; $11 / 16$-1nch screws; diameter of wheels $41 / 4$ inches; width of tire 2 inches. Lifting capacity, $4,000 \mathrm{lbs}$. each. Shipping welght, 50 lbs . each.
Weaver Auto Twin-Jack, each.
. $\$ 12.00$
Each...D.P. $\$ 20.00$
Weaver Auto Twin-Jack, per pair.............................. 20.00 Per pair....D.P. $\$ 38.32$

## Weaver Extra Heavy Auto Twin-Jack



Weight, each, 110 pounds. 7 -inch Wheels.
Since the regular type of Auto Twin-Jack was put on the market there bave been numerous calls for a beavier Auto Twin-Jack for service under light trucks or extremely beavy pleasure cars where the conditions to be contended with are particularly difficult. So the extra heavy Auto Twin-Jnck was designed. It is identical with the regular jack in general principle, but has twice its strength and capacity.

Comparative Dimensions
Itegular Auto
Twia-Jack

Extra Heavy

Twin-Jack

Auto Twin-Jack
50 lbs.
Weight (each)
Lifting capacity
Diameter of wheels $\qquad$ 4,000 lbs.

Length of handle. $\qquad$ 42 inches 26 inches
Diameter of screw. $\qquad$ $1 \frac{1}{16}$ inch

9 inches
110 lbs. $8,000 \mathrm{lbs}$.
7 inches
34 inches
$1 \frac{3}{4}$ inch
$9 \frac{1}{2}$ inches
The easter yokes on the jack are very strongly designed and made of the best cast steel. The large gear nuts which raise the sorews ench revolve upon twenty $5 / 16$-inch steel balls which operate between two very heavy hard steel thrust bearIngs. Fach wheel yoke revolves upon two sets of steel balls. The 7 -jnch wheels epable enormous burdens to be transported over comparatively rough foors with almost incredible ease, Large roller bearlags in the bulos assist in reduciag the reslatance to the minimom
Weaver Auto Twin-Jacks, extra heavy, each........ $\$ 20.00$ Each...D.P. $\$ 33,32$
Weaver Auto Twin-Jacks, extra heavy, per pair.... 36.00 Per pair...D.P. $\$ 60.00$

Weaver Auto Ambulance



For economically transporting disabled automobiles to the repair shop, the Weaver Auto Ambulance is an absolute necessity.

## Attaches to Either Axle

One of the greatest advantages of the Weaver Auto Ambulance is that it can be quickly and securely clamped to either the front or rear axle of any car.

## Adjustments

The height of the standard may be adjusted as conditions demand and the length of the telescoping tongue may be varied at will from $6 \frac{1}{2}$ to 12 feet.

Roller Bearings, Cast Steel Wheels
The wheels are of cast steel and designed to withstand the severest service. They have broad roller bearings.

## General Construction

The cast steel wheels are 14 inches in diameter with 3 -inch tires. Full length steel axle, $1 \frac{1}{2}$ inches in diameter. The telescoping tongue is of double strength steel tubing, and adjusts every 61 feet to 12 feet.
Weaver Auto Ambulance, each.
$\$ 30.00$
Each....D.P. $\$ 53.32$

## Body Extension for Extra Heavy Auto Twin-Jacks



This body extension is designed to attach securely to the raising screws of the Weaver Extra Heavy Auto Twin-Jacks for the purpose of supporting an automobile from the frame bolsters, instead of from the axle.

Dismantled cars can be easily moved with the body supported in this manner. Either or both axles may be removed and the car rolled to an out-of-the-way place in the shop while the necessary repairs are being made upon the axles. No more cars propped up on boxes obstructing the floor space in front of the work bench.

Full Adjustments-The extensions can be quickly attached and adjusted to fit any width frame from 24 to 36 inches. The height has a convenient pin adjustment with a range of from 18 to 40 inches.

Construction-The clamps are very strongly designed. The inside jaws of the clamps are threaded to fit snugly into the threads of the heavy jack screws so as to prevent slipping. The clamps are securely tightened by heavy nuts. Shipping weight, 22 pounds.
Price, complete, each
$\$ 8.00$
Each. .D.P. \$14.22

## The GIBSONOOMPANY

JACKS, TOWING TRUCKS AND POLES, VEHICLE CASTERS, ETC.


The Combination Auto-Turn Jack and Towing Truck may rightly be called the biggest time saver and the most convenient article in the garage. It costs nowhere near as much as a turntable, but will turn cars more quickly and more easily. It is perfectly adapted to moving cars anywhere about the garage, no matter how cramped the space. The heaviest car can be easily and quickly handled by one man. This jack may be converted into a towing truck in three minutes when needed for towing in a disabled car. Adjustable in one motion to any height of axle. Simple, sturdy and strong. Almost impossible to get out of order. All castings made of refined malleable iron and are fully guaranteed.

## Each

. $\$ 35.00$
Each. .D.P. $\$ 62.22$


The Hovey Auto Jack is the Jack on wheels. While alt the oll style Jacks operate on the principle of the lever or of the screw, the Hovey Jack uses entirely new mechanical principles, namely the "wheel und axle" and the "shifting fulcrum."' In the Hovey Jack, the wheel, which, in the fields of transportation und power trabsmission, has done so much to lighten man's labor, is now for the first time made available to ellminate unnecessary labor and loss of time io "Jacking "pp" and "letting down" vehicle wheels,
Each
Each.. D.P. $\$ 10,5 \mathrm{E}$ Dozen...D.P. $\$ 10.00$

## Norwood Vehicle Caster

Don't lift or drag your cars around; use a Norwood Caster.

Cars can be run on or off either end.
 Fits and protects the tires when car is not in use; indispensable for handling cars in the garage, factory, private barns, etc.
No. 2 Norwood Caster, size $13 \times 24$ inches, for cars
of any weight, each Each..D.P. $\$ 13.32$

The danger and inconvenience of towIng disabled cars is practically eliminated by the Weaver Towing Pole. The brakes of the towing car are in absolute control of the rear car. No danger of jamming on down grades or on sudden stops in crowded streets. Neither is there dinger of a long tow line tripplog nedestrians, or being run into by otber cars.

> Spring Abserbs All Shecks

The heavy coil snring cushions all pulting or ramming sbocks so that there is no jerk or jur on cither car. The connecting clamps are composed of wide LARATHER PADDED bockets with 30 inch straps of best harness leatber with heavy huckle cast into the clamp.


## Weaver Towing Pole

## Auto Running Gear Aligner

This eut shows method of using Auto Kunning Gear Aligner in getting forward measurements of front wheel rims
Absolute accuracy attained with Auto Running Gear Aligner

The Auto Runding Gear Aligner is a new instrument of precision which tells instantly whether front wheels are in proper alignment and if not how much they are out. It does away with guess work and uncertain methods and supplies absolute accuracy in their place. No car owner would willingly fncur beavy tire expense, increase liability to trouble and make steering ditticult when he can avoid them all by laving his wheels property aligned. A garage owner or repair man can pick up buaby a job by having this aligner in bis shop. It will be an earner from the start, and will enable one to know that his work is absotutely accurate.
Fach
. $\$ 12.50$
Kach..D.P. $\$ 17.76$



We carry in stock Vulcan Springs that fit the following cars:


VULCAN SPRINGS-Continued

CHEVROLET-Continued

| Model | Location | Price | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| H-2-1914 | Upper quar, rear. |  | 1502 |
| H-4-1914 | Lower half, rear. | 7.50 | 1503 |
| H-4-1914. | Upper quar, rear | 4.00 | 1504 |
| 1915-Little Six | Front......... | 7:5 | 1505 |

## COLE

| 30-up to 1913 | Front | 87.00 | 1450 |
| :---: | :---: | :---: | :---: |
| $30-u p$ to 1913 | Lower half, rear | $\times 75$ | 1451 |
| 40-up to 1913 | Front | 7.25 | 1452 |
| 40-up to 1913 | Lower half, roar | 9.25 | 1453 |
| 40-up to 1913 | Upper quar., rear | 5.00 | 1454 |
| 6-cyl.-1913 | Front | 8.00 | 1455 |
| 6 -cyl.-1913 | Lower half, rear | 9,50 | 1456 |
| 4-1914. | Front. | 7.00 | 1457 |
| 4-1914 | Lower half, rear | 11.25 | 1458 |
| 6-1914. | Front | 7.50 | 14.59 |
| 6-1914 | Lower half, rear | 13500 | 1460 |
| 6-1914 | Upper quar., rear | 8.00 | 1461 |

## DETROITER

| Up to 1915 Up to 1915 Up to 1915 | Front <br> Rear Side <br> Rear Cross. | $\begin{array}{r} \$ 5.00 \\ 5.00 \\ 5.25 \end{array}$ | 1600 1601 1602 |
| :---: | :---: | :---: | :---: |
| DODGE |  |  |  |
| $\begin{aligned} & 1915 . \\ & 1915 . \\ & 1915 . \\ & 1916, \\ & 1916 . \\ & 1916 . \end{aligned}$ | Front, Lower half, rear, Upper quar., rear Front. Lower rear. . . . Upper rear . . . | $\begin{array}{r} 85.00 \\ 7.60 \\ 3.00 \\ 5.00 \\ 7.75 \\ 3.00 \end{array}$ | 1550 1561 1552 1553 1544 1552 |

E. M. F.

| 30-1909-10-11 | Front | \$6.00 | 1700 |
| :---: | :---: | :---: | :---: |
| 30-1900-10-11 | Lower half, rear | 6.00 | 1701 |
| 30-1909-10-11 | Upper half, rear | 6.50 | 1702 |
| 30-1912 | Front. | 5.50 | 1703 |
| 30-1912 | Lower haif, rear | 6.75 | 1704 |
| 30-1912. | Upper half, rear | 7.00 | 1705 |

## EMPIRE

| 31-40-up to 1915. | Front. . . | \$5.00 | 5050 |
| :---: | :---: | :---: | :---: |
| $31-40-u p$ to 1915. | Lower, rear | 5.00 | 5051 |

## EVERETT

| $30-1911$. | Front | 86.25 | 1800 |
| :---: | :---: | :---: | :---: |
| 30-1911. | Lomer half, rear. | 5.25 | 1801 |
| 30-1911. | Upper half, rear. | 6.25 | 1802 |
| 6-48 | Front. | 7.25 | 1803 |
| $6-48$ | Lower half, rear. | 7.25 | 1804 |
| 6-48 | Upper half, rear. | 7.25 | 1805 |
| 36. | Front | 6.75 | 1806 |
| 36 | Lower half, rear | 7.50 | 1807 |
| 36 | Upper half, rear. | 7.50 | 1808 |

FEDERAL TRUCKS

| G. $\&$ H | Front | 38.75 | 1850 |
| :---: | :---: | :---: | :---: |
| G. $\& \mathrm{H}$ | Rear. | 17.50 | 1851 |

## FLANDERS

$20-1910-11$
$20-1910-11$
$20-1910-11$
$20-1912 \ldots$
$20-1912 \ldots$

|  |  |  |
| :--- | ---: | ---: |
| Front, |  |  |
| Lower half, rear........... | 85.00 | 1900 |
| Upper hal, rear........ | 6.00 | 1901 |
| Lower half, rear....... | 6.00 | 1902 |
| Upper half, rear........ | 6.00 | 1903 |

FORD

| Model | Location | Price | Stock No. |
| :---: | :---: | :---: | :---: |
| T . . . . . . . | Frobt |  | 2000 |
| T-Standard Trend | Rear | pationa |  |
| T-Routhern Tre | Rear. |  | 2002 |
| N-R-8 |  | Ford Section | 2000 2003 |

## HAYNES

| 19-20-21 | Front | \$7.25 | 3150 |
| :---: | :---: | :---: | :---: |
| 19 | lower half, rear | 8.00 | 3151 |
| 19 | Wpper gear, rear | 4.09 | 3152 |
| 21 | Lower half, rear | 8.50 | 3153 |
| 21 | Upper quar., rear | 4.25 | 3154 |
| 23 | Front | 8.00 | 3155 |
| 23 | Lower half, rear | 12.00 | 3156 |
| 23 | Upper quar., rear | 6.50 | 3157 |

## HUDSON

## $20-1910-11$ $20-1910-11$ $20-1910-11$ $33-1911 \ldots$ $33-191 \ldots$ $33-1911 \ldots$ $33-1912 \ldots$ $33-1912 \ldots$ $33-1912 \ldots$

Front
Lower half, rear
Tpper quar., rear Front
Lower half, rese.
Upper quar., rear Froat.
Lower half, rear. r, Speedater and Coupe.)

| 37-1913. | Front | 7,50 | 2106 |
| :---: | :---: | :---: | :---: |
| 37-1913. | Lower half, rear | 10.00 | 2109 |
| 37-1913. | Upper guar., resp | 5.75 | 2110 |
| (Used on Touring. Torpedo and Coupe.) |  |  |  |
| $\begin{aligned} & 54-1913 . \\ & 54-1913 . \end{aligned}$ | Front <br> Lower balf, rear 9 leaves. | \$. 00 | 2111 |
|  |  |  |  |
|  |  | 12.50 | 112 |

(Used on Touring Car and Torpedo.)
54-1913.
Lomer half, rear
11 leaves........... 15.00
(Used on Touring Car and Torpedo.)
54-1913.
Upper quar., rear
6 leaves.
5.00
(Used on Touring, Torpedo and Commercial Roadster.)
54-1913
Upper quar., rear 8.00

S leave
2115
(Used on Touring Car and Torpedo.)


HUPMOBILE

| 20-All Models | Front | \$1.00 | 2200 |
| :---: | :---: | :---: | :---: |
| 20-Roadster, Std. Trd | Rear | 6.00 | 2201 |
| 20-Touring, Std. Trd | Rear | 6.00 | 2202 |
| 20-Roadster, Sou. Trd | Resar. | 6.50 | 2203 |
| 20-Touring, Sou. Trd | Rear | 6.50 | 2204 |
| 20. | Auxiliary Top Leaf | 1.60 | 2205 |
| 32-1912 | Frout. | 5.00 | 2206 |
| 32-1913-14 | Front | 5.00 | 2207 |
| 32-1912-13-14. Std. Trd. | Rear. | 10.00 | 2208 |
| 32-1912-13-14, Sou. Trd | Rear | 11.50 | 2209 |

## VULCAN SPRINGS-Continued

HUPMOBILE-Continued

| Model | Location | Price | Stock No. |
| :---: | :---: | :---: | :---: |
| 32-All Models. | Auxiliary Top Leaf. | \$2.00 | 2210 |
| $\mathrm{K}^{\prime \prime}-1915$ | Front . . . . . . . . . . | 600 1000 | 2911 |
|  | $\underset{\text { Rear }}{\text { Front }}$ | 10.00 7.75 | 2212 |
| N-7-pass.-1916 | Front Rear. | ${ }^{7.75}$ | 2214 |


| INTERSTATE |  |  |  |
| :---: | :---: | :---: | :---: |
| 40-1913 | Front | 85.00 | 2250 |
| 40-1913 | Lower rear | 1025 | 2251 |
| 40-1913. | Upper rear | 5.25 | 2252 |
| 45-1914. | Front. | ${ }^{9.75}$ | 2253 |
| ${ }_{45-1914}$ | Upper rear | ${ }_{6.75}^{11.25}$ | 2255 |
| T-1915-1916 | Front. | 6.00 | 2256 |
| T-1915-1916 | Lower rear | 7.50 | 2257 |
| T-1915-1916 | Upper rear | 3.00 | 2258 |

# The GIBSONGOMPANY 

VULCAN SPRINGS-Concluded


# The GIBSONCOMPANY $\bar{A}$ INOLIS 

## SPRING CLIPS, SPRING REPAIRERS, CLIP YOKES AND SPRING LINKS


 Ford Rear ...............For Model $\mathbf{T}$ Ford............D.P. 88.00

## Buckeye Auto Spring Repairer



The Buckeye Spring Repairer will take care of any slze ppring broken elther at center, off center or at the ghackle. The bodles are made of high grade mallenble iron, the "U" bolts of wrought iron and the under clips of malleable.

An onder wood support is also furolsbed wbich prevents ellpplag when the repalrer is uaed for spring broken off center or at sbackle. This outit comes black enameled nod in packed In a strong telemcoped box.
Berh
Fach..D.P. \$38B


No. FU60 Assortment of 60 No. 145 Spring Clips, 14 sizes, put up in a substantial wooden box with hinged cover especially for repair shop. Per Box nt as follows:


## No. 38 Heavy Clip Yokes



Made Cold From Bar Stock
These Yokes are drilled and reamed, making a perfect fit for the bolt.

| No. | Distance <br> Between Holes | Slzes of Holes | Per |
| :---: | :---: | :---: | :---: |
| 38-B. | ...1交 in. | 7/16 in. | D.P. $\$ 1.66$ |
| 38-C. | . 13 in | 7/16 in. | D.P. 1.76 |
| 38-D. | 2 in. | 7/16 in. | D.P. 2.00 |
| 38-F. | 2 in . | $\frac{1}{1}$ in. | D.P. 2.44 |
| 38-G. | $2 \frac{1}{2} \mathrm{in}$. | $\frac{1}{2} \mathrm{in}$. | D.P. 2.55 |
| 38-H. | .21 $\frac{1}{} \mathrm{in}$. | $\frac{1}{2} \mathrm{in}$. | D.P. 2.66 |

## No. 300 Spring Links



Handy for repairs. Forged from Special Grade O. H. Steel.


# The GIBSONOOMPANY 

SPRING SPREADERS, OILERS AND SHACKLE BOLTS

## Knowlson's Spring Leaf Spreader



Made of the highest grade drop forging, nickel plated, polished and well finished; adjustable to any size auto spring; separates the leaves just enough to insert the lubricant; does away with the jacking up of the car; used as a clamp for broken springs.
Each
$\$ 1.50$
Each. .D.P. \$2.44


Tomahawk Spring Lubricator


Tomahawk Spring Lubricator makes spring lubrication easy. It will increase the comfort of riding and stops the squeak, prevents the leaves from rusting together and breaking. The simplest, quickest and most effective tool on the market for spring lubrication. Made of the finest drop-forged steel, hardened and nickel plated. Graphite grease is fed from container in handle. Any form of grease can be fed. One blow of the hammer, a twist of the wrist and the trick is done.
Each
$\$ 1.00$
Each. .D.P. \$1.66

## Cincinnati Spring Spreader



Quickly spreads the leaves of a spring far enough apart to be thoroughly oiled; not necessary to loosen clip or jack up frame.

Eliminates the necessity of taking springs apart for lubrication.
Each, japanned
Each. . D.P. \$0.44


The system consists of neat little boxes, clamped on the springs, which feel oil from a reservoir through a felt pad into the space between the spring leaves, just as the oil is needed. The boxes are easily and quickly attached to any car or type of spring. Once on the car, the only care required is a little oil in each box occasionally.

## Springs Need Oil

No use arguing-springs need oil. If they don't get it, they will rust between the leaves. The rust may cause a spring-break-it surely will cause stiff spring action, which means hard riding. Oil positively prevents squeaks and rust.

## The Price

The Brown System is sold at $\$ 1.00$ a unit-each oil box being a unit. Two units are required for each half elliptic spring. A car with three-quarter elliptic or platform springs requires ten units; a cantilever job, eight units; a Ford, four units.
Per unit. .D.P. $\$ 1.66$

## Spring Shackle Bolts



Spring Shackle Bolt. This bolt is being made to meet the demand for a low price repair bolt, and used largely in connection with shock absorbers. It is made from open hearth steel, fitted with grease cup and spring, castle nut, cotter pin; case hardened finish. Carried in stock in the following sizes:


Shackle Bolts in any of the above sizes, each......... $\$ 0.60$ Each....D.P. $\$ 0.55$

# Ohe GIBSON COMPANY $\overline{\text { OnPOLIS }}$ <br> HORN AND CUT-OUT VALVES 

Husk Valve



These valves are easily and quickly installed, take up but very little space and require absolutely no attention after installation.

No. 100 Husk Horn Valve, Smooth Bore, 1-in........ D.P. $\$ 1.20$ No. 101 Husk Horn Valve, Std. Iron Pipe, thread 1-ln. . .................................................. D. 1.30
(No. 101 opening measures $11 / 4-\mathrm{in}$., flts 1 -in. iron plpe.) No, 102 Husk Horn Valve, Smooth Bore, 11/4-in......D.P. 1.30 No. 103 Husk Horn Valve, Smooth Bore, $17 / 8$-in......D.P. 1.20 No. 104 Husk Horn Valve, Std. Iron Pipe, thread

11/4-in. ................................................... 1.32
(No, 104 opening measures $11 / 2-1 \mathrm{n}$., fits $11 / 4-\mathrm{in}$, iron pipe.)
No. 105 Husk Horn Valve, Smooth Bore, $11 / 2$-in......D.P. 1.32 No. 106 Husk Horn Valve, Smooth Bore, 15/in......D.P. 1.32 No. 107 Husk Horn Valve, Std. Iron Pipe, thread

(No. 107 opening measures $10 / 4-\mathrm{in}$., fits $11 / 4-\mathrm{in}$. fron pipe.)
No. 108 Husk Horn Valve, Smoeth Bore, $14 / 4-\mathrm{in}$...... D.P. 1.55 No. 109 Husk Horn Valve, Smeeth Bore, 17/4-in...... D.P. 1.55 No. 110 Husk Hern Valve, Smooth Bore, $\mathbf{z - i n}$........ D.P. 1.66 No. 111 Husk Hern Valve, Smeeth Bore, 2 $1 / 6-\mathrm{in} . . .$. D.P. 1.66 No. 112 Husk Horn Valve, Std. Iron Pipe, thread

2-ln. ............................................ P. 1.66
(No. 112 opening measures $21 / 4-\mathrm{in}$., fits 2 - in , Iron pipe.) No, 113 Husk Horn Valve, Smooth Bore, $21 / 4-\mathrm{in}$..... D.P. 1.66 No. 114 Husk Horn Valve, Smooth Bore, 2\%-in...... D.P. 1.77 No. 115 Husk Horn Valve, Smooth Bere, $21 / 2-\ln$...... D.P. 1. 77 No. 116 Husk Horn Valve, 8mooth Bore, 2\%-in.....D.P. 2.10 No. 117 Hask Horn Valve, Std. Iron Pipe, thread $21 / 2$ in. .....................................P.P. 2.10 (No. 117 opening measures $2 \pi / 4-\ln$., fits $21 / 2-\mathrm{in}$. iron pipe.) Ne. 118 Husk Horn Valve, Smooth Bore, 2 $\% / \mathrm{in}$...... D.P. 2.10 No. 119 Hask Horn Valve, Smooth Bore, $27 / 6$-in......D.P. 2.22 No. 120 Husk Horn Valve, Smooth Bore, 3 -in........D.P. 2.22

## Bolt-on Horn Valve



No. 78 Bolt-on Type Horn Valve, 1-inch ........D.P. $\$ 1.20$ No. 79 Bolt-on Type Horn Valve,
$1 \frac{1}{\mathrm{t}}$-inch ......D.P. 1.20
No. 80 Bolt-on Type Horn Valve,
$1 \frac{1}{4}$-inch ......D.P. 1.20
No. 81 Bolt-on Type Horn Valve,
13-inch ......D.P. 1.20
No. 82 Bolt-on Type Horn Valve, $1 \frac{1}{2}$-inch ......D.P. 1.20 No. 83 Bolt-on Type Horn Valve, $1 \frac{5}{5}$-inch..........D.P. 1.32 No. 84 Bolt-on Type Horn Valve, $1 \frac{1}{4}$-inch..........D.P. 1.32
No. 85 Bolt-on Type Horn Valve, $1 \frac{1}{6}$-inch.
D.P. 1.55

No. 86 Bolt-on Type Horn Valve, 2-inch..........D.P. 1.55
No. 87 Bolt-on Type Horn Valve, $2 \frac{1}{8}$-inch.
D.P. 1.77

No. 88 Bolt-on Type Horn Valve, $2 \frac{1}{4}$-inch.........
D.P. 1.77

No. 89 Bolt-on Type Horn Valve, 23 -inch.
D.P. 1.77

No. 90 Bolt-on Type Horn Valve, $2 \frac{1}{2}$-inch.
D.P. 1.77

No. 91 Bolt-on Type Horn Valve, $2 f$-inch.
D.P. 2.22

No. 92 Bolt-on Type Horn Valve, 21 -inch.
D.P. 2.22

No. 93 Bolt-on Type Horn Valve, $2 k$-inch.
D.P. 2.22

No. 94 Bolt-on Type Horn Valve, 3 -inch.
D.P. 2.22


No. 200 Rudy Cut-out Valve, 1-inch, Smooth Bore, each
D.P. $\$ 0.77$

No. 201 Rudy Cut-ont Valve, $1 \frac{1}{\mathrm{t}}$-inch, Smooth Bore, each
.D.P. . 77
No. 202 Rudy Cut-out Valve, $1 \frac{1}{4}$-inch, Smooth Bore, each
D.P. . 77

No. 203 Rudy Cut-out Valve, 1 1 -inch, Smooth Bore, each
D.P. . 77

No. 204 Rudy Cut-out Valve, $1 \frac{1}{2}$-inch, Smooth Bore, each ...............................................................D.P.
No. 205 Rudy Cut-out Valve, $1 \frac{1}{8}$-inch, Smooth Bore, each ...............................................................D.P. .88
No. 206 Rudy Cut-out Valve, $1 \frac{1}{4}$-inch, Smooth $\underset{\text { D.P. }}{\text { Bi. }}$ each ................................................................D.P. .88
No. 207 Rudy Cut-out Valve, $1 \frac{z}{z}$-inch, Smooth $\underset{\text { D.P. }}{\text { Bore }}$ each ........................................................P.

No. 209 Rudy Cut-out Valve, $2 t$-inch, Smooth Bore, each ..............................................................D.P. 1.22

No. 210 Rudy Cut-out Valve, $2 \frac{1}{4}$-inch, Smooth Bore, each
D.P.

No. 211 Rudy Cut-out Valve, $2 \frac{1}{k}$-inch, Smooth Bore, each ...........................................................D.P. 1.22

No. 212 Rudy Cut-out Valve, $2 \frac{1}{2}$-inch, Smooth Bore, each ........................................................ 1.32

No. 213 Rudy Cut-out Valve, $2 \frac{1}{6}$-inch, Smooth Bore, each
D.P. 1.32

No. 214 Rudy Cut-out Valve, $2 \frac{2}{4}$-inch, Smooth Bore, each .............................................................D.P. 1.32

No. 215 Rudy Cut-out Valve, $2 \frac{7}{6}$-inch, Smooth Bore,
 1.32

No. 216 Rudy Cut-out Valve, 3-inch, Smooth Bore, each D.P. 1.32

## G-P Muffler Cut-Out



The G-P Muffler Cut-out is designed along practical lines and, while there is no superfluous metal, there is no sacrifice made that might impair its strength. Its simplicity is commendable - the illustrations herewith show both interior and exterior.
The valve-tongue and its seat are so constructed that when the cut-out is open the line to the muffler is completely shut off and the correct angle is obtained for deflecting the exhaust gases freely and without possibility of back pressure.
G-P Muffler Cut-out for $1 \frac{1}{4}$-inch to $1 \frac{1}{4}$-inch pipe, in-

## clusive, each

.84 .50
Each. D. $\mathrm{P} . \$ 7.50$
G-P Muffler Cut-out for 2 -inch to 21 -inch pipe, inclusive, each
5.00

Each. D.P. $\$ 8.33$
G-P Muffler Cut-out for $2 \frac{1}{4}$-inch to $3 \frac{1}{4}$-inch pipe, inclusive, each
5.50

Each. .D.P. $\$ 9.10$
Above sizes refer to outside diameter of exhaust pipe. In ordering be sure and specify size.

## Ohe CIBSONOMMY

## CUT-OUTS, CUT-OUT OUTFITS, PULLEYS, CABLE AND SPRINGS



In the Gray Muffler Cut-out the outlet is large and turned downward at an angle of 30 degrees which throws the exhaust backward and downward, preventing it raising the dust. It is attached by cutting a notch in the fipe and clamping the cut-out over the opening. The valve is held against its seat by a strong spring. The lever is adjustable and may be placed on either side. The cut-out is made of malleable iron throughout and is furnished to fit all sizes of exhaust pipes.
No. 4-C For pipe $1 \frac{1}{4}-\mathrm{in}$. outside diameter, each. . . $\$ 1.50$ Each. .D.P. $\$ 2.48$

$$
\text { No. 5-A For pipe } 1 \frac{1}{8} \text {-in. outside diameter, each. . . . } 1.50
$$

## Each. D.P. ${ }^{2} 2.48$

No. 5-B For pipe $1 \frac{1}{2}-\mathrm{in}$. outside diameter, each.... 1.50 Each. . D.P. $\$ 2.48$
No. 6-A For pipe 1 양n. outside diameter, each.... 1.65 Each. .D.P. 82.74
No. 6-B For pipe $1 \frac{1}{4}$-in. outside diameter, each.... 1.65 Each. .D.P. $\$ 2.74$
No. 7-A For pipe $1 \frac{7}{6}$-in. outside diameter, each.... 1.75 Each. . D.P. $\$ 2.90$
No. 7-B For pipe 2 - in. outside diameter, each.... 1.75 Each. . D.P. $\$ 2.90$
No. 7-C For pipe $2 \frac{1}{8}$-in. outside diameter, each. ... 1.75 Each. .D.P. $\$ 2.90$
No. 7-D For pipe 24 -in. outside diameter, each.... 1.75 Each. .D.P. $\$ 2.90$
No. 8-A For pipe $2 \frac{1}{6}$-in. outside diameter, each. ... 2.00 Each. D.P. $\$ 3.32$
No. 8-B For pipe 24 -in. outside diameter, each.... 2.00
Each. D.P. $\$ 3.32$
No. 8-C For pipe 28 -in. outside diameter, each. . . 2.25
Each. D.P. $\$ 3.76$
No. 8-D For pipe 23-in. outside diameter, each. . . 2.25
Each. .D.P. $\$ 3.76$
No. 8-E For pipe $2 \frac{7}{6}$-in. outside diameter, each.... 2.50
Each. D.P. $\$ 4.18$
No. 8-F For pipe 3 - in. outside diameter, each.... 2.50
Each. .D.P. $\$ 4.18$

## Cut-Out Outfits

For the Dodge, Maxwell and Studebaker Cars


No. 10 Cut-out Outfit, Dodge, 2 -inch bore, complete, packed in carton, each
$\$ 1.10$
Each.. D.P. $\$ 1.54$
No. 11 Cut-out Outfit, Maxwell, $1 \frac{5}{8}$-inch bore, complete, packed in carton, each

## Each. .D.P. \$1.54

No. 12 Cut-out Outfit, Studebaker, 2 -inch bore, com-
plete, packed in carton, each.
1.10

Each. . D.P. \$1.54


4-in. Galvanized Swivel Pulleys, each. $\$ 0.10$ Dozen....D.P. $\$ 1.54$
1-in. Galvanized Swivel Pulleys, each .15
Dozen....D.P. $\$ 1.76$
Chain Cable


Chain Cable for Pedal Connection to borns or eut-out valve Heavily coppered to prevent rust and will not rust or stretch. Will last three times as long as wire cable and will run through an ordinary pulley more easily.
No. 8 Coppered Chain Cable, per ft .
$\mathbf{\$ 0 . 1 0}$
Per foot....D.P. $\$ 0.08$

## Wire Cable


t -in. Wire Cable for pedal connections to horn and
cut-out valyes, per ft.
$\$ 0.06$
Per foot....D.P. $\$ 0.06$

## Springs Oil Tempered



Box of 25 Assorted Oil Tempered Springs, per
box …............................................................D.P. \$0.88

## Cut-Out and Pedal Springs



No. 1 Oil Tempered Springs, length 53 inches, diameter
5 ibch, gauge 11. per dozen ................................... 80.77
Per Dozen...D.P. \$0.80
No. 2 Oil Tempered Springs, length 5 inches, diameter $\frac{1}{1}$
inch, gauge 17, per dozen
Per Dozen.. D.P. $\$ 0,66$
No. 3 Oil Tempered Springs, length $3 \frac{1}{2}$ inches, diameter $\%$ inch, gauge 11, per dozen
Per Dozen.. D.P. 80.40
No. 4 Oil Tempered Springs, length $1 \frac{1}{2}$ inches, diameter $\frac{7}{6}$ inch, gauge 16, per dozen

# The GIBSON OMPAY 



This Pedal is similar to the " M " in construction and also used for the same purposes. It is equipped with a tension spring.

No. 4 Pedal Style Y, black, each Each....D.P. \$0.33 Dozen....D.P. \$3.32
No. 5 Pedal Style Y, brass, each. .50 Each....D.P. \$0.44 Dozen....D.P. \$4.77
No. 6 Pedal Style Y, nickel, each...................... . 60 Each....D.P. \$0.44 Dozen...D.P. \$4.77

style 6
No. 7 Pedal Style G, black, each ......................... $\$ 0.25$ Each....D.P. $\$ 0.26$ Dozen....D.P. $\$ 2.77$
No. 8 Pedal Style G, brass, each $\qquad$
Each....D.P. $\$ 0.33$ Dozen.... D.P. $\$ 3.32$
No. 9 Pedal Style G, nickel, each. . 50
Each....D.P. $\$ 0.33$ Dozen...D.P. $\$ 3.32$

This is a substantial locking Pedal for cut-out and similar purposes. Locked and released by a tap of the foot.

Style L


## Horn and Cut-out Pedals



Style " R " is a very practical pedal for all purposes. The lower lever is operated by the pressure of the foot on the upper lever. By sliding the foot forward the travel of the lower lever increases, thereby opening the throttle, the foot resting in a comfortable position without strain. The floor plate is finished in black; the tos clip in either nickcl, brass or black, as specified.
No. 13 Pedal Style R, black, each
. $\$ 0.50$
Each...D.P. $\$ 0.55$ Dozen...D.P. $\$ 6.10$
No. 14 Pedal Style R, brass, each $\qquad$ .80 Each...D.P. \$0.88 Dozen....D.P. \$9.44

This rolling Pedal is operated by a sliding motion of the foot forward or backward to open or close the throttle. There is a friction fulcrum which holds the pedal in a firm position after removing the foot and the position will not be changed until it is again moved by the foot. Finished in either nickel, brass or all black.


No. 16 Pedal Style C, black, each ............. $\$ 0.66$ Each...D.P. $\$ 0.66$ Dozen....D.P. $\$ 7.22$
No. 17 Pedal Style C, brass, each.
Each...D.P. $\$ 0.88$ Dozen...D.P. $\$ 9.44$
No. 18 Pedal Style C, nickel, each85

Each...D.P. $\$ 0.88$ Dozen....D.P. $\$ 9.44$

## Gray Lock Pedals



The most simple and durable Lock Pedal made. It is small, attractive and easy to operate. Push the button down and it lockstouch the catch and it releases.

To attach, simply bore a 5 -in. hole in foot boardremove push rod and upper nut-slip the threaded part of Pedal through holescrew the nut on top until catch is in desired position and the top of nut is flush with top of Pedal, then secure by tightening lower nut.
No. 19 Gray Lock Pedal, black, each $\qquad$ $\$ 1.00$
Each....D.P. $\$ 1.00$ Dozen....D.P. $\$ 10.66$
No, 20 Gray Lock Pedal, brass, each. $\qquad$ 1.10

Each....D.P. \$1.22 Dozen....D.P. $\$ 13.32$
No. 21 Gray Lock Pedal, nickel, each. 1.20

Each....D.P. $\$ 1.33$ Dozen....D.P. $\$ 14.44$
No. 22 Gray Pedal without Lock, black, each........ 75
Each...D.P. \$0.77 Dozen....D.P. \$8.33
No. 23 Gray Pedal without Lock, brass, each........ .85 Each...D.P. $\$ 0.88$ Dozen....D.P. $\$ 9.44$
No. 24 Gray Pedal without Lock, nickel, each........ 90 Each....D.P. $\$ 1.00$ Dozen....D.P. $\$ 10.00$

# ซhe GIBSONGOMPANY 

## PEDAL PADS，MATTING AND HEEL PLATES

## ＂Perfection＂Pedal Pads

＂Perfection＂Pednl Pads are mounted from higb grade solid pliable rubber．The upper surface，with deep corrugated ribs，
 The prip for the foot The pad is firmaly se cured in a cola rolled steel frame，which is attacbed to the pedal by metal prongs．Tbe frame is bandsomely nickeled and adds greatly to the looks of the car．An inexperi enced person can easily clamp pad on pedal in
Pierce－Arrow，Ford，Cadillac
No drilling of holes in pedal or bolts necessary
Style＂A＂－Briscoe 1915－16，Car－Nation，Grant，Hollier
1916，MeFarlan 1914，Oakland 191z－13，Packard 1910－13．
Paige－Detroit 46．Stevens－Duryea， $15 \times 32$ ，per set．．．．．．．．$\$ 1.00$ Per Set，．D．P．$\$ 1.66$
Style＂B＂－De Dion Bouton，Kabier，Renault，azxab，Con－ vex，per set
． 1.50
Per Set．．D．P．$\$ 2.48$
Style＂C＂－CorreJa，Jeffrey 1915－16，Lancia 1915－16，Lex－
ington，Metroyol，Owen－Magnetic，Pierce－Arrow， $28 \times 48$ ． per set
Per Set．，D．P．$\$ 2.90$
Style＂D＂－Ford（Three Pisds），per set
Per Set．．D．P．$\$ 1.66$
Style＂E＂－Peerlens 191？－13，3x3，balf round，per set ．．．．1．50
Per Set．，D．P．\＄2．48
Style＂E－X＂－Peerless 1914－15－16，31x3子，half round，per set 1.50 Per Set．．D．P．$\$ 2.48$
Style＂F＂－Cadillac 1912，Haynes 1914，Herfl－Brooks 1914－
15，Overland，Pilot，Willys－Knight 1916， $22 \times 4$ ，oval， per set
Per Set．，D．P．$\$ 2.08$
Style＂G＂－Hudson S－J－R，Singer 1915，Studebaker 1915－ 16． $23 \times 33$ ，per set
Per Set，D．P，$\$ 2.00$
Style＂H＂－Locomobile 1912，23x35，per set ．．．．．．．．．．．．．．．．．．． 1.25 Per Set．．D．P．\＄2，08
Style＂H－X＂－Chevrolet 490，Locomobile 1913－14－15－16， $3^{\prime \prime}$

Per Set．，D．P．$\$ 2.08$
Style＂I＂－Abbott－Detroit，Case 1914．Croxton．E－M－F， Fischer－Magic，Garford，King 1914，Faige－Detroit 36, Paige－Detroit 1916，Palmer－N．．Studebaker 1914.
Willys－Knight， $2 \frac{1}{2} x 3 \frac{1}{2}$ ，per set ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．$\$ 1$
Per Set，D．P．$\$ 2.08$
Btyle＂J＂－Auburn 1912－13，Buick 1914．24，95，30，31．36． Buick 1915，C，24，25，Detroiter 1915，11x4，per set ．．． 1.25 Per Set．．．D．P．$\$ 2.08$
Style＂J－X＂－Allen，Austin 1916，Model 46，Cadillac 1914－ 15－16，Chalmers 1916 （6－40），Crawford 1915．Imperial． Marion 1916，Maxwell 1914，Model 25，Stutx，2x33． oval，per ket
Per Set．．D．P，$\$ 2.00$
Ptyle＂K＂－Amplex，Cadillae 1913．Cameron，Empire 1915, Great Western，Herreshoff，Jackson 1915－16，Lyons－ Knight 1914－16．Oakland 1914－16，Packard 1914－16，
Pope－Hartford，Speedwell 1914，Waverley 1916． $24 x 33$.
oval，per set
Per Set．D，P．$\$ 2.08$
Style＂L＂－Auburn 1916，Simplex，Sun 1916，3x32，per set 1.75 Per Set．．D．P．$\$ 2.10$
Style＂L－X＂－Auburn 1915，Benham．Chatmers 1914．Cole
1914，Havers，Kissel－Kar， $3 \times 31$ ，per set ．．．．．．．．．．．．．．．．．．．． 1.75 Per Set，D．P．$\$ 2.90$
Per Set．D＂P．Fiatt 1913－14．Knox，Lezier 4 Cylinder，Lexier
1916，Maxwell 1914，Mercedes．Metz 1914，Regal 1914. $2 \mathrm{~A} \times 3 \mathrm{~s}$ ．per set
Per Set．，D．P， 82.08
Style＂M－X＂－Chalmers 1915，Chalmers 1916．Cole 1915－16，
H．A．L．1916．Moon 1914－15－16．Fullman 1916，White
1915， $2 \pi \times 3 \frac{1}{2}$ ，per set
Per Set．，D P．$\$ 2.48$
Style＂N＂－Hnpmobile 1914，MeIntyre，23x31，per set ．．．．． 1.25
Per Set．，D．P．$\$ 2.08$
Style＂N－X＂－Marion 1014，218x33．per set
Per Set．．D．P．$\$ 2.08$
Style＂O＂－Buick 1914，368，37，38，40，43，55－6，Buick 1915，
all other cars，Buick 1916，Cartercar．Crow，Elkhart
1916，Keeton．Metallurgique，Oldsmobile，Pullman 1915.
Scripps－Booth Velie 1915，Model 15，23x4，per set ．．． 1.75 Per Set，D．P．$\$ 2.90$
Style＂O－X＂－National 1915－16，Winton 1914， $28 \times 4$ ，per set 1.75 Per Set，D．P．$\$ 2.90$
Style＂P＂－Fiatt 1913－14，Mitchell 1914－15．2 ${ }^{\mathbf{0}} \mathrm{x} 3 \mathrm{~s}$ ．per set 1.25 Per Set．D．P．$\$ 2.08$
Per Set．D．P．Mercer 1015－16，Minerva．Reo， $25 \times 43$ ．oval and convex，per set
Per Set．，D．P．$\$ 2.90$
Style＂R＂－Marmon 1914，Winton 1913，2】x4，per set ．．．． 1.75
Per Set．．D．P．$\$ 2.90$
Style＂S＂－Kline－Car，S－G－V，21x4，concave，per set ．．．．．．1．75 Per Set．．D．P．\＄2． M $^{2}$
Style＂T＂－Davis 1915－16．Iranklin 1914－15－16．Interstate， MeFarlan 1915－16， $22 \times 32$ ，Der set
1.50 Per Set．．D．P．$\$ 2.48$
Style＂T－X＂一King 1915 （Model D－1916）．Regal 1915．Rem－ ington 1915，Weatcott． $22 \times 4$ ．per set
Per Set ．，D．P．$\$ 2.94$

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QUICKLY ATTACHED

shoe，air is compressed in cell shoe，air is compressed in cells applied on pedal by sole of eftectively absorbs all vibration and jar．Ingtantls attached

In moments of emergency，when strong pressure is exerted on pedal，the air is pressed out of cells and the resulting Macuum absolutely prevents the feet from slipping
Mason－Allan Cushion Pedal Pads for any car，Der set ．．．．$\$ 1.00$
Per set．D．P， 81 fif Per set．．D．P．$\$ 1.66$

NOTE－When ordering give year and make of car．

## Pyramid Rubber Matting



Price per square yard
Per square yard．．D．P．\＄i．4


## Aluminum Matting

Aluminum Matting does not rust，tarnish，nor stain from the effects of oil，grease or gasoline，as does rubber matting，and can always be restored to its original brightness when washing the car．
The Mattiog costs less than good rubber and tasts longer． and is very durable．
Aluminum Matting， $1 \geq$ inches wide，per square foot．．．．$\$ 0.60$ Per square foot．．D．P．so．8s
Aluminum Matting．it inches wide，per square foot ．．．．．． 60 Per square foot．．D．P．$\$ 0 . \mathrm{Ss}$


## Heel Plate

Alnminum Heel Plates 6x101，6 in． Made of beavy aluminum having 1／4－inch pyramid with $1 / 2$－inch plain borders．Prevent wearing holes in floor covering．
Each

Each．．D．P．\＄0．23

# The GIBSON COMPANY 

## BALL BEARINGS

Fafnir Ball Bearings

Fafnir Ball Bearings, of which we carry a complete line, are the highest development in equipment of this class.

The balls and races are made from the highest grade steel, heat treated over a special process. The balls are held in specially designed races. All material and parts are selected and tested. Any showing the least defect is rejected, thus insuring bearings that will give great durability.


Wide Type, Light (200) Series)
$N 0$.
$200-A$
$201-A$
$208-A$
$203-A$
$204-A$
$205-A$
$206-A$
$207-A$
$208-A$
$209-A$
$210-A$
$211-A$

| Bore | Dinmeter <br> Inches | Width <br> Inches | 1.1811 |
| :---: | :---: | :---: | ---: |

Wide Type, Medium (300) Series


403-A
$403-A$
$401-A$
$401-A$
$406-A$
$406-A$
$405-\Lambda$
$406-\Lambda$
$40 \%-\Lambda$
$408-\Lambda$
$408-A$
$408-A$
$409-A$
$410-\Lambda$
$411-\Lambda$
$102-A$
$103-A$
$104-A$
$105-A$
$106-A$
$107-A$
$108-A$
200-A
$201-A$
203-A
204-A
205-A
207-A
209-A
211-A

Wide Type, Heavy (400) Series

| 0.6693 | 2.4410 | 0.6693 | 87.50 |
| :---: | :---: | :---: | :---: |
| 0.7874 | 2.8347 | 0.7480 | 8.75 |
| 0.9843 | 3.1496 | 0.8268 | 10.50 |
| 1.1811 | 3.5438 | 0.0055 | 11.90 |
| 1.3780 | 3.9370 | 0.9813 | 13.75 |
| 1.5748 | 4.8307 | 1.0630 | 18.50 |
| 1.2717 | 4.7244 | 1.1417 | 19.50 |
| 1.9686 | 5.1181 | 1.8205 | 22.50 |
| 3.1664 | 6.5118 | 1. $299 \%$ | 26.00 |

Narrow Type, Light Series

| 0.3037 | 1.2598 | 0.3543 | 83.75 |
| :---: | :---: | :---: | :---: |
| 0.5806 | 1.4667 | 0.3937 | 4.85 |
| 0.7874 | 1.6536 | 0.3937 | 4.75 |
| 0.0848 | 2.0473 | 0.3037 | 5.85 |
| 1.1811 | 2.4410 | 0.3937 | 6.25 |
| 1.3780 | \%.7509 | 0.3937 | 6.85 |
| 1.6748 | 3.1496 | 0.4831 | 7.50 |

## Fafnir Ball Bearings

INSTRECTIONS FOR ORDERING
When ordering be sure to give the bore diameter, outside diameter and width. Also give us the number and name of the old bearing that is to be replaced.

The Society of Automobile Engineers has standardized the ball bearing on all cars. We can therefore supply you with bearings for any make of car. Simply give us the name and location of the bearing.


Narrow Type, Medium Series

| No, | Bore <br> Inches | Diameter Inches | Width <br> Inches | Price Each |
| :---: | :---: | :---: | :---: | :---: |
| 1-A | 0.4724 | 1.4567 | 0.3543 | \$4.75 |
| 2-A | 0.5906 | 1.5748 | 0.3543 | 5.00 |
| 3-A | 0.7874 | 2.0473 | 0.3937 | 5.90 |
| 4-A | 0.9843 | 2.4410 | 0.4794 | 6.90 |
| 5-A | 1.1811 | 2.8347 | 0.5118 | 8.10 |
| 6-A | 1.3780 | 8.1496 | 0.5513 | 9.50 |
| 7-A | 1,5748 | 3.5433 | 0.6299 | 11.90 |
| 8-A | 1.7717 | 3.9370 | 0.6693 | 15.40 |
| 9-A | 1.9685 | 4.3307 | 0.7480 | 16.90 |
| 10-A | 2.1654 | 4.6063 | 0.7480 | 18.25 |
| 11-A | 2.3623 | 6.0000 | 0.7874 | 20.90 |

Narrow Type, Heavy Series

| $59-A$ | 0.7874 | 2.5591 | 0.5512 | $\$ 7.50$ |
| :--- | :--- | :--- | :--- | ---: |
| $53-\mathbf{A}$ | 0.8661 | 2.8347 | 0.6999 | 8.75 |
| $54-\mathbf{A}$ | 0.843 | 3.1496 | 0.6693 | 10.60 |
| $56-\mathbf{A}$ | 1.0630 | 3.4646 | 0.7480 | 11.90 |
| $56-\mathbf{A}$ | 1.1811 | 3.7402 | 0.7874 | 13.75 |
| $57-\mathbf{A}$ | 1.3780 | 4.0551 | 0.8661 | 17.50 |

Two Row Radial Bearings, Light Series
No
No
6800
6801
6300
6801
6302
6303
6804
6305
6306
6307

# The GIBSONOOMPANY 

KEYS, BALLS AND BALL JOINTS

## Whitney Keys



Ford Assortment Whitney Keys. Box contains 12 keys, being one complete set for a Ford.
Per Box
$\$ 0.75$
Per Box. .D.P. $\$ 0.88$


100 Assortment Whitney Keys. Assorted in sizes in general use.
Per box
$\$ 3.00$
Per Box.. D.P. $\$ 3.32$

## Whitney Keys in Bulk

Size Per Doz.
No. 1
No. 2 Whitney Keys, $\frac{1}{8} \times 1 / 16$. D.P. $\$ 0.23$

Per 100 Whitney Keys, $\frac{1}{2} \times 3 / 32$. D.P. .23
D.P. $\$ 0.89$

Whitney Keys, $\frac{1}{2} \times \frac{1}{7}$........D.P. . 23
No. 4 Whitney Keys, \& x 3/32..D.P.
No. 5
No. 6 Whitney Keys, $8 \times \frac{1}{1} . . . . . .$. D.P.
.23
D.P. .95 Whitney Keys, $5 \times 5 / 32$..D.P.
.25
D.P. 1.00

No. 7
Whitney Keys, $3 \times \frac{3}{3} . . . . . .$. D.P.
No. 8 Whitney Keys, $3 \times 5 / 32$..D.P.
No. 9 Whitney Keys, $3 \times 3 / 16$..D.P.
.28
.3
.40
No. 10 Whitney Keys, $7 \times 5 / 32$..D.P.
No. 11
No. 12
No. A
No. 13
No. 14
No. 15
No. B
No. 16 Whitney Keys, $\frac{7}{6} \times 3 / 16$..D.P.

No. 17 Whitney Keys, 1 ㄹ $7 / 32$..D.P.
No. 18 Whitney Keys, $1 \frac{1}{12} \times \frac{1}{2} . . . . . .$. D.P.
No. C Whitney Keys, 1之x 5/16..D.P.

Tool Steel Balls



Steel Balls. $1 / 8$ Per 100 Per 1(1). . D.P. 80.26 inech $\$ 0.35$ Steel Bails. $5 / 39$ ineh . 35 Per 100, D.P, $\$ 0,36$ steel 1Balls. 3/16 inch . 40 Per 100. . D.P. 30.44
Steel Balls. $7 / 39$ isela . 50
Per 100, D.P, 80,54
Strel Balls. 1/4 ineh . 50
Steel Walls. $1 / 4$ inch 50
Per 100.. D.P. $\$ 0.00$
Per 100.10.P. $9 / 32$ inch . 20
steel Balln. $9 / 32$ inch
Per 100. D.P. $\$ 1.00$
Steel Balls, $\quad / 16$ inch 86
Steel Balls, $5 / 16$ inch 86
Per 100. I) P. 81.00 Per 100, D.P, \$1.00 Steel 15alls. $11 / 32$ inch 1.00 Per 100. D.P. $\$ 1.44$ Steel Balls, $3 / 8$ inch 1.10 Per 100. D.P. $\$ 1.51$ Steel Balls, 716 incls 9.50 Per 100, D. P, $\$ 3,10$ Steel Balls, $1 / 2$ inch 3.00 Per 100 . D.P. $\$ 3.76$ Steel Ballo. $9 / 16$ inch 3.50 Per 100.. D.P. $\$ 1.44$
Steel Balls. 5/8 inch, per 100 .-
$\qquad$
Per 100. D.P.
Steel Balls, $11 / 16$ ineh, per 100
Pteel Balls, $11 / 16$ inch, per 10
Per 100..D.P. $\$ 7.76$
...................................... $\boldsymbol{7 . 0 0}$ Steel Balls, $3 / 4$ inels, per 100 Per 100. D.P. $\$ 11.55$
 Per 100, D, P, $\$ 15.54$
steel 13alls, $7 / 8$ inch, per 100 . . . . . . . . . . . . . . . . . . . . . . . . 12.00 Per 100. D.P. 820.00
Steel Ralls, $15 / 16$ inch, per 109 . . . . . . . . . . . . . . . . . . . . . . . . . . . 15.00
Per 100. . D. P, $\$ 22,22$
Steel Balls, 1 inch, per 100 . . . . . . . . . . . . . . . . . . . . . . . . . . . 16.00
Per 100. . D.P. \$26.66
The way we pack Steel Balls:
Steel Balls $1 / 8$ to $3 / 8$, in packages of 100 , Steel Balls $7 / 16$ to $1 / 2$, in packages of 250 , Steel Balls $9 / 16$ to $5 / 8$, in packages of 100 , Steel Balls $11 / 16$ to $13 / 15$ in packnges of 50. Steel Balls $7 / \$$ to $15 / 16$ and 1 , in packages of 25 .

We also supply Steel Balls in Auto Sizes in small boxes as follows:
No. 1 Steel Balls. $3 / 8$, 100 in box, per box ............. $\$ 1.10$ Per Box. .D.P, \$154
No. 2 steel Ralls, $7 / 16,100$ in box, per box ............... 2,50 Per Box . . D.F, $\$ 3.10$
No. 3 Steel Balls, $1 / 2$, 50 in box, per box .............. 1.50 Per Box. D.P. $\$ 1.88$
No, 4 Steel Balls, $9 / 16,50$ in box, per box .................. 1.75 Per Box. . D, P, \&2,22
No. 5 Steel Balls, $5 / 8$, 95 in box, per box .............. 1.00 Per Box., D.P. $\$ 1,35$ No. 6 Steel Balls. $11 / 16$, 25 in box, per box ............... 1.25 Per Rox. .D.P. $\$ 1.98$
No, 7 Steel Falls. $3 / 4$, 20 in box, per box ............ 1.40 Per Box, , D.P. $\$ 2.32$

## Ball Joints

Non-Adjustable Ball Joints. Used extensively for connecting carburetors and timers with levers on steering wheel.


| No. | Ingide ${ }_{\text {Rall }}$ Stem |  |  | Screw |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inside | Thrend | Socket | Ontside Diam. | Tbread | Each |
| 1 | 10 | 32 | 9/32 | 5/16 | 18 | \$0.25 |
| 2 | $\frac{1}{4}$ | 20 | 9/32 | 5/16 | 18 | . 25 |
| 3 | $\frac{1}{4}$ | 24 | 9/32 | $\frac{1}{4}$ | 27 | . 25 |
| 4 | 4 | 27 | 9/32 | $\frac{1}{4}$ | 27 | . 25 |
| 5 | $\frac{1}{4}$ | 28 | 9/32 | 4 | 28 | . 25 |
| 6 | $\frac{1}{4}$ | 20 | 5/16 | 咅 | 16 | . 25 |
| 7 | $\frac{1}{4}$ | 20 | 9/32 | $\frac{1}{4}$ | 20 | . 25 |
| 8 | 3/16 | 32 | 9/32 | 3/16 | 32 | . 25 |
| 9 | 7/32 | 32 | 9/32 | 7/32 | 32 | . 25 |

All sizes-Per Doz....D.P. $\$ 1.78$; Per 100....D.P. $\$ 15.54$
Adjustable Ball Joints, $\frac{+1}{} \times 28$, A. L. A. M., each.... $\$ 0.25$
Adjustable Ball Joints, $\frac{1}{4} \times 20$, U. S., each. $\qquad$ .25
Per Doz.....D.P. \$2.22 Per 100....D.P. \$16.65

This lining is composed of asbestos - that fireproof, indestructible min-eral-reinforced with brass wires interwoven in each strand.

That is why heat from friction which chars and burns ordinary brake linings will not affect it.


And asbestos to metalthat is why it will lock wheels instantly when emergency demands, yet will stop cars just as slowly as you wish.

Made to fit any brake and any friction or transmission clutch.

## Falcon Brake Band Lining

Jaleon Brake Band Lining, $1 \times 2$ inchen, per foot .50.32 Per ft., D.P. $\$ 0.2 \overline{7} 50-\mathrm{ft}$. lengths, per ft., D.P. $\$ 0.24$
Falcon Brake Band Lining, $14 \times 2$ inches, per foot
Per $\mathrm{ft}, \mathrm{D}, \mathrm{P}, \$ 0,29 \mathrm{50-ft}$. lengths, per ft ., $1 \mathrm{D}, \mathrm{P}$. $\$ 0.27$
Faleon Brake Band Lining, 12x2 inches, per foot
Per ft, D.P. $\$ 0.31$ 50-ft. leugths, per fL, D.F. $\$ 0.29$
Falcon Brake Band Lining, 17x $\frac{3}{3}$ inches, per foot
Per ft, D.P. $\$ 0.33$ 50-ft. Lebgths, per ft., D.P. $\$ 0.31$
Falcon Brake Band Lining. $2 x z$ inches, per foot
Per ft., D.P. $\$ 4,40$ 50-ft, lengths, per ft., D.P, $\$ 0.26$
Fatcon Brake Band Lining, $21 \times 2$ inches, per foot
Per ft., D.P. $\$ 0.44$ 50-ft, lengths, per ft., D.I. \$0. 40
Falcon Brake Band Lining, 22x: inches, per foot
Per ft., D.P. 80.48 50.ft. lengths, per ft., D.F. $\$ 0.4$
Falcon Brake Band Lining, $3 \times 1$ inches, per foot
Per ft., D.P. $\$ 0.52$ 50-ft. lengths, per ft ., D.P. $\$ 0$ is
Fatcon Brake Band Lining, $4 \times \frac{1}{3}$ inches, per foot,
Per ft ., D.P. $\$ 0.66$ 50-ft. lebgths, per ft., D.P. $\$ 0,60$
Fateon Brake Band Lining, 1x5/3: inclses, per foot Per ft.. D.P. \$0.2. 50-ft. Jengths, per ft. D.P. 80.27

Falcon Brake Band Lining, 1 $\frac{1}{} 5$ /at inches, per foot
Per ft., D.P. \$0.33 50-ft. leugths, per ft., D.P, \$0.31
Fatcon Brake Band Lining, 1 $1 \times 5 / 38$ inclies, per foot
Per ft., D.P. $\$ 0.4050-\mathrm{ft}$. lengtlis, per ft ., $\mathrm{D}, \mathrm{P}, \$ 0 . \mathrm{si}$
Falcon Brake Band Lining, $12 \times 5 / 3 \%$ inches, jer foot
rato
Falcon Brake Band Lining, $3 x 5 / 39$ inches, per foot
Per ft ., D.P. $\$ 0.5250-\mathrm{ft}$, lengths, per ft., D.P. $\$ 0.48$
Falcon Brake Band Lining, $21 \times 5 / 32$ inches, per foot
Per ft, It.P. $\$ 0,57$ (i).fr, Iengths, per ft., D.P. \$0.52
Faleon Brake Rand Lining, $23 \times 5 / 32$ inchen, per foot
Per ft., D.P. Wh.AB 50-ft. lengths, per ft., D.P. \$0.60
Faleon Hrake Band Lining. 3x5/32 inchen, per foot .94
1'er ft . D. P. $\$ 0.76 \mathrm{5a}$-ft. lengths, per ft ., D.P. 80.70
Fuleon Hrake Hand Linisg, $4 \times 5 / 32$ inchew, per foot
Per ft., D.P. sp.48 [6i-ft, lengths, per ft., D.P, \$0.88
Faleon Hrake Fand Lining, $1 \times 3 / 16$ inches, per foot

## Falcon Brake Band Lining

Falcon Brake Band Lining. 11x3/16 Inches, per foot. . . . . . . $\$ 0,50$ [ev ft., D,P, $\$ 0,4^{2}$ (0).ft, lengt bs, per ft., D.P. 80.38

Falcen Frake Band Lining, $1 \$ \times 3 / 16$ inches, per foot Per ft, D.P. $\$ 0.48 \quad 50-\mathrm{ft}$. lengths, per ft ., D.P. 80.44
Faleon Brake Band Lining, $19 \times 3 / 16$ inehes. per foot
Per ft., D.P. 80.55 50-ft. lengths, per It., IV.P. 80.50
Falcon Hanke Mand Lining, 2xa/16 Inches, per foot

Fatcon Mrake Band Lining, $9 \$ x 3 / 16$ inches, per foot . . . . . . . 84 Per ft.. D. P. si,is 50-ft, lebgths, Der ft. D. P, su.64

Fakcon Brake Band Lining, $93 \times 3 / 16$ inclies, per foot 94 Ier ft. D.P, $\$ 0,7 \%$ 50. 1 ft , lengths, per $\mathrm{ft} . \mathrm{D} . \mathrm{P}, \$ 0.70$

Fakeon Brake Banal Lining, $97 \times 3 / 16$ inches, fer foot ..... 1.04 Per $\mathrm{ft}=11 \mathrm{I}, \$ 0.81$ 50-ft, lengths, per ft.n D.P. 80.77
Falcon Brake Banal Linisg. 3x3/16 isclien. per foat ...... 1.12 Per ft., D.P. 80.88 50. ft . lenethis, per ft, D.P. so.se
Faleon Brake Band Lining. $4 \times 3 / 16$ inelaes. Jrer finot ...... 1.44 Per $\mathrm{ft}^{2}$, D. P. $\$ 1.14$ 50-ft. lengths, per $\mathrm{IL}, \mathrm{D} . \mathrm{P} . \$ 1.06$

Faleon Brake Eand Lining. 1x inches. per foot
Per ft , D.P. 30.44 50-ft. lengths, per ft.. D.P. 80.40
Falcon Brake Band Lining, 13x? inches, per foot .66 Per ft.. IV.P. $\$ 0.53$ 50-ft. leagths, per ft., D.P. 80.48

Faleon Brake Band Lining. 13x? Inches, per foot . . . . . . . . . 76 Per ft., D.P. श0.0: 50 ft. lengths, Jer ft.. D.P. 90.5 s

Faleon Brake Band Lining, $1 \frac{7}{4} \times \frac{1}{4}$ inches, per foot 88

Falcon Brake Band Lining, ${ }^{2} \times \frac{1}{4}$ inelses, per foot Per ft. D.P, $\$ 0.80$ 50-ft, lengths, Der ft $5, \mathrm{D} .90 .73$
Falcon Brake Banal Libins, $21 \times \frac{1}{4}$ inches, per foot . . . . . . . . 1.12 Per ft., 11.P, 90.88 50-ft, lengtbs, per ft, D.P. $\$ 0.82$

Falcon Itrake Hand Lining, $9 \frac{2}{2}$ : inches, per foot ....... 1.24 Per ft., D.I. \$1.02 50)-ft, leDgths, per ft., D.P. \$0.93
 Per ft. D.P. \$1.11 50-ft, lengtlis, per ft., D. P, \$1.00
Falcon Brake Hand Lining, $3 \times 3$ inches, per foot

Faleon Hrake Bund Lising, $4 \times 1$ inches, per foot1.88 Ver ft., I.P. $\$ 1.51$ 50-ft. lengths, per ft., D.P. $\$ 1.30$

## 

## BRAKE BAND LINING-Continued

Thermoid Hydraulic Compressed Brake Band Lining

Is brake lining all

## Thermoid HYDRAULIC COMPRESSED Brake Lining - 100\%



Brake Lining Must Be Dependable the way throughjust the same inside as out. Therefore it is dependable as long as any of it remains. That's why it is 100 per cent; why it's the best to sell-the best to buy.

Thermoid is constructed of pure Canadian asbestos, interwoven with solid brass wire.

Under giant heated rolls it is impregnated with a wondrous secret friction compoundforced through every pore.

Then it is compressed and cured at 2,000 pounds pressure for one hour, at intense heat.
Per ft.
Thermoid Brake Band Lining, $1 x \frac{1}{\frac{1}{6}}$ in ..... $\$ 0.40$
Per ft., D.P. so.j5 50-ft, lengths, per ft.. D.P. sinatThermoid Brake Band Lining, $1 \frac{1}{4} \times \frac{1}{6}$ in.50
Per ft., D.P. $80.4450-\mathrm{fi}$. lengths, per ft., D.P. $\$ 0.40$Thermoid Brake Band Lining, $1 \frac{1}{2} \times \frac{1}{8}$ in 60
Per ft., D.P. 90.58 50-ft. lengths, per ft., D.P. 80.48
Thermoid Brake Band Lining, $1 \frac{1}{4} \times \frac{1}{k}$ in. ..... 70
Per ft, D.P, 80,6250 -ft. lengthe, per ft., D.P. $\$ 0.58$
Thermoid Brake Band Lining, $2 \times \frac{1}{5}$ in ..... 80
Per ft, D.P. $\$ 0, \overline{1} 1$ 50-ft, lengths, per ft., D.P. $\$ 0.3 \mathrm{f}$
Thermoid Brake Band Lining, $2 \frac{1}{4} \times \frac{1}{6}$ in ..... 90
Per ft, D.P. 80.80 50.ft, lengths, per ft., D.P. 80.72
1.00
Thermoid Brake Band Lining, $2 \frac{1}{5} x \frac{1}{6}$ in
Per ft, D,P. $80.8850-\mathrm{ft}$. lengths, per ft., D.P. $\$ 0.80$
Thermoid Brake Band Lining, 1x5/32 in ..... 45
Per ft., D.P. 80.40 50-ft. lengths, per ft., D.P. 8035
Thermoid Brake Band Lining, $1 \frac{1}{4} \times 5 / 32$ in ..... 55
Per ft., D.P. $\$ 0.4850-\mathrm{ft}$. lebgths, per ft., D.P. $\$ 0.44$
Thermoid Brake Band Lining, $1 \frac{1}{2} \times 5 / 32$ in ..... 65
Per ft., D.P. so. $5 \mathrm{~S} 50-\mathrm{ft}$, lengths, per ft., D.P. $\$ 0.52$Thermoid Brake Band Lining, $1 \frac{3}{4} \times 5 / 32$ in75
Per ft., D.P. $\$ 0.66$ 50-ft. lengths, per ft, D P. $\$ 0.90$
Thermoid Brake Band Lining, 2x5 /32 in ..... 85
Per ft, D. P. $\$ 0.75$ 50-ft. lengths, per ft., D.P. \$0.6sThermoid Brake Band Lining, $2 \frac{1}{4} \times 5 / 32$ in95
Per ft., D.P. 30.84 j0-ft. lengths, per ft., D.P. \$0.78
Thermoid Brake Band Lining, $2 \frac{1}{2} \times 5 / 32$ in1.05
Per ft., D.P. $\$ 0.8 s$ 50-ft, lengths, per ft., D.P. 80.80
Thermoid Hydraulic Compressed Brake Band Lining
Thermoid Brake Band Lining, $2 \frac{3}{4} \times 5 / 32$ in

Perft
$\$ 1.15$

Thermoid Brake Band Lining, 1x $x_{1}^{3}$ in ..... 50
 .....  60

Thermoid Brake Band Lining, $1 \frac{1}{2} \times x^{3}{ }^{3}$ in ..... 70

Thermoid Brake Band Lining, $1 \frac{1}{4} \times \frac{3}{18}$ in ..... 80
Per ft, D. P. 80.70 ine.ft. lengths, per ft., D.P. 80.64
Thermoid Brake Band Lining, 2x ${ }^{\text {南 in }}$ ..... 90
Per ft., D.P. 30 so $50-\mathrm{ft}$. lengthe, per $\mathrm{ft}, \mathrm{D} . \mathrm{P} .90 .72$
Thermoid Brake Band Lining, $2 \frac{1}{4} x^{\frac{3}{4}}$ in ..... 1.00
Prer ft.. D.P. 80 ks Soff, lengths, per ft.. D.P. 80 on
Thermoid Brake Band Lining, $2 \frac{1}{2} x_{18}^{2}$ in ..... 1.10
J'er ft. D.P. Mo.ts $50-\mathrm{ft}$, lengths, per ft., D.P. $\$ 0.901$
Thermoid Brake Band Lining, $2 \frac{1}{4} \times \frac{x^{\frac{3}{6}}}{}$ in ..... 1.20

Thermoid Brake Band Lining, $3 \times \frac{3}{10}$ in ..... 1.30
Per ft., D.P. 81.14 50-ft. lengthes, per ft., D.P. 81.04
Thermoid Brake Band Lining, $4 x^{\frac{1}{18}}$ in ..... 1.70
Per ft., D.P. $\$ 1$, $\mathrm{F}_{2}$ 50.ft. lengths, per ft., D.P. 81.37
Thermoid Brake Band Lining, $1 \frac{1}{4} \times \frac{1}{4}$ in ..... 80
Por ft, D.P. so. 50 E0-ft. lengths, per ft,. D.P. socid
Thermoid Brake Band Lining, $1 \frac{1}{2} \times \frac{1}{4}$ in ..... 90

Thermoid Brake Band Lining, $1 \frac{3}{4} \times \frac{1}{4}$ in ..... 1.00
Fer tt. D.P. sis. 88 sis.ft. lengths, per ft., D.P. so. .8t
Thermoid Brake Band Lining, 2x $\frac{1}{4}$ in ..... 1.20
Per ft., D.P. 81.06 50-ft, ledgths, per ft., D.P. san.96
Thermoid Brake Band Lining, $2 \frac{2}{4} \times \frac{1}{4}$ in ..... 1.30
Per ft., D.P. $\$ 1.14$ 50-ft. lengthis, per ft., D.P. $\$ 1.04$
Thermoid Brake Band Lining, $2 \frac{1}{2} \times \frac{1}{4}$ in ..... 1.50
Per ft, D.P. $\$ 1.22$ so-ft. lengthe, per ft., D.P. $\$ 1.11$
Thermoid Brake Band Lining, $2 \frac{1}{4} \times \frac{1}{4}$ in. ..... 1.60
Iver ft., D. 1', 81.32 E0ft. lengthe, per ft., D.P. 81.20
Thermoid Brake Band Lining, $3 \times \frac{1}{4}$ in ..... 1.70

2.20
Thermoid Brake Band Lining, $4 x \frac{1}{4}$ in
Per ft, D.P. $\$ 1.95 \mathrm{~g}_{5} 0-\mathrm{ft}$, lengths, per ft., D.P. $81 . \mathrm{it}$
Safety First!

# The GIBSONCOMPANY $\overline{A P O L I S}$ 

## ASBESTOS PRODUCTS AND FIBER



Wire Woven Asbestos Packing<br>Asbestos Sheet Packing, durable and efficient; will not blow out; the most reliable flat packing for gas and gasoline engines. Comes in rolls 40 inches wide, 左-inch thick; weight about four pounds per square yard.<br>Per pound<br>.$\$ 1.50$<br>Per Pound. .D.P. \$1.67

## Mogul Rope Packing

This packing is made in braided or twisted form from absolutely pure asbestos yarn. Each strand is thoroughly lubricated, insuring minimum friction. It is fireproof, oil-
 proof, pressure-proof and practically wear-proof. Put up in $\frac{3}{4}-\mathrm{lb}$. spools.
Each
Per Spool. . D.P. $\$ 0.84$


## Asbestos Wicking

A loosely woven asbestos wick, adapted for various uses on automobiles, motor boats, etc., and used for packing exhaust and water pipes. Put up in $\frac{1}{4}-1 \mathrm{~b}$. balls.
Each
80.35

Per Ball, . D.P. $\$ 0.55$

## Asbestos Cord

Nos. 629 Asbestos Cord
$\frac{1}{17}$-inch diameter.
For packing spark plugs and minor parts, in place of copper ring gaskets.
Boxes of 1 dozen spools
(weight 1 lb. ) . . . . . . . . . $\$ 4.00$
Per Spool. . D.P. $\$ 0.55$
Per Dozen Spools. . D.P. $\$ 5.77$


Solderall


With an ordinary match it easily mends and stops all leaks in pots, pans, tinware, metal ornaments, agate ware, toys, umbrellas (broken ribs) and a hundred other things. Automobilists, mechanics and machinists use it regularly. Indispensable for wiring. A child can stop or mend a leak with it at once.
Solderall in Tubes, each.
$\$ 0.50$
Dozen. .D.P. $\$ 8.88$

## Red Fiber Tubing


$\frac{1}{2}$ inch
$\frac{5}{8}$ inch
$\frac{3}{4}$ inch
$\frac{1}{2}$ inch
1 inch
$\frac{1}{2}$ inch
$1 \frac{1}{4}$ inch

## Carried in 3-ft. lengths only

Thickness
of Wall.


## Red Fiber Rod



## Vellumoid Sheet Packing

 Vellumold Stieet Packing has as a basis a very strong regetable fiber which is chemical1) treated making it oil, water, gasoline, grease and air proof and exceed. ingly tough, as au examination will slow Owing to these properties Vellamoin sheet l'acking makes an exceptional gasket for use on all oll, grease, water and Kabolibe connections and all places where the conditions call for a very tough and durable packing. The only place whore we cannot recommend it is where it is subjected to a femperature over 300 degrees Fahrenheit. It contains no rubber or rubber substitute und no mineral matter. It is light in weight, very flexible and has high tensile and teartog streogth. Because of its flexibility it makes a particu. larly tight joint and its tougbness insures durability.
No. 2 Vellumoid Sheet Packing . 010 inch thick, weight 9 oz . per square yard; per yard.
.$\$ 0.60$ Per square yard. .D.P. $\$ 0.88$
No. 4 Vellumoid Sheet Packing, . 021 inch thick, weight 24 oz . per square yard; per yard.

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## GASKETS





# Ohe GIBSON OMPAYYAPOLIS 

GASKETS-Continued

Victor Ford Gaskets


This Box Contains 12 Cylinder Head Gasketw
No. J. V. 29. Box of 12 Ford Cylinder Head Gaskets, per box. $\$ 9.60$
Per box. . D.P. $\$ 8.88$
Less than box lot, each. . D.P. $\$ 0.83$

## Victor Ford Gaskets



This Box Contains 12 Complete Sets Lens the Cylinder Head Gasket

No. J. V. 9. Box of 12 Set Ford Gaskets. Less Cylinder Head Gaskets, per box 83.20

Per box. . D.P. $\$ 4.44$

## Victor Ford Gaskets



No. J. V. 25. Box of 12 Complete Sets Ford Gaskets, per box $\$ 12.00$
Per box. . D.P. $\$ 12.88$
Less than box, per set. . D.P. $\$ 1.22$

Victor Buick Gaskets


This box contains 300 Copper Asbestos and Copper Brass Asbestos Gaskets that will fit all models of Buick cars made during the years of $1905,1906,1907,1908$, 1909, 1910, 1911, 1912, 1913 and 1914.

The assortment consists of:


No. J. V. 42. Box of 300 Assorted Buick Gaskets,
per box
$\$ 10.00$
Per box. .D.P. $\$ 10.22$

## Assorted Victor Motorcycle Gaskets



This box contains 170 Copper Asbestos Gaskets that will fit all models of the Indian as well as every other make of motorcycle now on the market.

The assortment consists of the following: Quantity of Gaskets.... 62 Quantity of Gaskets.... 101 Solid Copper
Sizes of Copper Gaskets 2
Quantity of Gaskets.7
Total number of sizes. ..... 26
Total quantity of gaskets. ..... 170

The above range of sizes and numbers of gaskets enables one to pick a gasket instantly for every day repairs. Dealers and repairmen will therefore find this assortment an absolute necessity.
No. J. V. 21. Box of 170 Assorted Motorcycle
Gaskets, per box
Per box.. D.P. $\$ 5.77$
$\$ 6.00$

# The GIBSONGOMPANY 

## GASKETS-Continued

Assorted Victor Standard French Type
Round Gaskets


This box contains 100 assorted Victor Copper Asbestos French Type Gaskets, selected from among the most popular sizes exclusively used by all repairmen and garages, and are selected in proper proportion to accommodate every-day repairs on all makes of automobile motors.
No. J.V. 24 Box of 100 Assorted French Type Gas-
kets, per box
$\$ 4.75$
Per box...D.P. \$5.77

## Assorted Victor Standard Closed Type Round Gaskets



This box contains 200 assorted Victor Copper Asbestos Gaskets, selected from among the most popular sizes universally used, and in proper proportion for every-day repairs on all makes of automobile motors from the highest to the lowest priced car and are fully guaranteed by the manufacturer.

To make the assortment more complete sixty-five selective sizes of plug gaskets are included to fit all makes of spark plugs on the market.
No. J.V. 22 Box of 200 Assorted Closed Type Round
Gaskets, per box.
5. 77

## Assorted Victor Standard Gaskets



For Intake and Exhaust Pipes, Manifolds, Carburetors, Ete.
This box contains 50 assorted Victor Copper Brass Asbestos Gaskets, universally recognized as the most economical and efficient gaskets made for intake and exhaust pipes, inlet and exhaust manifolds, exhaust pipe flanges, carburetor connections, etc.
No. J.V. 23 Box of 50 Assorted Exhaust Gaskets,
per box. $\qquad$
per box.......... $\$ 5.77$
.84 .75

## G.Q. Open or French Type Assortment

No. 2 G.Q. Gasket Assortment, consisting of a highly finished and decorated board with hooks on which are placed 32 sizes French Type Gaskets, one dozen of each size, from small spark plug gaskets increasing in sixteenths up to 28 inside diameter.
Each
..D.P. $\$ 14.44$
These G.Q. Display Boards provide the best method yet devised for handling gaskets.


## G.Q. Closed Type Assortment

No, 1 G.Q. Gasket Assortment, consisting of a highly finished and decorated board with hooks on which are placed 32 sizes closed type gaskets, one dozen of each size, from small spark plug gaskets increasing in sixteenths up to 25 inside diameter.
Each
D.P. $\$ 14.44$


$$
20
$$

# BELTING, BELT LACING, HOOKS AND COUPLINGS 



Patented in United States, Nov, 2, 1909.
Patented in Great Britain, Aug. 94, 1909, No, 19515.
Saves time, saves labor. No tools required but a hammer.

It is adapted for use on leather, rubber, balata, cotton or canvas stitched belting. A separable lacing, hinging on a rawhide or sectional steel rocker pin.

No. 15 Alligator Steel Lacing for belts, $\frac{1}{6}$ to $5 / 32$ inch thick. For light single leather belting one to two inches wide, packed in 8 -inch lengths, in boxes containing sufficient for 64 inches in width of belting, complete with gauge pin for applying and 64 inches rawhide hinge pins.
Weight $\frac{\pi}{8}$ lb., price
$\$ 1.00$
Per box....D.P. $\$ 1.66$
No. 25 Alligator Steel Lacing for belts ${ }^{\frac{3}{18}}$ to $7 / 32$ inch thick. For medium and heavy single leather, 3 -ply rubber or 4 -ply cotton or balata or any make of belting is to $7 / 32$ inch thick. Packed in boxes complete with gauge pin and either rawhide or rocker hinge pins, as follows:

Box F contains sufficient for 48 inches in width of belting in 8 -inch lengths.
Weight $1 \frac{1}{6}$ lbs., price
$\$ 1.00$
Per box...D.P. $\$ 1.66$
Box G contains sufficient for 96 inches in width of belting in 12 -inch lengths.
Weight $2 \frac{1}{6}$ lbs., price
$\$ 2.00$
Per box...D.P. $\$ 3.32$
No, 27 Alligator Steel Lacing for belts $\frac{1}{4}$ to $9 / 32$ inch thick. Specially adapted for motorcycle belts.
Packed in boxes containing sufficient for 96 inches
in width of belting in 12 -inch lengths, per box., $\$ 2.25$ Per box....D.P. $\$ 8.75$

Improved Belt Hooks


For round or ilat belt, (Illustration $2 / 3$ actuat size.) When hent and clamperl into the helt they correspond to the kize of the loelt.
Price per dozen
D.1. 80.z?

## Neverbreak Cut Laces



[^10]
## Leather Beltings and Couplings



Gak-tanned Round Leather belting, 1 in. per ft...... D.P. $\$ 0.14$ Oak-tanned Kound Leather Belting, $5 / 16$ in.s per ft. D.P. .ts Oak-taaned Round Leather Belting, \% in., per ft...... D.P. .s Oak-tanned Round Leather Belting, $7 / 16$ in., per ft..D.P. A4 Oak-tabned Round Leather Belting, 8 in,, per ft .......D.P. .53 Oak-tanned Flat Leather Belting, 3 in.. per ft......... D.P. 22 Oak-tanned Flat Leather Belting. 1 in., per ft......... D.P. 33 Oak-tanned Flat Leather Belting, 11 in., per ft........ D.P. $A 0$ Round Steel Belt Couplings, 1. per pair................. D.P. is
Round steel Belt Couplings, 5/16, per pair
D.P. 31

Bound steel Belt Couplings, 2, per puir .
D.P. 40

Found Steel Belt Couplings, 7/16, per pair
D.P. . 4

Found Steel Belt Couplings, 8, per pair............... D.P. . 50

## Peerless V-Shaped Belting



Peerless Belt is built up of sections put together with coppered rivets. These sections overlap each other so that the belt is three-ply from end to end. This means that it has three times the tensile strength of a single-ply construction. If one of these sections should break, a repair can be easily and permanently made on the road or in your own garage by removing the broken section. This can be done in less than five minutes. Peerless V-Shaped Fan Belt, $\frac{5}{5}$ Oak, per foot. ..... $\$ 0.60$ Per foot. . D.P. \$0.77
Peerless V-Shaped Fan Belt, $\frac{1}{4}$ Oak, per foot
Per foot. . D.P. $\$ 0.88$

## Calcutt's Steel Wire Belting



Hook and Eye Wire Coupling
Wire Belting, 50 feet and 20 couplings in box, $\frac{1}{4}$ inch, per box
D.P. $\$ 3.75$

Wire Belting, 50 feet and 20 couplings in box, $\frac{5}{16}$ inch, per box............................................P.
Wire Belting, 50 feet and 20 couplings in box, $\frac{b}{b}$ inch, per box.................................................D.P.
Couplings for wire belting, any size, put up in packages of 25 , per package........................D. .
4.18

# The GIBSONCOMPANY $\overline{\text { GIPOLIS }}$ 

TIRE TOOLS

## Tire Tools



No. 4 Tire Tool, 8 inches long, each
Each..D.P. \$0.18 Dozen..D.P. $\$ 1.88$
No. 3 Tire Tool, 11 inches long, each Each. .D.P. $\$ 0.28$ Dozen. .D.P. $\$ 3.11$ No. 2 Tire Tool, 13 inches long, each

These Tire Tools are made of strong malleable iron and are very practical in puting on or removing tires from wheels or demountable rims.

Finish: Velvet Aluminum.
. $\$ 0.15$ Each. D.P. $\$ 0.26$ Dozen. D.P. $\$ 2.66$ No. 1 Tire Tool, 164 inches long, each Each. D.P. $\$ 0.37$ Dozen. .D.P. $\$ 4.00$
No. 6 Tire Tool, 12 inches long, each.
Each..D.P. $\$ 0.26$ Dozen. .D.P. $\$ 2.66$ .25
$\qquad$
$\qquad$

No. 5 Tire Tool, 14 inches long, each
Each. . D.P. $\$ 0.55$ Dozen. D.P. $\$ 6.11$


An adjustable tire tool, made to conform with the shape of all sizes of casings. Particularly adapted for loosening corroded casings from the rim. Made of malleable iron.
Springfield Tire Tool, price.
.80 .80
Each.. D.P. \$1.11 Dozen..D.P. \$12.22

## The Perfect Handle Tire Tool



132 $\frac{1}{2}$ inches long, 1 inch tapering to $\frac{7}{6}$ inch in width, $\frac{2}{3}$ inch tapering to $\frac{18}{16}$ inch in thickness, with a cute curved and round point tapered to $\frac{1}{16}$ inch, to slip under the tire and heave it off in a jiffy. A regular "cuss" preventer for automobilists.
Each
.$\$ 1.00$
Each. "D.P. \$1.44 Dozen.. D.P. \$15.54

## Auto Pry Bar

Octagon Tool Steel Bar, 14 inches long, one end straight and the other angled.
Auto Pry Bar, $\frac{3}{8} \times 14$ inches, each
Each. D.P. $\$ 0.38$
Auto Pry Bar, $10 x 14$ inches, each................. . . 30
Each..D.P. $\$ 0.40$
Auto Pry Bar, $\frac{1}{4} \times 14$ inches, each. .35
Each. .D.P. $\$ 0.44$ .35



Neatly Folded to Fit the Tool Box. easily adjusted to fit any slamel rim and can Im instanfly folded to fit in the tool box. Weight, a pounils
Price . $\mathrm{P}, \mathrm{P}, \mathrm{B} . \mathrm{H}$
The Buckeye Tire "Buckeye" Tire Remover
 marketed 1 It is ot service for both re-
moving and applging clincher tires to the rim.
The Buckeye Tire Remover is of special
value to Ford, Soxon, value to Ford, Saxon, Maxwell, etco owners.
As sbown in the illus. As shown in the illus-
tration, a lans can at. tach a Dew casint or remove an old one rusted to the rim. without any trouble whatever.
Price, per set (twe pieces), completely boxed.
'Tlee l'oxilive Sblit 16 im Itwoover remaven aby xplit fim fromit at life in a few seconels without pryink, bammeriak or damagimg the rim or injuring tho casing. Itemovime spilit rimis from casings has al. Ways been a hard task for the gurage man an well as for the raf owner. The ohl mathod of Drying and bummerlng bas ruined many a bew lim innd sent many a sood tire to the junk pille,

A Harlit and eflicient tool, combining con. venience and speed

## Chamois Skins



No. 1. Chamois gkins, 11x132, esch............................. $\$ 0.25$ Each..D.P. $\$ 0.33$ Per Kip of 30 Skims. D.P. 89.33
No. 2. Chamois Skins, 19x25, each...... D. P. \&ionoo
Each.. D.P. $\$ 1.11$ Per Kip of 30 Skins.. D.


## Sponges

Genuine Rock Island sheep's woot full form Sponges, clean.


No. 10 sponge, 2-oz., each.......... . $\$ 0.75$ Each..D.P. \$1.33
No. 30 sponge, 4-oz., each......... . . 1.25 Eacb..D.P. $\mathbf{\$}^{2} .44$
To meet the demand for a lowerpriced sponge, we bave a cheaper grade in soft relvet form.
No. 30 sponge, ?-0z., each......... 80.50 Tach. D.P. $\$ 1.88$
No. 40 zponge, 4 -oz., each ........ . . 70 1/ach. D.P. $\$ 1.22$

## Carriage Feather Dusters

These dusters contain 120 selected tall featbers wound on hardwood blocks, threads guaranteed not to strip and trimmed with short leatherette cuffs. They are very durable and the best low-priced duster that can be safely used on autos.

Chicago Feather Dusters


Cbicago Featber Dusters are made for hard service and are unequaled in wearing qualitles and appearqualit
ance.

No. 45 Feather Duster, 14-inch, each
Each. D. P. $\$ 2.55$ DoxeD..D.P. $\$ 28.00$
No. 46 Feather Duster, 16-1nch, ench
Racb. D.P, $\$ 3.00$ Hozen., D.P, $\$ 33,33$

Wool Dusters



Made of strong, staple imported wool only, well flled and tull length. Dyed is fast, bright colors, Handles are hardwood, enameled a bard, bright color.
No. $\frac{\text { Wool Dusters, } 8 \text {-inch, each. }}{}$
Each, D.P. So,Sy Dozen..D.P. $\$ 9.74$
No. 6 Wool Dusters, 10-inch, each
1.10

Each., D.P, \$1.66 Dozen. D.P. $\$ 1588$

## "Royal Blue" Wool Dusters

There is a strong demand for a wool daster, for use on cars, stronger and heavier than the common wool dusters. "Royal Blues" are made to supply this demand. A "Royal Blue" will outwear two ordinary wool dusters
 because they are well tilled with strong staple wool, wbich is held in place by reinforced cults. The bead into wbich the handle screws has an unbreakable metal hase. The handles are hardwood, "rubberold" finlah, and the threads gunranteed not to strid.

Wasbable in gasoline or soap and water.
A Royal Blae Wool Dusters, each............................. . . . 81.00 Each..D.P. $\$ 1.55$ Dozen..D.P. $\$ 18,52$
B Toyal Blue Wool Dusters, each.... Each..D.P. $\$ 2.10$ Dozen.. D.P, \$g.32 C Foyal Blue Wool Dusters, each.. Eacl...D.F. $\$ 2.66$ Doxen..D.P. \$20.00 D Koyal Blue Wool Dusters, rach. Each..D.P. \$2.8s Dozen...D.P, \$83.77

Packed one dozen in a carton.

## "Round Downs" Dust-Absorbing-For Body Wiping


"Round Downs" are a cylindrical shaped feather duster, made of down (marabou) feathers wound around a handle. Down feathers have small stems and thick, soft, silky plumage. A sufficient quantity of downs are used to produce a thick, soft, fur-like surface, which pleks up and retains dust particles until sbaken or waslied out.

For wiping bodies they are the ideal duster. They are soft as silk and won't scrutch the finest finisbed car. They absorb the dust instead of scattering it and bave a large dust-absorbing capacity becanse of their round shape and thtck, soft texture. May be washed or shaken clean when filled witb dust.

No. 18 Round Down, length of handtes 14 inches, length
of tlown face 61 inches, each................................... $\$ 1.5$ Each,. D.P, 81. ti Dozen, D.P. 820,00

No, 19 Feund Down, length of handles 16 Iaches, length
of down face 8 inches. each.
Each, .D,P. 82 16 Dozen.. D.P. $\$ 23.32$

# The GIBSONOOMPANY $\overline{\overline{A P O L I S}}$ 

## WASHERS, PROTECTORS, APRONS, BOOTS AND SOAP

Peoria Overhead Washer

The Peoria Overhead Washer has five-foot arm completing a ten-foot circle, double braced to prevent sagging of arm, which causes leakage; head very strong and substantial, being made entirely of the very finest machine brass, having a liberal-sized stuffing box.
Each
$\$ 12.00$
Each. . D.P. \$15.54

## Sleeve Protectors



These sleeve and cuff protectors afford great protection when washing or working around the car. They are held securely to the wrist by a strap and snap button. Will absolutely keep out the dust and dirt. Every motor car owner should have a pair.
No. 1086 Rubber finished cloth, per pair. $\qquad$
Per Pair. . D.P. $\$ 0.55$

## Wash Aprons

This is a strong, serviceable wash apron for use in garages or any place where a waterproof apron may be required. Just what is needed when washing the car, cleaning machinery, etc. Made of heavy waterproof material. Edges sewed all around. Provided with large grommets protecting the cloth from tearing.


No. 1077 Rubber Finished Duck Wash Aprons, each Each. .D.P. $\$ 2.55$

## Rubber Boots



Buckeye Soap


Buckeye Cleanser is put up in six different size packages, as follows:


Buckeye Cleanser in 5-1b. pails, each............ $\$ 0.75$ Dozen. . D.P. $\$ 16.66$
Buckeye Cleanser in 10-lb. pails, each........... . . 1.50
Dozen. . D.P. 833.32
Buckeye Cleanser in 25-1b. pails, each............ . . 3.00
Dozen. .D.P. $\$ 70.12$
Buckeye Cleanser in kegs, per lb. ................ . . . 12
Per lb..D.P. 80.21
Buckeye Cleanser in half barrels, per lb.......... . . . 12
Per lb..D.P. $\$ 0.19$
Buckeye Cleanser in barrels, per lb............... . . . 10
Per lb..D.P. $\$ 0.17 \frac{1}{2}$

## Whiz Hand Soap

When Whiz and dirt meet there is something doing. The dirt flies, Used by painters, printers, machinists, engineers, chauffeurs, mechanics, and all those whose work causes soiling of the hands. Lathers freely in hard water.
Whiz Hand Soap in 1-1b. cans,
each
. $\$ 0.10$
Per Dozen. . D.P. $\$ 2.00$


## Blue Ribbon Hand Soap



Blue Ribbon Cold Cream Hand Soap washes the hands without water. Leaves the hands soft and smooth. Just the thing for motorists on the road after tinkering with tires or engine. No grit, no water, soft as velvet, no chapped hands.
10-oz. can, per can. . . 80.10 Per Dozen..D.P. $\$ 1.77$
$2-1 \mathrm{~b}$, can, per can. . 25 Per Dozen.,D.P. $\$ 4.44$
$6-\mathrm{lb}$. can, per can.. . 60
Per Dozen. .D.P. $\$ 10.66{ }^{6}$

CLEANING AND POLISHING MATERIAL

Wonder-Mist


Clenns and polishes without water. Removes dust, dirt and wud like maglc-removes grease and tar perfectly. No possible injury to finish. No seratching. Non-intlammable, non-combustible. The quickest, easiest and best way to maintain a clead, bright car evecy day in the year. An investment protection. Always ure sprayer and dry with cheese cloth


PRICES
Gallon and Sprayer. $\$ 3.00$
Gallon. . D.P. \$4.44
Half Gallon and Sprayer 2.00
$\frac{1}{2}$ Gallon. .D.P. $\$ 2.93$
Quart and Sprayer
Quart. . D.P. \$1.84


## Waxit Body Polish


Waxit is the perfect polish. It bas been produced as a result of mucb experimenting, has been tried out thoroughly, has been improved in every way possible, and is now confldently offered as the very best polish on the market for ase dently offered as the very best polish on the market for use
on the very finest finisb. Waxit is a cream wbite emulsion which requires bo tedlous shaking, has no disagreeable odor, is not injurious to the skin, but on the contrary softens the hands, For automobile bodies Waxit is used as on furniture after the machine bas been wasbed. Waxit will remove all milkiness and leave the car looking as mood as new.
Waxit is put up in the following sizes:
6 Ounces, each.
Per dozen. D.P. 34.61
1 Pint, earls
Per (10
1 Quart, each

Half Gallon, vach
Per dosen. . D. P. \&eq.om

Johnson's Wax and Cleaner


Johnson's Prepared Wax is the standard polish for automobiles, electrics and limousines. It forms a thin, protecting coat over the varnish, adding years to its life. It covers up mars and scratches, prevents checking and "sheds water like a duck's back." Johnson's Prepared Wax preserves the varnish and protects it from the weather. It imparts a beautiful, high polish so hard and dry that it cannot gather dust. Johnson's Prepared Wax is a boon to the man who takes care of his own car as it makes a "wash" last twice as long. Cars treated with Johnson's Cleaner and Prepared Wax require washing only when they become covered with mud-ordinary usage does not affect the polish.
Auto Size Johnson's Prepared Wax, each........ $\$ 0.25$ Dozen. .D.P. \$4.44
No. 1 Johnson's Prepared Wax, 1-lb, cans, each.... . 75 Dozen. . D.P. $\$ 10.66$


Johnson's Cleaner really cleans-it entirely removes all stains, discolorations, scum, road-oil, grease, tar, etc. Even those spots that are ground in-mud frecklesand surface scratches which you thought were perma-nent-will disappear like magic under Johnson's Cleaner. And it doesn't injure or scratch the finest varnish-simply cleans and prepares it for the wax polish.
Johnson's Cleaner, in 8 -ounce cans, each.
$\$ 0.25$
Dozen. . D.P. \$4.44

# Teclisolw wink Molis 

## BODY AND METAL POLISH

This is a heavy polish, especially adapted for use on articles exposed to the weather. It is not a varnish, but a cleaner and renewer of the original finish. Contains no acid, alkali or grit, which destroys the finish. Does not gum, stick or leave a greasy surface to catch dust and soil the clothing. Leaves the surface perfectly dry. Preserves the luster and prevents checking.
Golden Star Body Pol-
ish, $\frac{1}{4}$ pint, each .... 80.25
Doz....D.P. \$4.44
Golden Star Body Pol-
ish, $\frac{1}{\frac{1}{2}}$ pint, each.......
Doz.... D.P. $\$ 8.88$
Golden Star Body Pol-
ish, pint, each $\qquad$ .75
Doz.....D.P. $\$ 12.22$
Golden Star Body Polish, quart, each
 Doz. D.P. $\$ 20.00$
Golden Star Body Polish, $\frac{t}{2}$ gallon, each .................. Doz....D.P. \$26.66
Golden Star Body Polish, gallon, each.................. 3.00
Doz.....D.P. $\$ 53.33$

## Mat's Body Polish

This polish is equally good as a body polish or leather dressing. It is used for renovating upholstery and tops, as well as brightening varnished surfaces.
Mat's Body Polish, pint,
each ............................... $\$ 0.50$ Doz....D.P. $\$ 6.66$
Mat's Body Polish, quart,
each ............................... 1.00
Doz.....D.P. $\$ 18.32$
Mat's Body Polish, $\ddagger$ gallon, each ...............
Mat's Body Polish, gallon, each
D.P. $\$ 40.00$


Glad Rags, each.
80.25

Dozen....D.P. $\$ 3.38$


Blue Ribbon Metal Polish, $\frac{1}{8}$ pint, each
A lasting shine in every drop. The quick action of Blue Ribbon Metal Polish attracts immediate attention. Its economy in use a $n$ d absolute freedom from injurious ingredients secures permanent friends.

Doz.....D.P. \$2.66 Case Lots, Doz.....D.P. \$2.44
Blue Ribbon Metal Polish, pint, each.
...................... 25
Doz.....D.P. $\$ 4.44$ Case Lots, Doz.....D.P. $\$ 4.00$
Blue Ribbon Metal Polish, quart, each
Doz.......... 88.00 Case Lots, Doz. D.P. $\$ 7.22$
Blue Ribbon Metal Polish, $\frac{1}{2}$ gallon, each...........
Doz.....D.P. $\$ 13,32$ Case Lots, Doz..... D.P. $\$ 12.00$
Blue Ribbon Metal Polish, gallon, each
Doz...... D.P. $\$ 22.22$ Case Lots, Doz.....D.P. $\$ 20.00$
Cases Blue Ribloon Polish Contain :
3 Dozen $1 / 2$ Pints
2 Dozen Pints
1 Dozen $y_{2}$ Gallons
2 Doren Quarts
Blue Ribbon
Nickel Polish
For Nickel Only
The ordinary metal polish manufacturer is experimenting on a new nickel polish, while we are giving you a Quality Nickel Polish which has already Stood The Test.


Blue Ribbon Nickel Polish, $\frac{1}{2}$ pint can, each
.80 .25
Doz.....D.P. $\$ 8.33$ Case Lots, Doz.....D.P. $\$ 3.00$
Blue Ribbon Nickel Polish, pint can, each.
Doz.....D.P. $\$ 6.11$ Case Lots, Doz.....D.P. $\$ 5.55$
Blue Ribbon Nickel Polish, quart can, each .......
Doz.....D.P. $\$ 10.00$ Case Lots, Doz.....D.P. $\$ 8.88$

## Blue Ribbon Auto Body Gloss and Furniture Polish



Is not an ordinary lacquer or veneer which simply produces a $n$ artificial luster and lasts scarcely longer than the time used in applying it.
Blue Ribbon Body Polish, 6 ounces, each................. $\$ 0.25$ Doz..... D.P. $\$ 4.00$ Case Lots, Doz.....D.P. $\$ 3.55$

Blue Ribbon Body Polish, pint, each. $\qquad$
Doz.....D.P. $\$ 8.88$ Case Lots, Doz.....D.P. $\$ 8.00$
Blue Ribbon Body Polish, quart, each................
Doz ....D.P. $\$ 16.00$ Case Lots, Doz...D.P. $\$ 14.44$
Doz.....D.P. $\$ 16.00$ Case Lots, Doz.....D.P. $\$ 14.44$
Blue Ribbon Body Polish, $\frac{1}{2}$ gallon, each............................ $\$ 28.22$
Doz.....P. $\$ 28.00$ Case Lots, Doz....D.P.
Blue Ribbon Body Polish, gallon, each
Doz.....D.P. $\$ 48.00 \quad$ Case Lots, Doz.....D.P. $\$ 43.00$

# Ohe GIBSONGOMPANY 

## PEERLESS AUTOMOBILE SPECIALTIES

Cushion Dressing, Liquid Wax, Fender Japan, Battery Box Battery



## Peerless Cushion Dressing

A dressing that renews the finish of leather seat cushions and dries in thirty minutes without danger of washing or rubbing on light clothes. Does not crack, chip or peel, and can be used on the finest work.

About a pint for small car; a quart for large car.
1-pint can 89
80.54

Doz. .D.P. $\$ 9.60$
$\frac{1}{2}$-pint can
.30
Doz. .D.P. $\$ 5.33$

## Peerless Liquid Wax

A polishing wax finish for automobile varnished surfaces in liquid form, so that it is easily applied in an even coat, polished with ease, and ready for use at once. Does not collect dust, and is not injured by water.
About one pint for a large car. 1-pint can .................... $\$ 0.54$ Doz. .D.P. $\$ 9.60$ $\frac{1}{2}$-pint can
 .30 Doz..D.P. $\$ 5.39$


## Peerless Jet Black Fender <br> Japan



An especially heavy-bodied, air-drying black enamel for fenders, hoods, and large surfaces of automobiles. One coat covers solid, giving a rich gloss finish, with full luster; air drying in twenty-four to thirty-six hours.

About one pint for fenders of five passenger car.
1-pint can 89.6
Doz..D.P. 89.60
$\frac{1}{2}$-pint can
Doz., D.P.
5.
5.38

[^11]

Rim Paint, Extra Fine Black Japan, Mirroroid, Body Polish



Peerless Anti-Rust Rim Paint

A coating that dries hard, and does not remain sticky, for automobile rims to keep the tires from sticking to the rims and the rims from rusting. Not affected by water and does not chip or peel.

About one pint for a small car.
1-pint can
.80 .54
Doz. .D.P. $\$ 9.60$
-pint can
.30
Doz. .D.P. \$5.83

Peerless Extra Fine Black Japan
A good body, rich, gloss, airdrying black enamel for use on wood and metal around an automobile. Covers solid with one coat, and very handy product for touching up where the paint is chipped off, to keep your car from rusting.
1-pint can ................. $\$ 0.54$
Doz. .D.P. \$9.60
$\frac{1}{2}$-pint can ................ . . . 30


Doz. .D.P. $\$ 5.83$

## Peerless Mirroroid



A varnish renewer-not a polish, to be applied with a soft brush, or if necessary a cloth. Used on all varnished surfaces that are in good condition where the luster has died out but the color and undercoats are in good condition. Leaves a rich luster like a new varnished surface, drying over night.

About a pint to a quart for an automobile.
1-pint can

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\therefore
$$

$$
\$ 9.60
$$

Doz. . D.P. $\$ 9.60$
$\frac{1}{2}$-pint can
Doz. D.P. $\$ 5.33$

## Peerless Auto Body Polish

A real good automobile body polish for all varnished surfaces to keep them bright and looking new. Easily applied, and polished ready for use in a few minutes. This is not a greasy preparation.

About one pint for a car.
1-pint can ................. $\$ 0.54$
Doz. .D.P. 89.60
$\frac{1}{2}$-pint can ................ . 30
Doz. .D.P. $\$ 5.33$


# G/re GIBSONCOMPANY商POLIS 

## PEERLESS AUTOMOBILE SPECIALTIES-Continued

## Top Dressings, Lining Dye

Peerless Mohair Top Dressing



The original Mohair Top Dressing that dresses and waterproofs mohair, ducks and canvas tops and curtains. Renew old mohair with a fine silky finish, cementing the layers of cloth together, and leaving the top soft and pliable. Dries over night.

About one quart for top of five-passenger car.
1 -pint can
$\mathbf{\$ 0 . 5 4}$
Doz. . D.P. $\$ 9.60$
$\frac{1}{2}$-pint can
.30
Doz.. D.P. $\$ 5.33$

Peerless Leather Top Dressing
An oil preparation to help used tops of leather, rubber and pantasote, and their imitations, keeping them soft and pliable. Renews the rich black finish. Dries over night.

About one quart for top of five-passenger car.
1-pint can ................ $\$ 0.54$
Doz. .D.P. $\$ 9.60$


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\frac{1}{2}-pint can .................... . }3
Doz..D.P. $5.33
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## Peerless Lining Dye

A black, non-fading dye, which makes a uniformly colored lining of grease-spotted and waterstained top linings. The color is fast and will not wash, fade or rub off. Dries in two hours.

About one quart for inside of top of five-passenger car.
1-pint can ................ 80.54
Doz. .D.P. $\$ 9.60$
$\frac{1}{2}$-pint can ................. 30 Doz.. D.P. $\$ 5.33$

## Peerless Ford Top Dressing

An especially prepared dressing for Ford Top material, making a rich, black gloss finish, so that an old top would look like new. Wears a long while.

About one pint for runabout; one quart for touring car.
1-pint can
$\$ 0.54$
Doz. .D.P. $\$ 9.60$
$\frac{1}{2}$-pint can
. 30
Doz. .D.P. $\$ 5.33$

## Lamp Enamels, Cylinder Enamels



Peerless Lamp Enamel-Gloss
A high gloss, air drying, enameled finish for lamps and similar parts around an automobile. One coat covers solid giving a rich finish. Air drying in ten or twelve hours. Wears indefinitely, and not affected by the heat of the lamps.

About one pint for the lamps of a car.
1-pint can
80.54

Doz. .D.P. \$9.60
-pint can
. 30
Doz. .D.P. \$5. 33

Peerless Lamp Enamel-Dull
A fine, rich dull finish for atltomobile lamps and similar parts. One coat covers solid. The finish is durable, and the heat of the lamps does not affect the enamel in any way. Air drying in three to four hours.

About one pint for the lamps of a car.
1-pint can $\ldots \ldots \ldots$...........s0.54
Doz. . D.P. $\$ 9.60$
$\frac{1}{2}$-pint can
. 30
Doz. .D.P. $\$ 5.33$


## Peerless Cylinder Enamel-Gray

A high-grade, gloss, gray, airdrying enamel finish for cylinders, metal rods, and all engine parts. Keep these parts free from rust, and the finish is not affected by heat, oil or gasoline. Air dries over night.

About a pint for four-cylinder car.
1-pint can
. $\$ 0.54$
Doz.. D.P. $\$ 9.60$
$\frac{1}{2}$-pint can
.30


Doz. .D.P. $\$ 5.33$

## MAKE OLD CARS LOOK LIKE NEW



Pioneer Rim and Gasket Shellac

It is used to cement bicycle tires to their rims; also to coat gaskets so that a perfectly tight union may be made. It does the trick.
Quart cans, each. $\qquad$ .$\$ 0.85$
Dozen. .D.P. $\$ 13.60$
Half-pint cans, each
.25
Dozen. .D.P. $\$ 4.00$
Two-ounce swab bottles, each .15 Dozen. . D.P. $\$ 1.86$

## Pioneer Clutch and Brake Compound

Restores leather, cork or composition clutch and brake facings to their original state, causing them to grip with their original tenacity. This is undoubtedly the best clutch and brake compound on the market. It is prepared on scientific principles and gives absolute satisfaction wherever used.
Per can. . . . . . . . . . . . . . . . . . . . $\$ 0.35$
Per Dozen. . D.P. $\$ 5.60$


## Norwesco Aluminum Bronze

It is put up specially for use on radiators, engines, mufflers, etc. Because of its heat resisting qualities it is particularly well adapted to painting those parts of the machine that are subject to heat.

One can will do over the largest size motor.
Per can. . . . . . . . . . . $\$ 0.60$ Per Dozen., D.P. $\$ 6,93$

## Never-Rust

The "chemically correct" rim paint used by all motorists who want to prevent tires from sticking to the rims. It protects the tires by preventing the rust from forming and eating into the canvas.
Per can. . . . . . . . . . . $\$ 0.50$
Per Dozen. D.P. $\$ 8.66$



## Norwesco Retouching Lacquer

A one coat air-drying Lacquer built on a lacquer base instead of a varnish base. This is a very high grade article intended for use on any part of the machine that has become shabby. It is particularly adapted for use on the brass and metal parts about the machine.
Per can ............30.50
Per Dozen. D.P. $\$ 8.66$

## Norwesco Upholstering Dressing

A one coat quick-drying dressing for upholstering and tops. It is furnished in a gloss black finish only and should be applied with a small varnist brush. It dries quickly, giving an ever finish which will not crack or rub off Each can contains enough of the dressing to do over the upholstering on one car.
Per can
. $\$ 0.50$
Per Dozen...D.P. $\$ 8.66$


## Norwesco Lining Dye

Prepared especially for use on auto tops and linings where it is desired to dye the top or lining to cover up dirt and grease spots. This is not a waterproofing dressing, but simply a dye. Each can contains enough to do one top. The material may be applied either with a brush or cloth.
Per can .................. 80.40
Per Dozen..D.P. $\$ 6.92$

## Norwesco Top Dressing

It imparts a soft, flat, black appearance to leather, pantasote, canvas or mohair. It has the appearance of satin and is, we believe, far superior to the shiny varnishes now used as top dressings. This dressing produces an absolutely waterproof and elastic finish. Each can contains enough dressing to cover the largest size top.
Large can, each.........
. 80.90
Per Dozen.. D.P. $\$ 16.00$


Small can, each........... . . 50
Per Dozen. .D.P. $\$ 8.66$

# The Cibson cumax 

## ENAMEL, PRUSSIAN BLUE, COMPOUND, JET-LAC, CEMENT AND PATCHES

## Engine Enamel

Never-Burn Engine Enamel is specially prepared for use on automobile engines. The heat of the engine bakes the enamel and produces a finish that will not crack nor burn off.

Never-Burn Engine Enamel, gloss black
Never-Burn Engine Enamel, flat black
Never-Burn Engine Enamel,
battleship gray
.60

Per Dozen..D.P. $\$ 11.11$


## Norwesco Prussian Blue

is made from the finest quality of imported Prussian Blue, ground in pure linseed oil.

It is used by all mechanics to show wear and high spots.
Per tube. .
.$\$ 0.15$
Per Dozen...D.P. $\$ 2.76$

## Wonder-Worker Neats Foot Oil Clutch Compound

is a sure remedy against clutch troubles. A high grade compound for softening and keeping clutch leather in perrect condition.

Is an absolute necessity and should always be kept handy by the owner and driver.

One can may save you no end of time and trouble.
Pint cans, each.
Per Dozen. .D.P. $\$ 4.44$


## Jet-Lac

An especially prepared black quick air-drying enamel for enameling lamps, horns and fenders.

Jet-Lac leaves a smooth, rich,
 durable, elastic finish that is not affected by heat, oil or grease, and is in every respect a high grade article, prepared especially for automobile use. An amateur can apply it, as the enamel runs together after it is applied and leaves no brush marks. Gives a neat and classy appearance to brass work and saves time and bother of polishing brass.
Jet-Lac will not scratch or chip off and will wear as long as any baked-on enamels,

Half-pint can, each $\$ 0.75$
Per Dozen. .D.P. $\$ 13.32$
Pint can, each..... 1.25
Per Dozen. .D.P. $\$ 24.00$

Quart can, each...... 82.25 Per Dozen. .D.P. $\$ 40.00$ Gallon can, each. . . 4.00 Per Dozen., D.P. $\$ 80.00$

## Wonder-Worker Iron Cement

Here is a metallic chemical iron cement that will withstand heat, oils, grease, steam and gasoline.

When once hardened it becomes a metallic substance which contracts and expands same as the iron. Used extensively for repairing cracks, blowholes or defects in piping, cylinders, jackets, radiators, etc. Should be in the possession of every auto owner, as Wonder-Worker Iron Cement will save you long delays and an expensive repairing bill, at the same time enabling any one to make a permanent repair at very low cost.
Pint cans, each.
\$13.32
Quad-Lac
For renewing worn
 and dingy leather cushions, mohair and pantasote tops, brass lamps and nickel trimmings.

Quad-Lac produces a smooth, durable, waterproof, black, elastic finish, easy to apply, no loss of time in holding up car a day or two overtime for drying.

Quad-Lac will not rub off, stiffen or crack leather or pantasote cushions or tops.
For mohair tops, simply dilute with equal parts of denatured alcohol; one pint makes a quart of mohair dressing. Imparts a black, silky finish that will not stiffen or crack the mohair, and will recolor and waterproof a faded and leaky mohair top, giving it the appearance and wearing quality as when new.

Two coats of Quad-Lac will give brass or nickel a rich black, durable finish. Excellent for touching up marred and scratched surfaces on body or fenders. Dries in twenty minutes. Directions on every can.
Quad-Lac, $\frac{1}{2}$-pint can, each.
80.45

Dozen. .D.P. $\$ 8.00$
Quad-Laç, pint can, each. .75
Dozen. . D.P. $\$ 12.00$


The annoying and troublesome small holes that are burned or chafed in comparatively new mohair tops may be quickly and permanently repaired so that the repair is unnoticeable, at the same time making the top as good as new and absolutely waterproof. For mending holes, leaks and rips in mohair tops, without sewing. Simply remove muslin from uncured side of patch, moisten with gasoline and place patch over hole on outside of top, pressing firmly with fingers.
Self-Curing Mohair Top Patches, box of ten, as-
sorted, per box.
.$\$ 0.50$
Dozen boxes. .D.P. $\$ 8.00$

## Gibson Quality Motor Oil



ONE OF THE MOST serious problems confronting the motorist is the use of a satisfactory lubricant for his automobile. The remarkable growth of the automobile industry and the natural large demand for oils and greases has flooded the market with hundreds of good, bad and indifferent lubricants, some of which do the motor and other machinery more harm than good. The automobile motor, with the variable conditions of heat and cold, expansion and contraction, friction and terrific speed under which it must operate, demands exceptional care in the selection of an oil that will lubricate all the bearings liberally without waste; that will flow freely at low temperatures without coagulation; that will retain its viscosity (body) at high temperatures and will not carbonize the cylinders. Such an oil must have these qualities:
High Flash Test-The flash point is the lowest temperature at which the vapors arising from the oil will ignite. Oils used for the lubrication of internal combustion engines are exposed to severe heat. The flash test should, therefore, never fall below 375 degrees. Gibson Quality Oil shows a flash test of 390 degrees.
High Fire Test-The fire point of an oil is the lowest temperature at which the oil itself ignites. Since the fire is always above the flash in temperature, the test should show not less than 430 degrees. Gibson Quality Oil shows a fire test of 445 degrees.
Cold Test-The cold test is the lowest temperature at which an oil will flow or pour. This is very essential, as motor oil should be fluid even at temperatures as low as 10 degrees. Gibson Quality Motor Oil shows a cold test of 8 degrees F.
Viscosity-This represents the body of the oil and determines its lubricating value. The viscosity is measured by the fluidity at certain temperatures. Gibson Quality Oil shows a viscosity of 220 at 100 degrees.
All the elements described above are found in high values in the Gibson Quality Motor Oil -an oil that has been subjected to every known test by the engineers of the largest automobile factories in America. This Gibson Quality Motor Oil is better adapted to automobile motors than any oil manufactured. It possesses those factors that guarantee the motorist-

> -Greatest mileage per gallon.
> - Least bearing wear per mile.
> - Least carbon.
> - Best general results.
> - Least friction and consequently less fuel.

An oil that is made for the varying conditions found in automobile motors and guaranteed to give perfect satisfaction.

Dealers-We have a special sales proposition on this line of oils and greases. Write for it at once. It will pay you.

## Gibson Quality Motor Oil and Greases




## Gibson Quality Motor Oil

The Gibson Quality Motor Oil is packed in lithographed cans of special design, with patented spout. These packages make it very convenient for handling and guard against loss in pouring.

Prices-Light, Heavy and Medium Grades 1-Gallon Can .................................................. 80.75
1-gallon cans, packed six cans to case, per case....D.P. $\$ 6.10$
5-Gallon Can .............................................. 3.50
5 -gallon can, packed one can to case, per case....D.P. \$4.44
$\frac{1}{4}$-Barrel Lots, per gallon
Per gallon....D.P. $\$ 0.69$
Barrel Lots, per gallon.......................... . 38
Per gallon....D.P. $\$ 0.65$

## Gibson Quality Motor Grease

Gibson Quality Motor Grease is of the right consistency to give the very best results in grease cups, transmissions and at all other points where a high-grade grease is necessary. This grease is guaranteed not to harden or cake. It is an ideal lubricant.

1-Pound Cans
$\$ 0.20$
Packed 24 1-pound cans to case, per case....D.P. $\$ 6.66$
5-Pound Cans90

Packed 6 5-pound cans to case, per case...D.P. $\$ 6.10$
10-Pound Cans..........................................................................
Packed 6 10-pound cans to case, per case...D. $\$ 11.10$
25-Pound Can.............................................................................................. 3.00
Packed 125 -pound can to case, per case....D.P. \$4.44
Half-Barrels, per pound....................................................................... . 10
Per pound....D.P. $\$ 0.11$
Barrels, per pound.......................................................................... . 09
Per pound....D.P. \$0.11

## Gibson Quality Heavy Transmission Oil

Some motorists and garage men prefer a heavy fluid oil for transmissions, and for this purpose we offer the Gibson Quality Heavy Transmission Oil as being the very best in this class of lubricants.
5-Gallon Cans ..... $\$ 2.00$5-Gallon Can....D.P. $\$ 3.33$Half-Barrels, per gallon.45
Half-Barrels, per gallon...D.P. $\$ 0.58$
Barrels, per gallon
Barrels, per gallon....D.P. \$0.5342

VACUUM, OILS AND GREASES

## Description of Gargoyle Mobiloils

Gargoyle Mobiloils are the result of long experience by experts in the science of lubrication. The following descriptions cover merely the general distinguishing characteristics of the different grades of Gargoyle Mobiloils.


#### Abstract



\section*{Gargoyle Mobiloil "A" <br> Medium Body}

A dark amber colored oil for cyllader tubrication of water-cooled gasoline engines requiring a rich Jubricant. Also for the motor and enclosed chains of electric vehicles, for motorcycles wbere a medium bodied oll is required and for motorboats. It holds its body under extreme beat.


Gargoyle Mobiloil "B" Heavy Bedy

For both air and water-cooled gasoline engines where a beavy bodled oll is required. It holds up compression under extreme beat. This oil is especially suitable for lubrication of motorcycle engines and gas tractors.


Gargoyle Mobiloil "E"
Light Body
A straw colored oil for cylinder lubrication of body is required. It fows freely in colll weather. Particularly suited to the labrication requirements of Ford cars.

## Gargoyle Mobiloil "Arctic" <br> Light Medium Body

A Hight colored oil of intermediate borly for both summer and winter lubrication of gasoline engines baving close fitting piston rings. It flows freely in the collest weather.


## FOR CYLINDER LUBRICATION <br> Gargoyle Mobiloil "A," "B," "E" and "Aretic"

Per Gallon
One gallon ean
$\$ 0.80$
Per Gallon.. D.P. $\$ 1.24$
Ten one gallon cans in case .75
Per Gallon..D.P. 81.18
Five gallon ean in case . 65
Per Gallon..D.P. $\$ 1.02$
Fifteen gallon steel drum with faucet
Per Gallon., D.P. $\$ 1.02$
(No charge for drum.)
Thirty gallon steel drum with fancet
Plus $\$ 0.75$ for drim
Per Gallon.. D.P. 80.91
Vifty-flve sallon steel drum with fancet

Half barrels (wood)
Per Gallon. .D.F. san 94
Barrels (wood)
Per Gallon ..D.P. sast
(Barreln average 50-65 Gal. Haif harrels average 28 - 30 Gal.)


## Gargoyle Mobiloil "C"

A heavy, dark oil for transmission and differential lubrication, especially for ball or roller bearing types, as well as for timing gears and worm gears.

## FOR TRANSMISSION AND DIFFERENTIAL

Gargoyle Mobiloil "C"


A beavy semi-solid lubricant of dark nmber color. It will follow, coat and cushion the genrs, allowing them ind cushion the genrs, allowing them
to engage easily without nofse, and will prevent annecessary wear.
One flve pound tin, each .................. 80.75 Each.. D.P. \$1.16
Pen Case. D. D.P sins
Ons ten ponind tin in case per ease ...n
One ten pound tin
Per Case.. D.P. $\$ 2.39$
gix ten pound tins i
Per Case. D.P. $\$ 13,06$
One twenty-flve pound tin. ench
Each.. D.P. \$4.2s
Half harrels. per pound
Per pound.. D.P. 80.12
Barrels, Der pound
Per Pount. D.P \&0 12

## Motogrease and Autosponge

These are excellent greases, light in color, and will give satisfactory results under all general conditions.


## Motogrease

Offered in three grades, light, medium and beavy, for the lubrication of transmission and differentlal gears. Consistencles range from a soft nonflula grease for the lifht, to a bard cup grease for the benvy.

Offered in two grades, light and heavy, for the lubrication of transmission and differential gears where a trease of fibrous consistency is preferrea.

## MOTOGREASE AND AUTOSPONGE PRICES

Barrels, per pound ........................................................ 80.21
Per Pound. . D.P. 80.12
Half barrels, per jouma
Per Ponnd, D, P, \$1. 12
One five pownil tin, each
Twelve five pound tins in case, per case
Per Case. D, P, \$10.7:
One twenty-flye pound tin in case, per case .............. 2.50
Top Case.. D. P. \$? 88
One nity posmal tin in case, per case . . . . . . . . . . . . . . . . . . . 4.50
Per Case..D.P. $\$ 7.00$
4.50

# G/ke GIBSONGOMPANY $\overline{\text { GPOLIS }}$ 

OILS, ETC.


Prices on all the above.

| 3-1b. Cans, each Each.. D.P. $\$ 0.84$ | मो) |
| :---: | :---: |
| 5-1b. Cans, esch | 1.00 |
| Each. . D,P. $\$ 1.40$ |  |
| 10-1b, Cans, each | 1.75 |
| Each,. D.P, \$2.76 |  |
| 20-1b. Cans, each | 3.06 |
| Each. . D.P. $\$ 5.55$ |  |
| 50-1b. Can 5 , each | 2.00 |
| Eacb., D, P, \$13.88 |  |

"K-No. 4" Non-Fluid Otl (Melting Point 488 deg. Fah.). Proves of great value for use under condition where greases melt and waste, especially on bearings or gears located in bot places. This product will "stay by" universal joints on shaftariven cars when notbing else will

Prices No. 4.

| 3-1b. Cans, each | . 75 |
| :---: | :---: |
| Each. . D.P, \$0.97 |  |
| J-1b. Cans, each |  |
| Each. .D.P. $\$ 1.64$ |  |
| 10-1b. Cans, each | 2.85 |
| Each. D.P. $\$ 3,22$ |  |
| 30-1b. Cans, each | 4.0 |
| Facb. D.P. $\$ 6.44$ |  |
| 50-1b. Cans, each | 0.50 |
| Fach,.D.P. \$16.10 |  |

Crum's Spring-Lub


Crum's Spring-Lub makes the springs more lively and resilient, prevents rust and pitting, lessens breakage of springs. Is a perfect lubricant. Is not gummy or greasy, and will not ooze out like oil does. Will not collect dust. Wears smooth, becomes a part of the spring and lasts a long time. Springs need lubrication the same as other working parts. They seldom get it. Unless they are lubricated they corrode between the leaves and become stiff, lose their resiliency and the car rides hard.
Each
.50 .75
Dozen. . D.P. $\$ 10.00$


Crum's Rim-No-Stick is a graphite rim paint that dries quickly and prevents tires from sticking to rim. Prevents rust and corrosion, preserves the rim and wears indefinitely. It is easy to apply. Any one can do it. When rims are painted with Rim-No-Stick and a change of tires is desired, it is not necessary to stamp and pound casings to get them off. A tire that is stuck to the rim and taken off by pounding or stamping is injured more than several hundred miles of road wear. If rims are painted with Rim-No-Stick, tires can be easily removed.
Each
$\$ 0.50$
Dozen, .D.P. $\$ 7.22$


## Three-In-One Oil

Three-In-One Oil is an oil of the highest quality. Especially recommended for magneto bearings, the finest also for bicycles, sewing machines, guns, etc.
One-ounce bottles, each............. . . $\$ 0.10$ Per Dozen. .D.P. $\$ 1.77$

Three-ounce bottles, each .25
Per Dozen. . D.P. $\$ 4.00$

## GRAPHITE

## Dixon's Graphite Transmission and Differential Grease No. 677



A graphited grease of just the right consistency for all transmission and differential gears, except those intended to be lubricated with light oil. It is the grease the "Speed Kings" use. There is nothing like it on the market. We stand behind this grease with our strongest recommendation.

1-lb. Tin Cans, 36 in case, per lb.
$\$ 0.35$
Per Lb..D.P. $\$ 0.62$
5-1b. Tin Pails, 10 in case, per lb. . . . . . . . . . . . . . . . . 30
Per Lb., D.P. $\$ 0.53$
$10-\mathrm{lb}$. Tin Pails, 6 in case, per lb.
.25
Per Lb..D.P. \$0.44

## Dixon's Graphite Gear Oil No. 675



A very light-bodied gear lubricant for use in transmission and differential cases designed for light oil lubrication. Generally speaking, No, 675 should be used only in cases fitted with plain bearings.
1-lb. Tin Cans, 36 in case, per lb. .................. . 80.35 Per Lb..D.P. $\$ 0.62$
$\mathbf{5}-\mathbf{l b}$. Tin Pails, 10 in case, per lb.
.30
Per Lb..D.P. $\$ 0.53$
10-lb. Tin Pails, 6 in case, per lb. .25
Per Lb. .D.P. $\$ 0.44$

## Dixon's Graphite Heat-Resisting Grease No. 676



No. 676 is the best grease we know of for universal joints, water pump cups, overhead valve cups and clutch thrust collars. It positively will not melt and run out. This grease should not be used on gears.
1-lb. Tin Cans, 36 in case, per lb. $\$ 0.35$ Per Lb., D.P. $\$ 0.62$
5-1b. Tin Cans, 10 in case, per lb.
Per Lb..D.P. $\$ 0,53$
$10-\mathrm{lb}$. Tin Pails, 6 in case, per lb
.25
Per Lb...D.P. \$0.44

## Dixon's Motor Graphite

The purest and most carefully selected grade of Flake Graphite, ground to impalpable fineness. May be mixed with oil or grease as required. Its function is to eliminate friction and wear of parts and to increase power. Use it in cylinders, on chains, springs, tires, wheel rims, bearings and wherever friction occurs.

$4-1 \mathrm{~b}$. Tin Cans, 36 in case, each.................. $\$ 0.50$ Each. . D.P. $\$ 0.88$
$5-\mathrm{lb}$. Tin Cans, 10 in case, each.
4.00

Each. .D.P. $\$ 7.10$

## Dixon's Graphite Cup Grease



Cup Greases containing fine Flake Graphite reduce friction to a minimum. In summer use Dixon's No. 5 ; in winter use Dixon's No. 3. Use in all grease cups, wheel spindles, etc. By using these high grade graphite greases the bearings soon acquire the well known graphite polish that eliminates friction and causes easy running.
1-lb. Tin Cans, 36 in case, per lb.
.30 .35
Per Lb.. D.P. $\$ 0.62$
$5-\mathrm{lb}$. Tin Pails, 10 in case, per $\mathbf{l b}$, ................. . . 30
Per Lb..D.P. $\$ 0.53$
10-lb. Tin Pails, 6 in case, per lb.
Per Lb..D.P. \$0.44


Pack wheel spindles and steering gear housings with Graphitoleo. It is the highest grade graphite lubricant made for ball bearings and other fine mechanism. Absolutely warranted not to gum or become rancid. The collapsible tubes are very convenient for automobile use.
$8-0 z$. Tubes, 36 in case, per doz. . . . . . . . . . . . . . . . $\$ 5.00$ Per Dozen. .D.P. $\$ 8.88$
1-lb. Tin Cans, 36 in case, per lb. . . . . . . . . . . . . . . . . 55
Per Lb. . D.P. $\$ 0.98$
5 -lb. Tin Pails, 10 in case, per lb. . . . . . . . . . . . . . . . 50
Per Lb. .D.P. $\$ 0.88$
$10-\mathrm{lb}$. Tin Pails, 6 in case, per lb .
Per Lb. .D.P. $\$ 0.80$

#  

## Dixon's Non-Leak Graphite Grease No. 680



Differential housings of many cars chronically leak at the ends of the axle. No. 680 is the result of several years experimenting with the idea of overcoming this trouble. It is all lubricant, has long life, will not allow gears to cut a path through it like very heavy grease and it does not leak out on the brakes and over the wheels. This special grease should be used only when No. 677 or No. 675 will not stay in the differential housing. It should not be used in transmissions. Great for Fords.
$5-\mathrm{lb}$. Tin Pails (10 in case), per lb.
$\$ 0.30$
Per lb.....D.P. $\$ 0.53$
$10-\mathrm{lb}$. Tin Pails ( 6 in case), per lb .
Per lb.....D.P. $\$ 0.44$
$25-\mathrm{lb}$. Firkin, per lb.
Per lb.....D.P. $\$ 0,40$
$50-\mathrm{lb}$. Keg, per lb.
Per lb....D.P. $\$ 0.36$

## Dixon's Graphite Wood Fiber Grease No. 688

A graphited gear lubricant containing a certain proportion of finely ground cedar fiber. It is prepared especially for noisy gears and leaky housings and is not intended for general use. No. 688 will prevent disagreeable noise and will not drip from the housing. It must be thinned before using.


$$
\text { 1-lb. Tin Cans ( } 36 \text { in case), per lb. }
$$

80.25 Per 1b.....D.P. $\$ 0.44$
5-1b. Tin Pails (10 in case), per lb........................... 20
Per lb....D.P. $\$ 0.36$
10-lb. Tin Pails ( 6 in case), per lb........................... .20
Per lb.....D.P. $\$ 0.36$
$\mathbf{2 5 - l b}$. Tin Pails, per $\mathbf{l b}$.
ant
Per lb.....D.P. $\$ 0.33$
50-1b. Kegs, per lb.
Per lb.....D.P. $\$ 0.32$
100-lb. Kegs, per lb.
Per lb.....D.P. $\$ 0.30$

## Dixon's Graphite Motor Chain Compound



Without an equal for lubricating automobile driving chains. When chain is cleaned and immersed in the melted compound no other external or internal applications are necessary. The compound may be used repeatedly. Prevents rust and wear. Put up in cakes of about three pounds each.
Per cake.
$\$ 1.00$
Per cake....D.P. \$1.76


## Gredag



This is the only grease lubricant that contains pure, gritless Acheson-Graphite. It is made in the various grades and consistencies to meet all requirements. Gredag is an ideal lubricant for automobile gears, transmissions and universal joints, as it has greater endurance and affords better lubrication. It builds a film that will not break under the pressure when full power is suddenly thrown upon the gears. The teeth will silently engage in mesh and the car will run quietly and sweetly. It will reduce friction and prevent wear.

The grades of Gredag strongly recommended for automobile use are: No. 31, semi-fluid; No. 32, soft; No. 33, medium. Either grade of Gredag will serve for a wider range of uses than plain grease.

Price of grades 31, 32 and 33 :
$5-1 \mathrm{~b}$. Can, per lb, $\$ 0.25$
Per lb....D.P. $\$ 0.39$
$10-\mathrm{lb}$. Can, per $1 \mathrm{lb} . . .24$
Per lb.....D.P. $\$ 0.38$
25-lb. Can, per lb... . 21
Per lb.....D.P. $\$ 0.86$
$50-\mathrm{lb}$. Can, per lb... . 20
Per lb.....D.P. $\$ 0.33$


100-1b. Keg, per lb...... $\$ 0.17$ Per 1b....D.P. $\$ 0.27$
200-lb. Barrel, per lb... . 16
Per lb....D.P. $\$ 0.27$
$400-\mathrm{lb}$. Barrel, per lb... . 15
Per lb.....D.P. $\$ 0.24$

## Oildag

No. 1 Screw-Top Can, containing charge for 1 gallon oil, each. $\$ 0.33$ Each...D.P. $\$ 0.33$
No. 1 Screw-Top Can, one dozen in a box, by the dozen
Per dozen....D.P. $\$ 3.88$
Case contains 6 or 12 dozen No. 1 cans.
No. 5 Screw-Top Can, containing charge for 5 gallons oil, each.
Each...D.P. $\$ 1.66$
Case contains 20 No. 5 cans.
No. 10 Screw-Top Can, containing charge for 10
gallons oil, each.
2.00

Each...D.P. $\$ 3.32$
Case contains 10 or 25 No. 10 cans.
No. 50 Can, containing charge for 50 gallons oil,
each
10.00

Each....D.P. $\$ 16.60$
Case contains 5,10 or 25 No. 50 cans.

# Ghe GIBSON COMPANY 

OIL AND GREASE GUNS

## Standard Oil Guns



No. 32 B
No. 32 B Standard Oil Gun, $1 \frac{1}{6} \times 8$, brass barrel, crook-neck handle, 5 -inch bent nozzle, each.... $\$ 0.60$ Each. . D.P. $\$ 0.77$ Dozen. . D.P. $\$ 8.38$


No. $33 \mathbf{P}$
No. 33 P Standard Oil Gun, $1 \frac{1}{4} \times 8$, brass barrel, cork plunger and metal handle with finger clips, each
Each.. D.P. $\$ 1.32$ Dozen. .D.P. $\$ 14.44$


No. 34 B Standard Grease Gun, $1 \frac{1}{2} \times 10$, brass barrel with screw rod, 4 threads to inch, allowing quick action, 4 -inch straight spout with large opening cork, plunger and metal handle, each
1.10

Each.. D.P. $\$ 1.55$ Dozen. .D.P. $\$ 17.11$

## Pioneer Grease Gun



Pioneer Grease Gun, $1 \frac{1}{4} \times 10$, brass barrel, spout turns in all directions, will handle heaviest grease, each
1.50

Each. D.P. $\$ 2.22$ Dozen. .D.P. $\$ 24.00$

## A New Grease Gun



Jumbe Combination Grease and Oil Gun
We offer here a high-grade Combination Grease and Oil Gun, made of extra heavy sheet brass. The barrel is 11 inches long and $2 \frac{1}{2}$ inches in diameter and weighs $1 \frac{1}{2}$ pounds. Capacity 13 ounces.

The change from grease to oil is quickly made by turning the small thumb nut by hand. Note the combination spout which is curved and conveniently arranged.

The gun is high-grade in every respect; has a large cork plunger and a rapid feed for grease.
Price
82.25

Each.. D.P. $\$ 3.88$ Dozen. . D.P. $\$ 44.00$


It can be filled-others cannot. It is filled through an opening in its side $1 \frac{1}{2}$ inches wide and 8 inches long, while others are supposed to be filled from the end, which is impossible, as when a spoonful or two has been put in, the opening becomes stopped up with a pocket of air behind it and no more can be crammed in.
Townsend Grease Gun, 6 oz ., each
Each..D.P. 85.00
Townsend Grease Gun, 8 oz., each
Each. .D.P. $\$ 5.82$
Townsend Grease Gun, 12 oz ., each
4.00

Each. .D.P. $\$ 6.66$
Townsend Grease Gun, 16 oz., each . ............. . . 5.00
Each. . D.P. $\$ 8.33$

## Carlyon Grease Gun



Carlyon Grease Guns embody entirely new ideas in grease guns. Two revolving cylinders. Onehalf turn opens or closes entire side. Requires but ten seconds to fill. Seven turns of the handle unloads heaviest grease. Simple, efficient, clean. Each
Each.. D.P. 82.44

## Bigsby Grease Gun



The Bigsby Automatic Grease Gun for forcing heavy grease or lubricants into the working parts of automobiles, engines, gear cases and all other kinds of machinery. Makes it possible to oil wearing parts not readily accessible, thereby reducing repair bills to the minimum. Any machine may be oiled without special effort or waste of lubricants. Grease cups may be filled with the heaviest grease. Wearing parts requiring lubrication are easily oiled. Gasoline may be drawn from the fuel tank for priming purposes. An oil nozzle in addition to the regular curved grease spout is supplied with every gun. Easy to operate-simply pull the trigger.
Each
. $\$ 3.00$
Each. D.P. $\$ 5,00$ Dozen. D.P. $\$ 56.00$

# The GIBSONGOMPANY 

## GREASE GUNS, BUCKET PUMPS AND RADIATOR COMPOUNDS



All metal construction. The cleanest, strongest and handiest grease gun on the market. Polished brass, lacquered. Metal plunger ground to a perfect fit. The gun for the man who really cares. Prices include B-Line Grease Filler and two tips.
Boston Combination Grease Gun, 6-ounce, 6x14.
inch, each
$\$ 3.00$
Each. , D.P. $\$ 5.00$
Boston Combination Grease Gun, 9 -ounce, $8 \frac{1}{2} \times 1 \frac{1}{4}$ inch, each
Each.. D.P. \$5.82
Boston Combination Grease Gun, 12-ounce, $11 \times 1 \frac{1}{4}$.
inch, each
Each., D.P. $\$ 6.66$
Boston Combination Grease Gun, 16-ounce, $8 \frac{1}{4} \times 2 \frac{1}{4}$ -
inch, each
6.00

Each. .D.P. $\$ 10.00$
Weaver Valveless Bucket Pump
for engine oils and heavy greases


One great advantage of the Weaver Bucket Pump is the fact that the valveless construction permits lubricants to be handled in "three ways."

FIRST-The lubricant can be forced out of the bucket and into the desired receptacle.

SECOND-Grease or oils can be sucked out of the differential, transmission housing, etc.

THIRD-The barrel or chamber of the bucket may be sucked full of foreign lubricant and discharged again through the hose into a third receptacle without disturbing the contents of the bucket.

## Self-Measuring

The lubricant is accurately measured as discharged.

## Steel Hose

The Weaver Bucket Pump is equipped with g-inch flexible steel hose which cannot be affected by the grease, as is the case with the rubber hose.

## Construction

The bucket proper is made of heavy sheet iron and has a capacity of 25 pounds of grease. The cylinder is of 16-gauge brass tubing, two-inch diameter, containing a plunger which will not leak and is impervious to the action of grease and oils.

Each
$\$ 12.00$
Each. D.P. \$21.33


## Radi-No-Leak

Radi-No-Leak is an absolutely reliable radiator compound. Stops leaks instantly and prevents formation of scale or rust.

Price, per can.
. $\$ 0.75$
Dozen. .D.P. \$9.44

## Se-Ment-OI

Se-Ment-O1 is a self-acting cement for repairing leaky radiators and cracked water jackets. Wben poured into the water Jackets.
radiator it dissolves in the water, cirradiator it dissolves in the water, cird culates through the cooling system and
flows out through the leak, When the flows out tbrough the leak. When the Se-Ment-O1 comes in contact with the air in coming through the leak it congeals, forming a clot which stops the leak. This clot hardens, making a permanent repair.

After the cement has "sset" the remainiler of the Se-Ment-O1 can be arained out through the pet cock, learing the entire cooling system free from foreign substance.

By using Se-Ment-O1 you can repalr leaks while using your car.

Se-Ment-O1 is put up in lithographed cans, each can containing enough Se-Ment-Ol to repair two radiators of ordinary size.
Retail Price, each.
Per dozen.. D.P. \$10.66


## Blue Ribbon Radiator Cement

When poured into the radiator the cement dissolves thoroughly, and as the golution comes into contact with the air at the leak point it immediately air at the leak point it immediately corming a permanent and lasting cement forming
This cement cleans out the circulating system and prevents scale and rust from forming. This preserves the metal and lncreases the coollog capacity.
9 -ounce Package, per can . . . . . . . . . $\$ 0.75$ Per dozen.. D.P. \$s.39

## VALVE GRINDING COMPOUNDS

Clover Valve Grinding Compound


## Duplex 4oz.Can40 ${ }^{\text { }}$

ns no emery or grit, and having no magnetic properties, it will not remain in the pores of cast iron after grinding.

Will not melt or run in temperatures under 200 degrees.
Clover Valve Grinding Compound, 4-oz. boxes, fine and coarse, each
30.40

Dozen. .D.P. $\$ 7.22$
Clover Valve Grinding Compound, 1-lb. boxes, fine, each
Clover Valve Grinding Compound, $1-\mathrm{lb}$. boxes, medium, each
1.25

Clover Valve Grinding Compound, 1-lb. boxes, coarse, each
1.25

## Each. . D.P. \$1.95

## Eureka Valve Grinding Compound

The Eureka Valve Grinding Compound will grind valves that are in the worst possible condition, and do it without scratching or grooving. Eureka is put up in boxes containing three grades -coarse, medium and fine.


Price.
$\$ 0.35$
Dozen.. D.P. $\$ 6.66$

## Carborundum Valve Grinding Compound In Combination Cans



No. G-20 Carborundum Valve Grinding Compound in 2 -ounce combination cans. The can, 2 inches high, 12 -inch diameter, is divided into two distinct compartments, one containing fine, the other coarse compound.

Carborundum Valve Grinding Compound is a superior material for valve grinding. It cuts fast and clean, leaving a smooth, uniform surface. The coarse compound is used first for roughing in the valve; the fine compound then gives the valve seat a perfectly true polished surface.
Each
$\$ 0.25$

## Carborundum



For the convenience of the motor supply dealer, the garage and re pair station owner, and for use in the machine shop, the Carborundum Valve Grinding Compound is put up in one and five-pound cans of the coarse and fine mixtures.
The coarser compound is used first in grinding the valve. It quickly removes all pits or masses of any foreign matter. The finer compound is then used in giving the valve seat a perfectly true, polished surface.

1-lb, tin Carborundum Compound, coarse or fine... $\$ 0.50$ Each. .D.P. $\$ 0.77$

5-lb. tin Carborundum Compound, coarse or fine. . . 2.00
Each. . D.P. $\$ 8.00$


Carborundum Valve Grinding Compound is the best medium possible for motor valve grinding. Its use positively assures a perfect valve.

Outfit No. 1, containing two collapsible tubes, cloth strips and booklet, packed in neat cardboard box, complete
Dozen. . D.P. $\$ 13.33$
Outfit No. 2, containing two half-pound tins, coarse and fine grain, cloth strips, booklet, packed in neat cardboard box
Dozen. . D.P. $\$ 13.93$


Carborundum Valve Grinding Compound is also put up in separate tubes containing fine or coarse paste, as desired. In this form it is most convenient for the individual car owner.

Carborundum Valve Grinding Compound, fine, in tubes, each. . . . . . . . $\$ 0.25$
Dozen. . D.P. \$4.44
Carborundum Valve Grinding Compound, coarse, in tubes, each
. 25
Dozen. . D.P. 84.44


## The GIBSONGOMPANY $\overline{\text { GINOLIS }}$

PRIMERS AND PET COCKS


Priming Cups


Nos, 1 and ?

No. 1 Priming Cup, upright long shank, $\frac{1}{8}$-in. pipe thread, each Dozen..D.P. $\$ 4.80$
No. 2 Priming Cup, upright long shank, $\frac{1}{4}$-in. pipe thread, each

No. 3 Priming Cup, angle long shank, $\frac{t}{f}-\mathrm{in}$. pipe thread, each35 Dozen. . D.P. $\$ 5.86$
No. 4 Priming Cup, angle long shank, $\frac{1}{4}$-in. pipe
thread, each
Dozen. D.P. $\$ 6.40$ Dozen.. D.P. $\$ 6.40$

No. 5 Priming Cup, upright short shank, $\frac{1}{8}$-in. pipe thread, each... .$\$ 0.35$
Dozen. . D.P. $\$ 4.53$
No. 6 Priming Cup, upright short shank, $\frac{1}{4}$-in. pipe thread, each ...........
Dozen. .D.P. \$4.80

Ideal Priming Cups


No. 34


Ne. 35

This Priming Cup is a radical departure from the old style priming cups now on the market and is designed on the needle valve principle.
No. 34 Ideal Priming Cups, $1 / 4$-in., brass, each............. 80.60
Dozen..D.P. $\$ 6,66$.
No. 34 Ideal Prim
Dogen, D.P. 84.46

Nozen. D.P, $\$ 8.00$ Ideai Priming Cups, 1/5-in., nickel, each.............. . 65
No. 35 Ideal Prim
Dozen. D. P. $\$ 8,53$


No. 16 Pet Cock, $\frac{1}{\frac{1}{-}-i n}$. pipe thread, each $\qquad$ Dozen. . D.P. $\$ 3.78$
No. 17 Pet Cock, $\frac{1}{4}$-in. pipe thread, each................. . 25 Dozen. . D.P. $\$ 4.26$
No. 26 Pet Cock, bibb nose, $\frac{1}{6}$-in. pipe thread, each .35 Dozen. . D.P. $\$ 6.40$
No, 27 Pet Cock, bibb nose, $\frac{1}{4}$-in. pipe thread, each .40 Dozen. .D.P. $\$ 7.46$

## Shut-off Cocks



Nos. 110 and 111


Nos. 10 and 11

No. 10 Shut-off Cock, $\frac{1}{6}-i n$. pipe thread and $\frac{1}{4}$-in. tubing, each.
$\$ 0.60$
Dozen. . D.P. $\$ 8.00$
No. 11 Shut-off Cock, $\frac{1}{4}$-in. pipe thread and $\frac{5}{16}$-in. tubing, each
Dozen. D.P. 88.88
No. 110 Shut-off Cock, both ends for $\frac{1}{4}$-in. tubing, each60

Dozen. . D.P. $\$ 9.60$
No. 111 Shut-off Cock, both ends for ${ }^{5} 6-i n$. tubing,
each
.60
Dozen.. D.P. $\$ 9.60$

## Air Cocks



No. 37 Air Cock, $\frac{1}{8}$, each $\$ 0.65$

$$
\text { Dozen. .D.P. } \$ 6.13
$$

No. 38 Air Cock, $\frac{1}{4}$, each70

Dozen. . D.P. $\$ 6.66$
No. 39 Air Cock, $\frac{1}{8}$, each
Dozen. . D.P. $\$ 8.00$
No. 40 Air Cock, $\frac{1}{6}$, each............................................. .75
Dozen. . D.P. $\$ 6.98$
No. 41 Air Cock, $\frac{1}{4}$, each ........................................... 80
Dozen.. D.P. $\$ 7.46$
No. 42 Air Cock, $\frac{3}{6}$, each.............................................. .90
Dozen. .D.P. $\$ 8.00$

## GREASE CUPS

## Compression Grease Cup



No. 700 Compression Grease Cup, $3 / 4$ Inch inside diameter, $1 / 4$ ounce capacity, $1 / 8$-inch pipe thread, plain steel, each
Dozen.. D.P. $\$ 1.32$
No. 701 Compression Grease Cup, 1 inch inside diameter, $1 / 2$ ounce capacity, $1 / 8$-inch pipe thread, plain steel, each
Dozen. D.P. 81.50
No. 702 Compression Grease Cup, 11/4 Inch inside diameter, \&/3 ounce capacity, $1 / 4$-inch pipe thread, plaia steel,
Dozen. D. $\overline{\mathrm{F}}, \mathbf{\$ 2 0 0}$
No, 99 Compression Grease Cup, 3/4 inch inside diameter, 1 ounce caparity, \&-inch pipe thread, brass, each ... Dozen.. D.P. $\$ 2.55$
Same in nickeled finish, ench.................................... Dozen . D.P. \$4.11
No. 100 Compression Girense Cup, 1 inch inside diameter, s-inch pipe thread, brass, eapacity $\frac{1}{2}$ eunce, each
Dozen.. D.P. $\$ 3.11$
Same in nickeled finish, each..................................... . . . . 35 Dozen. D.P. $\$ 4.44$
No. 101 Compression Grease Cup, $11 / 4$ inch inside diameter, 1-inch pipe thread, brnss, capacity $9 / 3$ ounces, each Dozen.. D.P. 84.66
Same in nickeled finish, ench.................................. . . . . . 10 Dozen.. D.P. $\$ 5.77$
No. 200 Compression Grease Cup, with leather washer, 4/4 inch inside diameter, 3-inch pipe thread, brass, capacity $\frac{1}{4}$ ounce, each
Dozen D.P. $\$ 3.00$

Dozen. . D. '. \$1.88
Ne. 201 Compresston Grease Cup, with leather wanher, 1 inch inside diameter, B-inch pipe thread. brass. capacity ounce, each
Dozeם..D.P. $\$ 3.54$
Same in sickeled finish, each. . . . . . . . . . . . . . . . . . . . . . . . . . . Dozen.. D.P. \& 5.33
No. S0\& Compression Grease Cup, with leather washer, 11/4 inch inside diameter, $\frac{1}{4}$-inch pipe thread. brans, capacity $2 / 3$ ounce, each
Dozen.. D.P. \$4.88
Same in nickeled flnish, each...................................... Dozen, D.P. ze.ss


No. 399 Ratebet Compression Grease Cup. 3/4 Inch inside dinmeter, $1 /$-inch pipe thread, polished brass, capacity $1 / 3$ onnce, each Dozen..D.P, 85,77
Bame in nickeled finish, each. . Dozen. . D.P. $\$ 7.77$
No. 300 Ratelaet Compression Grease Cup. 1 inch inside diameter, $1 / \mathrm{s}$-inch pipe thread. polished brass, capacity $1 / 2$ ounce, ench Dozen.. D.P, $\$ 7.10$
Same in nickpleal finish, each... , ति Dozen. D.P. $\$ 8.68$
No. 301 Ratchet Compression Girease Cup, 11/4 inelh inside diameter, $1 / 1$-inch pipe thread, polished brians, capacity $2 / 8$ ounce, each

Same in nickeleal finish, each [Poxen. . D, F. \$9.55

## Brass and Steel Ratchet Grease Cups

No. 800 Winkley Ratchet Compression Grease Cups, $\frac{2}{2}$ inch inside diameter, $\frac{1}{2}$ ounce eapacity, \& inch pipe thread. plain steel, ench
Dozen. D. P. $\$ 2.12$
No. 801 Winkley Ratebet Compression Grease Cups. 1 inch inside diameter, $\frac{1}{2}$ ounce capacity, $z$ inch pipe thread. pacity, suin steel. each
pozen.. D. $\mathrm{P}, 82.44$
No. 802 Winkley Ratchet Compression Grease Cups, $1:$ ineh inside diameter, $2 / 3$ ounce capacity, $\frac{3}{3}$ inch pipe thread, plain steel, each Dozen. . D.P. 82.00
No. 900 Winkley Ratchet Compression Grease Cups, ? inch inside diameter, $\frac{1}{2}$ ounce capacity, $\frac{a}{\text { inch pipe thread. }}$ pacity, brass, ench


Dozed...D.P. 83.88
No. 901 Winkley Ratchet Compression Grease Cups, 1 Inch inside diameter, 1 ounce capacity, $\frac{1}{2}$ inch plpe thread, dull brask, each
Dozen.. D.P. \&4.6G
No. 90? Winkley Ratchet Compression Grease Capa, 11 inch inside diameter, $9 / 3$ ounce capacity, 1 inch pipe thread. ilull brass, each

De Luxe Grease Cups


The DeLuxe Is a T-bandle compression cup with the plung. er threaded on the handle stem and beld in place by a collar and groove. This overcomes the objection to this type of cup, as the bandle does not protrude when cup is full. Base of cup forms hexagon for wrench and allows of cup fitting flush with article to which attached. Fin. Ish is blued steel base with polished nickel or brass body, makIng a very attractive as well as a strictly blath grade cup.
No. 000 DeLaxe Grease Cup,
$5 / \mathrm{m}$-inch inside diameter, $1 / /$
ounce capacity, $1 / 5$-ineh
pipe thread, nickel Enish. each Dozen. D.P. $\$ 9,00$
No, 00 DeLuxe Grease Cup. $\pi / 4$ inch inside diameter, $1 / 4$ ounee capacity, $1 \sim$-inch pipe thread, nickel tinish. pach

No, 0 DeLuxe Grease Cup, $15 / 16$ inch inside diameter, 1/3 ounce capacity, 1/s-inch pipe thread, niekel fiaish, rach Dozen. .D.P. $\$ 12.00$
No. 1 DeLuxe Grease Cup, $1 / 4$ inch inside diameter, $1 / 2$ ounce capacity, $1 / 1$-inch pipe thread, nickel Enish, each. 1.9 Dozen. . D, P. \$16,00


No. 1101


No. 1104

No. 1101 Grease Cup, sickeled finish, $1 / 6$-inch plpe thread. caparity, 1 ounce, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 0.20$ Dozen...D.P. se.93
No. 1102 Grease Cup, nicheled tinish, $5 / 16 \times 3 ?$ thread, capacity 4 ounce, each
Dosen. D. P. $\$ 2.93$
No. 1103 Grease Cup, nickeled Enish, $1 / 4 \times 39$ thread, capacity ${ }^{1}$ ounce, each
Dozen, D.P. $\$ 2.8$
No. 1101 Grease Cup, nickeled finisb, $1 / 4$-isch pipe thread, pacity b ounce, each

# The GIBSONOOMPANY 

## OIL CUPS, SAND PAPER, ALOXITE CLOTH AND CARBORUNDUM WHEELS

## Style N Oil Cups



Often an oil cup is to be used in a horizontal or oblique position and in such a place our style " N " may be used as it can be screwed into a tapped hole at almost any angle so that the oil hole is on top.

Our "N" Cup is made with a spring friction fit between inner and outer part, furnishing a smooth working, dust-proof cap which can be turned either way to open but will not jar open.
No. 1-N Oil Cup, Nickel, $\frac{1}{4}$-in. diameter, 32 thread, each
$\$ 0.10$
Dozen. .D.P. $\$ 1.46$
No. 2-N Oil Cup, Nickel, $\frac{18}{18}$-in. diameter, 32 thread, each
Dozen. . D.P. $\$ 1.88$
No. 3-N Oil Cup, Nickel, $\frac{1}{\frac{1}{-}}$-in. diameter, 24 thread, each
Dozen. .D.P. $\$ 2.00$
No. 3-N Oil Cup, Brass, $\frac{1}{6}$-in. diameter, 24 thread (Ford Size), each.
Dozen. .D.P. $\$ 1.11$
No. 4-N Oil Cup, Nickel, ${ }^{\frac{T}{6}}$-in. diameter, 24 thread, each
Dozen. .D.P. $\$ 2.44$
Sand Paper

B. \& A. Sand Paper

Sheets 9x11. 2t sheets in quire, 20 quires in ream.
B. \& A. Sand Paper, 2/0, per quire. . . . . . . . . . . $\$ 0.25$ Per Quire. .D.P. $\$ 0.33$
B. \& A. Sand Paper, O, per quire. ............... . 25

Per Quire. .D.P. $\$ 0.33$
B. \& A. Sand Paper, $\frac{1}{2}$, per quire ................ . . 25

Per Quire. . D.P. \$0.33
B. \& A. Sand Paper, 1, per quire . . . . . . . . . . . . . . . 30

Per Quire. .D.P. $\$ 0.35$
B. \& A. Sand Paper, 1 $1 \frac{1}{2}$, per quire . . . . . . . . . . . . . . 30

Per Quire. . D.P. $\$ 0.35$
B. \& A. Sand Paper, 2, per quire . . . . . . . . . . . . . . . . 30

Per Quire. . D.P. $\$ 0.35$
B. \& A. Sand Paper, 21, per quire . . . . . . . . . . . . . . 35

Per Quire. . D.P. $\$ 0.40$
B. \& A. Sand Paper, 3, per quire . . . . . . . . . . . . . . . 35

Per Quire. . D.P. $\$ 0.40$


Aloxite is a new abrasive material manufactured by The Carborundum Company. It is the ideal abrasive for steel cutting, and when coated on cloth it is far superior to emery for general machine shop work. Aloxite is exceedingly hard and extremely tough, and it not only does better and faster work than emery, but the Aloxite Cloth, because of the toughness of the grain, shows much longer life.

## ALOXITE CLOTH IN HANDY PACKAGES.

For the convenience of all users of Aloxite Cloth, the Handy Package meets a long felt want. Each envelope contains six $9 \times 11$-inch sheets of any desired grits.
Aloxite Cloth, Handy Package, each.
. $\$ 0.25$
Each. . D.P. $\$ 0.44$

## ALOXITE CLOTH STRIPS.

No. 66 Aloxite Cloth Strips, 15 strips, $1 \frac{1}{4} \times 11$, as-
sorted, coarse, medium and fine; per package. . $\$ 0.25$
Per Package, . D.P. $\$ 0.25$
In ordering state grits wanted.
Aloxite Cloth, Crocus, per quire. .................. 81.55
Aloxite Cloth, $F$, per quire. ................... 1.55
Aloxite Cloth, 2/0, per quire................... 1.55
Aloxite Cloth, 0, per quire. .................. 1.55
Per quire. .D.P. $\$ 1.90$
Aloxite Cloth, 1, per quire. . . . . . . . . . . . . . . . 1.65
Per quire. .D.P. $\$ 2.10$
Aloxite Cloth, $1 \frac{1}{2}$, per quire . . . . . . . . . . . . . . . 1.75
Per quire. .D.P. $\$ 2.22$
Aloxite Cloth, 2, per quire . . . . . . . . . . . . . . . 1.90
Per quire. . D.P. \$2.44

## Carborundum Wheels



Carborundum Wheels, 4 inch diameter, 1 inch thick, $\frac{1}{2}$ inch arbor hole.

Each...D.P. $\$ 1.60$
Carborundum Wheels, 4 inch diameter, $\frac{?}{4}$ inch thick, $\frac{1}{2}$ inch arbor hole. Each....D.P. 1.85
Carborundum Wheels, 6 inch diameter, 1 inch thick, 3 inch arbor hole. Each...D.P. 3.05
Carborundum Wheels, 6 inch diameter, 3 inch thick, 3 inch arbor hole. Each....D.P. 2.40
Carborundum Wheels, 8 inch diameter, 1 inch thick, 1 inch arbor hole. Each....D.P. 4.60
Carborundum Wheels, 10 inch diameter, 1 inch thick, 1 inch arbor hole. Each....D.P. 6.35
Carborundum Wheels, 10 inch diameter, $1 \frac{1}{4}$ inch thick, 1 inch arbor hole. Each....D.P.
Carborundum Wheels, 12 inch diameter, $1 \frac{1}{4}$ inch thick, $1 \frac{1}{3}$ inch arbor hole.

Each....D.P. 9.00
The above are all 80 grit , which is suitable for general work.

## TORCHES, FIRE POTS AND BRAZIERS




## No. 48 Torch

 (Pint Size)No. 48 is like No. 47, except that the buruer bas a hook and support for soldering coppers, convenient for repairmen.
Each
Each
D.P. $\$ 10.22$

No. 112 Torch (Quart Size)
$\$ 5.65$


No. 1 Fire Pot (Seven Pints)

The Greatest General Utility Fire Pot Made


For tinners, galvanized iron and copper workers, plumbers and electricians. The No, 1 Fire Pot is $123 / 2$ inches high, 9 aid inches diameter at base, and 64 inches at top. The tank is made of beavy galvanized iron, thoroughly braced to witbstand hard usage, and lasts mucb longer than if made of brass or any other materinl. The buruer fat the expense of only halt the gasoline required in other makes) represents the highest development in generating power and heat efficiency, quickly produclog an ideal blue flame entirely free from smoke, easily regulated, giving satisfactory results under all reasonable conditions,
The burner is swiveled, which permits moving the flame up or down, and fltted with cleanout plugs, thus being easily kept clean. With the No. I the heariest rons are thoroughly heated in half the time required by other makes, the fiame
being so directed that the heel of the copper is in the hottest part of the flame. A pair of $12-1 \mathrm{~b}$. soldering coppers can be heated, and a kettle of lead or solder melted at the same time. The top section can be removed, thus producing an open fire. No. 1 Galvanized Iron Tank, each Each. D.P. $\$ 13.32$

## No. 5 Fire Pot (Five Pints)

The No. 5 is an exact duplicate of
the No. 1. only smaller, being about two-thirds its size. Helgbt over nll, 12 inches: diameter at base 81,2 inches and at ton, 6 inches. Tank is made of heavy gavaanized iron and holds 5 pints. Top section is large ebough to easily bandle a pait of $8-16$. coppers and a 5 -inch metal pot at the same time. The burner produces a pure blue flame. intensely bot, using but ilitle gasoline (less than balf required by some makes), While the No. 5 is not as large and powerful as tbe other make of flue pot will to and much that cannot be fone with
 them. By removing the ton section. the base mar he psed us a torch or bmaing tire enabling the user to accomplish aby work any torch will do. No. 5 Galvanized Iron Tank, each torch will do. No. ${ }^{5}$ Galvanized
Each..D.P. $\$ 10.00$


Gasoline)
The No. 105 Brazier is designed for heary brazing. pre-heating surfaces, tempering,
nad for use in the and for use in the Earage and in general repair sbops and factories. The burner is atted with a powerfus generator that superheats the gas, produc. iog a perfect blue flam a perfect intense leat, flame of intense leat, allling the operator to point the flame in any direction desired is indicated, and bold it there. The tank is 10 gallon capacity, made with welded' seams and galvanized inside ${ }^{\text {and }}$ The ${ }^{2}$. 105 Braxier is operated under a working pressure of 75 phounds, prodnced by a nowerful, compound, detachable brass punf, and can he operated, if desired, by compressed air. The adjustable brazing tripod, as illus. trated, is furnished with the complete Arazier

Shipping welght, 130 pounds. Capacity, 10 gallons.
No. 105 -Complete with tripod, as Ithastrated, cach..... $\$ 87.50$ Brazier
Brazier-Complete without brazing tripod, cach. . . . . . . . . 33,00
Each..D.P. $\$+484$ Ench..15.P, $\$ 48.84$
Tank-Complete with pump, sauge and fller plag. each. 20.10 Each. D.P. \$ 8.45

Each..D.P. $\$ 11.10$
Burners only, cach

# The GIBSONOOMPANY IMPOLIS 

## SOLDER, BRAZING COMPOUND, ETC.

## Wire Solder



Tbis comes on large spools. Cut uny amount.
Per Pound....................................... . . 80.60 Per Pound . . D. P. \$0.80

## Bar Solder



Half and Half Solder, per pound . . . . . . . . . . . . . . . . . . . . . . . . . 30.60 Per Pound. . D.P, $\$ 0.88$

Reinhold "No Flux" Aluminum Solder

## 

## $100 \%$ Etriciency

This solder is recognized as the bighest standard, is scientifically compounded, and the result of exbaustive firvestigation. Not to be compared with the aluminum solders, so termed, which are prepared from random mixtures and uncertain formulns.

Any person can use the Reinhold Solder with an ordinary, elean soldering iron, blow-pipe or gasoline torch. The fact that it does not require an expert to use it is a strong point In its favor.

We are in position to meet every known need for Aluminum Solder and list in the following the regular and special mixtures:
No. 1 Reinhold No Flux Aluminum Solder, 4 oz , bar, each $\$ 1.60$ Each.. D.P. $\$ 1.11$
No. 2 Reinhold No Flux Aluminum Solder, 2 oz bar, each . 30 Each. . D.P. $\$ 0.60$

No. 5 Reinhold No Flax Aluminum Solder, 8 oz, bar, each $\mathbf{2 . 0 0}$ Eacb., D.P. $\$ 2.22$

## Soldering Coppers


soldering Coppers, is lb.. each
Each..D.P. $\$ 1.2$
Soldering Coppers, 1 ib., each $\qquad$
$\qquad$
Each..D.P. \$1,H
soldering Coppers, $1 \frac{3}{2}$ Ib., each ................................... 1.25 Fach. .D.P. $82 .+4$

## Spelter



Wire spelter, 9 gauge, per pound
$\$ 0.75$ Per Ponnd, -D.P. $\$ 1.11$


Soft Grain Brazing Spelter, per pound

## Worder Worker Brazing Compound

Every repair shop, no matter
 how small or remote, finds use for a brazing compound that will actually braze cast iron with surety.

It will be no longer necessary to send castings or ordinary joints to the factory to be made, as the above will do the work in ten minutes, at a very low cost.

This compound is a high grade article, and will insure a clean, bright and secure joint, free from all scale.

One Pound Packages, each.
$\$ 0.50$
Dozen....D.P. $\$ 8.00$

## Wonder Worker Solder Paste

The most effective, quick, active and non-corrosive soldering paste, which absolutely will not freeze or decompose. Can be used with any soldering flux, and will solder any metal except aluminum. Works freely on galvanized iron, lead, tinned steel and other metals. Used
 extensively by plumbers and tin workers in general. Prepared especially for needs of automobile repairers, dynamo builders, telephone makers, and by all the trades in general.
Two-Ounce Cans, each.
$\$ 0.25$
Dozen....D.P. $\$ 4.00$
Babbitt Metal


No. 4 Babbitt Metal, per pound
$\$ 0.30$
Per Pound. .D.P. 80.38
No. 2 Babbitt Metal, per pound. ................. . . 40
Per Polind. . D.P. $\$ 0.48$

## The Gem Soldering Set, No. 2



Comprises one bar of solder, one box of resin, a scraper, and a soldering copper.

Copper is of sufficient size to retain heat.
Packed one set in a wooden box, which is inclosed in a pasteboard carton.
No. 2 Gem Soldering Set, each.
$\$ 1.00$
Each....D.P. \&1.11

## CARBON REMOVERS, RIVETS AND WASHERS

## Carbonox

Carbonox is put up in lithographed cans, each can containing enough to keep a four-cylinder engine free from carbon for six months. The cans are fitted with detachable oil can spouts which may be inserted in the spark plug opening and the Carbonox injected by pressure on the spring bottom.

Carbonox does not dissolve the carbon, but attacks the charred oil that fastens the flakes of carbon to each other and to the cylinder, piston head, etc. After destroying this charred oil the carbon is left in a loose, flaky condition and is blown out with the exhaust.
Per can
$\$ 0.75$
Each...D.P. $\$ 0.88$

## Mound Carbon Scrapers



For removing carbon from cylinders and piston heads without tearing down engine. Made of $\frac{1}{4}$-inch crucible steel, hand forged, nickel plated, apple wood handles.
Set no. 55 , in box.
Per set....D.P. $\$ 0.77$


Made of the best file steel and hollow ground, with hard maple handle, stained and polished.
Each
$\$ 0.30$
Each....D.P. \$0.33
Flexible Carbon Scrapers
. .80 .80

MOUND FLEXIBLE GARBON SCRAPER


No. 57 Mound Flexible Carbon Scraper, each.
Each....D.P. $\$ 0.40$

## Mound Curved Bearing Scrapers



These scrapers have just the right curve on blade for scraping metal bearings and

Forged from the finest grade of steel, properly tempered for effective work.

Hollow ground and polished, mounted in rosewood handles. Packed in neat box.
No. 7 Set of Three
$\$ 1.25$
Per set....D.P. \$1.44

## Rivets

Copper rivets and burs in f.lb, boxes, assorted lengths
from from i to ?
No. \& Copper Rivets and Burs, askerted, $\frac{8}{8}$-pound bex,

Foch, D. P, \$0, 132
No. 10 Copper Hivets und Burs, ansorted, $\frac{3}{2}$ pound box,
No. 10 Cupper Rivets and Burs, ansorted, $\frac{1}{2}$-pound box,
Rach. T. P, $\$ 1.00$
No. 12 Cappor Kivple and Bafs, isssorted, $\frac{1}{2}$-pound box.
Eacl. . D. F. $\$ 1.06$

## Special Brake Band Copper Rivets



No. 9 Brake Band Copper Rivets in $\frac{1}{4}$-lb. boxes, $\frac{1}{2}$ inch, per box..... 80.65 Per box.. D.P. $\$ 0.93$
No. 9 Brake Band Copper Rivets in $\frac{1}{4}$-lb. boxes, $t$ inch, per box
Per box.. D.P. $\$ 0.93$
No. 9 Brake Band Copper Rivets in $\frac{1}{2}$-lb. boxes,
$\frac{3}{4}$ inch, per box
Per box. D.P. $\$ 0.93$
No. 7 Brake Band Copper Rivets in $\frac{1}{2}-\mathrm{lb}$. boxes,
$\frac{1}{2}$ inch, per box.
.65
Per box. D.P. $\$ 0.93$
No. 7 Brake Band Copper Rivets in $\frac{1}{2}-1 \mathrm{~b}$. boxes, $\frac{5}{8}$ inch, per box.
.65
Per box.. D.P. $\$ 0.93$
.65

No. 7 Brake Band Copper Rivets in $\frac{1}{2}-\mathrm{lb}$. boxes,
4 inch, per box.
.65
Per box. .D.P. $\$ 0.98$

## Slotted Copper Rivets, Fifty in Box

No. 1 Slotted Cop-
pered Rivets, $\frac{1}{2}-\mathrm{in}$., per box $\qquad$ $\$ 0.20$
Per dozen
boxes....D.P. \$1.66


No. 1 Slotted Coppered Rivets, $\frac{5}{8}$ inch, per box...... $\$ 0.20$ Per dozen boxes....D.P. $\$ 1.66$
No. 1 Slotted Coppered Rivets, $\frac{7}{4}$ inch, per box...... .20 Per dozen boxes....D.P. $\$ 1.76$

## Slotted Brass Rivets Fifty in Box

No. 10 Slotted Brass Rivets, $\frac{1}{2}$ inch, per box
Per dozen boxes.. D.P. \$4.44
No. 10 Slotted Brass Rivets, $\frac{5}{8}$ inch, per box
Per dozen boxes. . D.P. \$4.44
No. 10 Slotted Brass Rivets, 垂 inch, per box
Fer dozen boxes.. D.P. \$4.44
Sheet Felt and Felt Washers


No. 1 Felt Washers, $2{ }^{5} \mathrm{x}^{\frac{1}{2}}{ }^{\frac{1}{6}}$
$\mathrm{X}^{3}=$, per dozen.
$\$ 0.50$
Per dozen....D.P. $\$ 0.50$
No. 2 Felt Washers, $2 \frac{1}{2} \times 1$ 绝
$\mathrm{x}_{\mathrm{b}}^{\frac{2}{2}}$, per dozen.
. 60
Per dozen....D.P. $\$ 0.60$
No. 3 Felt Washers, $2 \times 1$ ite
$x_{8}^{3}$, per dozen.
.40
Per dozen....D.P. $\$ 0.40$
No. 4 Felt Washers, $1 \frac{1}{2} \times \frac{2}{8}$
$x 7 / 32$, per dozen.
.30
Per dozen....D.P. $\$ 0.30$
No. 5 Felt Washers, $2 \frac{1}{4} \frac{1}{2}$, per dozen. .60

Per dozen....D.P. $\$ 0.60$
No. 6 Felt Washers, $3 \times 2 \frac{1}{4} \times \frac{1}{4}$, per dozen
.70
Per dozen ....D.P. $\$ 0.70$
No. 7 Felt Washers, $3 \frac{1}{4} \times 2 \frac{1}{2} \times \frac{1}{4}$, per dozen
.75
Per dozen...D.P. \$0.75
No. 8 Felt Washers, $3 \frac{1}{2} \times 2 \frac{1}{4} \times \frac{1}{4}$, per dozen $\quad 1.00$
Per dozen....D.P. $\$ 1.00$
Best quality felt for washers or gaskets in sheets 36x36 inches.
No. 32 Blue Felt, $\frac{4}{4}$ inch, per pound.
No. 32 Blue Felt, $\frac{1}{5}$ inch, per pound
No. 32 Blue Felt, $\frac{1}{6}$ inch, per pound..................................
2.50
Per pound....D.P. $\$ 2.77$
A sheet of $\frac{1}{4}$ inch weighs about $2 \frac{1}{4}$ pounds.

# The GIBSONCOMPANY $\overline{\overline{A P O L I S}}$ 

## SHIM STOCK AND BEARING BRONZE



## Shim Stock

This stock is essentinl to every well regulated shop and is put up in conrenient packages. It is supplied in thicknesses varying from .002 to .15 of an inch in 2 -inch strips. as illustrated.

No. 1 Shim Stock-Package contains 4 rolls of special sheet brass, 50 incbes in length to each roll, $21 / 2$ inches wide, making a total of 500 square inches; per box... $\$ 1.50$ Per Box..D.P. $\$ 2.22$
No, o Shim Stock-Contents, one-half of No. 1. per hox.. ,8il Per Box..D.P. $\$ 1.11$

## Laminum

## "LAMINATED" SHIM METAL mertevto musa nisall roercsu cammats STOCK SHETTS 6 WIDE DV 36 LOMG

In selecting a Shim for any purpose, your cbolce must be made from among the three types whlch are in use. The trouble encountered in the use of the original solid brass Shim, the expensive flling and scraping by an expert mecbanic, and the difficulty of obtaining accurate thickness and an eren surface, led to the adoption by some of the loose-lear Sbim. But it was found that dirt and grease would get between the layers, and would work out under pressure, this leaving iu loose bearing

The careful study and experiments of specialists has evolven laminum, which, as its bame implies, is a material composed of innumerable thin layers or laminations of hard brass held together by a metal binder. These layers are made in two thicknesses-. 002 and .003 incbes. $B y$ peeling off successive layers of the metal anyone may obtain a perfectly smooth, solid, and uniform shim of any desired exact thickness.

For the convenience of automobile repairmen and mechan ics, laminum is put up in various packages, which are listed below.
No. 3 Assortment Laminum containing three strips $1 / 32 \times 2 \times 9$ inches, all .009 lamination, each ........... 81,50 Each..D.P. $\$ 2.45$
No. A Assortment Laminum containing three strips $1 / 32 \times 2 \times 9$ inches, all 003 lamination. each
$\qquad$
Fach..D.P. $\$ 2.45$

## Bunting Bearing Bronze



Cored Bars of Bunting Bearing Metal produced in various dimensions to be readily machined to the proper size bearing made from the famous Bunting Bearing Metal which has been used so generally for several years past wherever the highest grade of bronze bearings were required.

Plece No.
$\mathbf{A}$
$\mathbf{B}$
$\mathbf{C}$
$\mathbf{D}$
$\mathbf{E}$
$\mathbf{F}$
$\mathbf{G}$

$$
\begin{aligned}
& \text { Out } \\
& \text { Dian }
\end{aligned}
$$

Approximate

Welght ${ }^{121 / 4}$ $\stackrel{2}{2}$ $31 / 2$ | 3 |
| :--- |
| $\frac{5}{7}$ | 7

$81 / 2$
10
$111 / 2$

When ordering, use the letters at the left to denote sixe required.
Bunting Bearing Bronze, Der pound
Per Pound.. D.P. 31.32

Non-Gran Bearing Bronze



High Speed Non-Gran Bearing Bronze, cored bars for bushings at new low prices. You can now secure the same bronze used in the Packard, Locomobile, Marmon, Mercer, etc., at very near the cost of inferior bronzes. All bars absolutely guaranteed, no flaws, no waste, perfect cores.

A brand new assortment, $20 \frac{1}{1}$ pounds. It takes care of every bushing need up to a shaft diameter of 13 in .


Means less stock and more money for repairmen. The six different sizes of Non-Gran Bars in this assortment make fifty-four standard and all intermediate bushing sizes. This little inexpensive assortment of genuine standard Non-Gran Bars answers every possible bushing need up to and including a shaft diameter of $1 \frac{1}{3}$ inches. It takes care of every one of the bushing sizes which any automobile repairman has most constant call for. Not a single bar which will prove a "dead one." Most everything vou need is there; nothing is there you do not need. Every repair shop, machine shop, lathe equipped garage will recognize in this new assortment the best possible investment.
Special price on this new 6.54 assortment . D.P. $\$ 27.28$

## These are the 6-54 Assortment Bars



In addition to this 6-54 assortment we are prepared to make prompt shipment on all standard and nearstandard Non-Gran Bars of any diameter you may need.
Per Pound
D.P. $\$ 1.48$

## The GIBSON OOMPANY

## OIL CANS



Dover Steel Oilers


## Dover Auto Pump Oilers



COPPERIZED

|  | Quantity | Diameter, Incbes | Length of Spout, Incbes | Bacb |
| :---: | :---: | :---: | :---: | :---: |
| No. 800 1/2 pt. . . . . . . . . .31/4. . . . . . . . . . . . . 3 . . . . . . . . . . . . 81.50 |  |  |  |  |
| Per | zen.. D. P. |  |  |  |
|  |  |  |  |  |
| Per Dozen..D. |  |  |  |  |
| No. 809 | $1 / 2 \mathrm{pt}$ | : $=.33 \%$ |  | 1.75 |
| Per Dozen.. D.F. 321.55 |  |  |  |  |
| No. 803 | $\begin{aligned} & 1 \\ & \mathrm{pt} \\ & \mathrm{D} . \mathrm{P} \end{aligned}$ | $76^{41}$ |  | 1.85 |
| No. 804 | 1 pt | ...41/4 |  | 9.00 |

## Dover Compact Oilers

A very handy and convenient oiler to carry in tool box. Four-inch reversible spout with metal cap. Drip cap at base of spout catches all surplus oil. Occupies very small space, easily carried in tool box. Its powerful spring makes it practically a squirt gun, as it will throw a stream of oil into any part of the car.


## HEAVILY COPPER PLATED

No. 10. $\frac{1}{4}$-pt. $6 \frac{1}{4}$-in. long x 3 -in. wide $\times 1 \frac{1}{6}$-in. thick each
Dozen....D.P. $\$ 8.00$

Oil Can Holder


To be attached to dash under hood. Oil or priming can ready for instant use. Oil is kept warm in cold weather.
Price, without
can $\ldots \quad 80.35$ Doz....D.P. $\$ 2.22$
Price, with
can $\ldots$. . 50
Doz...D.P. $\$ 5.32$

Dover Auto Oil Measures


Heavily Comy WEIGHT
 No. 14 4-qt. Side Hanc

Dover Auto Gasoline Measures


HEAVILY COPPER PLATED AND LACQUERED Extra Heavy Weight with Re-enforced Bottoms
 No. 29 -gal. with Ba
Per dozen..D P. $\$ 60.00$

Dover Simplex Gasoline Measure


A Practical Easy Pouring Measure Heavily Copper Plated and Lacquered

$$
\begin{array}{cc}
\text { Diam. Bottom } & \text { Helght } \\
\text { Inches } & \text { Inches }
\end{array}
$$ Each No. 118 2-gal., with Ball.... $91 / 2 . . . . . . . . .$.

Per dozen.. D.P. $\$ 50.00$
No. 222 5-gal., with Ball.... 121/2
.19.
......... . . . . 3.50
Per dozen..D.P. $\$ 70.00$

## Dover Duplex Combination Measure and Funnel



Dover Saval Combination Measure and Funnel with Automatic Shut-Off Attachment


Simple in Construction. Positive in Action and Everlasting in Quality Heavily Copper Plafed


Positively Prevents Overfowing the Oil Tank and Spilling Oil Over the Eagine and Other Parts
It is nnt onlv a most practical measure, combined with a funnel for convenience in pouring, bat has in the spout a brass bal? valve (ground oll tight) to shut off the fow of the oil instantly (in a very simple manner) at the convenience of the asot.

## The GIBSON COMPANY

## FUNNELS



Lengtb, Wiatb. Heleht, Dism. Outlet. Inches Inches Inches Inches Each
 Per Dazen. D. P. \$s,00
No, 001. 1-pt. 53
Per Mozen..D.P. 84,20
No, ${ }^{\text {g. }} 1-q t, \ldots, i,{ }^{7}$
Por hazen.. $10, \mathrm{P}, ~$
21......62...... $\frac{1}{2} \ldots . . .40$

Oval Tep Pattera


Lengtlo. Incles.
No. 01. 1-pt...... 6!
No. i9. 1-9t. ....

These funnels are made especially ro carry on auto: oval shape, occupy small space, have un extra large spout so that wbile the body is small the gasoline will run through the fannel very fast, an important feature. The tube on funnel is fluted so that it will not get air bound while pouring.

Dover Standard Gasoline Auto Funnels With Fine Brass Sirainers and Movable Moop to Mohal Chamois


Heavily Copper I'listed
Diam. Top, Heirlit, Diam, Outlet,
 No. 40, -qt 1'er bazen. . D. P. sitio
 Ne. 81, 8-яt.......


## A Very Important Feature

We bave put beads or flated the lower part of the bods for une in fanlon with large egreainge, se that if flue filler opening In the tank in lorger than the spout and the lawer part of the boaly of the funnel gees dewn into the tank openings, the liendia form on air space and prevent the fannel from becomang uir beunal.

## Shut-off Funnel

A PERFECT GABOLINE AUTO FUNNEL


## Galvanized

A new and convenient sbape. Very practical, both for garage and atutomobile owner's use. An theal funnel for motor hoats. Complete with chamois skin attacbed. Positive in action, simple in construction and everlasting in quality.


Diam. Top,
Depth, Diam. Spout,
 Per Dozen. D.P. $\$ 50.05$ No. ${ }^{28 .}{ }^{8-g t s . . . . . . . . . . . . . . . . . . . . ~} 6$ 6) $\cdot \ldots .{ }^{2}$.
a. ........ 3.00 Per Dozen. D.P. $\$ 55.10$

Simply lift the funnel from the flling hole in the tank or can and no more gasoline can run through the spout. a necessity to safety and economy


Dover Gasoline Auto Funnels
Designed Especially for New Cars with Large Tank Openiaga The Fastest Flowing Funnel Made


## Heavily Copper Plated

Dlam. Top, Height. Diam. Ontlet, Inches Inches laches.

Eacls
 Per Dozen. . D. P. $\$ 20.00$
No. 28e, 8-ats........ 1t ......... 13!
Per Doxen. D.P. $\$ 32,00$

# The GIBSONCOMPANY㐫POLIS 

## New Dover Two－in－One Offset Gasoline Funnel

With fine brass strainer，movable hoop to hold chamois．Spout easily removed，thus forming a regular funnel．


Diam．of＇Iop Diam of Outlet Inches Inches Each No． 4000 4－qt．．．．．．．．．．．．．． $9 \frac{1}{4}$ $\frac{1}{4}$ Per dozen．．．．D．P．$\$ 36.00$
No． 8000 8－qt．．．．．．．．．．．．．． 12
12 ．．．．．．．．．．．．．．．．．．．．． 1
$1 \frac{1}{4} \ldots \ldots \ldots \ldots \ldots . . . . . . . . . .25$
Per dozen．．．．D．P．$\$ 41.10$
The increasing practice of carrying the gasoline in the rear tanks has greatly increased the demand of our offset Funnel，and after a careful study of the same we have re－designed our offset Funnel so that these tanks may be filled easily and quickly．

## Dover Leviathan Garage Funnel

Six－gallon capacity，extra heavy；has seamless brass spout threaded in brass base on bottom，thus being remov－ able，facilitating shipping and preventing breakage． Complete with chamois strainer．
Galvanized, with Bail


## Dover Garage Pails

For washing cars and general use．
Extra Heavy


No． 140 14－c．t．，Flat Bottom $\quad 12 \ldots . \quad 10$ ．
Per dozen．．D．P．$\$ 14.66$

This is our heaviest and strong－ est pail．Extra heavy body and bottom and has a heavy wrought steel hoop securely riveted on bot－ tom．

Extra Heavy
－$\quad \begin{aligned} & \text { Diam } \\ & \text { Inches }\end{aligned}$
No． $200 \quad 12$－qt．．．．．．．．．．．．．．．．．． $11 \frac{1}{4}$
Per dozen．．D．P．$\$ 18.10$
No． 400 14－qt．
$\$ 19.00$
$11 \frac{1}{6}-\quad 10 \frac{3}{4}$.
Helgur Inches $.10 \frac{1}{2}$ $\$ 1.00$
$\$ 19.00$

## Gasoline Tanks

## Emersency Gasoline Tank

Made of steel and pro－ tected by a wood casing， nicely finished．Has a special pouring spout and a wire strainer．This tank will store one gallon of gasoline in a small space and will always furnish a full gallon of gasoline in reserve to get home with．
No． $18 \frac{1}{2}$ inches wide
by 3 inches thick
by 12 inches high．$\$ 1.00$
Doz．．．．D．P．\＄14．44
Dover Tourist Oil and Gasoline Kit
（Patent applied for）



A neat，compact and dust－proof device for car－ rying extra oil and gaso－ line when touring．In－ stantly attached and instantly detached．Fur－ nished with strap，com－ plete．
No． $18 \times 9$ in．by $10 \frac{1}{4}$
in．high， $3!$ gals．
capacity，each ．．．．$\$ 4.00$
Dozen．．．．D．P．$\$ 80.00$
Attached to running
board

## Dover Gasoline Can



Extra heavy weight. Galvanized with blue stripes.
No. 52. 5-gal., with spout, diameter $11 \frac{1}{6}-\mathrm{in}$., height 151-in.; each
$\$ 1.50$
Each....D.P. \$2.22

## New Dover Galvanized Garage Measure

The ideal 5-gallon garage measure. Extra heavy. Warranted not to break.

This is the most prectical $5-\mathrm{gallon}$ measure made, because it can be filled from a tank, hose or faucet without spattering, and when full can be carried to auto and lifted up on running board to tank without spilling a drop and can further be poured into funnel very fast without spilling.

Opening in end of spout, $1 \frac{1}{2}$ inches Opening in top for filling, 41 inches
No. 15. 5-gallon capacity ; each.
82.00

Each. . D.P. $\$ 3.32$

Dover Non-Evaporating Gasoline Measure


## Dover 5-Gallon Wagon Measure

No. 300 Five-gallon Wagon Measure, painted red, $10 \mathrm{~g}-\mathrm{in}$. diameter by 201 in . high; diameter of pouring neck, four inches. The body is heavily reinforced with three bands, and a new sunk archshape bottom, which is indestructible; also has a new bail reinforced with wood boss and steel. Front of neck reinforced, also a new feature. They are designed to stand hard, everyday service. The strongest five gallon measure ever put on the market and are used largely by gasoline dealers for wagon use. Accurate to measure and guaranteed not to leak.


Each
.$\$ 4.50$
Each..D.P. $\$ 7.54$

## Dover Storage Oil Cans



Main Tin
No. 1. 1-gal. $5 \frac{1}{6}$-in. square $x \quad 10$-in. high $x \quad 1$-in. opening
$\qquad$
$\$ 0.30$ Each...D.P. $\$ 0.40$
No. 5. 5-gal. $9 \frac{1}{4}$-in. square $\times 13 \frac{3}{4}$-in. high $\times 1 \frac{1}{2}$-in.

## opening <br> Each....D.P. 80.77

.55
Wood Jacketed Tin Cans


Hamu. High. Open.
In. 10.
In.
In.
No. 55. 5-gal., with Wood Bail, $10 \frac{3}{4} \times 19 \frac{1}{2} \times 1 \frac{1}{8} . .80 .80$ Each...D.P. \$1.11
No. 510. 10 -gal., with Side Hdls., $13 \frac{3}{4} \times 23 \frac{1}{2} \times 1 \frac{1}{4} . .1 .45$
Each. D.P. \$2.00
The above cans are weil made, oil tight, and are used by dealers and garages for putting up special brands of oil.

# ซhe GIBSONCOMPANY官 

## SOAP ECONOMIZERS, DRIP AND TESTING PANS



New Dover Garage Soap Economizer
Reduces soap consumption one-half. Saves all waste and prevents theft. It works on the same principle that the common soap shaker does in washing dishes. Made of heavy galvanized perforated steel.

Capacity Dia, High
Price
No. $30 \quad 6 \frac{1}{2}$-lbs. $64 \times 8$-in., each. $\$ 1.75$ Each...D.P. $\$ 3.00$
Simply fill the perforated pail with four to six pounds of soap, and suspend by cord, chain or other method, in water washing tank or barrel.
Very little agitation is required, as the numerous perforations allow perfect circulation of water.

It not only saves at least one-half the soap consumption, but absolutely prevents all unnecessary waste and petty theft, as it is intended after filling to be securely locked with a padlock, the advantages of which will appeal to every practical garage man. It was designed by a practical garage man, and tried out in the largest garage in New England.

## Dover Soap Economizer

A Perfect Pail for Washing Cars
Will reduce soap consumption at least one-third


No. $20 \quad 25-q t s$. Capacity, $12-\mathrm{in}$. x $12 \frac{\mathrm{r}}{\mathrm{in} \text {., each.... } \$ 2.50}$ Each....D.P. \$4.22

## INDIVIDUAL SIZE

No. 40 13-qts. Capacity, $10 \frac{1}{2}$-in. $\times 10$-in., each... 2.00 Each....D.P. $\$ 3.32$
Fill the pail about one-quarter to one-third full of soap, place the perforated dise or pan on the soap with the concave surface uppermost, fill the pail with water, and use the same as an ordinary pail.

The advantages are: Economy in soap; keeps the sponge always clean, thereby saving both sponge and body of the car.

This pail was invented by a practical garage man, and has been tested most successfully in several of the largest garages.

It not only saves more than one-third of the soap consumption over an ordinary pail, but saves sponges, the varnish of the car and the time in washing.

These pails are well made of heavy steel, galvanized after they are made up, thereby coating every edge, seam and crevice, making them absolutely tight and rustless.

## Dover Auto Safety Drip Pan

Made of heavy Galvanized Steel WITH RIM TURNED OVER A HEAVY ROD LEAVING TOP SURFACE OF PAN WITHOUT SEAM or SOLDER, the only correct manner of making a Drip Pan.


## Extra Heavy Edge Banded with Red Stripe

No. 1 Rumabout, size $35 x 47$-in., each....................... . . 83.00 Rach. D.P, \$4.44
No. $\frac{3}{}$ Touring Car, *ize $35 \times 95$ in.. each ................. 5.00
Each. .D.P. $\$ 7.77$
New sizes, not quite so heavy, not striped but a cood serviceable pan.
No. 01 Runabout, size $29 \times 41-\mathrm{in}_{n}$, each..................... 2. 00
Each..D.P. 3.32
No. 02 Touring Car, size $29 \times 83$-in.. each. . . . . . . . . . . . . . . . . 4.00
Each..D.P. 96.66
COPPER DRIP PANS
No. 3 Size $39 x 59-i n ., 16-o x$. , Polished, each
$\qquad$
$\qquad$
Each. D, P, $\$ 26.66$
Placed on foor under auto the pan catches all oil, greage and gasoline. Easily cleaned. Keeps floor bright and clean.

This pan has no shnrp edges, and when on floor, if nuto is backed over edge it will not injure the tires nor injure the pan. All pans are shipped securely crated.

## Why All Garages and Automobiles Should

## Have a Drip Pan

Few automoblle users appreciate the importance of keeping ofl and grease from the floors of the garage over wbleb vehicle tires are run. A tire which las seen conslderable service becomes more of less porous, and will take up oll very mucb llke a pooge. The of being a natural solvent of rubber causes a soft spot in the tire which is allowed to stand in It, and it is but a short process of weariog away tbe partially dissolved rubber to cause a "pat spot." Where garage Goors are more or less covered with oil, different parts of the tire are more or less corered with oil, different parts of the tire
are affected, with the general resuit that the tire wears very are affected, with the general result ing and in extreme cases the user is very apt to lay the unerenly, und in extreme cases the user is very apt to
blame for its poor performance upon the tire maker.

Dover Tire Testing Pan
A Great Convenience To Every User of the Electric Vulcanizer and a Necessity to Every Garage


No. 1 30-in. long X 6-in. wide $x$ 8-in. deep, each. ......... $\$ 8.00$ Each..D.P. 85.00
Note rod which supports the tube allowing free use of both bands. This rod slides in a brass clamp, thus being adjustable to different size tire tubes.

The rod is easily removed and packed inside the pan for shipping and also occuples no space when not in use. For locating small leaks this tank is invaluable to any one who vulcanizes tires.

## Ohe GIBSONOMPANY

## CAP SCREWS, ETC.



No. 110 Set Screw Assortment, 14 assorted cup point set screws, U. S. standard thread, per box dozen boxes. . D.P. $\$ 4.26$

Hexagon Head Cap Screw Assortment


No. 75 Hexagon Head Cap Screw Assortment, 12 assorted U. S. standard thread, each
Per dozen boxes. . D.P. $\$ 6.93$
No. 90 Hexagon Head Cap Screw Assortment, 12 assorted A.L.A.M. thread, each.
Per dozen boxes. . D. P. $\$ 8.00$
Taper Pin Assortment


No. 115 Taper Pin Assortment, 40 assorted taper pins, per box
Per dozen boxes. . D.P. 89.38

## Hexagon Nut Assortment



No. 30 Hexagon Nut Assortment, 24 semi-finished assorted sizes, U. S. standard thread, per box. $\$ 0.40$ Per dozen boxes. .D.P. $\$ 5.86$

No. 45 Hexagon Nut Assortment, 24-semi-finished assorted sizes, A.L.A.M. thread, per box .40 Per dozen boxes. . D.P. $\$ 5.86$

## Castellated Nut Assortment



No. 60 Castellated Nut Assortment, 15 assorted castellated nuts, U. S. standard thread, per box. $\$ 0.40$ Per dozen boxes. . D.P. $\$ 6.66$

No. 63 Castellated Nut Assortment, 15 assorted castellated nuts, A.L.A.M. thread, per box
Per dozen boxes. . D.P. $\$ 7.46$

Lock Washer Assortment


No. 120 Lock Washer Assortment, 42 assorted lock washers, per box
$\$ 0.20$
Per dozen boxes, . D.P. $\$ 2.66$

## Ghe GIBSONGOMPANY $\overline{A P O L I S}$

## SCREW ASSORTMENTS



No. 2 Brass Machine Screw Assortment. Two dozen brass machine screws and nuts. Per box .......... $\$ 0.35$

Doz. . D.P. $\$ 6.11$


No. 3 Iron Wood Screw Assortment. Six dozen assorted flat and round head wood screws. Per box.... $\$ 0.25$ Doz. .D.P. $\$ 2.66$

Cotter Pins
One hundred assorted spring cotter pins of various lengths and thicknesses. Packed in a neat enameled box, which avoids scattering about in the tool box.
"Just the thing for your tool box."
Price $\qquad$ $\$ 0.15^{\text {L }}$
Doz. .D.P. $\$ 1.88$



No, 4 Iron Machine Screw Assortment. Two dozen as sorted iron machine screws and nuts, per box ............ 80.20 Doz. . D.P. $\$ 2.18$

No. 5 Iron Bolt Assortment. One and onehalf dozen assorted iron bolts and nuts, per box.... $\$ 0.20$ Doz. .D.P. 82.66


No. 6 Copper Rivet Assortment. Thirty assorted copper rivets and bars. Per
box ......... $\$ 0.20$
Doz. . D.P. $\$ 2.66$

Campbell Lock Cotter Pins

One hundred and twentysix assorted Campbell ham-mer-lock cotter pins in nickel plated screw top box.
Per box . . . . . . . . . . . 80.15
Per doz..D.P. $\$ 2.22$


## NUTS AND CAP SCREWS

Semi-Finished Hexagon Nuts U. S. Standard Thread


## Castellated Nuts

U. S. Standard Thread


|  | Per 100 |
| :---: | :---: |
| $1 /$ | 82.00 |
| Per 100.. D.P. $\$ 2.35$ |  |
| 5/16-18 |  |
| Per 100..D.P. $\$ 3.51$ |  |
| \%/16 | 25 |
| Per 100., D.P. $\$ 3.73$ |  |
| 7/16-14 | 3.75 |
| Per 100..D.P. $\$ 4.31$ |  |
| 1/2-12 | 4.50 |
| Per 100..D.P. $\$ 5.26$ |  |
| 9/16-11 |  |
| Per 100.. D.P. $\$ 6.46$ |  |
| 5/6-11 |  |

A. L. A. M. Thread
Per 100



## бKecibsoncomax

SET SCREWS, TAPER PINS, WASHERS AND STOVE BOLTS

Cup Point Set Screws


Per 100

| 1/4 $x^{1 / 2} \times \ldots . .$. | 81.80 | $3 / 8 \times 7 / 5$ | . 60 |
| :---: | :---: | :---: | :---: |
| Per 100.. D.P. $\$ 1.36$ |  | Per 100. D.P. $\$ 2.00$ |  |
| 1/9x94 ${ }^{\text {Pren }}$ | 1.90 | $3 / 4 \times 1$ | 65 |
| Per 100..D.P, \$1.47 |  | Per 100, D, P, \$2.02 |  |
|  | 2.00 | 2/9x11/4 | 85 |
| Per 100..D.P. $\$ 1.53$ |  | Per 100..D.P. 82.18 |  |
|  | 8.10 | Per 1100 | 3.10 |
| 1/4x1 | 2.15 | 7/16x\% | 2.80 |
| Per 100.. D.P. $\$ 1,64$ |  | Per 100.. D.P, $\$ 2.13$ |  |
| 1/9x11/4 - ${ }^{\text {d }}$ | 2.80 | $7 / 16 x^{2 / 4}$ | .90 |
| Per 100..D.P. $\$ 1.73$ |  | Per 100.. D.P. $\$ 2.20$ |  |
| $1 / 4 \times 11 / 20 \cdot \cdots \cdots{ }^{1}$ | 2.50 | 7/16x7/n | no |
| Per 100, D.P. \$1.8: |  | Per 1001. D.P. $\$ 2.27$ |  |
| $5 / 16 \times 1 / 4$ | 2.00 | 7/16x1 ........ | 3.10 |
| Per 100.. D.P. $\$ 1.63$ |  | Per 100.. D. P, \&2 |  |
| 5/16x ${ }^{5 / 4}$ | 9.10 | 7/16x11/4 | 3.50 |
| Per 100.. D.P. \$1.00 |  | Per 100..D.P. $\$ 2.6 \overline{4}$ |  |
|  | 2.80 | 7/16x11/2 | 4.00 |
| Per 100.. D.P, \$1.62 |  | Per 100.. D.P. $\$ 3.02$ |  |
| $\begin{aligned} & 5 / 16 \times 7 / 4 \\ & \text { Per } 100 \text {. D.P. } 81.73 \end{aligned}$ | 2.30 | $1 / 2 \times 7 / 4$ | 3.30 |
| $\begin{aligned} & \text { Per } 100 \text {.. D.P. } \$ 1,73 \\ & 5 / 16 \times 1 \end{aligned}$ | 2.35 | Per 100., D.P. $\$ 2.53$ |  |
| Per 100.. D.P. \$1.78 |  | $1 / 2 \times 3 / 4$ | 3.40 |
| 5/16x11/4 | 2.50 | Per 100.. D.P. $\$ 2.00$ |  |
| Per 100.. D.P, \$1.89 |  | 1/2x $7 / 5$ | 3.60 |
| 5/16x11/2 | 2.80 | Per 100...D.P. $\$ 2.73$ |  |
| Per 100..D.P. $\$ 2.07$ |  | 1/2x1 | 3.80 |
| Per 100.. D. P \$1.78 | 2.85 | Per 100.. D.P. \$2.80 |  |
|  | 9.45 | $\begin{aligned} & 1 / 2 x 11 / 4 \\ & \operatorname{Per} 100 \ldots \mathrm{P} . \mathrm{P}^{2} 20 \end{aligned}$ | 4.30 |
| \% ${ }^{\text {P }}$ /4 | 2.50 | $1 / 2 \times 11 / 2$ | 4.80 |
| Per 100.. D.P. $\$ 1.85$ |  | Per 100 |  |

Taper Pins


Lock Washers


(Lock Wasbers, Packed in Boxes of 250.)
Leck Washers for $3 / 16$ bolt, per 100

Per 100 . D. P. $\$ 0,11$ Per box of 250 . . D. P. 80.22
 Loek Washers for $5 / 16$ bolt, per 100
Per 100. D.P. 80.32 Per box of 250 .. D, P, $\$ 0.66$ Loek Washers for 2 bolt, per 100.
Per 100. D.P. 80.44 Per box of 250..D.P. 80.88 Loek Washers for 7/16 bolt, per 100

Per 100..D.P. \$0,66 Per box of 250. D.P, $\$ 1.32$


## Wrought Iron Washers


Per Lbb.
Iron Wasbers for $3 / 16$ bolt ..... $\$ 3.30$
Per th., D.P. \$0..0.
30
30
Per $1 \mathrm{~b}, \mathrm{D} . \mathrm{P}, \$ 0,35$
30
Iron Washers for $5 / 16$ bolt
Iron Washers for $5 / 16$ bolt
Iron Washers for 2 bolt ..... 30
Per 1b..D.P. 50.25
Iron Washers for 7 ..... 30
Per Ib, D, P, \$0.33
Iron Washers for

- 30
- 30
Per 1b. .D.P, $\$ 0,83$
30
Per 1b..D.P. $\$ 0.33$
Iron Washers for f bott . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30Per 1b..D.P. $\$ 0.35$

Stove Bolts


Flat Head
Per 100

| $3 / 16 x^{3} 4 \quad$................... 80.85 |  |
| :---: | :---: |
|  |  |

Per 100, , $\mathrm{D}, \mathrm{P}$, ' 80.45 3/16x1
16x1 …................. . 90

Per 100..D.P. $\$ 0.47$
$3 / 16 \times 11 / 4$ ㄱ․ 1.00

Per 100. D.P. $\$ 0.49$
$3 / 16 x 11 / 2$ ................. 1.10
Per 100, D.P. \$0.j4
$3 / 16 \times 12$
1.15
$\begin{aligned} & \text { Per } 100 . \text { D. P. } \$ 0.58 \\ & 3 / 16 \times 2\end{aligned} . . . ., 1.30$
Per 100 , ' $\mathrm{D}, \mathrm{P}$ ", 80.6 f ....... 1.20
Per 100 .D.P. $\$ 0.622^{1 / 30}$
$1 / 9 \times 1$
Per $100 ., D, P, ~ \$ 0,67 ' ~$

Per 100..D.P. $\$ 0.71 \quad 1.50$

$1 / 4 \times 12, \ldots$
Per $100 \ldots$ D. P.
$1 / 40 x^{2}$
Per 100. D. $\mathrm{P}, \$ 0.50$


Round Head
Per 100


Per 100 . D. $\mathrm{P}, \$ 0.45$ $3 / 16 \times 1$
Per $100, ~$
D
P.
30.47

# Ghe GIBSONGOMPANY 

## SCREWS, NUTS, CASES AND COTTER PINS



Bolt and Screw Cases
Revolving Casen


Poplar Wood Cases-Cherry Stained
No. 10 Case, 72 drawers, height 33 isches, width 91 isches, With knobs, ench.
With knobs and label holders, each Fach. D. 1, \&fo. 43
No. 12 Case, 80 drawers, height 36 inches, wialth 91 inches. with knobs, eacls. Each D. P $\$ 42.43$
With knobs and label holders, each.... . . . . . . . . . . . . . . . . . . 40.50 Each..D. P. $\$ 67.45$
No. 14 Case, 88 drawers, belght 39 inches, width 94 inches. with knobs, each. Fach.. D.P. \$69.93
With knobs and label boldern, each. . . . . . . . . . . . . . . . . . . . . . . . 44.25 Eacb. . D. P, 573.68
No. 16 Case, 96 drawern, helght 48 inches, width 24 inches, with knobs, earh.
With knolow and latiel bolders, eneh. . . . . . . . . . . . 40.00 Ench..D.P. $\$ 81.50$
No. 10 Case in oak, with knobs anal label bolders, each. 44.00 Each., D.P. $\$ 73.26$
Ne. 13 Case in oak, with knobs and label holders, eaph Each, D, P, $+79,9$ ?
No. 14 Case in oak. with laobos and label helders, each Eacb. . D P. $\$ 91.05$
No. 16 Case in onk, with laobs and label holders, each... T1.ne Enco. DIF \$719.4)

Cotter Pins


Cotter Pins in bulk, packed in boxes of 500 and 1,000 .

| Inches | Per ML | Inches | Per M. |
| :---: | :---: | :---: | :---: |
| 1/16x $3 / 4 \ldots .$. | \$0.75 | 1/8x11/2 ${ }^{(1)}$ | 75 |
| Per M, . D P P. $\$ 0.67$ |  | Per M..D.P. \$1.40 |  |
| 1/16x1 | 80 | 1/4x19/4 | 1.85 |
| Per M, D.P. $\$ 0.78$ |  | Per M..D.P. $\$ 1.51$ |  |
| ${ }^{1 / 16 \times 11 / 4}$ Der ${ }^{\text {c }} 30$ | 1.00 | 1/5x ${ }^{\text {a }}$ | 2.00 |
| $\begin{aligned} & \text { Per M.D.P. } \$ 0.89 \\ & 1 / 16 \times 11 / 2 \end{aligned}$ | 1.20 | Per M., D.P. $\$ 1.67$ |  |
| Per M, D. P, $\$ 1.00$ |  | 9/64x11/4 | 1.80 |
| $3 / 32 \mathrm{x} 9 / 4 \mathrm{C}$ | . 90 | Per M..D.P. $\$ 1.45$ |  |
| Per M. .D.P. $\$ 0.67$ |  | $9 / 64 \times 13 / 2$ | 2.00 |
| 3/32x1 | 1.00 | Per M, D.P. $\$ 1.67$ |  |
| Per M., D.P. $\$ 0.78$ |  | $9 / 64 \times 13 / 4$ | 2.20 |
|  | 1.10 | Per M, D.P. \$1.78 |  |
| Per M., D.P. $\$ 0.89$ |  | $9 / 64 \times 2$ | 2.40 |
| $3 / 32 \times 11 / 2$ | 1.20 | Per M.. D.P. \$1.96 |  |
| Per M..D.P. $\$ 1.00$ |  | $5 / 82 \times 11 / 4$ | 2.10 |
| 3/32x1\%/4 | 1.40 | Per M..D.P. $\$ 1.74$ |  |
| Per M., D.P. $\$ 1.11$ |  | 5/32×11/2 | 2.30 |
| 3/32x ${ }^{\text {a }}$ | 1.50 | Per M..D.P. $\$ 1.89$ |  |
| Per M.. D.P. $\$ 1.29$ |  | $5 / 32 \times 1$ /4 | 2.50 |
| \%/64x1 | 1.10 | Per M..D.P. \$2.11 |  |
| Per M..D.P. \$0.89 |  | 3/32x ${ }^{\text {a }}$ | 2.80 |
|  | 1.20 | Per M. . D.P. \$2.33 |  |
| Per M...D.P. $\$ 1.07$ |  | $3 / 16 \times 11 / 4$ | 2.75 |
| $\begin{aligned} & 7 / 64 \times 11 / 6 \\ & \text { Per M..D.P. } \$ 1.16 \end{aligned}$ | 1.40 | Per M..D.P. $\$ 2.45$ |  |
| 7/64x11/4 ${ }^{\text {P }}$ | 1.50 | $3 / 16 \times 11 / 2$ <br> Per M..D.P. $\$ 2.67$ | 3.00 |
| Per M., D, P. \$1,29 |  | Per Mn..D.P. \$2.67 |  |
| 7/64x2 | 1.70 | $3 / 16 \times 1^{2 / 4}$ | 4 |
| Per M..D.P. $\$ 1.40$ |  |  |  |
| 1/4x11/4 | 1.50 | $3 / 16 \times 9$ | 3.70 |

## Campbell Hammer-Lock Cotter Pins

PATD. MARCH 1912


## The GIBSONGOMPANY $\overline{\overline{A P O L I S}}$ 

## EXTRACTORS, PLIERS, CUTTERS, HAMMER MOLDS AND DISPLAY STAND



Cotter Pin Extractor, 6-inch, each
$\$ 0.15$
Cotter Pin Extractor, 7 -inch, each .15
Dozen. . D.P. $\$ 1.60$

## Mesnard Cotter Spring Plier



To insert, spread and remove spring cotter pins in difficult places has brought about the necessity of this wonderful invention, which has proved beyond doubt that every owner of machinery can not be without it. The combination of cotter pin inserter, spreader, extractor, cutter, screw driver and gas tank wrench makes this a six (6) in one (1) teol, with no adjustments whatever.
Mesnard's Cotter Pin Plier, each................ $\$ 0.75$
Each. .D.P. \$1.33

## Glass Cutters



Light iron handle; cutter head polished; steel cutter wheel, carefully tempered and ground.

Each cutter packed in an individual carton.
No. 7 Glass Cutters, each
s0.15
Each..D.P. $\$ 0.22$


Nickeled frame; fancy wood handle. Six highly tempered and perfect cutting steel wheels set in a revolving turret, clamped in place by set screw.
No. 300 Glass Cutters, each.
.80 .50
Each. .D.P. \$0.55

## Mound Gasket and Washer Cutter



Mound Gasket and Wasber Cutter will cut gaskets up to 24 inches outside diameter suitable for large cylinder heads and flange joints down to small size washers.
No. so Mound Gasket and Washer Cutter, nickel plated,
ench
Each..D.P. 8.33

## Horat Soft Metal Hammer Mold



Patent applied for.
It meets a distinct want.

A soft metal hammer that you make yourself; that costs but a trifling amount; that you make over with the same metal when it becomes battered; that you will use constantly.

Any one who handles metal knows the efficiency of a soft metal hammer. You can use it on finished steel, brass, bronze, aluminum, gears, cams, sprockets, pins, shafts, screws-on any finished part without injury, thereby saving many unnecessary repair bills.

Made in two sizes for Nos. 2 and 3 hammers. There are but three parts-the bottom of the mold and the ladle combined, the top, and a clamp. One hammer handle is included with the mold.
No. 2 Horat Hammer with mold and ladle, weight
two pounds, each
$\$ 2.00$ Each. . D.P. $\$ 3.33$
No. 3 Horat Hammer with mold and ladle, weight
three pounds, each
2.25

Each. .D.P. $\$ 3.66$

## Rubber Head Hammer



The Yoang Pertect Hammet for bett who take pride in tbeir work, The rublier head prevents the marring of sur-
faces where a tinished face is desired, while the opposite end is used for rougher work. The inserted rubber head
end can be renewed at sliglit expense, saving the necessity of buyiog a new hammer. The bammer is mate of cast steel witb the tonghest rubher head, abd will withstand the roughest usage. It is handled with splected Indiana white hickory, Weight, 2 pounds.
Each $\because$ D.........

## Gemco Tire Display Stand



The Gemco Tire Holder grips and holds all sizes of tires from 3 inches to 6 inches with or without a rim. There are no screws or clamps to adjust. It is simple, durable and "fool-proof." A glance at the cut will convince you of this.
Each
.89 .50
Each. D.P. $\$ 4.18$

WHEEL PULLERS, AUTOWLINE, MOTOROPE, TACKLE OUTFITS, ETC.



## New Model Crane Wheel Puller

For removing auto wheels, fly-wheels, transmission and cam shaft gears, commutators, sprockets, collars, pulleys, propellers, couplings, etc. The point of the screw is flat with inserted tempered tool rteel point. Will not spread centers. Works equally well on work without centers. The strain is taken on the flat point of screw. Grease to keep from cutting. All Pullers are furnished with two sets of the new combination hook and extension arms.
No. 2 Two Arm Crane Puller with two sets combination arms, each.
$\$ 8.00$
Each. .D.P. \$13.82
No. 3 Two Arm Crane Puller with two sets combination arms, each
10.00

Each. . D.P. \$16.66
No. 2 Three Arm Crane Puller with two sets combination arms, each.......................... . . . 10.50

Each. .D.P. $\$ 17.50$
No. 3 Three Arm Crane Puller with two sets combination arms, each
13.00

Each. .D.P. \$22.58

## "Little Giant" Gear and Wheel Puller

The Little Giant Gear and Wheel Puller is indispenssble in any machine shop or garage.

As a garage tool the "Little Giant" will be found to be the greatest labor saver and money maker of any tool around the place. It is especially applicable and designed for gear pulling where the space is limited around the gear, such as timing and other gears in an automobile which are surrounded by a close fitting gear case. By setting the pulling arms parallel or slightly convergent, you will be able to get in and pull a gear in a jiffy which would be practically impossible to remove without hours of labor on account of the clear-
 ance or room between the gear and the grear case being very limited. With the "Little Giant," however, which has very thin tempered steel drop forge prongs, very little space is needed to get in and when once in and the grip assured, to remove the gear is simply the work of a moment.
Each
$\$ 10.00$
Each. D.P. \$15.54

## The GIBSONGOMPANY



## Pllll-9.7x

 N.0
The motorist who has Pull-Li-Out in his tool-box is indevendent of rosal conditions. If bis auto skids inf" trouble, turns over or sticks in the mud, be doesn't lame to go for limp; he simply drives into the gromnil the On a $4 \times 4$ attached to ring three little stakes that conme vith the Pull. D. Ont litulus bolts in ceiling can beeasi-Pull-U-Ont to them and to the auto, gives the crank a ly moved about Pull- -out to them anil to the auto, gives the crank a ly moved about few taras, and ont comes the anto in almost no time abd used any
With Pall-U-Out a bov can easily lift or move the lieaviest where desired. With Pull-U-Out a boy can eagily lift or mave the heaviest
touring car. In case of eagine trouble. Pall-U.Out chains make the finest possible tow line.

A Wonderful Nevs Hoist
Because of its light welgbt, great power. jow costbecause it will work in any position, and pull horizontally as well as lift, and has a grenter reach and more power tban a ehain block, Pull-1-Out will revolutionize present methods of boisting.

Does Jobs No Other Machine Can Do
Cheapens Present Methods of Hoistins
There are hondreds of lifting and palling jolso for which no mechanical help bas beretofore been provided, sweh as setting boilurs, shifting machinery, lowering cauits and setting stones in cemeteries, raising rasiators,
 pullog wires through conduits, placing telegraph poles, otc. Pull-U-out and one man will do fobs of this kind that require from threp to a dozen men.
In all ordinary hoisting in shops, factories. on constroction jobs, ete. Pull- L-Out will do the work quicker and better than the customary chain block, Where individual hoists are nepded, Pull-[-Out is cheap coongh to supply every workman with one.

For spotting cars, stretclaing wire fences, pulling stumps, for painters rigging, and lundreds of other similar jobs, Pull-U-Out surDasses anything now in use. two No, 1 Pull-U-Out, Bquipped with 40 -foot stecl cabbe. pacity lift one tan Pull fon selght, 28 pounds. En Reach, 10-foot lift: 17?-foot prll.

## Each


No. 2 Pull-U-Out. Equipped with 50 -foot steel cable, two extra heavy ${ }^{\text {t-foot chains three extra heavy stakes. }}$ Weighi, 50 pounds. Capacity. lift 2 tonst pull (on wheels) Weighi, 50 pounds. Capacity, lift 2 tons: pull (on wheels), 150,000 pounds. Reach, 12 -foot lift : 19 -foot pull. Earh
.D.P. 344.44
No. DX Pull-ए-Ont with 100 -foot steel cable. Each D. P \&

No NollWout Fupped same as No \% x ith addition of internal brake for controlling device when lowering extra beavy weight for long distance. loweri
Each Each Fach..D.P $\$ 62.22$
 No chains or stakes. Weight. 75 pounds. Capacity, lift 3 tons: pull 200,600 pounds (on wheels); lifts or puils 100 reet.
.860 .00 Each
D. P. $\$ 1010,66$

Portable Crane made of extra heavy tublng. Weight.

On a $4 \times 4$ tripod especially On a $4 \times 4$ tripod especinly


Junior S. P. Pull-U-Ont For stump pulling and heary hoistiag. Pull-U-Opt No. $2-\mathrm{X}$ with two 7 -foot chains, two triple blocks with 100 feet of steel cable ( 1 inchi., 48 feet of $\frac{1}{2}$-inch steel ancbor cable and one plece 12 -foot $\frac{1}{2}$-inch steel anchor cable and fittings complete. Reach, 6 feet. Pulling or lifting capacity, five to elght
tons.
Fach
Each. D.P, $\$ 123.32$

Tumbo 8 P Pull-ll-Out. For stump pulling and extra bolsting or pulling. Consists of Pull-U-Out No. 2-X with two 7 -foot chains, two triple blocks and 100 feet of 8 inch steel cable, 48 feet of s-inch steel anchor cable and one piene of 12 -foot ${ }^{\text {? }}$-inch ancbor cable and fittings complete, sufficient for 6i-foot reach. Pulling or lifting eapacity, 10 to 15 tons.
Each Däp. 8177.7


## The GIBSONGOMPANY

## PISTON RINGS

Leak-Proof Piston Rings


No. 77 Piston Rings


For the convenience of our customers we list the standard size piston rings for the majority of cars.

Great care has been taken in preparing this list, but it is best to measure the desired ring or piston to insure accuracy where possible.

If the make of car or model is not listed, it does not mean that we cannot supply you, as we were unable to secure and list all makes and models.

Our No. 77 Piston Rings are carefully made of special soft gray cast iron and sizes are accurate to manufacturers' specifications. All rings are step cut, eccentric form and magnet ground. Fit and service guaranteed.
No. 77 Piston Rings, all sizes, each
Dozen. .D.P. $\$ 4.00$ Per 100. .D.P. $\$ 30.00$
Ford sizes, each
Dozen. .D.P. $\$ 2.66$
Prices on Leak Proof Rings on Opposite Page
Either Leak Proof or No. 77 Rings are obtainable for sizes given.



PISTON RINGS-Continued


## PISTON RINGS-Concluded

| Will Fit | Model | Style Size No. | Winl Fit | Model | Style Size No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Oakland | 1913-14 | 35-36-6-48 $34 x \geq 3$ | Rambler | 1913 |  |
|  | 1914 | $43-6-423$ |  | 1913 | 83 A 4 43 / 164 |
|  | 1915 | 37-49 3) $3 \times 3 / 163$ | Regal | 11908 | $3 \mathrm{6} \times 5 / 164$ |
|  | 1916 | 32 2 $23 / 16 x 3 / 163$ | Rega | 1909-10 | 30 4 $50 / 164$ |
|  |  | 4 and 8 Cyl . 31x3/164 |  | 1910-11-12 | 40-40S $42 \times 3 / 164$ |
| Oldsmobile | 11908 | Z 43x5/163 |  | 1911-12-13-14 | $20 \mathrm{~N}-\mathrm{N}$ and F-25 |
|  | 1908-09 | M $\mathrm{Z} \cdot \mathrm{D}$ ( $4 \times 5 / 163$ |  |  | D and $\mathrm{F} \quad 31 \times 3 / 164$ |
|  | 1910 | n2 Special $4 \times 55 / 163$ |  | 1915 | D and $\mathrm{R} \quad 31 \times 3 / 163$ |
|  |  | 22 Limited 4) $55 / 164$ |  | 1911-12 | 301 itx $3 / 164$ |
|  | 1911 | $27-25$ 5 x ${ }^{2}$ 2 |  | 1912 | 35 H |
|  | 1912-13 | 32-33-35 $5 \times 5 / 164$ |  | 1913-14 | C ( $\mathrm{C}^{\text {c }}$ |
|  | 1912-13 | 40 ¢ 40 |  | 1914 |  |
|  | 1913 | 53 44×5/163 |  |  | $\mathrm{D} \quad 32 \times 3 / 163$ |
|  | 1914 | 42 3 $\times \pm 3$ |  |  | F $3 \times 3 / 163$ |
|  | 1914 | 54 4, $55 / 163$ | Reo | 1908-09 | A-D 49 x - 3 |
|  | 1915 | 42 34x3/163 |  | 1910-11-12-13 | R and S ( $4 \times 5 / 163$ |
|  | 1915 | 58 4 $4 \times 5 / 163$ |  | 1914 | F and S ( 4 ¢ $\times 5 / 163$ |
|  | 1916 |  |  | 1915-16 | F and S 4 $4 \mathrm{x} \frac{1}{2}$ 2 |
|  |  | Flyer $5 \times 5 / 163$ |  |  | ${ }_{6}^{6} \mathrm{Cyl}$. M 39/16x 2 |
| Overland | 1900 |  | Reo Truck | $1910-11-12$ | H 4ix\} 3 |
|  | 1910-11-12 | $\begin{array}{ll}38-49-58 R & 31 \times 3 / 163 \\ 40-41-42-52-53\end{array}$ |  | $\begin{aligned} & 1913-14 \\ & 1913 \end{aligned}$ | J ix5/163 |
|  | 1910-11 |  |  | 1914 | J +195/163 |
|  | 1911 | $45-46$ |  | 1915 |  |
|  | 1911-12-13 | $50-51-50-60 \quad 4 \times 3 / 163$ | Saxon | 1914 | A 2$\} \times 3 / 163$ |
|  | 1915 | S1 4 x $3 / 163$ |  | 1915 | 4 Cyl A $2[x 3 / 163$ |
|  | 11112 | 60 - $41 \times 3 / 163$ |  |  | 6 Cyl. B2 $2 \leq x 3 / 163$ |
|  | 1912-13 | $61-71$ - $61 \times 8$ |  | 1916 | 82 2 $2 \times 3 / 163$ |
|  | 1913-15-16 | 79-80-83-81 $41 \times 3$ |  |  | 14 - $23 \times 3 / 163$ |
|  | 1915-16 | 82-86 31x3/163 | Scripps-Booth | 1915 | 8 21x3/163 |
| Paige | 1910-11-12 | $3]^{2} \times 3$ | Seripp-Booth | 1916 | 8 2ix3/163 |
|  | 1913 | +36 $4 \times 3$ |  |  | 4 31x3/163 |
|  | $1914-15$ |  | Selden | $1905-09$ | All Models 4.x 4 |
|  | 1915-16 | 66-H6 $31 \times 3 / 163$ |  | 1910-11-12 | All Models $41 \times 1$ |
| Patbinder | ${ }_{1914}^{1912-13}$ | $4-6 L L$ |  | 1913-14 | All Models 3ix3/162 |
|  | 1914 | 6-B $3 \times 3 / 163$ |  | 1916 | $41 \times 3 / 163$ |
|  | 1915 | 7 ABC 3 ${ }^{\text {7 }}$ (3/163 | Stearns-Knight | 1908 |  |
|  | 1916 | $8 A B C \quad 3 \pm \times 3 / 163$ | Stearns-Kırop | 1909-10-11 | 30-60 $5 i x$ |
|  |  |  |  | 190! | 15-30 $4\|x\|$ |
| Peerless | 15018 | R-18 - $43 \times 1 \times 5 / 164$ |  | 1990-11 | SK-20 $\mathrm{SE}^{4 \frac{1}{2} \times 1 \times 8}{ }^{3}$ |
|  | 1808-09 | T-20, S-19 and X 25 |  | 1912 | SK-4, SK-6 44x3/164 |
|  |  | C.as 4ix ${ }^{\text {c }}$ (164 |  | 1914-15-16 | SK-4, 8K-6 ${ }_{\text {SK }}$ |
|  | 1910 | C 28 ( ${ }^{\text {c }}$ | Stevens-Durvea | ${ }^{19158}$ |  |
|  | 1910-12-13 |  | Stevens-Daryea | 1909 | X and Y $41 \times \frac{1}{2}$ |
|  |  | 2J-98 |  | 1910-11 | AA $45 / 16 x+3$ |
|  | 1911-12-13 | F31-632-H33 5 x5/164 |  | 1912-13-14 | C and B 45/16x |
|  | 1914 | L3 3 -Six-2L-60 |  | 1913-14-15 | CC-D $4 i x i$ |
|  |  | 3L 5 55/164 |  | 1915 | DD $47 / 16 x$ |
|  | 1912-13 | K36-8ix-2J-38 $4 \frac{1}{2} 55 / 164$ | Studebaker | 1912 | EMF 30 ¢ $4 \times \frac{1}{6}$ |
|  | 1914 | Six $2 \mathrm{~J}-384 \times 3 / 163$ |  | 1912 | Flanders 20 31x |
|  | 1914-15 | Six-3K-48 41x $3 / 163$ |  | 1913 | 35404 |
|  |  | 5K-48 |  | 1913 | 25 Six 31x $3 / 164$ |
|  | 191+-15 | Truck TC m $4 \times 3 / 164$ |  | 1914-15 | Four-Six 3)x $3 / 163$ |
|  |  | 3-4-5-6 Ton T |  |  | ER Six SD Four |
|  | 1015 | Light 4 DD $5437 \times 3 / 163$ |  | 1916 | 4-40 3ix5/32 4 |
|  | 1915 | Light 6 EE $503313 / 163$ |  |  | 6-50 3ix5/32 4 |
|  | 1915 | $3 \times 33 / 163$ |  |  | 7 Truck 3 3x5/32 4 |
| Pierce-Arrow | 1108 |  | Stutz | 1912-13 | A4-B4 4?x 4 |
|  | 1908-09-13-14 | Q-PP-QQ-A $5 \times 9 / 324$ |  | 1916 |  |
|  | 1915 | A2-37429-43 |  | 191+-15-16 | Et-F4 $4 \leqslant \mathrm{x}$ - |
|  | 1509 | F.UU $\quad 35 / 16 \mathrm{x} \frac{1}{4}$ |  | 1913 | B6 $41 \times 4$ |
|  | 1909-10-11-12 |  |  | 1914-15 |  |
|  | 1913-14-15 | 3626-83 |  | 1915 | $\mathrm{HCS}-81 \quad 37 \mathrm{x}$ 1 3 |
|  | 1910-11-12 | UN-C-C2 $4 \times 4$ | Velie | 1900 | A-B-C $\quad \pm 3 / 163$ |
|  | 1913-14-15 | $3625-\mathrm{C} 3$ - $51 \times 9 / 20$ |  | 1910-11-12 | D-E-F,G-H 4ix ${ }^{\text {d }}$ ( |
|  | 1910-11-12 | QQ 5 5 59/324 |  | 13 | $\mathrm{I}-\mathrm{K}-\mathrm{L}-\mathrm{M}-\mathrm{N}-\mathrm{O}$ - |
|  | 1916 | Ct $4 x \geq 3$ |  |  | 8-T |
|  |  | $\mathrm{B4}$ 4 $3 \times 3$ |  | 1912-13 |  |
|  |  |  |  | 1913-14 | R series 114 X |
| I'remier | $\begin{aligned} & 19 \mathrm{NO}-10 \\ & 1911-12-13 \end{aligned}$ |  |  | 191+-15 | Serles 9 Serles 12 |
|  |  | Series M 6-60 |  | 1914-15 | Series $10 \quad 33 \times 3 / 163$ |
|  | 1912-14-15 |  |  |  | Serles 14 |
|  | 1914 | A |  | 1915 | Serles $15 \quad 31 \times 3 / 16 t$ |
| Pullinan | 19148 19008 | $\stackrel{\text { I }}{\text { I }}$ and J $415 / 14 \times \mathrm{x} / 16 \mathrm{3}$ |  | 1916 ${ }_{1910}$ |  |
|  | ${ }^{19065}$ | $\mathrm{K}^{\text {and J }}$ (15/16xy/163 | westcott | $19112-12-13$ 1911 |  |
|  | 1909 | M1-4-40 $5 \times 5 / 163$ |  | 1913 | 6-50 $4 \times 3 / 163$ |
|  | 1909 | L 4 3 $3 \times 9 / 323$ |  | 1914-15 | Serles 10 31x 3 |
|  | 19101-11-12 | 0.4-30 $41 / 32 \mathrm{x}$ ( 3 |  |  | 4.Cyl |
|  | 1913-14 | $4-36$ 41/32x 4 |  | 1915 | $6-\mathrm{Cy1}$ - $3 \frac{1}{2} \times 3 / 163$ |
|  | 1910-11-13 | M-4-50 $51 \times 5 / 163$ | Willys-Kıight |  |  |
|  | 1912-13 | 4-40-6-60 415/32xt 3 | Previonsly Garford | 1914-15 | K17-K19 $4 \times 5 \mathrm{M} / \mathrm{M}$ ? |
|  |  | +-44-6-66 |  | 1916 | 84 - 412x ? |
|  | 1914 | +-44-606 $48 \times 3$ | Winton | 1908-10-11 | XVI-17A 4 4 込 3 |
|  | 1914 | 6i-4t $37 \times 3 / 163$ |  |  |  |
|  | 1916 | All Monels $37 \times 3 / 163$ |  | 1914 |  |
| Hambler | 1808-6 | $34-314 \quad 41 \times 5 / 164$ |  | 1915 | $\mathbf{M} / 21$ - $4 \times 3 / 164$ |
|  | 151611 | 4. 53.68 |  | 1915 |  |
|  | 1900 -60-10 | 21-37-11-45 $5 \times 5 / 164$ |  | 1909 | 17 年 $4 \times 5 / 163$ |
|  |  | 47-51-55 |  | 19019-10 | 18-18A $5 \times 5 / 163$ |
|  | $1911-12$ $1972-13$ | $\begin{array}{lll}61-45-71-75-76 & 5 \\ 7550 / 163 \\ 485\end{array}$ |  | 1916 |  |

# Ghe GIBSONGOMPANY 

## VALVE SPRING RELEASE, LIFTERS, GRINDERS AND AUTO TRAYS

## Chain Valve Spring Release

This is without doubt the most practical tool ever made to remove valves. Will fit any motor. The lever has a narrow fork on one end and a wide one at the other to accommodate valves having split washer instead of pins to hold the spring on the stem.
Complete, nickel plated,
each
.80 .50
Each. . D.P. $\$ 0.66$


Gemco Valve Spring Release


This valve tool is made entirely of pressed steel. The spring ratchet device holds the valve spring firmly in place after being compressed by the fulcrum action of the valve tool, enabling the pin to be easily extracted from the stem. It can be used on practically any type of motor.

Gemco Valve Spring Release, each . . . . . . . . . . $\$ 0.50$ Each. .D.P. $\$ 0.55$

## Vlchek Valve Lifter



This is the only drop forged valve lifter on the market.

The sliding cam increases the leverage as the valve spring is compressed and allows quick action with greatest ease.
Each
Each. .D.P. $\$ 1.88$

## Handy Valve Lifter



Constructed of the best spring steel. Goes into the port hole of an engine, and its knurled edges engages the sides of the slot in a valve by a slight pressure of the fingers, and the valve may then be easily and securely removed.

There has never been a tool designed for picking the valves out of an engine, and this Handy Valve Lifter is something absolutely new. It is a labor-saving device that should be in every garage.
Each
$\$ 0.50$
Each. . D.P. $\$ 0.66$

## Mossberg Valve Grinder



No. 610 Mossberg Universal Valve Grinder will fit valve tops on all cars, whether slotted or drilled with two holes. The brace type is admittedly the ideal valve grinding construction and this particular tool is recommended by practical automobile mechanics. For use on Ford valves or other drilled tops bring down the two wings and secure them tightly in desired position with knurled nut. If valve tops are slotted, loosen the nut and swing the two wings back onto shank and fasten them out of the way by turning up again on knurled nut. Length $15 \frac{1}{2}$ inches over all, made of finest steel bright finish with wooden handle and top.
Each
$\$ 1.00$
Each. . D.P. $\$ 1.65$

## Turko Valve Grinder



The Turko Valve Grinder permits the operator to grind all valves of automobile engines or other internal combustion engines without taking down the engine. The shaft carrying the grinding bit makes one step forward and return for every revolution of the crank, seven complete revolutions of the crank carrying the grinding bit completely around the valve seat; yet the gear is so designed that the grinding bit never comes to a stop twice at the same point on its way round the valve seat. Substantially made with die cast gears and handsomely finished in nickel plate. Indispensable to the garage manager and makes it possible for any person to take care of his own engine.
Each
$\$ 2.25$
Each. . D.P. $\$ 3.55$
Ideal Auto Tray


The Ideal Auto Tray is of hardwood construction throughout. Natural finish. Fitted with ball bearing caster and neatly upholstered head rest. Size $22 \times 86$ inches.
Each
$\$ 2.00$
Each. . D.P. $\$ 3.00$

# Ohe CIBSON CMMANY <br> PLIERS 

## Combination Pliers



These Pllers are drop forged of the best tool steel, the Jolnt is carefully milled nad they are finished is a first class manner. Guaranteed in every respect.
No. 85 Combination Pliers, 6 -isch, black. .................. . . $\$ 0.30$ Dozen. D. P. $\$ 6.66$
No. 355 Combination Pliers, t-inch, niekeled. ............. . . . 40 Dozen..D.F. $\$ 5.33$


No. 355 Combination Pliers, 8 -inch, nickeled . . . . . . . . . . . . . . $\$ 0.60$ Dozen.. D. P. $\$ 10.66$
No. 355 Combination Pliers, 10-inch, nickeled.................. . 75 No. 355 Comhinati
Dozen..D. P. $\$ 13.55$


We present bere an exceptionally high grade tool, not only in quality, but in finish. This tool is carefully forged from 60-carbon steel and is accurately machined. Tbe knurled bandles are a distinct feature and add greatly to the beauty of the pliers.

Per Pair
No, 356 Combination Pliers, $51 / 2$-inch, nickeledl............... $\$ 0.45$ Dozen. D. P. \$s. 33
No. 356 Combination Pliers, 6 -inch, nickeled............. . . . 50 Dozen. . D.P. 80,32
No. 356 Combination Pliers, 8 -inch, nickeled. ............... . . . 65
Dozen, D. P. $\$ 11.66$
No. 356 Combination Pliers, 10 -inch, nickeled.............. . . . 80 Doxen. . D.P. $\$ 14.44$


Distinetly a bigh grade tool is quality, itg utility and finish. Forged from 60-carbon steel, accurately machined and correctly fibished with knurled bandles.
No. 305 Victor Univernal Plierk, 7-inch, nickeled. . . . . . . . Doze日. . D. P. $\$ 13.52$

Slip Joint Side Cutting Pliers


These Pliers are made of a special cutting plier steel. cuts elght-penny box nalls with ease, owlog to the immense leverage and shape of handles. Is bighly nickel plated with beautifully knurled bandles, and the words "Forged Steel" struck inside of same. Has two wire cutters, one on eltber side of fulcrum. Has proved a ready seller, taking the place of both cheap side cutting pliers as well as all combination pllers.
No. 1873 silp Joint side Cutting Pliers, 7 -incb, per pair., $\$ 0.75$ Dozen .D.P. $\$ 1232$

## Lap Joint Side Cutting Pliers



Handsomely finisbed with knurled handles. This tool is atrletly high grade. It is carefully forged from f0-carbon steel and in necurately machined. Recognized immediately by mechanics as un exceptional tool.

## Lap Joint Side Cutting Pliers Prices

No, 1801 side Cutting Pliers, 6 -inch, per pair.
80.90

Dozen_.D.P. $\$ 16.00$
No. 1801 Side Cutting Pliers, 7-inch, per pair, ............. 1.10
Dozen., D.P. $\$ 2 \times 1.00$
No. 1801 Side Cutting Pliers, 81/w-inch, per pair. . . . . . . . . . 1.35 Dozen_ . D.P. $\$ 23.38$


No. 1863 Combination Pliers, 9-inch, nickeled, per pair.... 80.75 Dozen. .D.P. \$12.44


No. 1903 Thin Nose Combination Pliers, jaws made additional length to insure greater reach and employ two grips, length i inches, full nickel, each.................so.s Dozen..D.P. $\$ 13.55$


No. 1983 Bent Nose Combination Pliers, the pliers for odd plaren that are difficult to reach, length 8 inches, full
nickel, each. .
Dozen . D. P. $\$ 16.00$


This is a beautiful as well as serviceable tool. Forged from a superior quality of cutting plier steel.
No. 2601 Diagonal Pliers, $51 / 2$-inch. per pair.
Dozen...D.P. \$16.00


No, 1631 Curved Needle Nose Pliers, $51 / 2$-inch, nickeled. per pair. . . . ................................................. . . 80.8 Dozen..D.P. $\$ 17.33$


No. 1681 Long None Side Cutting Chain Pliers, 6-inch, nickeled, per pair ................................................... . 80.88 Doxen. .D.P. $\$ 16,00$


No. 1593 Milliner's Pliers, $41 / 2$-lnch, nickeled, per pair. . . $\$ 0.90$ Dazen., D.P. $\$ 16,66$


No. 1701 Short Nose Pliern with cutter, nickeled, per palr, 80.75 Dozen. . D.P. $\$ 13.32$

## The GIBSONGOMPANY

WRENCHES AND PLIERS

Crescent Adjustable Wrench


The Crescent Wrencb can be used in practically every openiug where the solid wrencb can be used. The 10 -inch size takes the place of nine sizes of solld wrencbes Other sires proportionately.

The bandle is arop forged from hest carbon steel; the movable jaw from special alloy steel showing four times the strength of ordinary steel; the entire wrench is carbonized, hardened in oil, and tempered. Tbey are neatly finished.
Size 4-inch. Capacity $1 / 2$-inch, varh . . . . . . . . . . . . . . . . . . . . $\$ 0.65$ Dozen...D.I', \$11.55

Size 6-Inch, Capacity \%-inch, each.......................... . . 65 Doxen...D.F, $\$ 11.55$

Slze 8-inch, Capacity 15/16-inch, each...................... . . . . 80 Dozen., D. P. $\$ 14.20$

Size 10-inch, Capacity 11/a-inch, eacl ......................... 1.00 Dozen..D.P, $\$ 17.76$

Size 18-Inch, Capacity $18 / 8$-inch, each ........................... 1.85 Dozen. . D.P. $\$ 22.22$

## The Crescent Silent Salesman



Mounted with Six 4-inch Crescent Wrenches Size $81 / 2 \times 111 / 2$ inches

Tbe Crescent Wrencb is one of the best tools for the automobile owner that bas ever been put on the market.

This display board is made of beavy cardboard, attractively designed and provided with an easel back which locks and will not fall over on a glass show case,
Crescent Wrench Display Board with six 4-inch Crescent
Wrenches, each
.$\$ 3.90$
Each., D.P. $\$ 5.78$

## Simplex Pliers



Simplex Combination Pliers are drop-forged from a 60-carbon crucible unalysis, open-bearth steel, oil-tempered, hand finisbed, and unconditionally warranted satisfactory. These pliers are so made that by a quarter turn of the bandles they can be used on a wide range of sizes of either round pipe or auts. Nickel finish.

Simplex Combination Pliers, 5-inch, nickeled, each........ 80.40 Doxen..D.P. $\$ 5.55$

## Motor Kit Combination Pliers



A bigb-grade tool of the sume quality and flnish as the Simplex brand. Has knurled or cross-corrugated bandles which insures a perfect grip at all tlmes without hurting the band. Guaranteed satisfuctory. Tbe slip joint permits of a wide range of work.

Motor Kit Combination Pliers, 5 -inch, welght $31 / 2$ ounces,
capacity \%-inch, each...................................... . . 80.40
Dozen.. D.P. $\$ 5.55$
Motor Kit Combination Pliers, 6-inch, welght 8 ounces,
capacity 1 -inch, each
. 40
Dozen. . D.P. $\$ 5.55$

## CeeTeeCo Combination Piers



The CeeTeeCo is a high-grade tool, drop forged from 60-carbon open-hearth steel, but machine finished instead of hand finished. The machine finish does not give the high polish of the band work but makes a very satisfactory and rust-proof $\bar{f} i \mathrm{lsh}$ for all-around work.

Tbe slip joint permits of a wide range of sizes in either round pipe or nuts. CeeTeeCo Pliers are made with crosscorrugated handles, which insures a perfect grip without burting the band. They are accurately machlned with drilled holes and milled teeth and for all practical purposes are the equal of any plier.

CeeTeeCo Combination Pliers, 6 -inch, welght $31 / 2$ ounces, capacity $3 / 4$-inch, each......................................... . . . 80.38 Dozen., D.P. $\$ 3.89$
CeeTeeCo Combination Pliers, 6-inch, weight 8 ounces,
capacity 1-inch, each....................................... . . . . 35
Dozen. .D.P. $\$ 3.89$

# The GIBSON COMPANY SCREW DRIVERS 

Mound Offset Screw Driver No. 27



These screw drivers are made especially to get at screws where a straight tool is not desirable. Made of 4 inch square tool steel.
5 -inch, nickel plated, each. $\$ 0.25$
Dozen....D.P. $\$ 4.00$
6 -inch, nickel plated, each.
Dozen....D.P. $\$ 4.22$
7 -inch, nickel plated, each. .35
Dozen....D.P. \$4.66

## Twin Screw Driver



A very handy tool for work on coils, magnetos, elocks, etc.
Twin Screw Driver, each
$\$ 0.10$
Dozen....D.P. $\$ 1.45$


Four-In-One Screw Driver


This clever little tool is a combination of the several screw drivers shown on preceding page. Each tool fits into the one larger, making a neat compact combination which fits in the vest pocket.

Length over all, 59 inches.
Each
$\$ 0.60$
Dozen....D.P. $\$ 10.00$
Three-In-One Screw Driver


Same construction as in the Four-In-One, but does not contain the largest size blade, being a combination of our Twin and Perfecto Screw Driver.

Length over all, $3 \underset{7}{ }$ inches.
Each
$\$ 0.25$
Dozen..D.P. 85.55

## Perfect Handle Screw Drivers

The Perfect Handle Screw Drivers are the most durable and substantial screw drivers ever placed upon the market. The oval-shaped wood handle gives great leverage and fits the hand perfectly. The end of the handle is very heavy and can be used as a hammer head.
Perfect Handle Screw Driver, length of blade 4 inches, diameter $\frac{1}{4}$ inch, each.
80.40

Dozen. .D.P. $\$ 6.66$
Perfect Handle Screw Driver, length of blade 5 inches, diameter $\frac{1}{4}$ inch, each
Dozen. .D.P. $\$ 7.56$
Perfect Handle Screw Driver, length of blade 6 inches, diameter, $\frac{5}{16}$ inch, each.
Dozen. .D.P. $\$ 9.11$
Perfect Handle Screw Driver, length of blade 7 inches, diameter $\frac{5}{18}$ inch, each.
Dozen. . D.P. $\$ 10.67$
Perfect Handle Screw Driver, length of blade 8 inches, diameter $\frac{7}{8}$ inch, each.
Dozen. . D.P. $\$ 12.22$
Perfect Handle Screw Driver, length of blade 10 inches, diameter $\frac{1}{5}$ inch, each.
.90
Dozen. . D.P. $\$ 15.22$
Perfect Handle Screw Driver, length of blade 12 inches, diameter $\frac{1}{6}$ inch, each
1.00

Dozen..D.P. $\$ 16.00$

## Perfect Handle Machinist Screw Driver

Perfect Handle Machinist Screw Driver, length over all $9 \frac{1}{2}$ inches, length of blade $4 \frac{1}{2}$ inches, diameter $\frac{7}{10}$ inch, each.
$\$ 0.75$
Dozen. D.P. $\$ 16.00$
Perfect Handle Machinist Screw Driver, length over all $10 \frac{1}{2}$ inches, length of blade 5 inches, diameter ${ }^{\circ}$ inch, each.

## The "Triple Lever," Perfect Handle Screw Driver



A very strong screw driver for mechanics and automobilists, with point $\frac{1}{2}$ inch wide and $5 / 64$ inch thick. A convenient and ingenious arrangement by which the benefit of a variety of extraordinary leverages can be obtained in an instant.
Each
$\$ 1.50$
Dozen
....D.P. $\$ 25.53$

## Wood Handle Screw Driver



## No. 1001

Wood Handle Screw Driver with forged steel blade. Riveted to hard wood handle. Finished in black rubber enamel.
5 -inch blade, each
. $\$ 0.25$
Dozen. .D.P. $\$ 3.56$

Insulated Screw Driver



No. 87 Insulated Screw Driver. The finest kind of a tool to use around ignition apparatus on the automobile or for electricians' use. Insulated to within 2 inches of end of the blade.
No. 87 Insulated Screw Driver, 2 -inch, each..... . 80.40 Dozen..D.P. $\$ 6.67$
No. 87 Insulated Screw Driver, $2 \frac{1}{3}$-inch, each...... 40 Dozen. .D.P. $\$ 6.89$
No. 87 Insulated Screw Driver, 3-inch, each...... . 45 Dozen. . D.P. 87.44
No. 87 Insulated Screw Driver, 4 -inch, each...... . 50 Dozen. .D.P. $\$ 8.88$
No. 87 Insulated Screw Driver, 5 -inch, each...... . 55
Dozen. .D.P. \$9.78
No. 87 Insulated Screw Driver, 6-inch, each...... . 70
Dozen. .D.P. $\$ 12.00$
No. 87 Insulated Screw Driver, 7 -inch, each...... . 75 Dozen. .D.P. $\$ 13.67$
No. 87 Insulated Screw Driver, 8 -inch, each...... . 90 Dozen. .D.P. $\$ 15.56$

## Slim Screw Driver

No. 180J Extra Slim Screw Driver. A very fine tool for magneto-coil use, or anywhere where small screws are used, made from highly polished steel rod, correctly tempered, has a long ferrule and black, friction polished handle.
No. 130J Extra Slim Screw Driver, length of blade $1 \frac{1}{2}$-inch, each
80.30

Dozen. .D.P. $\$ 4.44$
No. 130J Extra Slim Screw Driver, length of blade 2-inch, each
Dozen..D.P. \$4.66
No. 130J Extra Slim Screw Driver, length of blade 3-inch, each
Dozen..D.P. \$4.66
No. 130J Extra Slim Screw Driver, length of blade 4-inch, each
Dozen. .D.P. $\$ 5.33$
No. 130J Extra Slim Screw Driver, length of blade 5-inch, each
Dozen. . D.P. $\$ 5.88$

## All Steel Screw Driver



Tool Steel Drop Forged
All Steel Screw Drivers, $\frac{1}{4}$-inch, polished, square shank, length 6 inches, each
Dozen..D.P. $\$ 7.22$
All Steel Screw Drivers, $\frac{5}{18}$-inch, polished, square shank, length $7 \frac{1}{4}$ inches, each.
Dozen. .D.P. \$8.88
All Steel Screw Drivers, $\frac{1}{6}$-inch, polished, square shank, length 9 inches, each.
.60
Dozen. .D.P. $\$ 10.66$

Champion Screw Driver


Forged from toughest steel. Intended for and will stand harder work than any other screw driver. Stronger construction. Tougher temper. Finer finish. Every blade tested to split a screw driver head.
Champion Screw Drivers, 4-inch, each.. $\$ 0.35$ Dozen. .D.P. 85.22
Champion Screw Drivers, 5-inch, each. . 45 Dozen..D.P. \$6.12
Champion Screw Drivers, 6-inch, each. . 50
Dozen.. D.P. $\$ 7.22$
Champion Screw Drivers, 7-inch, each . 60
Dozen. . D.P. $\$ 8.55$
Champion Screw Drivers, 8-inch, each . 70
Dozen. .D.P. $\$ 9.66$
Champion Screw Drivers, 10 -inch, each.... . . 85 Dozen. .D.P. 810.78

## Yankee Screw Driver



No. 10 Yankee Ratchet Screw Driver, 2-inch, each $\$ 0.50$ Dozen. . D.P. $\$ 7.78$
No. 10 Yankee Ratchet Screw Driver, 3-inch, each .70 Dozen. . D.P. $\$ 10.00$
No. 10 Yankee Ratchet Screw Driver, 4-inch, each .80
Dozen. . D.P. $\$ 10.78$
No. 10 Yankee Ratchet Screw Driver, 5-inch, each .90 Dozen. . D.P. \$11.78
No. 10 Yankee Ratchet Screw Driver, 6-inch, each 1.00 Dozen. .D.P. $\$ 14.00$

## Yankee Ratchet Spiral

No. 30 Yankee Ratchet Spiral Screw Driver, each $\$ 2.30$ Dozen. .D.P. $\$ 40.00$


Round Blade, Crucible Steel, carefully hardened and tempered, finished bright. Hard Wood Handle.
No. 230 Telegraph Screw Driver, 2-inch, each..... $\$ 0.30$
Dozen. . D.P. $\$ 3.00$
No. 230 Telegraph Screw Driver, 3-inch, each....... . 30
Dozen. .D.P. \$3.11
No. 230 Telegraph Screw Driver, 4-inch, each....... . 30
Dozen. .D.P. $\$ 3.33$
No. 230 Telegraph Screw Driver, 5-inch, each........ . 35
Dozen. . D.P. $\$ 3.66$
No. 230 Telegraph Screw Driver, 6-inch, each....... . 40
Dozen. .D.P. $\$ 3.89$
No. 230 Telegraph Screw Driver, 7 -inch, each........ . 40
Dozen. .D.P. $\$ 4.00$
No. 230 Telegraph Screw Driver, 8-inch, each....... . 45 Dozen. .D.P. \$4.44

## BILLINGS \& SPENCER'S WRENCHES



## Billings \& Spencer Wrench Sales Board No. 3

The board is designed to hang in a conrenient position back of the counter, or to stand up on the floor,
It is handsomely finished with trademark at the top.
The wrenches bang in one-balf dozen lots and they are selected as being the sizes and styles most in demand
Tbe dealer is entitled to one of these boards free on condition that he purchase the wrenches complete as per list, full finished and in lots of one-half dozen each.
A printed eard giving the number, bolt sizes and milled openings of the wrenches as placed on the board will be furbisbed with each board.
No. 3 B. \& S. Wrench Sales Board, com-
plete with 6 each of the 35 sixes ( 210
in all) fall finished wrenches as
shown by list that follows, each D.P. $\$ 140.76$
Prices are also given for wrenches when desired witbout the board.

## Wrenches on No. 3 Sales Board

Engineer's Wrenches- $15^{*}$ Angle, Double Head

| Number | $\begin{array}{\|c\|} \text { S.A.E. Std. } \\ \text { Nuts and Cap } \\ \text { Screws } \\ \text { Inches } \\ \hline \end{array}$ | Milled Openings Inches | Lenath Inches | Price | Retail |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1100 \\ & 1118-5 p . \\ & 1126 \\ & 1132-\mathrm{Sp} . \\ & 1140 \end{aligned}$ |  |  | $41 / 2$ 6 8 9 $111 / 2$ | $\begin{array}{lr}\text { D.P. } & 30.32 \\ \text { D.P. } & 46 \\ \text { D.P. } & .68 \\ \text { DP. } & 88 \\ \text { DP } & 1.40\end{array}$ | $\begin{array}{r} \$ 0.22 \\ .30 \\ .45 \\ .58 \\ .95 \end{array}$ |
| Cheek Nnt or "Thin" |  | Wrenches-15* |  | Angle, Double | Head |
| Number | Diameter of Screw Inches | Milled Openings Inches | Length Inched | Price | Retail |
| $\begin{aligned} & 1350 \\ & 1352 \\ & 1354 \\ & 1356 \\ & 1358 \end{aligned}$ |  |  | 4313 $41 / 2$ $51 / 2$ 7 7 | $\begin{array}{lr}\text { D.P. } & 80.38 \\ \text { D.P. } & 38 \\ \text { D.P. } & .48 \\ \text { D.P. } & .60 \\ \text { D.P. } & .60\end{array}$ | $\begin{array}{r} \$ 0.25 \\ .35 \\ .30 \\ .40 \\ .40 \end{array}$ |

Engineer's Wrenches- $15^{\circ}$ Angle, Double Head


Billings \& Spencer Wrench Sales Board No. 3-Continued
Light Service Wrenches

| Number | Milled Opening Inebea |  | Length Inchea | Price | Retsil |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2000 \\ & 2007 \\ & 2017 \\ & 2025 \\ & 2023 \end{aligned}$ |  |  | $\begin{gathered} 614 \\ 71 / \\ 81 \\ 914 \\ 103 / 8 \end{gathered}$ | $\begin{array}{lr}\text { D.P. } & 80.38 \\ \text { D.P. } & 47 \\ \text { D.P. } & .58 \\ \text { D.P. } & .72 \\ \text { D.P. } & 90\end{array}$ | $\begin{array}{r} \$ 0.25 \\ .30 \\ .40 \\ .48 \\ .60 \end{array}$ |
| Number | $\begin{array}{\|c} \text { S.A.E. } \\ \text { Nutsand Cap } \\ \text { Screws } \\ \text { Inches } \\ \hline \end{array}$ | Milled Openings Inches | Length Inches | Price | Retail |
| $\begin{aligned} & 2001 \\ & 2013 \\ & 2026 \\ & 2028 \\ & 3044 \end{aligned}$ |  |  | $\begin{aligned} & 61 / \\ & 81 \\ & 914 \\ & 12 \\ & 12 \end{aligned}$ |   <br> D.P. $\$ 0.38$ <br> D.P. .58 <br> D.P. .72 <br> D.P. 1.30 <br> D.P. 1.30 | $\$ 0.25$ .40 .48 .85 .85 |

## Billings \& Spencer Wrench Sales Board No. 4

No. 4 B. \& S. Wrench Sales Board complete with 6 each of 21 sizes ( 126 in all) full finished wrenches as shown by list that follows:
Per Board, complete
D.P. $\$ 82.38$

Prices are also given when wrenches are wanted without board.

Wrenches on No. 4 Sales Board

| Light service |  |  | Vrenches-Double H |  | Head |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\begin{gathered} \text { S.A.E. } \\ \text { Nuta nnd Cap } \\ \text { \&crews } \\ \text { Inches } \end{gathered}$ | Milled Openings Inches | Length Incbes | Price | Retail |
| $\begin{aligned} & 2000 \\ & 2007 \\ & 2017 \\ & 3026 \\ & 2038-\mathrm{Fp} . \end{aligned}$ |  |  | $\begin{array}{r} 61 / 6 \\ 71 / 3 \\ 81 / 4 \\ 91 / 4 \\ 12 \end{array}$ | D.P.  <br> D. 0.38 <br> D.P. .47 <br> D.P. .58 <br> D.P. .72 <br> D.P. 1.30 | $\begin{array}{r} \$ 0.35 \\ .30 \\ .40 \\ .48 \\ .85 \end{array}$ |
| Number | S.A.E. Nuts and Cap Screws Inches | Milled Openings nehes | Length Inches | Price | Retail |
| $\begin{aligned} & 2000 \\ & 2007 \\ & 2017 \\ & 2025 \\ & 2033 \end{aligned}$ |  |  | $\begin{gathered} 64 \\ 71 / \\ 814 \\ 914 \\ 103 \end{gathered}$ | $\begin{array}{llr} \\ \text { D.P. } & 30.38 \\ \text { D.P. } & .47 \\ \text { D.P. } & .58 \\ \text { D.P. } & 72 \\ \text { D.P. } & .90\end{array}$ | $\begin{array}{r} \$ 0.25 \\ .80 \\ .40 \\ .48 \\ .60 \end{array}$ |
| Engineer's Wrenches-15* Angle, Double Head |  |  |  |  |  |
| Number | S.A.E Incber | Milled Openibgs Inches | Length <br> Inches | Price | Retail |
| $\begin{aligned} & 1104 \\ & 1110 \\ & 111 \\ & 1120-\mathrm{sp} . \\ & 1126 \\ & 1136-\mathrm{Sp} . \end{aligned}$ |  |  | $\begin{aligned} & 41 / 2 \\ & 5 \\ & 5 \\ & 63 \\ & 8 \\ & 8 \\ & 10 \end{aligned}$ | D.P. 80.32 <br> D.P. .38 <br> D.P. .38 <br> D.P. .56 <br> D.P. .68 <br> D.P. 1.08 | $\begin{array}{r} \$ 0.22 \\ 25 \\ .35 \\ .38 \\ .45 \\ .70 \end{array}$ |
| Number | 8AE Inches | Milled <br> Openings <br> Inches | Length Inchea | Price | Retail |
| $\begin{aligned} & 1114 \\ & 1119 \\ & 1120 \\ & 1133 \\ & 1140 \end{aligned}$ |  | $\begin{aligned} & \frac{3}{2}=1 \frac{1}{31} \\ & \frac{3}{3}=1 \\ & \frac{3}{2}-1 \\ & 1 \frac{1}{51}-11 \end{aligned}$ | $\begin{gathered} 6 \\ 62 \\ 63 \\ 9 \\ 1112 \end{gathered}$ | D.P. 80.46 <br> D.P. .56 <br> D.P. .56 <br> D.P. .86 <br> D.P. 1.40 | $\$ 0.30$ .38 .38 .58 .95 |

# The GIBSONOOMPANY商INDIANIS 

## BILLINGS \＆SPENCER＇S WRENCHES－Continued



## Wrench Sales Board No． 5

For T Handle Socket Wrenches
The board is designed to hang in a convenient position back of the counter， or to stand up on the floor．

It is handsomely finished with trade－ mark at the top．

The wrenches hang in convenient lots，and they are selected as being the sizes and styles most in demand．

Board No． 5 contains 35 Socket Wrenches，comprising three wrenches each of 9 sizes，and two each of the remaining 4 sizes．

The dealer is entitled to one of these boards free on condition that he pur－ chase the wrenches on the board as stated above．A printed card giving the number，bolt sizes，milled openings，etc． of the wrenches as placed on the board will be furnished with each board．
No． 5 B．A S．Socket Wrench Sales Board，complete with 35 full finished socket wrenches，each．．．．．．．．．．．．D．F，$\$ 3 / 4.66$ Wrencbes singly at prices below．

Wrenches of No． 5 Sales Board－Socket Wrenches

| No． | $\begin{aligned} & \text { U,S.8, } \\ & \text { Nut } \\ & \text { Incbes } \end{aligned}$ | $\begin{aligned} & \text { Cap } \\ & \text { Screw } \\ & \text { Inches } \end{aligned}$ | S．A．E Incher | Acroes <br> Flats <br> Inches | Lebeth Inches | Dis． <br> Head <br> Inches | Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 723A | $1 / 4$ | 卧 | 츙 | 33.64 | $5 \cdot / 4$ | 3 | D．P | \＄0．65 |
| 724 A |  | 18 | 2 | $37 / 64$ | 53. | $3 / 4$ | D．P． | ． 72 |
| 724 B | 寺 |  |  | $39 / 64$ | $5^{3 / 3}$ | 3／8 | D．P | ． 72 |
| 725 A |  | $\cdots$ | ${ }^{\frac{1}{16}}$ | $41 / 64$ | 61, |  | D．P． | － 79 |
| $\frac{725 B}{72.5}$ | $3 / 8$ |  | $1 / 6$ | $45 / 64$ $49 / 84$ | 61. | $11 / 3$ | D．P． | 89 89 |
| 726 A | $\sqrt{5}$ | $1 / 2$ | 1／2 | 49 64 $61 / 64$ | ${ }_{7}^{61 /}$ | 11.3 | D．P． | $\begin{array}{r}89 \\ \hline 97\end{array}$ |
| 726 B | 15 | 者 |  | $63 / 64$ | $\frac{7}{7}$ | 114 | ${ }_{\text {D }} \mathrm{P}$ P | .97 .97 |
| 726 C | 1／2 | \％， | $\frac{\square}{16}$ | 57／64 | 7 | 11. | D．P | 1.10 |
| 727A | \％ |  |  | 63.64 | 714 | $11 / 2$ | D．P | 1.24 |
| 727 B |  | 3 | $\frac{14}{14}$ | $11 / 64$ | $77 \%$ | 112 | D．P． | 1.24 |
| 7288 | 5 |  | ${ }_{3}$ | 1564 | $8{ }^{8}$ | 118 | D．P． | 1.40 |
| 729 A | 14 | 1 | 3 | $19 / 32$ | $91 / 8$ | 13／8． | D．P． | 1.90 |

## Rit－Rrace Socket Wrench Set



| Number | $\begin{aligned} & \text { U. 8. sud, } \\ & \text { Bolt Size } \\ & \text { Inches } \end{aligned}$ | Openings Inches | Length Inobea ？ | Price Finished |
| :---: | :---: | :---: | :---: | :---: |
| 923 A | 14 | 33／64 | $4{ }^{4}$ | D．P． 80.65 |
| 924 B | $\frac{18}{10}$ | 1139／64 | 51.4 | D．P．${ }^{\text {D }}$ ．${ }^{\text {P2 }}$ |
| 925 B ． | 8 | 45／64 | 514 | D．P．${ }^{\text {D }}$ 89 |
| 926 A． | $\frac{1}{10}$ | 51／64 | 51／4 | $\begin{array}{ll}\text { D．P．} & .97 \\ \text { D．} & 110\end{array}$ |
| 928 C | $1 / 2$ | 57／64 |  | D．P． 1.10 |
| Handle |  |  |  | D．P．$\quad .60$ |
| Cag． |  |  |  | D．P．$\quad .60$ |
| Complete |  |  |  | D．P． 5.50 |

## Tool Kit



This kit is made up of tools specially adapted to use on Ford cars．They are selected from the well－ known Billings \＆Spencer drop forged line，insuring quality and durability．The bag is made of good quality of canvas，bound edges，and leather strap．The tools are as follows：

18 －inch Auto Wrench
16 －inch Combination Pliers
19 －inch Screw Driver
1 Double Head Wrench，openings 18 －in．and $1 \frac{1}{2}$－in．
1 Double Head Wrench，openings g －in．and $\frac{\mathrm{a}}{}$－in．
1 Double Head Spark Plug Wrench $\bar{z}$－in．and ${ }^{3} G-i n$ ．
1 Double Head Hub Cap Wrench $1+\frac{1}{2}-\mathrm{in}$ ．and $1 \frac{1}{6}-\mathrm{in}$ ．
1 Socket Wrench，opening ${ }_{8}-\mathrm{in}$ ．
18 －ounce Ball Pein Hammer
1 Chisel， 1 Punch， 1 Cotter Pin Tool， 1 File Each，including bag and tools as above． $\$ 4.50$ Each．．．．D．P，$\$ 7.22$

## Allen Friction Wrench Set



Spark Plug Socket，Short Extension，Long Exten－ sion，Special Box； 8 Pressed Steel Sockets，Specially Heat Treated．

Consists of the following sizes： $13-32,17-32,19-32$ ， 15，23－32，25－32， $31-32,15-32$ in．hex．
No． 9 Allen Friction Wrench Set．
$\$ 6.00$
Each．．．．D．P．$\$ 8.88$

## Allen Friction Ford Special Set

A strictly high grade Wrench Set for Ford cars．
The Allen Friction Wrench，with no lost motion， works in places where no ratchet wrench can be used， including all crank shaft bearings．
Ford Special Set．
$\$ 6.00$
Each．．．．D．P．$\$ 8.88$
Same as Size No． 9 except special sockets to fit nuts of the Ford automobile．

BILLINGS \& SPENCER'S WRENCHES-Concluded

Billings \& Spencer Wrench Set
No. 2. No. 21, No. 4


Billings \& Spencer Wrench Set

No. 8, No. 83-8. A. E.


Set No. 8, Full Finished

| Number | $\begin{aligned} & \text { S.A.E } \\ & \text { Inches } \end{aligned}$ | $\begin{gathered} \text { Milled } \\ \text { Openings } \\ \text { Inches } \end{gathered}$ | Length Inchea | Price |  | Retsil |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1105 | - |  | $41 / 2$ | D. P | 30.32 | \$0.22 |
| ${ }_{\text {118 }}^{1185-8 p}$ | - |  | 6 | DP ${ }_{\text {D }}$ | ${ }_{\text {c }}^{46}$ | . 45 |
| ${ }_{1132}^{112}$-sp. | 二兎 |  | $\stackrel{8}{9}$ | ${ }_{\text {D }} \mathrm{P}$ | 85 | . 58 |
| $1140-8 \mathrm{p}$. |  |  | $111 /$ | DP |  | . 95 |
| Per set in cardiourd boxCanvas bag. extra |  |  |  | DP |  | 2.50 .30 |
|  |  |  |  |  |  | . 30 |

Set Ne. 81, Full Finished

| Number | $\begin{aligned} & \text { S.A.E. } \\ & \text { Incbiose } \end{aligned}$ | Milled <br> Upenimer <br> inctes | Leneth Inches | Price |  | Retsil |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1104 | $1 / 4$ |  | $41 / 2$ | D.P. | 80.32 | \$0.22 |
| 1111 | -8, |  |  | D.P | 35 | . 25 |
| 1120-5p. |  |  | $6{ }^{8}$ | D. P | . 36 | . 35 |
| 1126 | 2 |  | 8 | D.P. | . 68 | . 45 |
| 113 (insp. <br> Per set in candhourd bo $x$ |  |  | 10 | D.P | 1.08 | 70 |
|  |  |  |  | 3.02 | 2.00 |
| Camyns |  |  |  | D.P. | 45 | 0 |

# The GIBSONGOMPANY 

## BILLINGS \& SPENCER'S WRENCHES-Continued



For use on bicycles, motorcycles, automobiles, etc. B. \& S. original design. Millions now in use.

Model 97 B. \& S. Wrench, $4 \frac{1}{4}$-inch, $1 \frac{1}{8}$-inch eapacity,
weight $5 \frac{1}{2}$ ounces, nickel finish, each. .
$\$ 0.85$
Each. D.P. \$1.33

## Model GA



The jaws of this wrench are set at an angle of 25 degrees, insuring greater convenience to the user in reaching for nuts in narrow spaces.

Is drop forged steel of best quality.
Full Finished
No. 1-6-inch, 1 ? ${ }^{2}$-inch open; retail, each. ...... 81.00 Each. . D.P. $\$ 2.66$
No. $2-8$-inch, 13 -inch open; retail, each....... 1.25 Each. .D.P. $\$ 1.88$
No. 3-10-inch, 132 -inch open; retail, each ...... 1.50
Each. D.P. $\$ 2.22$


No. 1-6-inch, 1 it-inch open; retail, each........ $\$ 0.90$ Each. . D.P. \$1.44
No. $2-8$-inch, $1 \frac{1}{2}$-inch open; retail, each......... 1.25 Each. . D.P. $\$ 1.77$
No. 3-10-inch, 2 尔-inch open; retail, each. . . . . . 1.50
Each. . D.P. $\$ 2.33$
No. 4-12-inch, $2 \frac{2}{4}$-inch open; retail, each. . . . . . . . 2.00
Each. . D.P. \$3.11
The Hayden Patent Combined Wire Cutter and Gas Pliers


Handles and jaws drop rorged of open-hearth steal and hardened. Wire cutters are interchangeable and made from best tool steel.
No. 1-6-inch; will cut $\frac{1}{6}$-inch wire; retail, each... $\$ 1.00$ Each. D.P. $\$ 1.33$
No. 2-8-inch; will cut ${ }^{3}$-inch wire; retail, each.. 1.25 Each. .D.P. $\$ 1.66$
No. 3-10-inch; will cut sinch wire; retail, each. 1.65 Each. .D.P. $\$ 2.22$

Cutters, per pair:
No. 1-Retail ....... $\$ 0.40$
Each..D.P. $\$ 0.66$
No. 2-Retail
No. 3-Retail ...... \$0.60 Each. D.P. $\$ 0.88$


Drop forged; of the best steel for the purpose, strap polisbed and casp hardened. Tbe adjusting jaw is easily manipulated, and, when adjustment is made. lield in place by a tempered steel spring in conjunction with the serrations ent on the under side of the wrencl nad the teeth of the jaw

| Takes Circles | Diameter of Pin | Lengeth of Pin | Length of Wrench Inches |  |
| :---: | :---: | :---: | :---: | :---: |
| No. Incbes | Inehes | Incbes | Inches | Each |
| 0 to 2 | 冎 | $\frac{1}{8}$ | 7 | \$1.00 |
| Dozen...D.P. \$14.20 |  |  |  |  |
| 12 to 4 | $\frac{1}{4}$ | $\frac{1}{4}$ | 9 | 1.10 |
| Dozen.... D.P. \$16.00 |  |  |  |  |
| $2 \quad 2$ to 4 | 18 | $\frac{1}{4}$ | 9 | . 25 |
| Dozen...D.P. $\$ 17.76$ |  |  |  |  |
| $3 \quad 2$ to $4 \frac{3}{4}$ | $\frac{1}{4} \times \frac{3}{8}$ | $\frac{1}{4}$ | $10 \frac{3}{3}$ | 1.75 |
| Dozen...D.P. \$26.64 |  |  |  |  |

## Improved Combination Pliers



No, 1 13. \& $s$. Combinution Pliers, G-ineh, full nickel 81,10 finish, each
Dozen. . D.P. $\$ 16,00$
No. \& B, \& \&, Combination Plipra, X-inch. full niekel faish. each

# Ohe GIBSON COMPANY 

## WILLIAMS WRENCHES

## Williams Light Cap Screw Wrenches

15-Degree Ancle, Single Head. Semi-firished


| Number | $\begin{gathered} \text { U. } 8.8 . \\ \text { Cap sirews } \\ \text { Incher } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Mulled } \\ \begin{array}{c} \text { Openings } \\ \text { Onches } \end{array} \\ \hline \end{gathered}$ | Lenath <br> Inchibes | Price | Retai |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 700 \\ & \begin{array}{c} 701 \\ 701 A \\ 7012 \\ 703 \\ 704 \end{array} \end{aligned}$ | 商 <br> 等 |  | $\begin{aligned} & 31_{2} \\ & 4 \\ & 4 \\ & 44_{4} \\ & 55_{4}, \end{aligned}$ |  | 30.12 <br> .14 <br> .14 <br> .17 <br> .17 <br> .25 |

Williams Semi-Finished Wrenches
${ }^{15-\text { Degree Angle, Light Cap Screw wrencb for Hex Heald }}$ Cap screws.


| Number | $\begin{aligned} & \hline \hline \text { Hex. Head } \\ & \text { Cap Screws } \\ & \text { nohes } \end{aligned}$ | $\begin{gathered} \text { Milled } \\ \text { Openings } \\ \text { niches } \end{gathered}$ | ${ }_{\text {L }} \begin{aligned} & \text { Length } \\ & \text { Iochess }\end{aligned}$ | Prive | Ret |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 721 782 723 7231 725 7268 720 727 728 729 730 731 731 |  |  |  |  | $\begin{array}{r}\mathbf{3 0 . 1 3} \\ 16 \\ 16 \\ 16 \\ 16 \\ .20 \\ .20 \\ .23 \\ 23 \\ 28 \\ .28 \\ .38 \\ \hline\end{array}$ |

Williams Semi-Finished Engineers' Wrench
15 -Degree Angle, Double Head.


| Number |  | $\begin{gathered} \text { Milled } \\ \text { Openinges } \\ \text { Incbes } \end{gathered}$ |  | Price | Retail |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\square$ |  |  |



Williams Set Screw Wrenches
22). Depree Angle, Dotble Head. Semi-finished.


| Number | Set Screw: Inches | Length <br> Inches | Thickness Head Inches | Price | Retsil |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 523 \\ & 527 \\ & 531 \\ & 535 \\ & 539 \end{aligned}$ |  | $\begin{gathered} 31 / 5 \\ 5 \\ 65 \\ 83 \\ 112 \\ \hline \end{gathered}$ |  | D.P. 80.23 <br> D.P .32 <br> D.P. .50 <br> D.P. .72 <br> D.A. 1.55 | $\begin{array}{r} \$ 0.15 \\ .22 \\ .35 \\ .50 \\ 1.05 \end{array}$ |

## Williams "Ford" Sets of Superior Drop-Forged Wrenches




## 

WILLIAMS＇WRENCHES

Superior Drop－Forged Wrench Sets
For Light Work Oniy


S，A．E．，＂Lizht Five＂

＂Big Six＂

Superior Drop－Forged Wrench Sets

For severe nervice about Autemebiles， ete．No aluplication of openings

＂Duplex＂

| Automobile＂Duplex．＂Nos． 8 and 9 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No． | $\begin{gathered} \text { U.S.S. } \\ \text { Nute \& } \end{gathered}$ | Milled Openimg Inches | Length Inches | Semi－Finish |  | Full Finish |  |
|  | Inches |  |  | Price | Retail | Prive | Ftetail |
| 725 | $1 /$ | 寺－1 | 13.8 | D．P． 80.27 | \＄0．20 | D．P．$\$ 0.42$ | \＄0．28 |
| 25 | $\frac{1}{10}$ | 2－${ }^{1}$ | 41. | D．P $\quad .27$ | ． 20 | D．P． 42 | ． 28 |
| 27 C | 18 | \％－1 | 518 | 1PP $\quad 34$ | ． 25 | D．P．$\quad 02$ | ． 35 |
| 285 | \％ |  | $6{ }^{18}$ | D．P 41 | ． 28 | D．P B 8 | ． 42 |
| 731.4 | $1_{2}$ | － | $7^{3}$ | DP $\quad .52$ | ． 35 | D．P． 75 | ． 60 |
| 34 | 5 | -1 相 | 924 | D．P． 75 | ． 60 | D．P． 1.20 | ． 80 |
| 736 |  | $1-114$ | $111 / 2$ | D．P． 1.06 | ． 78 | D．P． 1.55 | 1.05 |
| Set N | 9，withou | $t$ roll |  | D．P 3.601 | 2.45 | D．P． 6.60 | 3.75 |
| Set N | 8，withou | t roll |  | D．P． 4.22 | 2.80 | D．P．6．44 | 4.35 |
| Canv | a roll，estrs |  |  | D．P． 50 | ． 35 | DP．$\quad 50$ | ． 35 |



Set No． 9 does not coutain the Spark Plug Wrench．

Superior Drop－Forged Wrench Sets

For severe service about Automo－ biles，etc．No duplication of openiags

| No． | par |  |  | Set．＂Biz Ten＂No． 10 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U．S．S． Bolte \＆ Nuts <br> Inches |  | $\left\lvert\, \begin{gathered} \text { Milted } \\ \text { Openings } \\ \text { Inches } \end{gathered}\right.$ | Semi－Finish |  | Full Finish |  |
|  |  |  |  | Price | Ftetail | Price | Retail |
| ${ }^{721}$ |  |  |  | D P．80．20 | \＄0．13 | D．P． 80.24 | \＄0．20 |
|  |  |  | ， | D．P $\quad 23$ | 15 | D．P． 35 | ． 25 |
| 725 A | $3$ | $14 \frac{1}{3}{ }^{3}$ |  | $\begin{array}{ll} \mathrm{DP} & 28 \end{array}$ | .20 | D．P 42 | ． 28 |
| $\begin{array}{r} 27 \\ 729 \end{array}$ |  |  |  | $\begin{array}{ll}\text { D．P } & 35 \\ \text { DP } & 11\end{array}$ | ． 25 | D．P． <br> .52 | ． 35 |
| $\frac{729}{731 B}$ |  | $1 \frac{1}{14}-1 / 2$ | － | $\begin{array}{ll}\text { D．P．} & 41 \\ \text { D．P } & 50\end{array}$ | ． 28 | D．P ${ }^{\text {D．P．}}$ | ． 42 |
| 32 |  |  | － 18 | $\begin{array}{ll}\text { D．P．} & 50 \\ \text { D．P．} & 60\end{array}$ | ． 35 | $\begin{array}{ll}\text { D．P．} & .75 \\ \text { D．P．} & .95\end{array}$ | ． 50 |
| －337 |  | －16 | 6 －1 | DPP 60 | 42 | DP P 95 | ． 60 |
| 73 |  | $1 / 2$ | $1^{1},-1^{1}$ | D．P． 1.08 | 72 | D．P． 1.55 | 1.05 |
| d |  | 17 | 11 发－1 | D．P． 1.65 | 1.05 | D．P． 2.00 | 1.45 |
| Set | 0 wit | at rodl |  | D．P． 5.77 | 3.90 | D．P． 8.44 | 5.75 |
| Cran | Il，ex |  |  | DP． 66 |  | D．P． 66 |  |

Superior Drop－Forged Wrench Sets＂Thin＂

For Light Work Only，
No duplication of opening


S．A．E．Set＂Thin Five＂Ne． 35

| No． | $\begin{aligned} & \text { BA.E. } \\ & \mathrm{Nuts} \dot{k} \end{aligned}$ | Milled Openings Inches | Length Inches | Semi－Finish |  | Full Finish |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Incher |  |  | Price | Retal | Price | Retail |
| 623 E | $\frac{1}{4}$－${ }^{\text {a }}$ |  | $\begin{gathered} 483 \\ 51, \\ 67 / \\ 81 / 2 \\ 1038 \end{gathered}$ | D．P．80．28｜ | $\begin{array}{r} \$ 0.20 \\ .25 \\ .30 \\ .42 \\ .63 \\ 1.80 \\ .35 \end{array}$ | DP． 80.42 | $\$ 0.30$ |
| 626 X |  |  |  | D．P． 35 |  | D．P | .36.45 |
| 629 E |  |  |  | D．P． 44 |  | D．P． 66 |  |
| 632 X |  |  |  | D．P． 60 |  | D．P． 88 | ， 6 |
| 63 |  |  |  | D．P．${ }^{\text {D }}$ ， 95 |  | D．P， 1.50 | ． 80 |
| Set No | 35，witho |  |  | D．P． 2.66 |  | D．P． 3.77 | 2.55 |
| Canv | ill．ex |  |  | D．P． 50 |  | ก．P．． 0 |  |

# Ohe CIBSONOMPANY <br> WRENCHES 



The Perfect Handle Adjustable " S " Wrenen is far ahead of the ordinary malleable adjustable " S " wrench and the clumsy drop-forged adjustable all steel " S " wrench that looks identically like the malleable. The perfect handle is the most practical, comfortable and powerful adjustable " $S$ " wrench ever made.
No. 641 Perfect Handle Wrencb, 6-inch, each
.. $\$ 0.85$ Dozen. .D.P. $\$ 15.22$
No. 641 Perfect Handle Wrench, 8-inch, each........ 1.10

## Dozen. .D.P. $\$ 18.88$

No. 641 Perfect Handle Wrench, 10 -inch, each........ 1.25 Dozen. .D.P. $\$ 22.77$


No. 642 Perfect Handle Wrench, 6-inch, each........ 80.85 Dozen. . D.P. $\$ 15.22$
No. 642 Perfect Handle Wrench, 8-inch, each...... 1.10 Dozen. . D.P. $\$ 18.88$
No. 642 Perfect Handle Wrench, 10 -inch, each 1.25 Dozen. .D.P. $\$ 22.77$

The "Perfect Handle" Screw Wrench


The drop-forged screw wrench is the strongest, most practical, most comfortable, most salably priced.
Perfect Handle Screw Wrench, 6-inch, capacity $11 / 16$, each
$\$ 0.75$
Dozen...D.P. $\$ 13.32$
Perfect Handle Screw Wrench, 8 -inch, capacity 11, each
Dozen. . D.P. $\$ 15.00$
Perfect Handle Screw Wrench, 10 -inch, capacity $1 \frac{1}{8}$, each.
Dozen.. D.P. $\$ 17.76$
Perfect Handle Screw Wrench, 12 -inch, capacity $23 / 16$, each
Dozen. .D.P. 822.22
Perfect Handle Screw Wrench, 15 -inch, capacity 27, each
Dozen. D.P. 835.55
Perfect Handle Screw Wrench, 18 -inch, capacity 3!, each.
Dozen. . D.P. 844.00
Perfect Handle Screw Wrench, 21-inch, capacity 4, each.
3.00

Dozen. D.P. $\$ 51.11$

Stillson Pipe Wrench


Length open, 6 inches, takes pipe from $\frac{1}{8}$ to $\frac{1}{2}$ inch, each
$\$ 0.85$
Dozen. .D.P. $\$ 15.99$
Length open, 8 inches, takes pipe from $\frac{1}{8}$ to $\frac{3}{4}$ inch, each
Dozen. .D.P. $\$ 15.99$
Length open, 10 inches, takes pipe from $\&$ to 1 inch, each
Dozen. . D.P. $\$ 18.66$
Length open, 14 inches, takes pipe from $\mid$ to $1 \frac{1}{1}$ inch, each
Dozen. . D.P. $\$ 23.98$
Length open, 18 inches, takes pipe from $\ddagger$ to 2 inch, each
Dozen. .D.P. $\$ 33.33$

## Bemis \& Call Wrench


B. \& C. Adjustable S Wrench, 6 -inch, each............ $\$ 0.70$

Dozen. .D.P. $\$ 11.11$
B. \& C. Adjustable S Wrench, 8-inch, each............ . 90

Dozen. D.P. \$14.44
B. \& C. Adjustable S Wrench, 10 -inch, each.......... 1.20 Dozen. .D.P. $\$ 18.66$

Eagle Claw Wrench


The Eagle Claw is the handiest and best tool for all work around an automobile. It never slips on oily, slippery grease cups, and gets a firm grip on set or lag screws, no matter how round or worn the corners may be.

Designed and constructed for use in difficult places where it is impossible to use any other wrench.
Eagle Claw Wrench, 7-inch, each.
$\$ 1.00$
Dozen. .D.P. $\$ 16.00$
Eagle Claw Wrench, 10-inch, each. . . . . . . . . . . . . . 1.25
Dozen. . D.P. $\$ 22.22$

## 

WRENCHES

## Adjustable Wrenches



No. A3 Adjustable Wrench, 6-inch, mottled, each.... $\$ 0.20$ Dozen. .D.P. $\$ 2.40$

No. A3 Adjustable Wrench, 6-inch, bright nickeled, each.
Dozen. . D.P. $\$ 3.20$


No. A6 Adjustable Wrench, 6 -inch, mottled, each. $\mathbf{\$ 0 . 3 0}$ Dozen. . D.P. $\$ 4.80$

No. A8 Adjustable Wrench, 8 -inch, mottled, each.... . 35
Dozen. . D.P. $\$ 5.60$


No. 18 Malleable Adjustable Wrench, 9 -inch, blued, each
$\$ 0.25$
Dozen....D.P. $\$ 3.33$


No. 19 Malleable Adjustable Wrench, $9 \downarrow$-inch, blued, each.

Dozen....D.P. $\$ 4.00$

## Victor Adjustable Alligator Wrench



Drop forged of best tool steel.
Combines strength, simplicity and rapidity of adjustment. No springs to break. Can not get out of order. Every part visible.

The movable jaw, which is of the best steel, is interchangeable and may be replaced easily in case of wear or breakage. Length 7 inches.
No. 365 Full Nickel Plated, each.
$\$ 1.00$
Dozen....D.P. $\$ 13.32$

Ronson Wrenches


Length closed, 6 inches; weight 8 ounces; material, highest quality plate steel, superbly tempered; nut drop forged. Finish, incorrodible nickel.

Sizes-A, 2, 3-16 inch, 9-32 inch, $\frac{1}{2}$ inch; B, 5-16 inch, $\frac{\pi}{8}$ inch; C, 11-32 inch, 11-16 inch; D, inch, 13-16 inch.

Each of the four members is a perfect wrench in itself and can be used separately if necessary.
Each
$\$ 1.00$
Dozen...D.P. $\$ 17.76$

## Marvel Adjustable Socket Wrench



The Marvel replaces over 32 loose sockets, has a spread of from $\frac{1}{2}$ inch to $129 / 32$ inch, and, what's more, it grips the nut tight. You don't have to chisel off nuts which have become slightly worn.
Each $\$ 3.00$
Each....D.P. $\$ 5.00$
The Utility Socket Wrench Set
A New Princinie With Many Advantages


7 -in., 6 -in. and 6 -in. Long. Kenpectively
Has all the advantages of socket wrench sets consisting of fourteen wrenches, with none of their faults. Instant in adjustment. No screws to manipulate or parts to get out of order. Can be applied to all shapes and kinds of nuts immediately. Has many new features possessed by no other wrench.
Utility Wrench Set complete, packed in neat canvas bag.
Each....D.P. $\$ 3.88$


Lane's Unique Wrench Set

Lane's Standard Socket Wrench Set contains one handle, 7 inches in length; two screwdriver bits; 7 sockets to fit semi-finished hexagon nuts as follows: U. S. Standards from 3 -inch to $\frac{1}{2}$-inch; A. L. A. M. Standards from $\frac{5}{1}$-inch to $1 t$-inch. Machine made throughout. Made of the best material obtainable. The sockets are turned from Bessemer steel and case hardened and are warranted not to break or spread. Has no equal for close work.
In leather case, each
. $\$ 3.00$ Each.. D.P. 84.44

## SOCKET WRENCHES



Sets
No. 5 Mossberg Socket Wrench Set. primarily for motorcycle and bleycle use, consists of No. 321 offset bandle with five tboroughly hardened and guaranteed pressed steel sockets, sizes as follows: $17-32,19-32$, \%8, 21-32 and 23-32, to enamel canvas case.
Each
Each., D.P. $\$ 1 . \mathrm{S}_{2}$

No. 51/2 Mossberg Socket Wrench Set for motorcycle or bicycle use consists of one No. 355 ratchet handle and flve hex. sockets of the following sizes: 17-32, 19-32, 5, 21-32 and 23-32, in ebamel cansas
 case.
82.00

Each
Each. D. P. $\$ 3.92$


No. 6-B Mossberg Soeket Wrencb Set is a small but very handy socket for untomobiles and motor boats ; con. sists of No, 310 folding has ale, two sizes of screw driver bits and seven hex. sockets of the followiog sizes: 17.32. $19.32,21-32$, $23-32, \quad 13-16$, $29-32$ and $1 \quad 3-32$ and one special spark plug socket $20 / 32 x 4$ inches, packed in leather case. Each Each.. D. P. $\$ 3,06$

No. 7 Mossberg Socket wrencb Set has fifteen sockets and two bandles, as fol10ws: Offset socket wrench handle No. 320 , ten-inch; take. down "T" socket wrencb handle No. 340, ten-inch; one $29 / 32$ hexagon spark plug socket four inches long.
 and bex sockets מs follows: $13-32,15-32,17-32,19-32,54,21-32,23-32,25-32$, 13-16, 27-32, 29-32, 1-inch, $11-32,13-32$, packed in wood box, Each
Each . II E. \$5.40

Mossberg Wrench Sets


No. 11 Mossberg Socket Wreach Set for all-around mo. tor work; includes a No. 350 ratchet handle and exten. sion tube No, $\$ 51$ $91 / 2$ inches long, one 29-32 bexagon spark plug socket and the following hex. sockets: 13-32, 15-32, $17-32, \quad 19-32, \quad$ \%. 21-32, 25-32, 13-16, $17-32,29-32,1,11-32$
$13-32$. in wood box
Each
$\$ 4.50$
Each. . D. P. $\$ 7.50$
No. 16 Mossberg Universal Small Car Wrench Set; bas one No. 350 hnndle, whe tubular extension No. 351, one universal joint No. 336 , one serew driv-
 er bit, one spark plug socket 29-32, and hex, sockets as follows: $17-32,19-32$, 21-32, 23-32, 25-32, 27-32, 29-32, 31-32, 19-32, also square sockets $13-32,15-32,17-32,21-32$, packed in black fiber case.
Each
.86.00
Each..D.P. $\$ 10.60$
No. 9 Mossberg
 Sucket Wrench Set: an ideal set for factory work: has a No. 350 ratchet handle, extension bar No. 351, universal joint No. 336, screw driver bits and hex. sockets as follows: $15-32, \quad 1 / 2 . \quad 17-32$, 19-32. 5. 21-32, 11-16, $23-32, \quad 25-32$, 13-16, 27-32, T/s. 29-32, 31-32, 1, 11-32, 13-32, 15-52, 19-32, also square sockets 13-32, 17-32, 19-32, 21-i2, 25-32, 11-32, 15-32, packed in wooden box
Earlh
$\$ 7.00$
Each. D.I'. \$11.64
No. 10 Mossberis Socket Wrench Set; an eflicient set for repatir and gacage work: has No. 350 ratchet bamble, extension bar No. 351. universal Joint No. 336, two screw driv. er bits, two spark plug sockets $29-32$ abd 15-32. fitting standard plugs, and the following hex.
 suckets: $15-32,1 / 2$ $17-32,19-32,5 / 5,21-32,11-16,23-32,25-32,13-16,27-32,7 / 4,29-32$, $31-32,11-32$ 13-32, 15-32, 19 -32, packed in wooden box.
Each
.$\$ 8.60$ Each. . D.F. \$13.32

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SOCKET WRENGHES--Continued

Mossberg Wrench Set



No. 13 Mossberg Socket Wrench Set contains fifteen sockets and spark plug wrench, No. 355 Ratchet Handle and Extension Bar. Sockets of following sizes: 33, 32 $3232,32,5$,
 $\frac{3}{3}, 1 \frac{1}{\sqrt{2}}, 1{ }^{\frac{2}{2}}$; will fit bolts and nuts from $\frac{1}{4}$ to $\frac{5}{2}$ inch.
In hardwood cabinet, each. . . . . . . . . . . . . . . . . . . . . $\$ 3.50$ Each. .D.P. $\$ 5.82$

No. 19 Mossberg Heavy Duty Set is an assortment of sockets and handles adapted for heavy and large construction work. Set contains nine sizes of
 sockets, one No. 357 reversible ratchet handle, 18 inches long; one No. 324 offset handle, one No. 348 extension tube, one No. 337 universal joint, one No. 338 connection bushing; socket sizes to fit bolts 1 to $1 \frac{1}{2}$ inches.
Complete in hardwood case.
Each. . D.P. $\$ 21.66$


No. 15 A Mossberg $\frac{8}{8} 0^{\circ}$ e $k e t$ Set is ch exclusive use exclusive use on Ford cars pletely covpletely
ern all
covjustments that are to be found on these machines. In cortalning Mossberg ratchet socket wrench No, 300 , tubular extension bar, universal joint, screw driver bit, spark plug socket, bine regular, mottled, thoroughly hardened pressed steel sockets, ftting standard sizes of screws, nuts and bolts; one special 10/32 oval socket for three crank shaft bearing bolts.
No. 15A Mossberg Socket Wrench Set, packed in wood case, each.......
Elach..D.P. $\$ 8.33$

No. 30 Mossberg Socket Set for Ford cars contains all sizes of sockets needed to fit all Ford bolts
 and nuts, together with No. 355 Ratchet Handle, extension tube, universal joint and screwdriver bit.
Packed in fiber case, per set.
.$\$ 4.00$
Each. . D.P. $\$ 6.66$


No. 14 Mossberg Socket Wrench Set is the largest and most complete socket wrench set ever offered to the trade. Has No. 350 bandle and No. 340 take-down handle, No. 320 ofrget wrench, No, 100 nickel plier and Gripsall pipe wrench No. 470. No. 1 general service double end wrench set with ten different openings and universal folnts, three special sparis plug sockets, three gerew driver blts and cotter pin extractors
 17-32, 19-32, $44,21-32,11-16,23-32,25-32,13-16,2-32,113$, $13-32,15-32,19-32$. Also square sockets as $\begin{array}{llllll}31-32,1, & 11-32, & 13-32, & 15-32, & 19-32, & \text { Also } \\ \text { follows: } & 13-32, & 15-32, & 17-32 & 19-32, & 21-32, \\ 23-32, & 25-32, & 29-32,\end{array}$ $11-32,15-32,19-32$, in wooden box.
 Bact. .D.P. $\$ 20.00$

Large Auto Cle Socket Wrench Set No. 1


The dean of all socket wrenches Auto Cle is offered for the belp and assistance of automobile mecbanics, machinists and car owners as most sensible. There are no innccessible adjustments if you bare Auto Cle. Consists of 31 Mossberg guaranteed sockets (steel), teed sockets (steel), 13-32, 7-16, 15-32, $1 / 2,17-32,9-16,19-32, ~ \%, 21-32,11-16,23-32$, i/ $25-32,13-16,27-32,4 / 4,29-32,15-16,31-32,1,11-32,13-32,15-32$ $19-32$. Square $13-32,17-32$, 21-32, Spark plug socket $29-32 x 4$ inches. "Auto Cle" take-down, reversible, ratchet handle (nickel plated). Long extension bar ( $91 / 2$ inches). Short extension connection bar ( $1 \% / 4$ inches). Unfversal joint (permits of making adjustments "around a corner"). Two siges screw driver bits.
Large Auto Cle Socket Wrench Set.
t. . . . Each,..D.P. $\$ 16.66$
For its size and price the flaest arrangement of socket wrencbes made; this small Auto Cle Set is guaranteed completeguaranteed completely. In flexible leather case containing: One take-down reversible ratchet bandle, nickel plated; one swivel or universal folnt, which permits using the wrench at any angle; ove $91 / 2$ - inch extension bar; one $1 \% / 4$-Inch extension bar; two si, $\omega$ of screw driver bits; twelve guaranteed steel sockets; hes $15-32,17-32,19-32$ $21-32,23-32,13-16.29-32,13-32 ;$ square $13-32,17-32,21-32 ;$ spark plug socket 29-32, 4 inches lodg.
No. 2 Small Auto Cle Set, each................................ . . . 87.50 Each.. D.P. $\$ 12.48$

Small Auto Cle Set No. 2


## SOCKET WRENCHES-Concluded



No. 360 Mossberg Brace Wrench will fit all small series Mossberg sockets and makes an ideal handle for rapid work. Ball friction holds the socket firmly in place.
Price, each
$\$ 0.40$
Each. D.P. \$0.55


No. 4 Mossberg Garage Set is intended for the repairman and mechanic. Each wrench is made with one end to fit U.S.S. bolt and the other end to fit S.A.E. cap screw of same size. U.S.S. bolt sizes, $\frac{1}{4}$ to 3 inch. Nine full finished wrenches in hardwood box, per set
. $\$ 4.30$


No. 300 Mossberg Socket Cabinet is a nicely finished chest containing a complete assortment of the best sellers only. No. 300 assortment includes:

300 assorted pressed steel sockets;
15 assorted spark plug sockets;
4 No. 350 reverse ratchet handles;
4 No. 355 ratchet handles;
4 No. 322 double and offset handles;
4 No. 340 takedown T handles;
4 No. 336 universal joints;
4 No. 351 extension tubes;
2 No. 370 B Lrace extensions;
4 canyas tool rolls, circulars, etc.
Mossberg No. 300 Chest complete . . . . . . . . . . . . $\$ 72.00$
Each. D.P. $\$ 120.00$


Mossberg Mexagen Sockets, all sizes, each............... 80.20
Mossberg Square Sockets, all sixes, each.................. . . . . 20 Dozen. . D.P. \&3,32



No. 320 Mtossberg Socket Handle is the simplest and least expensive handle for sockets manufactured. Sockets are held in place by ball frlction.
Each
Each..D.P. 80.39

No. 310 Mossberg Folding Socket Wrencb Handle makes a convenient wrench for automobile and other light work. The upright bar is $51 / 2$ inches long and the handte 6 inclies.

Each
.80 .50
Kach. . D.P. $\$ 0.84$


No. 350 Mussberg If atcbet Socbet Wrencb Handle simplites adjustments to in point that impressit troint thint impress-
es the user with its Es the use
cleverbess.
Each
Kach , D. P.
. 82.00

No. 355 Mossberg
Katchet Socket Handle otters a flue but inexpensive fatchet socket landle for use with all
standard sockets. The socket shank fits square opening and is tirm:y held by tension spring. This tool is reversible by slamply turning it over.
Each
$\$ 1.00$
Each . D. P. 81.66


No. 351. The long tubular extension bar gives increased opportunities to use Mossberg Ratchet Handle No. 350 , and is used with screw driver bits, universal joint and all sockets. This bar is $9 \frac{1}{2}$ inches long.
Each
.80 .50
Each. .D.P. $\$ 0.84$

# The GIBSONCOMPANY 

## STARRETT TOOLS



This wrench is made from drop forged and other steelall tinished in a workmanlike manner, case bardened and strong where strength is needed, yet ligbt and convenient to handle. The ratchet can be instantiy reversed by simply rotatIng between thumb and finger the stem end of the dog in the end of the handle half a turn. Hexagon drawn steel sockets varying by 32 ds from $5 / 16 \mathrm{in}$. to $11 / 4 \mathrm{in}$. have duplicate sbanks varying by to $^{2}$ the square opening through the ratchet head, also the end of a square extension piece which ats the ratchet where they are frictionally beld.
No. 443 A, price complete
Each. . D.P. $\$ 30.00$
$\$ 15.00$
.


These tapes are $\frac{1}{4}$ inch wide, in well-finished nickel plated cases with rounded edges. Spring wind with center stop. Graduated in inches and sixteenths of an inch.

Diameter
Incbes
No. 500 Steel Tape, 60 -inch
Each
Each. D.P. $\$ 1.44$
No. 500 Steel Tape, 72 -inch. $111 / 16$
$\$ 0.75$

Each. .D.P. \$1.54
No. 500 Steel Tape, 96 -inch.
113/16
.80

Each. D.P. $\$ 2.10$

## Flexible Rules

These are very thin spring tempered rules, nicely graduated on one side only. Those from 1 in . to 12 in . are $1 / \mathrm{in}$ in wide, and will easily conform
 to a 2 in. circle.
No. 320 Flexible No. 10 graduations (32nds and 64ths), 6-inch, each.
$\$ 0.65$
Each. . D.P. $\$ 1.22$

## Spring-Tempered Rules

With Graduated End


No, 303 has No. 4 graduations and is graduated in $32 d s$ of an inch on opposite slaes of one enal.

No. 303, 6-inch, each
$\$ 0.65$
Each. D.P. $\$ 1.22$
No. 303, 12 -inch, each
$\$ 1.25$
Each. . D.P. $\$ 2.38$

.
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1.15
Sp
$\qquad$ 1-1

## Improved Hook Rules

Very convenient in taking measurements from round corners, through hubs of pulleys, setting inside calipers, etc. The
 6 -inch may be carried in the pocket. The hook can be quickly removed by turning eccentric stud one-half around.
No. 419 Improved Hook Rules, 6 -inch, each......... $\$ 1.00$ Each. . D.P. $\$ 1.88$
No. 419 Improved Hook Rules, 12 -inch, each 1.75 Each. . D.P. $\$ 3.32$

## Narrow Hook Rules



These rules are designed for use in taking measurements through small holes where our regular hook rules cannot be used. They can also be used for setting inside calipers, etc. Measurements through holes as small as inch can be obtained. The rules are graduated one side in 32ds and the other in 64ths of an inch.
No. 422 Narrow Hook Rules, 6-inch, each .......... $\$ 0.90$ Each. D.P. \$1.66
No. 422 Narrow Hook Rules, 12 -inch, each............ 1.50
Each. . D.P. $\$ 2.75$

## Pocket Slide Calipers

## No. 425

Graduated in 32 ds and 64ths. The improved clamping device is a valuable feature.


No. 425 Pocket Slide
Calipers, 5 -in., ea. $\$ 3.00$ Each. .D.P. $\$ 5.77$


## Thickness Gauge

Nos. 172 A and 172 B
Has leaves, viz.: .002, $.003, .004, .006, .008, .010$, $.012, .015$. The leaves are tempered, and have the thickness marked upon them.
No. 172-B. Case $4 \frac{3}{4} \mathrm{in}$. long by 4 in . wide; leaves $4 \frac{1}{2} \mathrm{in}$. long by $\frac{1}{2} \mathrm{in}$. wide; each. $\$ 1.50$ Each., D.P. $\$ 3.00$
No. 172 A. Case $3 \frac{5}{4} \mathrm{in}$. long by $\frac{1}{2} \mathrm{in}$. wide; leaves
$3 \frac{1}{1} \mathrm{in}$. long by $\frac{1}{2} \mathrm{in}$. wide. Has same leaves as
$172-\mathrm{B}$ and .0015 in addition, each.
1.00

Each. D.P. $\$ 1.88$

## Center Gauges

For use in grinding and setting screw cutting tools.


No. 390. Not tempered, graduated one corner,
each in 32ds, 24ths, 20ths and 14ths; each....... $\$ 0.25$ Each. D.P. $\$ 0.47$
No. 391. Spring Tempered, each
Each. . D.P. $\$ 0.67$


Each....D.P. \$1.89

## Screw Pitch Gauge

No. 4
Has the following pitches: $4,4 \frac{1}{2}, 5,5 \frac{1}{2}, 6,7$, $8,9,10,11,11 \frac{1}{2}, 12,13,14$, $15,16,18,20,22,24,26$, $27,28,30$. The teeth are sharp and clean cut. Like our No. 40 it can be used inside of a nut as well as on outside of a screw or bolt. It is also a convenient and reliable tool to use as a 60 -degree center gauge and to test the grinding of either an inside or outside threading tool.
No. 4 Screw Pitch Gauge, each.
$\$ 1.25$
Each.. D.P. \$2.44

## Starrett Patent Combination Square

## No. 11 With Hardened Blade

Every tool warranted accurate, With the adjustable scale
 this forms one of the most conthis forms one of the most convenient and useful tools ever devised for mechanics use It is a complete substitute for a whole set of common try squares, and is one of the best gauges made for transferriog exact measurements of laying out work. It is also convenlent for a depth gauge, or to square in a mortise. For a miter it is perfect, whlle with the auxiliary center bead it forms a centering spuare, both inside and outside, whlch for convenlence and accuracy has no equal. The blades are bardened and graduated with beavy figures, reading both ways.
No. 11 Combination Square, 6 -inch, with center head, each.
$\$ 1.50$
Each. D.P. $\$ 2.75$
No. 11 Combination Square, 12 -inch, with center head, each
. 77

## Starrett Micrometer <br> No. 3-1 inch

Starrett Micrometer No, 3, 1 -inch, polished steel, for measurement by thousandths up to one inch, with lock nut and ratchet stop; length $4 \frac{1}{4}$ inches.


No. 3 Starrett Micrometer, 1-inch, each. .86 .50
Each. D.P. $\$ 12.77$

## Starrett Micrometer

No. 2-2 inch
Polished steel, for measurement by thousandths from one inch to two inches; with lock nut, ratchet stop and one-inch test gauge; length, $5 \frac{5}{8}$ inches.
No. 2 Starrett Micrometer, 2 -inch, each............ $\$ 7.00$ Each. .D.R. $\$ 13.88$

High Speed Indicator

## No. 104

This indicator may be run at highest speed required without heating, and this on account of our frictionless bearing against which the inner end of the spindle revolves (a feature patented by us).

The working parts of this instrument are encased, and the dial plate has two rows of figures, reading right or left, as the shaft may run.
No. 104 Speed Indicator, each
$\$ 1.00$
Each. .D.P. 81.88

## Registering Speed Indicator No. 107

This instrument was devised to automatically register hundreds as well as units and tens, and thus relieve the mind from keeping tally; also to furnish a better registering indicator at a more reasonable cost than has been on the market heretofore. The instrument will register 5,000 revolutions. The large dial is graduated into one hundred lines, each one representing a revolution of the spindle. The small dial has fifty lines cut upon its face, each representing one hundred revolutions of the spindle (or one complete turn of the large dial). Nickel plated. No. 107 Speed Indicator, each.. $\$ 3.00$ Each. . D.P. \$5.77

English Standard Wire Gauge


No. 189 Wire Gauge, takes Nos. 6 to 36, each.... $\$ 2.00$, Each. . D.P. $\$ 3.77$

## Time Saver Drill, Tap and Steel Wire Gauge

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No. 185
By the use of this gauge one is enabled to select at once the right sized drill to suit machine screw tap most commonly used, leaving just stock enough for the tap to cut as near a full thread as is practicable for one tap without breaking it, thus saving much time and uncertainty of result attending the former crude ways of making a selection.
No. 185 Wire Gauge, each
$\$ 2.00$
Each. . D.P. $\$ 3.77$

# The GIBSONGOMPANY 

## STARRETT TOOLS-Continued

Outside Thread Calipers<br>No. 179

These calipers are designed for meas. uring the diameter at bottom of threads on the outside of screws.


Sent with solld nut unless otberwise ordered.

No, 179 Outside Thread Callpers,
4-Inch, with solld nut, each..... 80.75 Each., D,P. \$1.44

No. 179 Outside Thread Callpers.
6-Inch, with solid nut, each.....
Each.,D.P. $\$ 1.54$
No. 179 Outside Thrend Callpers. 4-Inch, with spring nut, each.... Éach.. D.P. $\$ 1, \mathrm{E}_{6} 6$

No. 179 Outside Thread Callpers, 6-inch, with spring nut, each.... 1.00 Each..D.P. \$1.8s

## Yankee Outside and Inside Calipers



The Yankee Calipers and Dividers are manufactured under the Fay patents, but are not quite so beavy as the Fay and cost less. They are much liked, and on account of price are preferred by many to the higber priced tools.

All sizes are supplled with either solid or quick adjustIng nut.

No, 73 represents a new Yankee Inslde Transfer Caliper with elther spring or solid nut. The bow is stiff, making the caliper reliable. After calipering inside of chambered cavity by springing in the legs they may be withdrawn, and as they spring back will show the exact size calipered.

No. 79 Yankee Outside Callpers, 3-inch, with solid nut.... $\$ 0.70$ Eacb.. D.P. $\$ 1.29$

No. 79 Yankee Outside Calipers, 6-inch, with solid nut.... . 88 Each..D.P. $\$ 1.54$

No. 79 Yankee Outside Callpers, 3-inch, with spring nut.. 85 Each. .D.P. $\$ 1.54$

No, 79 Yankee Outaide Calipers, 6-inch, with spring nut., 1.00 Each..D.P. $\$ 1.76$

No. 73 Yankee Inside Calipers, 3-inch, with solid nut..... . 70 Eacb-D.P. $\$ 1.32$

No. 73 Yankee Inside Callpers, 6-Inch, with solld nut..... .ss Each., D.P. \$1.66

No. 78 Yankee Inside Calipers, 3-inch, with epring nut... . 85 Each., D.P. \$1.66
Ne. 78 Yankee Inside Callpers, 6-Inch, with spring nut... 1.00 Each..D.P. $\$ 1 . \mathrm{SB}^{2}$

## Improved Firm Joint Calipers

Nos. 26 and 27


The improvements in these callpers consists in the construction of the joint, which is so made as to be drawn together by means of a screw. The main stud is gquared and fitted to one leg, thus preventing the stud from turning when loosening and tightening, and insures a smooth and uniform friction of more or less tension to sult the user.

The quality of these callpers is incomparably superior to that of any old style.
No. 96 Firm Joint Callipers, 6-inch, each.................... . . 80.65 Each. D.P. $\$ 1.22$
No. 26 Firm Joint Callpers, 8 -inch, each.................... . . . 80
Eacb. D.P. $\$ 1.54$
. 68
No, ${ }^{27}$ Firm Join
Each, D.P. $\$ 1,22$
No. 27 Firm Joint Callpers, 8 -Inch, each.......................... . . . 80
Each.. D.P. $\$ 1.54$

## Yankee Thread Calipers



No, 80 Yankee Thread Callipers,
4-inch, with solid nat, each....., 90.90 Eacb..D.P. $\$ 1.66$
No, 80 Yankee Thread Callipers,
4-inch, with spring nut, each.... 1.00
Each.. D.P. $\$ 1.88$

## Cut Nipper

Ne. 199
For bicycle spokes, etc.
This nipper comblnes great power with rigidity. Wire can be cut at elther extreme end of the jaws.
The cutting faws conform to the fnside of a bicycle rim and will cut off the spokes just as close as required.

All our nippers are tested before leaving the factory. All parts are interchangeable, so that in case a Jaw breaks a new one can be obtained.
In ordering extra Jaws, specify as per cut which jaw is wanted.
No. 199 Cut Nippers, 5 -inch, each. ......89.25 Each..D.P. $\$ 4.66$


## Adjustable Jaw Cut Nipper

Ne. 1
The jaws are detachable, so that they can be removed, ground, and adjusted when they have become worn. Each jaw can be ground away to the extent of $1 / /$-inch, remaining as good as new for practical use; and when used up, if ever, new faws can be procured.
No. 1 Adjustable Jaw Cut Nippers,
53 -inch, each
82.50

Each.. D.P. $\$ 5.00$

Nickel Plated Pocket Level



Nickel Plated Pocket Level, each. . . . . . . . . . . . . . . . . . . . . . . . . $\$ 0.50$ Each. . D.P. $\$ 0.59$

## Machinist's Center Punch

No. 11 \%
Made to supply the demand for a better article than has beretofore been on the market. Male of fline steel, neatly shaped, with both ends tempered and points nicely ground,

Length of each gize, 4 Inches. Diameter, A $5 / 64$ inch, B $3 / 32$ inch, C $9 / 64$ inch, D $5 / 32$ inch.

A larger size, E, is made for heavy work; length 5 inches, diameter $1 / 4$ inch, diameter of knurled part $1 / 2$ inch.
No. 117 Machinist's Center Punch, any size, each........ 80.20 Each. D.P. $\$ 0.30$

## Nail Set



No, 116
Made of floe grade of steel, both ends hardened, centers olcely knurled, tips concaved, tops oval, and the size just right.

Length of each size 4 inches. Dlameter at tip. A $1 / 16$ Inch, B $3 / 32$ locb, C $1 / 5$ inch, D $5 / 32$ inch.
No. 116 Nail Set, any sixe, each............................. . . 80.10 Each..D.P. 80.15

## Automatic Adjustable Stroke Center Punch

## No. 18A

This center puncb (patent applied for) is provided with knurled adjustable screw cap, which, working in connection with a spring, regulates the stroke. For work requiring a heavy mark, turb cap down; for work requiring a light mark, turn it up. To use it no bammer is needed. The pubet belng placed in an upricht position over the working line, a downward pressure releases the striking block and makes the Impression without danger of slipping, ns is llable when the impression with
a bammer is used.

No. 18A Adjustable Stroke Center Panch, each. .............. . \&t. 00 Nach. D. P 84.00

## Pocket Screw Driver



$$
\text { Ne. } 653
$$

This tool is made from steel tubing. knurled and nickel plated. The butt of the blade nts $a$ soild lock in the tube, preventing it from turning, and is beld from coming out by a alight turn of tbe cbuck.

To carry in pocket, reverse the blade, inserting it in the handle, giving a sligbt turn of the chuck to keep it there. It takes no more room in the pocket than a penknife,

Tho screw driver blades are properly tempered.
No. 563 A Pocket Screw Driver, handle $1 / 2$ inch diameter, blate $17 / \mathrm{m}$ inches long, weight $1 / 2$ oz., each................. 80.25 Ench.. D.P. $\$ 049$
No, 653 B Focket Serew Driver, bandle $\%$ inch Aliameter, blade 3 inches long, weight $11 / 2$ ox,, each
Dach . D D. $\$ 0.07$

Electrician's Pocket Screw Driver

## No. 560

The handle is covered with hard rubber for insulation from electrical currents and is nicely ribbed so as to insure a firm grip when using the tool. It bas four blades of different widths, any of which may quickly be taken from the telescope bandle and inserted in the end, where it is auto. matically locked and firmly held for use.

Tbe widths of the blades are $3 / 32$ inch, $5 / 32$ inch, $1 / 4$ inch and $7 / 4$ inch.
No. 560 Pocket Screw Driver, each.
81.50 Fnch., D.P. \$2.88

## Starrett Hack Saws

No, 103. With Common Teeth, 18 to the Inch, for General Use in Hand Frames.

The 8 -inch saws are $7 / 16$ inch wide, 022 inch thick; the 10 and 12 -incb are $1 / 2$ inct wide, . 025 luch thick.
Length
Per dazen ${ }^{\text {. . . . . . . . . . . . . . . . . . . . . . . .8-is. }}$
Dozen. D. P. $\$ 1.22$ D.P. $\$ 1.67^{\$ 1.00}$ D.P. $\$ 2.00$
No. 102. With Fine Teeth, 24 to the Inch, for Use in Hand Frames, on Tubing, etc.

For sawing tubing, brass,
 copper and sheet metal. The s-inch are $7 / 16$ inch wide. 022 inch thlek.
The 10 and 12 -inch are $1 / 2$ inch wide, .025 inch tbick.
Length . . . . . . . . .................... 8 -in. $10-\mathrm{in} . \quad 18-\mathrm{in}$. Per doxen . . . . . . ................. 80.80 . $\$ 1.00$ D.P. $\$ 0.80$

Dozen..D.P. $\$ 1.32$ D.P. $\$ 1.67$ D.P. $\$ 2.00$
No. 253. With Extra Fine Teeth, 32 to the Incb, for Use in Hand Frames, on Tbin Metals, etc.
For sawing thin sheet metal and tubing. The $s$. inch are $7 / 16$ inch wide, .022
 inch tbick.

The 10 and 12 -inch are $1 / 2$ inch wide, .025 inch thick.


Dozen. D. P. $\$ 1.82$ D.P. $\$ 1.67$ D.P. $\$ 2.00$
No. 252. Flexible Back witb Fine Teeth, 24 to the Ioch, for Use in Hand Frames, on Tubing, etc,

For sawing tublog, brass,
 copper and sheet metal. The S-inch are $7 / 16$ inch wide. .022 inch thick.
The 10 and 12 -incb are $1 / 2$ incb wide, 025 inch thick.


Dozen. D.P. $\$ 1.32$ D.P. $\$ 1.87^{\$ 1.60}$ D.P. $\$ 2.00$
No, 258. Flexible Back with Extra Fine Teeth, 32 to the Ibch. for Use in Hand Frames, on Thin Metal, etc.

For sawing thin sheet metal nud tubing, The 8 inch are $7 / 16$ inch wide, 022
 Inch thick.

The 10 and 12 -jnch are $1 / 2$ inch wide, .025 fach thick,
Length ........................... s-in. $\quad 10-\mathrm{in} . \quad 12-\mathrm{ln}$
Per dozen . . . . . . . . . . . . . . . . . . . . . . $\$ 0.80$ \$1.00 $\$ 1.30$

Dosen. D. i, $\$ 1.32$ D.P. $\$ 1.87^{\$ 1.00}$ D.P. $\$ 2.00$
No. 112 With Common Teeth, 18 to the Inch, for General Use in Power Machines or Hand Frames.

The No. 112 gaws are \% inch wide, 030 inch tblek.
 Experience has taught us Experience bas taught us
that these blades are of the correct width and thickness for general use either in power machines or band trames.
Lengeth $10-\mathrm{in}$.

12-in.
 Dozen,.D.P. $\$ 1.67$ D.P. $\$ 2.11$

# The Cibsoncomar 

HACK SAWS AND TOOL KITS

Star Hack Saw Blades

## C

Tempered to the utmost without injuring the toughness and toughened to the utmost possible without injuring the temper. Perfectly toothed with patent set; scientifically designed and absolutely correct as to width, thickness and number of teeth to the inch. Made with 14 and 24 teeth to the inch. Blades with 14 teeth to the inch are adapted to all kinds of hack saw work and materials except thin stock and tubing with thin walls, for which blades with 24 teeth should be used. Blades with 14 teeth to the inch are supplied unless 24 teeth or "fine" is specified.

Star Hack Saw Blades, 8 -inch; per dozen......... $\$ 0.75$
Per Dozen, , D.P. \$1.11
Star Hack Saw Blades, 10 -inch; per dozen........ . . 85
Per Dozen. .D.P. $\$ 1.32$
Star Hack Saw Blades, 12 -inch; per dozen. ...... . . 1.00
Per Dozen. .D.P. $\$ 1.54$
Star Power Hack Saw Blades, 12-inch; per dozen. . 1.25
Per Dozen. . D.P. \$2.44


No. 1027 Star Hack Saw Frame. Pistol grip; black composition handle; polished and nickeled steel stock, If X 钺 inch. Compact, stiff frame, with extra strength in the middle of the back where there is the greatest strain. Handle a perfect fit for any size of hand, secured to the frame by a steel rib extending nearly the full length of the handle, and shaped so as to make the tool correctly balanced. Blades strained by thumb nut and screw stud, placed beneath the handle, so as to allow maximum stroke; blades may be faced in four directions. Extensible for blades from 8 to 12 inches. Depth under back, $3 \frac{1}{2}$ inches.

## Each

81.50

Each. . D.P. $\$ 2.22$

## Starrett Hack Saw Frame

This solid steel frame is very stiff, the stock in same being wider than commonly used, and it cannot be
 cramped by straining the blade. The saws may be set to cat in elther of four directions and tigbtened by simply turning the handle. It is well tande and in every way just right. Polished and nickel plated. No. 141-12-inch, with one blate, each............... . D.P. $\$ 1.66$

## Hack Saw Frame



This is, we believe, a better frame for the price than any other make. The stock is wider and stiffer than commonly used and cannot lie cratuped when kaws are strained up, and will not tremble when used. It is well made with our improved adjustable back and will take in $8,9,10,11$ and 12 -incb saws, wbicb may be set to cut in either oue of four directions, and tightened by simply turning the handle. Polisbed and niekel plated.
No. 146, with one blade, each.
D.P. $\$ 2,44$

## Starrett Patent Hack Saw Frames

Spring plungers overlap the ends of the saw, automatically holding it to its home. By slightly
 pushing them back the saw may be instantly removed, thus furnishing the most convenient way of attaching or detaching the saw ever devised. An improved nut within the handle, turning with it, gives the desired tension to the saw, which may be quickly and conveniently set at any required angle. The adjustable or extension back frames have improved spring pawls which securely hold the frames to receive saws of various lengths. The frames are neither too light nor too heavy-just right-are finely finished and nickel plated. In appearance, workmanship and utility, these tools are not approached by any other hack saw frames made.
No. 140, with one blade, each.
D.P. $\$ 2.22$

## No. 2 Handy Tool Kit



No. 2 Handy Three-Piece Set. Just the tools most needed and which you want to keep within easy reach in the car. Set consists of: 14 -inch screwdriver, 16 inch adjustable wrench, 16 -inch pair pliers. Tools are highest quality, service tools and are put up in handy cloth case.

Per Set
.$\$ 1.75$
Per Set. . D.P. $\$ 2.44$

## RULES AND BAGS



No. 61 Two feet, four-fold, square Jolnt, middle plates, 8ths and 16ths, 1 Inch wide, each........................... . 80.30 Dozen.. D.P. $\$ 3.47$


No. 62 Two feet, four-fold, square joint, full bound, 8ths,
10the, 12ths, 16ths, and drafting scales, 1 inch wide, each. $\$ 0.65$
Dozen...D.P. $\$ 9.33$


No. 84 Two feet, four-fold, square Jolnt, half-bound, 8ths, 10ths, 12ths, 16 ths and drafting seales, 1 Inch wide, each. $\$ 0.50$ Dozen.. D.P. $\$ 8.00$


No, 69 One foot, four-fold, round joint, middle plater, 8ths and 16ths, 5/6 inch wide, ench...... $\$ 0.15$ Dozen. .D.P. $\$ 2.22$

No. 86 square joint, two-fold. 6 -inch. Bths, 10ths, 12ths and 16ths, with andiper, price call der, price Dozen...D.P. 85.23



No. 33 Arch Joints. edge plater, fourfold, 12-inch, sths, 10the, 12ths itnal 16ths, with eallper, price erch. . . . . . . . . 80.60 Dosen.. D. P. \$8. 00


A very strong and well-made bag, witb lock and key. Just the thing for the auto repair man.
Each
Eacb., D. $\mathrm{P} . \$ 389$

## Security Tool Bag



The Security Tool Bag is positively the Bag is positively the
most convenient tool most convenient tool bag ever made. Wen the bag is opened nil
the tools come into the tools come lato
plain sight 30 you can pick up just the tool you want to use. When it 18 closed there is no possible chance for the tools to get out of it. Instantly put away. It is made of heary cotton duck fabrle cotton duck fabrle and will last a life-
time,

Each
. $\$ 1.25$
Each..D.P. $\$ 2.09$
Tool Roll

No, 30-A Toel Roll, holds $\$ 0$ tools, each

# The GIBSONCOMPANY (a) 

## PUNCHES, CHISELS AND PLIERS

## Solid Punches



No. 201 Solld Punches: these punches are made of blgh quality Octagon Tool Steel; blae finish, very attractive: length six inches; sizes as shown below; esch........... $\$ 0.20$ Dozen. . D.P. \$2.67


No. 24 Octagon Prick Punches; these punchea are made of high quallity Octagon Tool Steel; blue finish, very attractive; $41 / 2$ Inches long, Wininch stock, each............. 80.15 Dozen. . D.P. \$2.22


No. 23 Octagon Center Panches; these punchee are made of high quallity Octagon Tool Steel; blue finish, very attractive: size $/ / 3$-inch, ench.
.$\$ 0.15$ Dozen.. D.P. \$2.22


No. 389 Cold Chisels; made of higheat grade hammered cruclble steel. These chisels are sold by face size.
Yx $/ 4$-Inch, made from $\mathbb{1} / 4$-lach stock, each..................... $\$ 0.30$
Dozen. . D.P. $\$ 2.22$
$5 / 16 \times 5-\mathrm{inch}$, made from $5 / 16$-inch stock, each .20
Dozen. . D.P. \%2.44
.25
/hx 5 -inch, made from $\%$-Inch stock, each.
Dozen. . D.P. $\$ 2.75$
1/2x6-inch, made from $7 / 16$-inch stock, each................ 30
Dozen. . D.P. $\$ 3.32$
\$/8x6y/2-inch, made from 1/2-inch stock, each................. . . 85 Dozen. . D.P. $\$ 4.10$


No. 331 Round Nose Chisels; made of highest grade hammered crucible steel.
5/16xb-Inch, ench. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 80.80 Dozen., D,P, $\$ 2,22$

Dozen. D.P. $\$ 2.67$
Dozen. D.P. $\$ 3.65$
$5 / 6 \times 61 / s$-inch. each .80
Dozen . . D.P. $\$ 1,22$


No. 838 Dhamond Polat Chisels; made of the blgbest grade bammered cracible steel.
$5 / 16 \times 5-1 n c h$, each. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 80.80
Dozen., D.P. $\$ 2.22$
\%x5-inch, each.
Dozen. D.P. $\$ 2.75$
1/2x59-ineh, each
Dozen.. D.P. $\$ 3.88$
.25
\%/4x61/4-inch, ench.
Dozen. D.P. $\$ 4.66$


No. 335 Cape Chlsels; made of higheet grade hammered crucible steel.
5/16x5-inch. ench
.30 .20
Dozen. .D.P. $\$ 2.75$
Kx5-inch, ench..
.20
Dozen. D.P. $\$ 3.22$
.25
Doximen, esch.
$5 / 6 \times 61 / \frac{1}{2}$-inch, each
D/5x6\%-inch, each
Dozen..D.P. 85.00

## Revolving Punch



No. 18 Revolving 4 Tube Spring Pumch, forged steel, high
grade in quality and flnish, knurled handles, ench......81.09 Dozen. .D.P. \$14.44

## Wiss Tinners' Steel Snips



Tinner's Enips, g-Inch cut, esch. Dozen., D.P. $\$ 20,00$
Tinner's Snipn, 3-Inch cut, each........ . . . . . . . . . . . . . . . . . . . . 2.04 DozeD. . D,P, \$29,38

## The Necessity Tire Chain Repair Tool



End of jaws (as shown in cut) sbows posttion of books when opentog; ingide of jaws close to handle, for closing position.

With the Necessity Tire Cbain Repair Tool a repair can be made in a few seconds. A broken cross cbain removed and a new one foserted in less than one minute, while the chain is on the wheel, and without deffating the tire or solling the hands. This tool is so constructed that an enormous pressure is brought to bear on the chain links with very little effort.
Ench
Each.. $\ddot{\mathrm{D}} . \ddot{\mathrm{P}}, \$ 2.2$
Weed Pliers


Weed Pliers for opening and closing the clrcular books on Weed Cross Chains. They do the work with ease in a few seconds without removing the Chain from the tire.

Each
Nach..D.P. $\$ 0.84$

# Ghe GIBSONGOMPANY 

MILLERS FALLS TOOLS


10-Inch Sweep
Polished and nickeled steel; cocobolo wood.
Ball-bearing bead and chuck shell.
sweep bandle with inserted brass rings,
Sweep babde with inserted brass rinifs to hold chuck to sweep witbout working loose

Forged steel jaws, holding positively and securely, and centering with reasonable accuracy round shanks from $1 / 6$ to $1 / 2$ Inch in diameter. No. 1 Morse taper and all slzes of bit stock and expansion bit sbanks.
No. 72 Brace , each
Each. D.P. $\$ 7.5$

## No. 730 Brace



14-Inch Sweep
Polished and nickeled steel; cocobolo wood.
Ball-bearing head.
Sweep baodle with inserted steel rings.
Patent cup washer (F) and screw (E) to bold cbuck to sweep without working loose.

Forged steel jaws, bolding positively and securely and centering with reasonable aceuracy round shanks from $1 / 5$ to y inch in diameter, No. 1 Morse taper and all sizes of bit stock and expansion bit shanks.
No. 730 Brace, each
No. 32 Brace


10-Inch Sweep
Pollshed and nickeled steel; cocobolo wood.
Ball-bearing bead.
Sweep handle with inserted steel rings.
Patent cup washer (F) nud screw (E) to hold chuck to sweep without working loose.

Forged steel alligator jaws holding bit stock and many sizes of round and Irregular shanks.
No. 32 Brace each
Eacb.. D.P. \$1.44
No. 1322 Brace


10-Inch Sweep
Pollsbed and nickeled steel; ebonized heads and bandles; steel clad hend.

Forged steel alligator Jaws,
Brass rings inserted In sweep bandle
Priction washer beneath the quill in head
No. 1329 Brace. racb
Each.. D. F. $\$$ : $2=$

No. 422 Brace


## 10-Inch Sweep

Nickeled; stained hardwood beads and bandles.
Steel sweeps and jaw sockets. Alligator jaws of malleable Iron: opeo ratchet.
No, 422 Brace, each
$\$ 1.75$
Eacb , D.P. $\$ 2.4$
No. 162 Brace


## 10-Inch Sweep

Setal parts polished; stained hardwood.
Steel sweeps and jaw sockets.
Malleable alligator jaws. Fing ratchet.
No. 162 Hrace, each
. 81.25
Each. .D.P. $\$ 1.76$
No. 222A Brace


10-Inch Sweep
Polished and nickeled steel; stained hardwood; steel clad head.

Brass ribgs inserted in sweep bandle.
Forged steel alligator Jaws.
No. azza Brace, each.
.81 .60
Each.. D.P. \$2.30

## Automatic Star Pocket Borer

 pressed, $41 / 4$ Inches.

## The GIBSONCOMPANY

## MILLERS FALLS TOOLS-Continued

## No. 04 Hand Drill



Black enameled, cast iron frame and gears.
Steel spindle.
Nickeled chuck
Drills range from $1 / 16$ to $11 / 64$ inch in dlameter, are for boring in wood and soft metal and are put up in a wooden box. Length. 8 inches.
No. 04 Hasd Drill, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 81.50 Ench..D.P. §1.06

No. 03 Hand Drill

Stnined bardwood; solld steel frame. Bright metnl parts nickeled.
Detachable hollow end handle with receptacle for twist drills.

Detacbable side, grip bandle.
Cut gears, witb ider gear to equallze bearings.
Three-jawed chuck holding round sbanks from 0 to $3 / 16$ Inch in diameter. Length, 11 inches
No.
Eacb. . D.P. $\$ 3,29$

No. 3 Hand
Drill


The same as No. 03, except that it does not have the small filer gear.
No. 3 Hand Drill, each . .............................................. . $\$ \mathbf{8 2} .00$ Eacb..D.P. $\$ 2.88$


No. 5 Hand Drill

Cocobolo wood; malleable iron frame; bright metal parts nlckeled.

Hollow end handle with screw cap, containing 8 wood boring points, ranging in size from $1 / 16$ to $11 / 6$ inch in diameter.

Removable side, grip bandle.
Cut gears; large gear with wide rim, idler gear to equal tre bearlings. Ball thrust bearing.

Tbree-jawed cbuck bolding, and centering accurately round sbank drills from 0 to $3 / 16$ tach in diameter.

Length. $121 / 2$ inches.
No. ${ }^{5}$ Hand Drill, each....... ........ ..................... . . $\$ 3.50$
Ench..D.P. $\$ 2.55$

No. 98
Hand Drill


Stained hardwood bandles; malleable iron frame; bright metal parts nickeled

Hollow end bandle for bolding twist drills.
Removable side grip bandle.
Instantly changeable speed, $11 / 2$ to 1 and 4 to 1 , operated by shifting knurled ring B.

Cut gears, with adjustable friction roll to equalize bearInge.

Ball thrust bearing.
Chuck of Star pattern with tbree jaws opening with springa, whtch are protected from injury and will not get out of order, and closing evenly on, and centeriog accurately, round shanks from 0 to $i n c h$ in diameter

Length, without bandle, 10 laches; with handle, 151/4 Inches.
No. 98 Hand Drill, each
Each., D.P. $\$ 5.88$

No. 980 Hand Drill


The same as arill No. 98, except for the hollow end handle. which is of shapely design with mushroom head.

Length witbout bandle, 10 inches; with bandle, $151 / 4$ Inches.
No. 980 Mand Drill, each
Each.. D.P. $\$ 5.88$

## No. 1980 Hand Drill



The same as No. 980, except that it is provided with a simple and effective ratchet.
No. 1980 Hand Drill, each
.85 .00
Each. D.P. $\$ 7.11$

## No. 717 Chain Drill

Yoke and nuts japanned; socket and bit sbank nickeled.
Automatic self-regulating feed, or may be fed by hand.

Four feet of stout chain.
Length of main spindle, $81 / 2$ fucbes.
Weight, 31/2 pounds.
No. 717 Chain Drill, each........... $\$ 9.50$ Each..D.P. $\$ 3.66$


No. 718 Chain Drill


Same as Cbain Drill No, 717 exrent that master cbuck is added for bolding round shanks from $1 / 8$ to $1 / 2$ inch in diameter, bit shanks from $1 / 8$ to $1 / 2$ inch in diametel.

Length with cbuck inserted, $111 / 2$ inches
Weight. $4 \frac{1}{2}$ pounds.
No. 718 Chain Drill, each ............. $\$ 3.60$ Each., D.P. 85.33

## No. 719 Chain Drill

Same as Cbain Drill No, 717 excepting that Star chuck is provided for bolding round shanks from 0 to $1 / 2$ inch in diameter.
Jaws are operated by springs that are protected from injury and will bot get out of order.
Length with chuck inserted, $11 \% / 4$ inches
Weight, $41 / 2$ pounds.
No, 213 Chain Drill, ea
Each., D.P. 87.11


# Ohe GIBSON MINANY 

## MILLERS FALLS TOOLS-Continued



Malleable iron black frame; chuck and crank nickeled. Breast plate adjustable to different positions and made to fit the hand; when grasped with middle finger through hole provided for it the tool can be held easily and steadied in awkward and out-of-the-way places when the breast plate must be held in the hand. Auxiliary Breast Plate, as shown in illustration. To add ease and comfort or for use in doing heavy work. Instantly changeable speed from even to 3 to 1 . Cut gears; small gears of steel. Ball thrust bearing. Chuck is of the Star pattern with three jaws holding round shanks from 0 to $\frac{z}{\frac{k}{4}}$ inch in diameter. Jaws are operated with springs that are protected from injury and will not get out of order. Weight, each, 7 pounds. Length, 18 inches.
No. 100 Breast Drill, each
$\$ 5.00$
Each.. D.P. $\$ 7.22$


No. 99 the same as No. 100 , except that chuck is of the master pattern, holding and centering with reasonable accuracy, round shanks from $\frac{1}{6}$ to inch in diameter, No. 1 Morse taper and all sizes of bit sto $k$ shanks. No. 99 Breast Drill, each.
.$\$ 4.25$
Each.. D.P. $\$ 6.33$


Maitenble Iron black frame: bo nickeled parts. Instantly changeable speed from $11 / 3$ to 1 and 4 to 1 . Cut gears; small gears of ateel. Auxiliary ulde handle. Chuck of star pattern with three Jaws operated by springs that are protected from infury and will not get out of order. Holds round shanks from 0 to $1 / 4$ lach in dinmeter. Provided with a simple and effective ratchet. Weight, each, 6 pounds. Length, $171 / 2$ Inches. No. 2200 Ratchet Breast Drill, each............... . $\$ 5.75$ Each. . D.P. \$8.22


## No. 19

No. 19. Black enameled cast fron frame and breast plate: rolled steel main stock; adjustable crank with radlus of 4 to 7 inchea; cut gears; ball thrust bearing; changeable speed from even to 3 to 1 ; speed changed instantly and without removing bit from the work. Barber 1mproved chuck with allgator jaws bolding bit stock and many sizes of round hanks. Leakth, 18 juches. Welybt, each, 6 pounds. No. 19 Breast Drill, each.
Each. . D.P. $\$ 4.11$


No. 212
Malleable iron frame; chuck polished. Breast plate adjustable to different positions and removable; cut gears; small gears of steel; ratio $3 \frac{1}{2}$ to 1 ; diameter of large gear, 4 inches; radius of crank, 4 inches. Hardened steel washer as thrust bearing. Star chuck with large jaws, holding and centering accurately round shanks from 0 to inch in diameter. The jaws in this chuck are operated by springs that are protected from injury and will not get out of order. Length, $14 \frac{1}{2}$ inches; weight, each, 4 pounds.
No. 212 Breast Drill, each.
$\$ 2.85$
Each. .D.P. $\$ 4.22$

## Bench Drill Press



Strong cast iron standard. Hand feed. Instantly changeable speed, 1is to 1 and 4 to 1. Adjustable crank, extensible from 3 to 6 inches in radius. Table with swivel arm; may be raised within range of 2 inches. Wrench to fit all nuts on the tool. Chuck of star pattern, holding round shanks from 0 to $\frac{1}{2}$ inch, and jaws operated by springs that are protected from injury and will not get out of order. Height over all, 24 in . Maximum distance from chuck to table, 9 in. Weight, boxed, 27 l lbs.; net, 22 lbs . Packed one in a wooden box.

No. 210 Bench Drill Press, each . . . . . . . . . . . . . . . $\$ 9.50$ Each. .D.P. $\$ 13.88$

## Bench Drill Press

Automatic feed witb two grades of positive feed or may be fed by hand. Instantaneous cbange of speed; speeded even and 3$\}$ to 1. Cbuck of Star pattern bolds round shanks from 0 to $\frac{z}{2}$ inch In diameter. Adjustable crank with radius from 3 to $6 \frac{1}{2}$ inches. Ball thrust bearings. Table slotted to recelve vise clamps or posts to hold work in place. Distance from standard to drilling point, 3 inches. Height above bench, 22 inches; over all, 28 tocbes. Welght, gross, 50 pounds; net, 30 pounds. Packed one in a wooden box.


No. 216
No. 216 Bench Drill Press, each .$\$ 18.00$
Each. . D.P. $\$ 27.22$

# The GIBSONGOMPANY $\overline{\text { GPOLIS }}$ 

## HAMMERS, MOTOR WASHERS AND ENGINE CLEANERS



## Machinist's Ball Pein Hammer

Eacb
Each

4-0z. B.P. Hammer.. $\$ 0.50$ Dozen., D. P. 88.33
6-0z. B.P. Hammer.. . 50
Dozen..D.P. $\$ 8.33$
8-oz. B.P. Hammer.
Dozen..D.P. $\$ 8.33$

Dozen . D.P. $\$ 8.88$
24-oz. B.P. Hammer Dozen..D.P. $\$ 10.66$ 16-oz. B.P. Hammer . 55


12-oz. B.P. Hammer $\$ 0.50$ Dozen. D.P, $\$ 8.25$

10-ounce B. P. Hammer, semi-finished, each. . . . $\$ 0.40$ Dozen., D.P. \$6.66
12-ounce B. P. Hammer, semi-finished, each...... . 40 Dozen.. D. P. \$6.66
16-ounce B. P. Hammer, semi-finished, each..... . 40 Dozen. .D.P. \$6.66

## All Steel Ball Pein Hammer



Drop forged in one piece. Can be used instead of regular ball pein hammer to better advantage. Suggested particularly for motorcycle and automobile repair work, on account of having tire iron handle.

A practical tool for all mechanics.
4-ounce All Steel Ball Pein Hammer, each............ $\$ 0.50$ Dozen..D.P. $\$ 8.33$
10-ounce All Steel Ball Pein Hammer, each........... . 60 Dozen..D.P. $\$ 10.46$


Made of drop forgings, one piece of steel; is 10 inches long, with 3 -inch head, and weighs 19 ounces. Price, each $\$ 0.85$ Dozen., D.P. \$ $\$ 17.76$

## Riveting Hammer



No. 1 Tinner's Riveting Hammer, $\frac{1}{2}$ pound $\$ 0.50$ Dozen..D.P. $\$ 8.88$
No. 2 Tinner's Riveting Hammer, $\frac{1}{2}$ pound, each... . 55
Dozen. D. P. $\$ 9.44$
No. 3 Tinner's Riveting Hammer, 1 pound, each.... . 60 Dozen..D.P. 810.22


Engineer's Hammer

No. 0 Engineer's Single Face Hammer, 1 pound 2 ounces, each.
$\$ 1.00$

Dozen...D.P. $\$ 12.21$
No. 1 Engineer's Single Face Hammer, 1 pound 10 ounce, each.
Dozen..D.P. $\$ 13.32$
No. 2 Engineer's Single Face Hammer, 2 pound, each
Dozen., D. $\mathrm{P} . \$ 14.66$
No. 3 Engineer's Single Face Hammer, 2 pound
8 ounce, each
Dozen..D.P. $\$ 15.99$

## Turner Motor Washer

This device is indispensable to the auto owner or the garage repair man. By using it all grease, grime and dirt can be instantly removed from all otherwise inaccessible parts of the motor and other mechanism. No grease or oil cup should ever be removed and opened for filling without first being cleaned with this washer. Its use before mak-
 ing repairs or changes in the motor will insure clean hands and clothing.

The high air pressure forcing the gasoline will quickly remove every particle of dirt and grease, and uses a minimum amount of gasoline, one quart being sufficient for cleaning the dirtiest motor. Once used, you would never go back to the old way of wiping with a cloth or piece of waste. Not only can it be used for cleaning motors, but in the factory for washing the gummed oil and dirt from all parts of the machinery which can not be reached in any other way.
Each $\qquad$ . $\$ 4.00$
Each....D.P. $\$ 6.66$

## Romort Engine Cleaner

 guaranteed device that has no equal for the cleaning of dirt and grease from the machinery of automobiles and motorcycles. Constructed on scientific lines-the air does not enter the tank, but passes right through the air tube, picking up the fluid at the extreme end of the cleaner, thereby eliminating all danger of explosion, this being absolutely impossible. With the long spout the operator reaches every nook and corner of the machinery. Fluid capacity two quarts (common coal oil is the best). This quantity is sufficient to clean the largest engine. Air may be supplied from any system that produces from 20 to 200 pounds pressure. We highly recommend power tire pumps attached to autos, garage storage air systems, etc. When attached to air supply, fluid is forced out in a heavy spray, requiring not over five minutes to thoroughly clean the machinery. Size of cleaner $20 \frac{1}{2}$ inches long by 4 inches diameter. Weight 2 pounds.
Each
$\$ 3.00$
Each. . D.P. $\$ 5.00$

## Ohe GIBSON COMPANY

## FILES




Size Warding Files, dozen
Dozen. D.P. $\$ 2.66$ D.P. $\$ 2.00$ D.P. $\$ 3.55$

Magneto Files, 3 -inch, for platinum points on coils and magnetos, dozen............................................................
Dozen...D.P. $\$ 3.00$


Set of twelve needle files of the following varieties:
Round, half round, flat, oval, knife, square, 3 -square, equaling, slitting joint, barrette, marking with round handle.
Price per set
Per set....D.P. $\$ 2.67$

# The GIBSONOOMPANY 

## VISES AND COMBINATION FORGE, ANVIL AND VISE


This is our standard stationary base vise. It bas all the qualities of deslgn, strength and material of the Diamond swivel base vise.
These vises are heavy and the material is well dis. tributed. All vital points steel; handle, cold rolled steel; jaws, crucible cast tool steel, carefully hardened; nut, malleable fron.

| Width Jaw, | Opens, | Welght, |
| :---: | :---: | :---: |
| No. Inches | Inches | Pounds |
| 90 21 | 21 | 17 |
| Each. . D, P. 87.22 |  |  |
| 91 3 | 4 | 22 |
| Each., D.P. 8 ¢55 |  |  |
| 92 3! | 5 | 28 |
| Each. . D.P. \$10.c0 |  |  |
| 93 4 | 6 | 42 |
| Each. . D.P. 812.22 |  |  |
| 94 4! | $6 \frac{1}{2}$ | 54 |
| Each. . D.P. \$14.44 |  |  |
| 95 5 | $7 \frac{1}{2}$ | 75 |

Eacb
$\$ 5.00$
6.00
7.00
8.50
10.00
13.00

## Rock Island Diamond Swivel Vise

This is our stand. ard swivel vise, and we believe we have the best design on the market. Notice the lines of thls vise.
These vises are 4 beavy and the material is well dispoints are reinpoints are reinmond rises are practically unbreakpractically unbreaktee to replace any
 that do break.

This vise can be turned in any position on an axis parallel with the floor and is locked by a clamping bolt, whicb works in a channel.
$\left.\begin{array}{lccr}\begin{array}{lll}\text { No. } & \begin{array}{c}\text { Width Jaw, } \\ \text { Inches }\end{array} & \begin{array}{c}\text { Opens, } \\ \text { Inches }\end{array}\end{array} & \begin{array}{c}\text { Welght, } \\ \text { Pounds }\end{array} & \begin{array}{c}\text { Each }\end{array} \\ 70 & 2 \frac{1}{2} & 20\end{array}\right)$

## Rock Island Auto Vise



Rock Island Diamond Swivel Vise With SelfAdjusting Jaw


Our standard swivel vise with self-adjustiog juw. This vise can be turned in any poturued in any por sition ob in axis paratiel with the foor, and is locked ly a clumping bolt which works in a channel.
The back jaw of this vise is selfadjusting, and when in use conforms automatically to any angle and makes firm the object beld. Tbe self-adjusting jaw feature is of such a design that it is absolutely as strong and durable as a solid jaw. Other manufacturers do not use this design because it costs more to build.

| No. | Width Jaw. Inches | Opens, <br> Inches | Weight, Pounds | Eneb |
| :---: | :---: | :---: | :---: | :---: |
| 50 | $3 \frac{1}{2}$ | 5 | 37 | \$12.00 |
| Fach. . D.P. $\$ 18.66$ |  |  |  |  |
| 51 | 4 | $6 \frac{1}{2}$ | 53 | 15.00 |
| Each. . D.P. $\$ 22.22$ |  |  |  |  |
| 52 | $4!$ | 7 | 70 | 18.00 |
| Each.. D.P \$26.06 |  |  |  |  |
| 53 | 5 | $7 \frac{1}{2}$ | 95 | 22.50 |
| Each. D.P. 833.88 |  |  |  |  |
| 54 | $5 \frac{1}{2}$ | $8!$ | 125 | 30.00 |
| Wach . D.P. \$tk6t |  |  |  |  |
| 55 | 6 | 11 | 158 | 35.00 |
| Kach..D.P. 5 \%it7 |  |  |  |  |
| 56 | 7 | 12 | 220 | 40.00 |

## Rock Island Combination Forge, Anvil, Vise, Drill, Etc.



Forge-Pan is oval shape, $12 \times 15$ incbes and stands 27 inches from floor.

Fan-Is 7 inches in diameter, is Ariven by an accurately cut gear and pinion. Will produce sullicient blast with very little exertion.

Anvil-Is $31 / 2$ inches wide by 12 inches long. Is solld semi-steel. A bardy is furnished.

Vige-Jaws are $31 / 2$ inches wide and open 11 Inches. We use crucible tool steel in the jaws. Pipe jaws will take pipe up to 2 inches dinmeter,

Drill Chuck-Takes $1 / 2$-inch round shank drill. Distance from chuck to feed table 8 incbes. Chueks are cold rolled steel.

Each
$\$ 25.00$
Each. .D.P. \$35.55

Niagara Grinder No. 3



Carborundum Niagara Grinder No. 3 is fitted with an adjustable tool-grinding guide, and a medium grit Carborundum wheel, 6 inches in diameter, 1 inch thick. Weight, packed, 10 pounds.
No. 3 Niagara Grinder, complete, each. $\mathbf{\$ 5 . 0 0}$ Each..D.P. $\$ 8.33$

## Niagara Grinder No. 4



Carborundum Niagara Grinder No. 4 is fitted with an adjustable tool-grinding guide and a Carborundum wheel $7 \frac{1}{2}$ inches in diameter, $1 \frac{1}{4}$ inches thick.

Weight, packed, 26 pounds.
No. 4 Niagara Grinder, complete, each. $\qquad$ Each..D.P. \$12.44

## Niagara Grinder Foot Power Attachment No. 21

This foot power attachment can be fitted to either No. 3 or No. 4 Niagara Grinder. The attachment is simple and powerful. It is made of malleable iron and is strong and durable. It is readily adjusted to several heights. The illustration shows attachment fitted to No. 4 Grinder.

No, 21 Niagara Foot Power
Attachment, each
$\$ 1.50$ Each.. D.P. $\$ 2.49$

## "Handy" Bolt and Wire Cutters



No. 60 Wire Cutter cuts g -inch wire, weight 9 ounces, length 6 inches, ench ................................................. $\$ 1.09$ Each. . D, P, \$1.66
No. 70 Wire Cutter cuts $5 / 38$-inch vire, welght 11 ounces,
length 8 inches, eacb ........................................................ 15 Each..D.P. $\$ 1,76$
No. 80 Wire Cutter cuts $3 / 16$-inch wire, weisht 14 ounces,
lemgth 10 inches, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.25
Each..D.P, 82,00
These three numbers are packed $\frac{1}{2}$ dozen in a box, Tbese cutters are indispensable in every sbop and garage.

Side Cutting
No. 00 Wire Cutter euts 1 -inch wire, weisht 2 pounds, length 18 inches, emch ............................................... $\$ 1.40$ Fach.. D. P. $\$ 2.22$
No. 40 Wire Cutter cuts $5 / 16$-inch wire, weight $2 \frac{1}{2}$ pounds,
length 15 inches, each .......................................... 1.90 Each..D.P. \$3.11
No. 50 Bolt Cutter cats $5 / 16$-inch bolts, weight $3 \frac{7}{4}$ pounds,
lebgth 18 inchen, each . . . . . . . . . . . . . . . . . . . . ................. 2.25 Each..D,P, \$5,00

## New Easy Bolt Clippers



No. 0 New Easy Bolt Clippers, length 18 inches, weight 3
pounds, fer 5/16-inch bolts, each .............................. $\$ 3.75$ Each., D.P. $\$ 4.17$
No. 1 New Easy Bolt Clippers, length 24 inches, weight
44 pounds, for $\frac{1}{8}$-inch bolts, each ..................................... 50 Ench, D.P. 85.55
No. 3 New Easy Bolt Clippers, length 30 inches, weight
7\% pounds, for t-ineh bolts, each .......................... 7.00 Nach. D.P. 87.77
No. 3 New Kasy Bolt Clippers, length 36 Inches, weight
111 pounds, for g-ineh bolts, each ......................... 9.00 Each. D,P. $\$ 10.00$


## Yale Differential Block

Made by Yale \& Towne
These blocks handle heavy loads readily and are sold at the lowest prices possible for reliable blocks.
Yale \& Towne Chain Hoisting Block,
$\frac{1}{4}$ ton capacity, 6 -foot hoist, each. $\$ 18.00$ Each..D.P. $\$ 24.00$
Yale \& Towne Chain Hoisting Block,
$\ddagger$ ton capacity, 7 -foot hoist, each.. 21.00 Each..D.P. $\$ 28.00$
Yale \& Towne Chain Hoisting Block,
1 ton capacity, 8 -foot hoist, each.. 28.00
Each. .D.P. $\$ 37.33$
Yale \& Towne Chain Hoisting Block,
$1 \frac{1}{2}$ ton capacity, $8+$-foot hoist, each $\mathbf{3 6 . 0 0}$
Each. .D.P. $\$ 48.00$
Every block tested to a 50 per cent. overload.

## Thecibson cumax

## SCREW PLATES



No. 1460
Five Cutting Sizes in Hardwood Case. Plug taps, dies and guides $2-3 / 16$ inch. Outside diameter, stock 18 inches long. No. 1802; adjustable tap wrench, 11) inches long. No. 5.
No. 1460 S. A. E. (formerly A, L. A. M.), 5 sizes: 1-28,
$5 / 16-24, \frac{3-24}{3}, 7 / 16-20, \frac{1}{2}-20$, per set, ......................... $\$ 10.75$ Per set.. D.P. $\$ 15.55$
No. 1460 U. S. S., 5 sizes: $1-20,5 / 16-18,2-16,7 / 16-14$, 1-13. per set
10.75

Per set,.,D.P. $\$ 15.5 \overline{5}$

## No, 1464

Seven Cutting Sizes in Hardwood Case. Plug taps, dies and guides 2-3/16 inches. Outside diameter, stock 22 inches long. No. 1808 ; adjustable tap wrench, 15 inches long, No. 6.
No. 1464 8. A. E. (formerly A. L. A. M.), 7 sizes: 1-28,
5/16-24, g-24, 7/16-20, $1-20,8-18, \frac{3}{4}-16$, per set.......... $\$ 14.00$ Per set..D.P. $\$ 21.66$
No. 1464 U, S. S., 7 sizes: $1-30,5 / 16-18,2-18,7 / 16-14, \frac{1}{2}-13$,
6-11. 2-10, per set
$\$ 14.90$
Per set..D.P. $\$ 21.66$
No. 1462
Eleven Cutting Sizes in Hardwood Case, shown in fllustratton above. Plug taps, dies and guides $2-3 / 16$ inches. Outside diameter, stock 22 inches long, No. 180:; two adjustable tap wrenches, $11 \frac{1}{2}$ inches long. No. $5 ; 19 \frac{1}{2}$ inches long, No. 7.
No. 1462 S. A. E. (formerly A. L. A. M.), 11 sizes 1 1-28,
$5 / 16-24, \frac{1}{2}-24,7 / 16-90,3-30,0 / 16-18, \frac{\pi}{5} 18,11 / 16-16,3-16$,
 Per set..D.P. $\$ 40.00$
No. 1462 U. S. S., 11 sizes: $\frac{1}{-20}, 5 / 16-18, \frac{3}{8}-16,7 / 16-14$,
§-13, $9 / 16-19,3-11,11 / 16-11, \frac{7}{3}-10, \frac{j}{6}-9,1-8$, per set $\ldots . ., \$ 27,00$ Per set.,D.P. $\$ 40,00$


No. 1468
No, 1468 contains five sizes of taps and dies in both S. A, E. and $\mathrm{U}, \mathrm{S}, \mathrm{S}$, make, cutting sizes as follows:
$\frac{1}{4} / 16-7 / 16-\frac{1}{2}$ S. A. E.
$\frac{1}{2}-5 / 16-\frac{1}{2}-7 / 16-\frac{1}{2}$ U. S. S.
Also No. 15 -tap wrench, 1 stock dieholder 18 inches long, 1 bit brace diebolder, places for 1 tap die, 7 guide, $2-3 / 16$ inches diameter.
Price
n'p'sog
.$\$ 17.00$
Each..D.P, \$29.33
No. 1469
No. 1469 contains eight sizes of taps and dies in both S. A. E. and U. S. S., making sixteen cutting sizes:
$\frac{1}{4}-5 / 16-7 / 16, \frac{1}{2}-9 / 16-5-\frac{1}{2}$ S. A. E.
$\frac{2}{4}-5 / 16-7 / 16, \frac{2}{2}-9 / 16-\frac{1}{8}-\frac{1}{4}$ U. S. S.
Price
Frice
Each..D.P.
. . 88.88


No. 1475
With 8. A. E, (formerly A. L. A. M.) Standard Taps and Round Adjustable Dies.
 tained in leather roll as illustrated above. Plugs, taps, round button dies, 1 inch outside diameter; stock, No. 18529 inches long; adjustable tap wrench, "T" style.

Above set furnished in hardwood case at same price.
Price $\qquad$ . $\$ 10.00$
Price. .D.P. \$14.44


Style 0 Screw Plates
$\underset{G}{z}$-inch diameter adjustable dies; U. S. S. form thread.

## Contents:

Plug. Taps: Dies and Guides $\frac{z}{3}$ inch outside diameter; Stock, No. 1800 ( 6 inches long) and " $T$ " Style Tap Wrench.

## Machine Screws

No. 151. 5 sizes: 4-36, 6-32, 8-39, 10-21, 12-24, per set.... 85.50 Per set...D.P. $\$ 8.33$.
No, 153. 7 sizes: $4-36,6-32,8-32,10-24,12-24,14-24,16-18$, per set ........

## Fractional Sizes

No. 150, 5 sixes: $\frac{2}{6}-40,5 / 33-36,3 / 16-30,7 / 32-28, \quad 3-20$, per set . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 5.50$ Per set..D.P. $\$ 8.33$
No. 152. 7 sizes: 7/64-50, 2-40, 9/64-40, 5/80-36, 3/16-30, 7/32-28, 1-20, per set............................................. 7. Per set..D.P. $\$ 10.55$
No. 154. 10 sizes: 1/16-64, 5/64-64, 3/39-50, 7/64-50, 8-40, $9 / 64-40,5 / 32-36,3 / 16-30,7 / 38-28,3-20$, per set........... 0.75
Per set..D.P. $\$ 15.00$


No. 1420
Seven sizes in leather roll as shown.
No. 1470 S. A. E. (formerly A. L. A. M.), 7 sizes,
$\frac{3}{3}-28, \hat{r}_{6}-24, \frac{2}{3}-24, \frac{T}{16}-20, \frac{1}{2}-20, \frac{2}{16}-18, \frac{5}{\square}-18$; price. $\$ 13.50$ Per Set. .D.P. $\$ 18.18$
No. 1470 U. S. S., 7 sizes, $\frac{1}{4}-20$, 亮-18, $\frac{g}{6}-16$, $\frac{1}{16}-14$,
$\frac{1}{2}-13, \frac{{ }^{3}}{6}-12, \frac{5}{3}-11$; price......................... 13.50 Per Set.. D.P. \$18.88


No. 1489
Seven sizes in hardwood case.
No. 1480 S. A. E. (formerly A. L. A. M.), 7 sizes. Plug taps; round button dies, $1 \frac{1}{2}$ inches diameter; die stock 14 inches long, No. 1853.
Tap and die sizes: $\frac{1}{4}-28, \frac{1}{6}-24, \frac{3}{3}-24, \frac{7}{17}-20, \frac{1}{2}-20$,
Th - 18, $\frac{\pi}{8}-18$; price.
Per Set.. D.P. $\$ 18.88$
No. 1480 U. S. S., 7 sizes. Plug taps; round button dies, $1 \frac{1}{2}$ inches diameter; die stock 14 inches long, No. 1853.

Tap and die sizes: $\frac{1}{4}-20, \frac{5}{16}-18, \frac{8-16}{2} \frac{7}{10}-14, \frac{1}{2}-13$,
品-12, $8-11$; price. .................................. $\$ 13.50$
Per Set., D.P. $\$ 18.88$


No. ©300-s. A. E.
A handy and compact set put up in a compact case covered with imitation leather.
C-300. Five sizes: $\frac{2}{4}-28, \frac{3}{6}-24, \frac{2}{8}-24, \frac{1}{6}-20, \frac{1}{2}-20, S$.
A. E.; price.
$\$ 6.50$
D.P. $\$ 11.11$


No. 2500-For Ford Cars
GOATSEIN LEATHER, CANVAS LINED
Contents:

Sizes: 6-32, 10-24, $10-32,12-24,14-24,{ }_{3}^{\top} 2-32$, $\frac{1}{2}-20$, $5 / 16-18,5 / 16-24, \frac{3}{8}-16, \frac{2}{8}-24,1$| 16 |
| :--- | ${ }_{3}{ }^{1}$ pipe.

Plug taps; round dies, 13 -inch outside diameter for sizes ro-inch and smaller, and 1 -inch for sizes g -inch and larger; 2 stocks 6 s inches long and 9 inches long; 2 adjustable tap wrenches, "T" style.

Contained in leather roll as illustrated.
Above set furnished in hardwood case at same price. Price
. $\$ 18.50$
D.P. $\$ 26.66$


No. 2501-For Ford Cars
This assortment of taps, dies and reamers has been selected to meet the demand from garages and repair shops, and is based on their experience in handling repairs on Ford cars.
Screw cutting sizes: $\frac{1}{4}-28, \frac{5}{16}-24, \frac{2}{2}-24, \frac{18}{2}-16, \frac{7}{10}-20, \frac{7}{18}-14$, 3-20.
Plug taps and round adjustable dies.
Spiral fluted reamers-
2-in-1 for spindle body and spindle arm bushing,
1 for piston pin bushing.
Stock fer round adjustable dies.
"T" tap wrench (adjustable).
Weight, 44 pounds.
Price
. $\$ 14.50$
D.P. $\$ 20.00$

# The GIBSONGOMPANY 

## WRENCHES AND STOCKS

Adjustable Tap Wrenches


Lightning Adjustable Tap Wrenches will hold both hand and pipe taps.

Adjustment is obtained through a right- and lefthand screw by revolving one of the handles.

The jaws are made of fine tool steel, are rigidly held in place, and give a tight, strong grip.

Sizes No. 7 and smaller are made from drop forgings. The larger sizes have malleable iron bodies.

The bodies of all wrenches (except No, 24) have a neat mottle finish.

| No. | Hand | Machine Screw | Pipe | Fall <br> Length <br> Inches | Price D P. | Fetail Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6 to 13 |  |  | \$2.77 | \$2.00 |
| - 0 | $\frac{1}{16}$ to $\frac{12}{4}$ | 0 to 18 |  | $71 \%$ | 8. 3.33 | 2.25 |
| 4 | 新 to 12 | 6) 1024 | Is | 9 | 3.88 | 2.50 |
|  | 站 to $\frac{1}{2}$ | 8 to 28 |  | $11^{1 / 2}$ | 4.44 | 3.00 |
| 6 | $\frac{1}{31}$ to 4 | 8 to 30 | 1 is to is | 15 | 5.85 | 3.00 5.00 |
|  | 3, to 1 | 15 to 30 | 1s to ${ }_{1}{ }_{4}$ | $191 / 2$ | 7.77 | 5.00 |
| 71/2 | ] to $1 \frac{1}{4}$ | 22 to 30 | 1/4, 4 to 114 | 31 4015 | 14.44 | $\begin{array}{r} 9.00 \\ 12.00 \end{array}$ |
|  | 1/6 to 1\%/ |  | ${ }_{2}+1013$ | $40 \%$ | 17.78 |  |



Mude of finest steel carefally hardened

| No. | Hange | Price <br> Each | Price Each |
| :---: | :---: | :---: | :---: |
| 329 333 | $\begin{aligned} & \left\{\begin{array}{cc} 0-18 & \text { Machine Screw Sizes.. } \\ 0-\text { in } & \text { Fractional Sizes, } \end{array}\right\} \\ & \left\{\begin{array}{cc} 14-30 & \text { Machine Screw Sizes. } \\ \text { f to } 1 / 2 \text { Fractional Sizes. } \end{array}\right\} \end{aligned}$ | $\begin{aligned} & \text { D.P } \$ 1.11 \\ & \text { D.P } \$ 2.22 \end{aligned}$ | $\begin{aligned} & \$ 0.75 \\ & \$ 1.50 \end{aligned}$ |

Stocks Fitting Round Adjustable Dies


| Number | Dia, of Die Inches | Length Over <br> All, Inches | Price |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Each | Retail |
|  |  |  |  |  |
| 1853 | $\frac{11}{2}$ | 18 | $\begin{array}{ll}\text { D.P. } & 2.11 \\ \text { D.P. } & 2.44\end{array}$ | 1.25 1.50 |
| 1857 | 2 |  |  |  |

Single Stocks for Screw Plates


Elastic stock used in Lightning and Green River Serew Plate

| Number | Dia. of Die Inches | Length Over All. Inches | Price |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Each | Retail |
| $\begin{aligned} & 1802 \\ & 1803 \end{aligned}$ | $\frac{2}{2} \frac{1}{16}$ | ${ }_{22}^{18}$ | D.P.  <br> D.P. 83.77 <br> 1.11  | $\begin{array}{r} \$ 2.35 \\ 2.50 \end{array}$ |

# The GIBSON COMPANY 

## TAPS AND DRILL AND TAP SETS

Hand Taps (Smaller Than $1 / 4$ Inch)



## No. 300

A set consists of three taps, one each, taper, plug and bottoming.

United States Standard form of thread recommended and furnished unless otherwise ordered.

Sizes: $\frac{1}{10}-64,5 / 64-64, \frac{3}{32}-50,7 / 64-50, \frac{1}{3}-40,9 / 64-40$,

Price, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 0.20$ Each. . D.P. $\$ 0.22$
Per set . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
Per set. .D.P. $\$ 0.66$

## Taper Pipe Taps



Ne. 320
Taper of taps is 3 -inch per foot diameter (Briggs standard). All right-hand threads, machine relieved. Sizes given are iron pipe sizes and each size will cut threads for that size pipe.

| Sive | Price |  | Size | Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | D.P. | Retail |  | D.P. | Retail |
| - 1/6-27 | \$0.55 | \$0.50 | 11 $-111 / 2$ | 81.66 | \$1.50\| |
| 14-18 | . 66 | . 60 | $11.111 / 2$ | 2.00 | 1.75 |
| 12-14 | 1.00 | . 90 | $2{ }^{2}-111 / 2$ | 3.03 | 2.50 |
| $34-14$ | 1.33 | 1.25 |  |  |  |

## Spark Plug Taps



[^12]
## Hand Taps-Machine Relieved



A set consists of one taper, one plug, and bottoming tap.

In ordering state the style of tap desired and whether U. S. S. or S. A. E.


No. 1 Drill and Tap Set for Ferds
For removing broken cylinder head bolts. The drill and tap set is provided with a guide to insure drilling the proper depth. The handiest set for the repairman for getting the broken end of cylinder bolts out and making a clean thread for a new bolt.
Per set
. $\$ 1.00$
Per set. . D.P. $\$ 1.55$

## DIES AND GUIDES

Round Adjustable Dies<br>$1^{\prime \prime}$ Outside Diameter．$a^{\prime \prime}$ Thick

No． 371


U．S．Form thread furnished in both U．S．S．${ }^{*}$ and S．A．E．

| U．S．S． | S．A．E． | U．S．S． | S．A．E． |
| :---: | :---: | :---: | :---: |
| $\mathrm{Tc}^{\text {c }}$－-30 | 袚－32 | 8－16 | \％－24 |
| ＋－20 | 3－28 | ${ }_{16}^{2}-14$ | ${ }_{3}$ |
| \％f－18 | fr－24 | b－13 | 交－20 |

All sizes，each．．D．P．$\$ 1.11$
Price each．．$\$ 0.75$
$1 \frac{12}{}{ }^{\prime \prime}$ Outside Diameter．$\frac{1}{2}^{\prime \prime}$ Thick
No．37\％


U．S．Form thread furnished in both U．S．S．and S．A．E．

$9^{\prime \prime}$ Outside Diameter．$\overbrace{}^{\prime \prime}$ Thick


U．S．Form thread furnished in both U．S．S．and S．A．E．



Solid Hexagon Dies


These dies are used principally for repair work，and for dressing over bruised or rusty threads，and will go into any space that hexagon nuts will go into．

They can be used in bit－brace sockets，ratchet or monkey－wrenches，and will be found convenient in many ways．

They are accurate，durable，and will give satisfac－ tory service．

United States standard threads recommended and furnished unless otherwise ordered．

| Sive <br> 8．A．E． <br> Inches | Sise U．S．S． Inches | Size of Die |  | Price Breh | Price Bach |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Acrose Flats Inches | Thickness Inches |  |  |
| 1／4－28 | $34-20$ | 将 |  | D．P． 80.66 | \＄0．50 |
| 15－24 | 故 18 | 楥 |  | D．P． .88 | ． 60 |
| \％ 5 － 24 | $\frac{5}{3}-16$ | $\frac{12}{12}$ | 3 | D．P． 1.11 | ． 75 |
| 16－20 | İ－14 | 娄 | ${ }_{16}^{15}$ | D．P， 1.33 | ． 8.85 |
| $1 / 2-20$ | $\frac{1}{2}-13$ | $1 \frac{1}{15}$ | $\frac{18}{12}$ | D．P． 1.56 | 1.00 |
| 妾－18 |  | $1 \frac{1}{15}$ | $\frac{15}{2}$ | D．P．$\quad 1.77$ | 1.15 |
| － 18 | if－11 | $11 / 4$ | $8 / 5$ | D．P $\quad 2.00$ | 1.25 |
| $11-16$ | d6－11 | $1 \frac{18}{15}$ | 5 | D．P． 2.11 | 1.35 |
| $\begin{aligned} & 16-16 \\ & T / /-14 \end{aligned}$ | $1 /-10$ $7 / 8-9$ | $1 \frac{1}{15}$ | $3 / 4$ | $\begin{array}{ll}\text { D．P．} & 2.22 \\ \text { D．P } & 2.33\end{array}$ | 1.50 1.75 |
| $1^{1 / 5}-14$ | $1-8$ | 111 | $1^{3 / 5}$ | $\begin{array}{ll}\text { D．P．} & 2.33 \\ \text { D．P．} & 2.66\end{array}$ | 1.76 2.00 |

# The GIBSON COMPANY 

## REAMERS

Spiral Fluted Taper-Pin Reamers

| No. 404 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Size } \\ & \text { No. } \end{aligned}$ | Diam, at Small End Incbes | Length of Flute trebles | Total Length Incbes | Price Each D.P | Price <br> Each <br> Retail |
| 6 1 2 3 4 5 6 7 8 9 10 | 0.135 <br> 0. 146 <br> 0.162 <br> (0. $1 \times 3$ <br> 4. 20 s <br> 0.240 <br> 0.279 <br> 0.331 <br> 0.308 <br> 0.482 <br> 0.ก281 |  | $\begin{aligned} & 24 \\ & \frac{21}{23} \\ & 31 \\ & 3 \\ & 3 \\ & 3 \\ & \frac{1}{16} \\ & 4 \frac{1}{16} \\ & 5 \frac{1}{15} \\ & 614 \\ & 714 \\ & 8 \frac{1}{15} \\ & 912 \end{aligned}$ | $\begin{array}{r} \$ 1.34 \\ 1.34 \\ 1.67 \\ 2.00 \\ 2.33 \\ 2.67 \\ 3.00 \\ 3.33 \\ 4.00 \\ 4.67 \\ 5.33 \end{array}$ | $\begin{array}{r} \$ 1.00 \\ 1.00 \\ 1.25 \\ 1.50 \\ 1.75 \\ 2.00 \\ 3.25 \\ 2.00 \\ 3.00 \\ 3.00 \\ 4.00 \end{array}$ |

Diameter is taken at small end.
Each reamer made to overlap about $\frac{1}{2}$ inch the size smaller. Special or larger sizes made to order.

## Patent Spiral Fluted Taper Reamers

GREEN RIVER
з.

Taper $2^{\prime \prime}$ to foot. No. $4 t 0$
These reamers will be furnished in 8 -inch taper on special order.

Spiral flutes insure smooth, even cuts and prevent the reamer drawing in to the work.

All are accurately ground and true to size. Sizes given are for the size of finished hole.

| $\begin{aligned} & \text { Size } \\ & \text { Inches } \end{aligned}$ | Full Leagth Inches | Length of Flute Inches | Price |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | D.P. | Each Retail |
|  | $\begin{aligned} & 414 \\ & 41 / 2 \\ & 41 / 2 \\ & 5 \\ & 51 \\ & 51 / 2 \\ & 514 \\ & 6 \\ & 614 \\ & 612 \\ & 62_{2}^{2} \\ & 7 \\ & 714 \end{aligned}$ | $\begin{aligned} & 21 / 2 \\ & 21 / 2 \\ & 211 \\ & 21 / 8 \\ & 3 \\ & 318 \\ & 31 / 4 \\ & 31 / 8 \\ & 31 / 2 \\ & 318 \\ & 318 \\ & 31 / 8 \\ & 4 \end{aligned}$ | 1.83 81.33 1.44 1.55 2.11 2.43 2.66 3.11 3.55 4.11 4.66 5.33 3.77 | $\$ 0.80$ .85 .95 1.10 1.25 1.40 1.60 1.85 2.10 2.45 2.80 3.15 3.50 |

Taper Pipe Reamer


No. 480
Taper is ?-inch per foot and is the same taper as our standard taper pipe taps.

Sizes given are for same size iron pipe.

| $\begin{aligned} & \text { Pipe } \\ & \text { Size } \\ & \text { Inctres } \end{aligned}$ | Price |  | $\begin{aligned} & \text { Pipe } \\ & \text { Size } \\ & \text { Incher } \end{aligned}$ | Price |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | D. P. | Hetail |  | D.P. | Hetail |
|  | $\begin{array}{r} 81.55 \\ 66 \\ 77 \\ 100 \\ 1.33 \end{array}$ | $\begin{array}{r} 30.60 \\ 60 \\ 75 \\ 90 \\ 1.25 \end{array}$ | 1 11 112 2 | 81.06 2.00 2.77 3.35 | $\begin{array}{r} \$ 1.50 \\ 1.75 \\ 2.25 \\ 2.60 \end{array}$ |

Spiral Fluted Taper-Pin Reamers


Set for Automobile Kits in Handsome Leather Case
These reamers are very useful for quick repair work and breakdowns on the road. Jammed and worn pin holes can be reamed smooth or to take next size larger pin.

In handsome and substantial leather case, size closed 5 inches by 2 inches; weight 4 ounces.
Set No. 1423 Six sizes Spiral Fluted Taper-Pin Reamers, Nos. $0,1,2,3,4$ and 5 , price complete,
in genuine leather case.
$\$ 7.00$
Each. . D.P. $\$ 10.00$


No. 1420 Taper-Pin Reamer Set, same as No. 1423, only put up in wooden case, each $\$ 7.00$ Each. .D.P. $\$ 10.00$


142111 Sizes, $0,1,2,3,4,5,6,7,8,9,10$, in hardwood case, each
$\$ 18.00$
Each. . D.P. \$28.88

# Thecibsoncomin 

## REAMERS

Solid Spiral Fluted Reamers



No． 400

| Size Inches | Total Length Inches | Length of Flute Inchea | Price Each |  | Price Each Fetnil |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1／8 | 3 | 11／2 | DP | 81.66 | \＄1．00 |
|  | 314 | 18 | D．P． | 1.88 | 1.10 |
| $\frac{15}{15}$ | $31 / 2$ | 15 | DP． | 2.00 | 1.20 |
| \％ | 334 | 11／8 | DP | 2.22 | 1.30 |
| 1 | $4{ }^{4}$ | 2 | D．P． | 2.33 | 1.40 |
| ？ | 414 | $21 / 3$ | DP． | 2.44 | 1.45 |
|  | $41 / 2$ | 214 | DP | 2.55 | 1.50 |
| $\frac{1}{2}$ | 434 | $2{ }^{2}$ | DP． | 2.55 | 1.65 |
| 1. | 5 | 21.2 | D．P | 2.66 | 1.60 |
| 媇 | $51 / 4$ | 238 | D．P． | 2.66 | 1.65 |
| 1 | 512 | $2{ }^{4}$ | D．P． | 2.88 | 1.75 |
| 溇 | ${ }_{6} 4$ | 2715 | D．P | 3.11 | 1.85 |
| 12 | 6 | 3 | D．P． | 3.22 | 1.90 |
| 11 | 646 | $31 / 1$ | D．P． | 3.22 | 1.95 |
| 音 | 615 | 314 | D．P | 3.33 | 2.00 |
| $1{ }^{1}$ | 61／4 | 32\％ | D．P． | 3.65 | 2.10 |
| 5 |  | $31 / 2$ | D．P． | 3.66 | 2.20 |
| 季 | 741 | 31 | D．P． | 3.77 | 2.30 |
| H | $7{ }^{1}$ | 3 校 | D．P． | 4.00 | 2.40 |
| 㣙 | 8 | $\stackrel{4}{1}$ | D．P． | 4.11 | 2.50 2.60 |
| \％ | 818 | ${ }_{4} 5$ | D．P． | 4.44 | 2.70 |
| $\frac{18}{4}$ | 91 | $4 \frac{13}{75}$ | D．P | 4.66 | 2.80 |
| 寿 | 93 | 4 景 | D．P． | 4.88 | 2.95 |
| 13 | 911 | $4 \frac{3}{3}$ | D．P | 5.11 | 3.10 |
| 㥒 | 10 年 | ${ }_{5}^{10}$ | DP． | 5.33 | 3.25 |
| 亲 | $10 \%$ | 51\％ | D．P． | 5.55 | 3.40 |
| 15 | $10 \frac{10}{4}$ | 5 年 | D．P． | 6.00 | 3.55 |
| 1 | $10 \%$ | ${ }^{1} 1$ | D．P． | 6.22 | 3.70 |
| 17 | 11 有 | 5 | D．P． | 6.44 | 3.85 |
| ${ }_{1}^{13}$ | 1115 | 5 | DP． | 6.66 6.88 | 4.00 4.15 |
| 11／8 | 115 | 5 咅 | D．P． | 7.11 | 4.30 |
| 11 | 11 1280 | 5 㥅 | DP． | 7.33 | 4.45 |
| $1 \frac{1}{15}$ | 12 | 6 | D．P． | 7.77 | 4.60 |
| 12 | 121／5 | $6 \frac{1}{10}$ | DP | 8.00 | 4.75 |
| $11 / 4$ | $12 / 4$ | $61 / 8$ | D．P． | 8.22 | 4.90 |
| 13 | 12 年 | 67 | DP． | 8.44 | 5.05 5.20 |
| $1{ }^{1}$ | 12 12 \％ | $6{ }^{1}$ | D．P． | 8.66 8.88 | 5.20 5.40 |
| $13 / 1$ | 12. | $6 \frac{1}{15}$ | DP． | 9.33 | 5，60 |
| 117 | 12 年 | 615 | DP． | 9.66 | 5.80 |
| ${ }_{1} 1$ | 12 | 6 立 | D．P． | 10.00 | 6.00 |
| 119 | 12 硓 | 618 | DP． | 10.33 | 6.20 |
| 119 | 13 | 613 | DPP | 10，66 | 6.40 6.60 |
| 117 | 13 | $61 / 2$ $61 / 2$ | DP． | 11.11 | 6.60 6.80 |
| ${ }_{1}^{1} \frac{1}{1 / 2}$ | 13 | $61 / 2$ $61 / 2$ | $\mathrm{D}_{\mathrm{D}}^{\mathrm{D}} \mathrm{P}$ | 111.33 | 6.80 7.00 |

## Expansion Reamers

## No． 125 Expansion Reamer



| （Eccentric |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diam． laches | Length of Flute Inches | Length Over All Inches | Each D．P． | Dism． Inches | Length of Finte Inches | Length Over All Inches | $\begin{aligned} & \text { Each } \\ & \text { D.P. } \end{aligned}$ |
| $1 / 4$ | 2 | 344 | \＄4．44 | 31 | $4^{3 / 4}$ | 8 8） | 39.84 |
| 3 | $21 / 8$ | $3 \%$ | 4.53 | 1 | 473 | $81 / 2$ | 10.00 |
| \％ | 208 | 4 | 4.80 | $1{ }_{12}$ | 5 | $83 / 4$ | 10.37 |
| 衰 | $2{ }^{2}$ | 431 | 4.67 | 118 | 51／3 | 9 | 10.75 |
| 3 | $23 / 2$ | 41 | 4.75 | 13 | 518 | $91 / 8$ | 11.10 |
| $1 \frac{1}{3}$ | 21 | $4 \frac{1}{4}$ | 4.82 | 115 | 51 | 94 | 11.48 |
|  | $2{ }^{2}$ | 41.2 | 4.89 | 12 | $5{ }^{4}$ | ${ }^{91} \frac{1}{2}$ | 11.86 |
| 雱 | $2{ }^{2}$ | $4 \%$ | 4.98 | $1{ }^{1}$ | 5\％／3 | $9 \%$ | 12.30 |
| 13 | 2k | 5 | 5.04 | $1 \%$ | 51 | 91？ | 12.75 |
| 㢺 | 251 | 5 | 5.20 | 15 | $51 / 2$ | $92 / 8$ | 13.19 |
| $\frac{1}{5}$ | 21 | 5\％ | 5.12 | $1{ }^{12}$ | 54 | 10 | 13.61 |
| 4 | $2 \%$ | $5 \cdot$ | 5.64 | $1 /$ | 54 | 1015 | 14.06 |
| 8 | $31 \%$ | $5 \%$ | 5.93 | $11 \frac{1}{2}$ | 512 | 1015 | 14.81 |
| 1 | 3 | 6 | 6.22 | 13 | 67 | 1036 | 15.54 |
| ${ }^{4}$ | $31 /$ | $61 / 4$ | 6.53 | $1+\frac{1}{5}$ | 54 | 1012 | 16.30 |
| 3 | 3 | 6 | 6.82 | 17 | $5{ }^{5}$ | 108 | 17.03 |
| \％ | $3 \%$ | 傀 | 7.11 | $1 \%$ |  | 104 | 17.76 |
| 38 | 311 | $67 / 1$ | 7.42 | $11 / 2$ |  | $10^{1 /}$ | 18.52 |
| f | 4 | $71 / 6$ | 7.77 | $1{ }^{2}$ | $61 / 1$ | 1118 | 19.25 |
|  | 428 | 75 | 8.15 | 1519 | 614 | 111.6 | 19.95 |
| 6\％ | 48 | 7 7 | 8.53 | 14 | 63 | 1136 | 20.74 |
| 4 | 41. | $7{ }^{\text {c }}$ | 8.88 | 1\％／4 | 61／2 | 11／2 | 21.47 |
| 16 | $4 \frac{18}{16}$ | 81 | 8.26 |  |  |  |  |

The Crone Valve Reamer Set
seat reamplete set of valve stem relacing tools，etc．，of strietly first quality，con－ talned in a substantial hard－ wood box．Will meet the re－ quivements of the garage， frimg service to variou many low－priced sets on the markst，but experience has shown that in valve tools only the best material and workmanship will meet the have selected this set from among many for quality Only the best material used and great care used in
maklog and testing to insnre
 maklay and testing to insure seats insured in a few minates Price
Complete．D．P．\＄50．00
Extra Parts Furnished
D．P．Retail
Valve Dresser Heat
$\$ 26.06 \$ 16.00$ obk Case ．．．．．．．．2．22 1.35 Spanner Wrench $\quad .24 \quad 15$

| Brace Bit...... |
| :--- |
| Follower |
| -10 |
| 15 |


1 $\frac{1}{2}$－inch Reseater．． 2.221 .30

## Sioux Standard Valve Tools

Set is packed in a substantial hardwood case．
Price

－imeh Reswater iD．P．Ftetail 13 －imeh Iteseater－$\$ 2.33 \quad \$ 1.40$ | 18 －ineh | teseater－ | 2.44 |
| :---: | :---: | :---: |
|  | 1.50 |  | －inch Feseater－$\quad 2.77 \quad 1.70$ $\begin{array}{llll}2, i n c h & \text { Reseater } & 3.00 & 1.80 \\ 21-i n c h ~ R e s p a t e r ~ & 3.11 & 1.90\end{array}$ $\begin{array}{crrr}21-i n c h ~ R e s p a t e r ~ & 3.11 & 1.90 \\ 5 / 16,3 / 8,7 / 16,1 / 2 & .73 & .45\end{array}$ .73 ．

 Set．．D．P．$\$ 36.00$

## Noonan Valve Seating Tool

Noonan＇s Valve Seating Tools are made from the flnest grade of high speed steel and are gunranteed for one year from defects in material and workmanship．
No．．Noosan Valve Seating Tools $\begin{gathered}\text { Nor all other cars，guide }\end{gathered}$ now banale（without cutter）． each ，．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．$\$ 1.67$ （rutters as follows：

## DRILLS AND DRILL SET

Stubs Stcel Wire Gauge Drills


With Straight Shanks List No， 98

With Grooved Shanks
List No． 90 （ 1 to 42 only）

| Wire Gauge No． | Dlameter Incbes | Leagth Over All Incbes | $\begin{aligned} & \text { Price Per } \\ & \text { Dozen } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 1 | ． 2280 | 4 | D．P．$\$ 2.35$ |
| 2 | ． 2210 | 318 | D．P． 2.35 |
| 3 | ． 2130 | 314 | D．P． 2.35 |
| 4 | ． 2090 | 3 \％ | D．P． 2.35 |
| 5 | ． 2055 | 3 接 | D．P． 2.35 |
| 6 | ． 2040 | 3 12 | D．P． 2.25 |
| 7 | ． 2010 | 3 9 | D．P． 2.25 |
| 8 | ． 1990 | 3 tt | D．P． 2.25 |
| 9 | ． 1960 | 3 tb | D．P． 2.25 |
| 10 | ． 1935 | 3 5 | D．P． 2.25 |
| 11 | ． 1910 | 3 星 | D．P． 2.10 |
| 12 | ． 1890 |  | D．P． 2.10 |
| 13 | ． 1850 | 3 | D．P． 2.10 |
| 14 | ． 1820 | 3 \％ | D．P． 2.10 |
| 15 | ． 1800 | 3 \％ | D．P． 2.10 |
| 16 | ． 1770 | 38 | D．P． 1.95 |
| 17 | ． 1730 | $3{ }^{5}$ | D．P． 1.95 |
| 18 | ． 1695 | 3 \％ | D．P． 1.95 |
| 19 | ． 1660 | 3 \％ | D．P． 1.95 |
| 20 | ． 1610 | $3 \frac{18}{18}$ | D．P． 1.95 |
| 21 | ． 1590 | 3 \％ | D．P． 1.75 |
| 22 | ． 1570 | 3 \％ | D．P． 1.75 |
| 28 | ． 1540 | 3 \％ | D．P． 1.75 |
| 24 | ． 1520 |  | D．P． 1.75 |
| 25 | ． 1495 | 3 | D．P． 1.75 |
| 26 | ． 1470 | 2 17 | D．P． 1.55 |
| 27 | ． 1440 | 2 楼 | D．P． 1.55 |
| 28 | ． 1405 | 27 | D．P． 1.55 |
| 29 | ． 1360 | 2 好 | D．P． 1.55 |
| 30 | ． 1285 | 2 妇 | D．P． 1.55 |
| 31 | ． 1200 | 2 | D．P． 1.40 |
| 32 | ． 1160 | 2 新 | D．P． 1.40 |
| 33 | ． 1130 | 2 ¢ | D．P． 1.40 |
| 34 | ． 1110 | 28 | D．P． 1.40 |
| 35 | ． 1100 | $2 \frac{18}{18}$ | D．P． 1.40 |
| 36 | ． 1065 | $2 \%$ | D．P． 1.25 |
| 37 | ． 1040 | 21 | D．P． 1.25 |
| 38 | ． 1015 | 2 \％ | D．P． 1.25 |
| 39 | ． 0995 | 2 城 | D．P． 1.25 |
| 40 | ． 0980 | 29 | D．P． 1.25 |
| 41 | ． 0960 | 2 \％ | D．P． 1.10 |
| 42 | ． 0935 | 2 玺 | D．P． 1.10 |
| 43 | ． 0890 | $2 \frac{3}{4}$ | D．P． 1.10 |
| 44 | ． 0860 | 2 尔 | D．P． 1.10 |
| 45 | ． 0820 | 2 敢 | D．P． 1.10 |
| 46 | ． 0810 | $2 \frac{1}{4}$ | D．P． .95 |
| 47 | ． 0785 | 2 \％${ }^{\text {\％}}$ | D．P． .95 |
| 48 | ． 0760 | $2 \frac{1}{18}$ | D．P．． 95 |
| 49 | ． 0730 | 2 | D．P． 95 |
| 50 | ． 0700 | 1 澵 | D．P． 95 |
| 51 | ． 0670 | 1 ＋5 | D．P．． 95 |
| 52 | ． 0635 | $1{ }^{1 / 8}$ | D．P． 95 |
| 53 | ． 0595 | 1 ＋8 | D．P．． 95 |
| 54 | ． 0550 | $1+8$ | D．P． 95 |
| 55 | ．0520 | 19 | D．P．． 95 |
| 56 | ． 0465 | 1 th | D．P．． 95 |
| 57 | ． 0430 | 1 ＋ 7 | D．P． 95 |
| 58 | ． 0420 | 15 | D．P．． 95 |
| 59 | ． 0410 | $1{ }^{18}$ | D．P． .95 |
| 60 | ． 0400 | 1 \％ | D．P．． 95 |

## Straight Shank Twist Drill

|  | Short Set <br> List No． 94 |  |
| :---: | :---: | :---: |
| Diameter <br> Inches | Length Over All Inches | Carbon Steel Price Per Dos． |
| 1／16 | $2 \frac{1}{2}$ | D．P．$\$ 1.00$ |
| $5 / 64$ | 2 5 | D．P． 1.10 |
| 3／32 | 27 | D．P． 1.20 |
| 7／64 | 2 T | D．P． 1.30 |
| 1／8 | 3 | D．P． 1.45 |
| $9 / 64$ | 3 b | D．P． 1.60 |
| 5／32 | 3 4 | D．P． 1.80 |
| 11／64 | 3 \％ | D．P． 2.00 |
| 3／16 | 3 | D．P． 2.20 |
| 18／64 | 38 | D．P． 2.40 |
| 7／32 | 3 I | D．P． 2.65 |
| 15／64 | 3 \％ | D．P． 2.90 |
| 1／4 | 4 | D．P． 3.15 |
| 17／64 | $4 \frac{1}{6}$ | D．P． 3.40 |
| 9／32 | $4 \frac{1}{2}$ | D．P． 3.65 |
| 19／64 | 48 | D．P． 3.90 |
| 5／16 | $4 \frac{1}{2}$ | D．P． 4.20 |
| 21／64 | 4 | D．P． 4.50 |
| 11／32 | $4 \frac{1}{4}$ | D．P． 4.80 |
| 23／64 | 4 \％ | D．P． 5.10 |
| 3／8 | 5 | D．P． 5.40 |
| 25／64 | 5 \％ | D．P． 5.70 |
| 13／32 | $5 \frac{1}{2}$ | D．P． 6.00 |
| 27／64 | 5 | D．P． 6.40 |
| 7／16 | $5 \frac{1}{2}$ | D．P． 6.80 |
| 29／64 | 5 | D．P． 7.20 |
| 15／32 | 51 | D．P． 7.50 |
| 31／64 | $5 \%$ | D．P． 7.75 |
| 1／2 | 6 | D．P． 8.00 |



List No． 5
Here＇s a mighty attractive，practical Drill Stand， designed in the form of our trade－mark．It contains a full set of Jobber＇s Straight Shank Drills，from $\frac{1}{10} \mathrm{in}$ ． to $\frac{1}{2} \mathrm{in}$ ．in＂sixty－fourths．＂The stand is divided so that the thirty－second size drills occupy one－half，and the sixty－fourth sizes the opposite half．Each drill is placed in a hole properly marked，facilitating quick and proper selection．

## Prices

Stand and Drills，complete
D．P．$\$ 13.66$
Stands only．．．．D．P．\＄2．77

## The GIBSONGOMPANY

## GARAGE PRESSES

 heaviest nature and in a truly mechanical manner.

It will save hours every day replacing a sledge hammer and block. It will gain a garage prestige as the work performed is more scientific and satisfactory than can be performed in an old and antiquated manner.


The unusual width of this Presn ennbles it to accept the largest automoblle wheels intact for pressing out bearings, bands, ete.


[^13]
## Construction and Operation

The wide bearing is a great advantage in atralghtening shafts, axles, etc.
The frame is of one piece of heavy channel steel; the hand wheel is 15 inches in diameter, and the weight of wheel and screw is carried upon ball bearings. The hand lever has a leverage of over 1,500 to 1 . The thrust of the
 screw is directed against heavy bronze thrust bearings. The screw is 2 inches in diameter, with 3 -pitch Acme thread and has a range of movement of 12 inches. The screw does not revolve.

The bolster which carries the plate can be set at any desired height with extreme adjustment of 48 inches. The width between frame uprights is 32 inches. Floor space, $36 \times 36$ inches; weight, 425 pounds.


Crank shafts and similar bulky pieces can be very easily bandled by reason of the divided bolster, as illustrated above.


The vise block attachment provides a means of holding ponderous awkward work in convenient position for working. Will also hold work againgt a twisting strain, etc.

Each
D.P. $\$ 106.60$

## TOOL KITS

Forty－Piece Mechanician Kit


A most complete nssortment of hipliest quality tools，every one practical and in－ dispensable，everytbing necessary for mak－ ing all repairg on the roan or in the gavage．

Consists of the Following Tools
No， 28 Semi－linisbed 15 －degree Angle Drop Forged Wrem h．
No． 25 Semi－tinislied 1J－degree Angle Drop Forged Wrench．
No． 27 Semi－finished 15 －degree Angle Drop Forged Wrench．
No． 29 Semi－finished 15－degree Angle Drop Forged Wrencl．
No． 31 Semi－flnished 15 －degree Angle Drop Forged Wrench．
10－inch Wood Handle Pipe Wrench．
9 －inel Ebony Automobile Monkey Wrench． 5－inch Nickel Plated biesele Wrench T／h－inch Spark Plus socket Wrench，ja－ parnged．
panned．
G－incl Nickel Plated Adjustable Combi－ nation Pliers．
S－inch Electrleian＇s Round Shank Screw Driver．
5－inch Flectrician＇s Siquare Shank Serew Driver
9 －inch Machinist＇s All－steel Screw Driver．
s－inch Square Flle witl Handle．
\％－inch Solld Punch，half－polished， $1 / 8-i n c b$ point．
$5 / 16$－inch Solid Punch，half－polished， $3 / 32$－inch point
8－ibeh Drift Punch，balf－polished，y／g－inch poibt．
\％－Incb Center Punch，hali－polisbed．
$\frac{1}{6}$－inch Cupe Chisel，half－pollshed
sf－inch Cotter Pia Extractor，fall－polished．
No． 1 Macbinist＇s Bearing Seraper
10－ounce Machinist＇s Ball Pein Hammer．
G－inch Side－cutting IVIers．
5－ibeb Ofget Drop Forged Screw Driver
3 Sheets Emery Cloth．8－lach Round File with bandle． Soldering Iron with bandle．Box Solder Paste， Bundle 15 Copper Wire．Bunale 20 Copper Wire．
8－inch Huck Suw and Frame．
4 －inch Flat File with bandle
w－inch Cold Chisel，hali－pollsbed．
位－inch Cold Chisel，half－polished．Bundle Wire Solder． Soldering Torch．Spark Plug Brusb．
8 －incb Flat File with Handle．Box Assorted Cotter Plos － $1 / 2$－inch Carriagemaker＇s Clamp．
40－piece Mechanician＇s Tool Kit，high grade tools in 815.00 water－proof cas

## Thirty－four－Piece Chauffeur Kit

Designed to meet the demand for a medium－priced outht．A choice assortwent of practical tools，high grade and warranted perfect in quality and design．At the price this kit can not be ex－ celled．
Censists of the Following Tooln
No， 23 Semi－finished 15－degree Angle Drop Forked iv rench No， 25 Seni－floished 15 －degree Angl：Drop Forged Wreneh．
No． 27 Semi－finished 15－degree Angle Irof Forked Wrench．
No． 29 Semi－6nished 15－degree Absle Drop Forged Wrench

10－inch Wood Handle Pipe Wrench．
9 －inch Ebony Automoblle Mon－ key．Wrench．
5－inch Niekel Plated Bicycle Wrench
G－inch Adjustuble Combination Plers，Ebous

－inch Electrician＇s Found Shank Screw Irpiver，
5－inch Electrician＇s Square Shank Screw Driver
5－incb Offset Drop Foriged Screw Driver
9 －inch Machioist＇s All－8teel Screw Irliver
$5 / 16$－inch Solid Funch，half－polished，3／32－Inch point．
说－inch Solfa Punch，half－polished，M－inch point

orinch Drift Puncb，baif－polisbed，
多－inch Center Punch，balf－polished
W－inch Cotter Pin Extractor，full polished
No．I Machinist＇s Bearing Scraper．
10－oubce Nacblalst＇s Hall Peln Hammer
6－inch Side－cutting I＇liers．Solderlng Copper with hande
4－inch Flat File with handle．Eundle Wire Solder
8－inch Flat File witb bandle，Bundle 15 Copper Wire，
I－Inch Rownd File with bnndle．Itundte 20 Copper Wire． 8 －Inch Square File with bandle，Box Assorted Cotter PIns．多－inch Ca［re Chisel，balf－pollshed．Box Solder Iaste．
of inch Cold Chisel，balf－pollshed．Spark Plug Brush．
is－ineb Cold Chisel，baif－pollshed．
31－piece Chauffear Toot Kit，bigh griode tools in water－
irbof case，cach
givel I I．Sipaio

## Thirty－Piece Motorist Kit



An excellent Kit，containlng all tools necessary for making ordinary repairs．All tools of the highest grade and fully warranted．Case is heavy water－proof canvas with bar－ ness leather retaining straps．We recommend this kit to the automo bile owners．
Consists of the Following Tools：
No． 23 Semi－floished 15 －degree Angle Drop Forged Wrench，
No． 25 Semi－finished 15－degree Angle Drop Forged Wrench
No． 27 Semi－finished 15－degree Angle Drop Forged Wrench
No． 31 Semi－tibished 15 －degre Angle Drop Forged Wrench
10 －inch Wood Handle Pipe Wrench．
9 －inch Ebooy Automobile Monkey
Wrench．
Double Jaw＂Ready Grip＂Wrench polished．
3－inch Electrician＇s Round Shank Screw Driver．
5－inch Electrician＇s Round Sbank Screw Driver
9－Inch Machinist＇s All－steel Screw Driver．
5－inch Offset Drop Forged Screw Driver，
finch Ebony Adjustable Combination Pliers．
a／s－inch Solld Punch，half－polished， $1 / 2$－ineb point．
3 －inch Center Punch，balf－polished
os－inch Cold Chisel，balf－polished．
$1 / 2$－inch Cold Chisel，balf－polished
$1 / 2$－inch Cape Chisel，half－pollsbed．
5／16－inch Cotter Pin Extractor．
No． 1 Machinist＇s Bearing Scraper．
10－ounce Machinist＇s Ball Pein Hammer
File Handle．
8－ineh Flat File
6 －inch Side－cutting Plers．
Spark Plug Socket Wrenct．
Box Assorted Cotter Plas．
s－luch Round File．
6 －inch Three Corner File
5－Inch Black Bleycle Wrench
Bundle 15 Copper Wire
Bundle 15 Copper Wire
Bundle 20 Copper Wire．
so－piece Moterist Tool Kit，high grade tools in water－proof
case，each．
Each．．D．P．\＄14．4t

## Twenty－Piece Commercial Kit

Made up of tools particu－ larly adapted to use on a larly adapted to use ou al
truck．All large，heavy tools truck All large，beary tools selected for strength and ex－
tra quality．This set is used tra quality．This set is used
extensively by shop men io extensively by
all vocations，

Consists of the Following
No． 23 Semi－floished 15 － degree Angle Drop Forged Wrench．

No．${ }_{27}$ Semi－flaished 15 － degree Angle Drop Forged Wrench．

No， 31 Semi－tinished 15 － degree Angle Drop Forged Wrench．
No， 34 Semi－tinisbed 15 － degree Angle Drop Forged Wrench．
10－inch Wood Handle Pipe Vrench．
11－inch Mottled Automobile
 Monkey Wrench，with tire fron bandle

3－Inch Electrician＇s Round Shank Screw Driver．
6－Inch Electriclan＇s Square Sbank Screw Driver
6 －inch Offset Drop Forged Screw Driver．
G－inch Offset Dinch
9 －inch Machinist＇s All－steel Screw Driver．
$9-$ inch Machinist
7 －inch Flat File．
F－inch Round File
File Handle
8 －inch Mottled Adjustable Comblation Pliers．
$1 / 2$－foch Solld Punch，bulf－polished， $1 / 4$－Inch polnt．
1．Inch Cold Chisel，natural finisb．
$1 / 2$－Inch Cape Chisel natural ninish．
1－pound Machinist＇s Ball Pein Hammer
Box Assorted Cotter PIns．
so－piece Commercial Tool Kit，high grade tools in case． cach
Each．DID．$\$ 127$

# TCGIBSONOWANAPOLIS 

## TOOL KITS-Continued

## Thirty-Piece Garage Kit



A Mechanic's Kit-containing an assortment of necessary tools for general repair work.

The case is of heavy brown duck and has adjustable webbing retainin straps.
Consists of the Following Tools:
No. 25 Semi-finished 15 -degree Angle Drod Forged Wrench.
No. 725 Semi-flnished 15 -degree Angle Drop Forged Wrencb.
No. 27 Semi-6nished 15 -degree Angle Drod Forged Wrench.
No. 731A Semi-finisbed 15 -degree Angle Drop Forged Wrencb.
9-Inch Ebony Auto Wrench.
S-inch Nickel Plated Bicycle
Wrench.
s-inch Spark Plug Wrench.
4-inch Nickel Plated Pliers.
4-ibch Nickel Plated Pliers,
G-inch Ebony Adjustable Combinution Pllers.
5-inch Square Shank Screw Driver. 6-inch Flat File.
8 -lach Round File.
8 -inch Half Round File.
File Handle.
\%-Inch Center Punch, balf-polished.
\%-Inch Prick Punch, half-polisbed.
$5 / 16-$ inch Solld Punch, $3 / 32$-inch point, balf-polished,
S-inch Drift Punch, $1 /$ s-inch point, hait-polished
\%-inch Drift Punch, $\frac{1 / 8-i n c h}{6}$ point, half-pollsbed.
r-inch Cold Chisel, half-pollshed.
7/16-Inch Cold Chisel, half-pollished
$\frac{3}{4}$-Inch Cape Chisel, half-polished.
$1 / 2$-Inch Cape Chisel, half-polished.
5/16-Inch Black Cotter Pin Extractor.
5 -1nch Offset Screw Driver.
Sheet Emery Cloth.
Bundle No. 15 Copper Wire.
No. 1 Bearing Scraper.
10-ounce Machtalst's Ball Pein Hammer
Spark Plug Brush.
s0-Plece Garage Tool Kit, high grade tools in ease, each., $\$ 8.50$ Each.. D.P. $\$ 13.85$

## Nine-Piece Little Roadster Kit



We maintain the same bigh quality of tools in this kit as in those preceding.

Consists of the Following
No, 23 Unfinished 15-degree Angle Drop Forged Wreach. No, 25 Unfinished 15 -degree Angle Drop Forged Wrench. No, 29 Unanisbed 15-degree Angle Drop Forged Wrench. Angle Drop Forged
$9-i n c b$
Black Automobile Wrench.
i-inch Electrician's Found S-inch Electrician's
\%-Inch Solld Punch, half-polished, $1 / s$-inch point.
6-inch Cold Chisel, natural finish.
6 -inch Black Adjustable Combination Pliers,
8-ounce Machinist's Ball Pein Hammer.
$\mathbf{9}$-Piece Little Rondster Tool Kit, each..
Eacb. . D.P. \$4.11

## Seven-Piece Ford Tool Kit



This set contains all of the tools originally sent out with a Ford cat and some additional tools that are very convenient to have.
Consists of the Following Tools:
No. 27 Semi-tinisbed 15degree Angle Drop Forged Wrench.
9 -inch Black Automobile Wrench.
3. inc h Electrician's Round Sbant Sclew
6-Inen Black Adjustable Combination Pliers.
\%-Inch Cold Cbisel, natural floish.
5 -inch Offset Screw Driver.
8-ounce Ball Pein Hammer.
7-Plece Ford Tool Kit, each.
Each..D.P, $\$ 3.22$

## Twenty-Piece Tourist Kit

This assortment is used by the majority of the medium priced car manufacturers and contalos an assortment that appeals to the prospective buyer who will do most of bis own repair work.
All bigh grade tools.

Consists of the Following
No. 23 Semi-finishes 15: degree Angle Drop Forged Wrenct.
No. 25 Semi-finished 15 . degree Angle Drop Forged Wegree

No. 27 Semi-finished 15degree Angle Drop Forged Wrench.
No. 29 Semi-finished 15 -
degree Angle Drop Forged
 Wrench,
Single Jaw Wrench, half-polished,
9 -inch Ebony Automobile Wrench
3-inch Electrician's Round Sbank Serew Driver,
5-inch Electriclan's Square Sbank Screw Driver
9-inch Machinist's All-steel Screw Driver.
f-inet Flat File.
G-incb Ebony Adjustable Combination Pliers.
每-inch Solld Pubch, half-polished, $1 / 8$-inch point.
S/-inch Center Punch, balf-polished.
$1 / 2$-ituch Cold Chisel, halt-pollsbed.
$1 / 2$-Inch Cape Cbisel, half-polished
$5 / 16$-inch Cotter Pin Extractor, Black.
10-ounce Machinist's Ball Pein Hammer
No. 1 Mnchinist's Bearing Scraper.
Box Assorted Cotter Pins.
File Handle.
20-Piece Tourist Tool Kit, high grade tools in case, each , $\$ 6.00$ Each, D.F. $\$ 10.00$

Handy Kit


All tools in thls kit are correctly finished and are fully warranted.

Contents-1 Victor Universal Combination Fliers, 1 Victor Adjustable Alligator Wrench, ${ }^{1}$ Diamond Point Chisel, 2 Cold Chisels 2 Cape Chisels, 1 Oval Face Chisel, 2 Center Punches, 2 Solld Pubcbes. 1 Cotter Pin Extractor, 1 Three-Square Scraper.
Handy Tool Kit, each. Each.. D.P. \$6.66

## Kit No. 77

All tools in this kit have a beautifal blue finish and are warranted in exery Warrant
respect.

## Contents

1 Three-Square Scraper.
1 Cotter Ein Extractor: 1 Diamond Point Cbisel
1 Cape Chisel.
1 Oyal Face Chisel.
2 solld Round Punches.

2 Cold Chisels.
1 Center Puncb,
No. $\%$ Tool Kit,
each.............. $\$ 8.00$
Fach.. D.P. $\$ 2.33$

# The GIBSONGMPANY 

## AIR COMPRESSORS FOR GARAGE SERVICE

The Model Garage, irrespective of size, finds many applications for compressed air, from both a standpoint of economy and greater convenience, as well as forming one of the necessities which either recommend or disapprove of the garage to the automobile owner. Among the numerous applications may be mentioned the following: Inflating tires; cleaning tops and bodies; operating small pneumatic tools, such as air hoists, riveting and chipping hammers, drills, etc.

In this "day of service," nothing is so important as the dispensing of "FREE AIR." It brings trade to your front door, and will return your initial investment in a short time.

We have sold Compressor equipment for hundreds of garages, and in offering the Ingersoll-Rand line, believe we have found the best manufactured for the purpose. They are built along the most up-to-date engineering lines, by the oldest Compressor manufacturer in America, a concern that has built compressors with capacities as high as $1,000,000$ cubic feet per hour and for every conceivable service. We have had experience with numerous other compressors, and investigated all other makes before adopting this line, and offer it to our trade as the most efficient and economical manufactured.


If you desire motor-driven equipment, write our Engineering Department, giving us the size of your place, the number of cars you handle and the nature of power used, whether electric or belt drive. If electric, specify whether Alternating or Direct Current. If Alternating, give the voltage, number of phases, number of cycles (frequency), and if Direct Current, voltage only. We will be glad to prepare an estimate of cost and installation.

We have an equipment for every size garage, belt or motor driven, water or air cooled, stationary or portable.

The illustrations show the IMPERIAL TYPE XII Compressor in section. The general sturdiness of the design is seen at a glance; they are durably constructed, self-oiling and wholly enclosed. The method of lubrication is plentiful and thorough. All bearings are adjustable. Capacities range from 3 to 100 cubic feet per minute.

Unlike the majority of compressors offered for this service, the "Imperial" is built with a view to economical opera-
 tion. The suction stroke completely fills the cylinder without waste of power (note the very large valve in the piston head). On the discharge stroke every ounce of air is instantly expelled, as the discharge valve has the same diameter as the cylinder, and is not (like most other compressors) fitted with small poppet valves which restrict the passage of air, set up friction, create losses and consume power.

## Air Receiver Storage Tanks and Compressor Fittings

The installation of your Compressor plant is incomplete unless you have a satisfactory receiver or storage tank. This is essential, as it cuts down your power expense and gives you a ready supply at instant command. Best results are obtained when large capacity receivers are used, as with a proper sized receiver it is only necessary for you to operate your compressor a few times each day (depending on the demand for air).

We carry a complete line of Electrically Welded Seamless Tanks, made of the very best Open Hearth Basic Steel Plates. They are built to stand extremely high pressures, are thoroughly tested and guaranteed by us to be air tight.

In addition to the tank, certain fittings and accessories, such as gauges, hose, air valves, safety valves, air chucks, etc., are required. We refer you to our lists of these articles, which cover the best in the market.

# The GIBSONGOMPANY $\overline{\overline{A P O L I S}}$ 

## AIR COMPRESSORS FOR GARAGE SERVICE

## Imperial Type XII <br> sixe $2 x z 2$



This is the smallest of the Imperial line and is recommended for intermittent service and for pressures up to and including 150. It will serve a garage housing from is to 20 cars. If furnisbed in the Air Cooled Type only. We recommend for this compressor Alr recelver $16 \times 48$ - 42 -gallon capacity. Piston alsplacement, 3.2 cu . ft. free air per minute.

## Speed.

Hpeed.................. 400 to 700 R.P.M Belt Wheel 10 luired........................... Length over all. Width
$.141 / 3-\mathrm{m}$.
Height
$.16-\ln$
$\qquad$
Shipping weight $\qquad$ 25 lbs net

Price with tight pulley only........................... . . . D.P. $\$ 66.00$
Price with tight and loose pulleys....................... D.P. 75.50

## Imperial Type XII <br> Size $2 \sqrt{2} x 3$

## Air Cooled Type

This slze bas larger capacity than the $2 \times 2 \frac{1}{2}$., and is recommended for pressures up to 175 lbs ., and is adaptable for garages bandling from 20 to 30 cars.
Can be furnished either air cooled, water circulating cooling, or reservoir cooling systems.
We recommend for this compressor, alr receiver $18 x 00$ - 66 -gallon capacity. Piston displacement, 6 cu . ft . free alr per mioute.
Horse Power required...................11/2
Belt Wbeel... 12-in. diam. by 3 -in. face
Speed.................... 400 to 700 R.P.M.
Le $\qquad$


Width . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12-in.
. . . . . . . . . . . . . . . . . . . .221/2-1n.
Welght . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 160 1bs. net
Shipplag welght
.220 lbs
Price with tight pulley only (air cooled) .............. . . D.P. $\$ 91.00$ Price with tight and loose pulleys (air cooled)...... D.P. 102.00

## Imperial Type XII

Sixe 21x3


## Hopper Cooled Type

Thts compressor is exactly like the $22 x 3-1 \mathrm{~b}$. shown above, except tbat the metbod of cooling is different. The cylinder is jacketed, which. in conjunction witb a reservolr bead, to which communication is had by ports, forms a very elficient thermo-syphon system. Under average temperature conditions one filling of the reservoir will permit continuous running of the compressor for a full day. We recommend this type of cooling.
We recombuend for this compressor, air recelver $18 x 60$ - 66-gallon capacity. Piston displacement, $6 \mathrm{cu} . \mathrm{ft}$. free air per minute.

## Speed.

Horse Power required to 700 R.P.M. Belt Wbeel...12-in. diam. by 3 -in............... Length $17-1 \mathrm{D}$.
Width
$12-\mathrm{in}$
Helght ............................................................... $29-\ln$
Shlpping weight .......................................................... 245 lbs.

## Reservelr Type-

Price with tight pulley.
D.P. $\$ 100.00$

Price with tight and loose pulleys.
D.P. 110.00

Water Circulating Type (Tank System)-
Prices same as Hopper Cooled Type.

Imperial Type XII

Size $31 \times 4$



Water Circulating Type (Tank System)
This size compressor is for the garage housing up to 75 cars. It is of very rugged construction and large capacity. It will bandle preasurea up to 200 lbs ., running intermittently and will take care of 150 lbs . operating constantly

We recommend for thls compresmor, alr receiver $18 x 72-80-$ gallon capacity. Plston displacement, 12.2 cu . ft. free nir per minute.
Speed...................... 350 to 550 R.P.M.
Horge Power Horse Power required....................... Belt Wheel...16-1n. diam. by $4-1 \mathrm{~L}$. face Length $\quad . . . . . . . . . . . . . . . . . . . . . . . . . . . . .181 / 2$
Width


Sbipping welgbt .......................................... 275 lbs .
Price with tigbt pulley obly................................ . . . . . . $\$ 166.50$
Price with tight and loose pulleys.................. . . . D.P. 180,00

## Imperial Type XII

## Size 31x4

## Hopper Cooled Type

This machine is a duplicate of tbat shown above differing only in that it has the reservoir thermo-syphon cooling system and shows the tight and loose pulley arrangement. Where a compressor is to be operated from a line shaft, tight and loose pullers make the ideal arive, making it easy to shut down without the use of a clutch on the line shaft.

We recommend for thls compressor, ulr receiver $18 \times 72-80$-gallon capacity. Piston displacement, $12.2 \mathrm{cu} . \mathrm{ft}$. air per minute.

## Speed.

$\qquad$ . 350 to 550 R.P.M. Horse Power required..................... 3 Belt Wbeels. .. $16-\mathrm{in}$, diam, by $4-\mathrm{in}$. face Length $\qquad$ $25-\mathrm{In}$. Width $\qquad$ . 16 -in.
Helght $\qquad$
$\qquad$ $.35-\mathrm{in}$.
Shipping weight $\qquad$ .400 lbs.
Price with tight pulley only


Price with tigbt and loose pulleys

## Imperial Type XII

## Size $4!x 5$



Water Circulating Type (tank system). This compressor is the largest of this type, and is built for those garages bandliog 100 cars garages
or more. Its capacity is so large that it will meet the largest demands for equipment of this class. It la of exceptionally heavy construction and will operate continuously at 200 pounds pressure.
We recommend for this compressor, air receiver 24 x $60-120-$ gallon capacity
Piston displacement, 23 cu .
ft . free air per minute.
Speed...... 325 to 500 R.P.M. Horse Power required..... 5 Belt Wheels, $20-\mathrm{in}$, dlam, by 5-in. face.
Length ................. 22 -In.
Width … .................20-18. Height ................. $371 / 21 \mathrm{~L}$. Shipping weight......5301be. Price-
Ether Hopper Cooled Type
or Water Circulatiog Type (tank system).
With tight pulley only...................................... D. . $\$ 244.00$
With tight and loose pulleys.
D.P. $\quad 266.00$

MOTOR DRIVEN AIR COMPRESSORS FOR GARAGE SERVICE

The Compressor outfits shown below represent the most simple, compact and efficient electrically driven units on the market.

They are practically noiseless in operation and supply the maximum demand both from a standpoint of capacity, quality and inexpensiveness of operation.

The Compressors are the same as those described under the heading of "Imperial Type XII."

The driving end is a General Electric motor of the most approved design, combining highest efficiency with economical operation. These motors are either direct or alternating current, direct connected to the Compressor by an "Imperial" short belt drive attachment, and the whole mounted on a suitable sub-base as shown, all ready for work after bolting to the foundation and plugging into the lighting circuit.

When ordering state kind of current used, whether direct or alternating. If direct give the voltage. If alternating, specify voltage, number of phases, number of cycles (frequency).

## Imperial Type XII



Air Cooled Type

## Imperial Type XII

```
                            size 31/2 x 4-in.
```

Can be furnished in hopper cooled or water circulating types only. Is equipped with a 3-H.P. motor.
With Single Phase Motor . . . . . . . . . . . . . . . . . . . . . . . . . . . . D.P. $\$ 475.20$
With Two or Three Phase Motor . . . . . . . . . . . . . . . . . . . . D.P. 353.10
With Direct Current Motor . . . . . . . . . . . . . . . . . . . . . . . . . . . . D.P. 440.00
These prices apply to either hopper or water circulating (tank system) types.

Size $1 \frac{12}{x} \times 5$-in.
Can be furnished in either hopper cooled or water circulating type. Is equipped with a $5-H . P$. motor.

With Single Phase Motor ....D.P. $\$ 618.20$ With Two or Three Phase

Motor
.D.P. 451.00
With Direct Current Motor . . . D.P. 577.50
These prices apply to either hopper cooled or water circulating type.

MOTOR DRIVEN AIR COMPRESSOR MOUNTED ON SUB-BASE slze $2 \times 21 / 2=10$.
This is a standard $2 \times 21$-inch Compressor direct connected to a $1-H . P$. motor. The capacity of the Compressor is given on the preceding page.

This size is furnished in Air Cooled only.
With Single Phase Motor . . . . . . . . . D.P. $\$ 238.70$ With Two or Three Phase Motor. . . D.P. 189.20 With Direct Current Motor . . . . . . . . D.P. 209.00 Size $21 \times 3$-in.
Can be furnished in air cooled, hopper cooled or water circulating type (tank system). Is equipped with $1 \frac{1}{2}-$ H.P. motor.

Air Cooled-
With Single Phase Motor. . . . . . . . . . D.P. \$323.40 With Two or Three Phase Motor, . . D.P. 238.70 With Direct Current Motor........ D.P. 271.70

Hopper or Water Circulating CoolingWith Single Phase Motor . . . . . . . . . D.P. 331.10 $\begin{array}{ll}\text { With Two or Three Phase Motor. ... D.P. } & 246.40\end{array}$ With Direct Current Motor. . . . . . . . . D.P. 279.40

# The GIBSONCOMPANY 

AIR COMPRESSORS FOR GARAGE SERVICE-Continued


## Jacobson Garage Compressors SPECIFICATIONS:

Cylinder size.
3-in. bore, 4-in. stroke
Normal speed. $\qquad$ 200 R.P.M.
Capacity free air per minute... $\qquad$ $.3 \frac{1}{4} \mathrm{cu} . \mathrm{ft}$. Compresses at any pressure up to. 200 lbs . per sq. in. Diameter and face of fly wheel for belt........................... $24-\mathrm{in} . \times 3-\mathrm{in}$. Diameter and face of loose pulley for shifted belt.........24-in. x 3-in. Power required operating at 100 pound pressure. $\quad$ H. . $\quad$. Power required operating at 200 pound pressure................... H.

 Each ........................................................................................................ If furnished with Fly Wheel only, each. D.P. 63.50

We carry a full line of Jacobson Single and Double Cylinder Compressors. Prices on request.


Single Cylinder Water Jacket Type With Flywbeel and Loose Pulley

## The Gardner Midget

The "MIDGET" Compressor meets the needs of a private garage, dental office, motor boat, and other places where small volumes of air are required. It is a simple, practical and durable compressor, with few parts, and so constructed that any person can, with the aid of a wrench furnished with the machine, dismantle and reassemble it within a very few minutes.

The lubrication is by the oil splash system and is perfect. Every interior working part is thoroughly drenched with oil, but provision is made for keeping the oil from going over with the air. This makes it possible to pump direct into automobile tires, eliminating an air receiver.

The "MIDGET" takes up little space, operates without noise and is of attractive appearance in a neat aluminum finish. The capacity is 1.25 cubic feet of free air at 600 revolutions, but it may be speeded to 800 revolutions with a corresponding increase in capacity. It is good for 125 pounds continuous working pressure and weighs 30 pounds.


With tight pulley, each.
.$\$ 16.60$ Each..D.P. $\$ 27.77$


## Au-To Air Compressor

Specifications No. 0 Au-to Air Compressor
Cylinder.
3-inch bore
Piston stroke.. .4 inches
Fly wheels. $\qquad$ 14 inches diameter Pulleys. $\qquad$ . 13 inches diameter, 2 -inch crown face Height from floor to top. $\qquad$ .. 21 inches Floor space. $14 \times 18$ inches
Assembled at the factory and delivered set up ready to put the belt on and make pipe connections.

Each.
D.P. $\$ 61.00$

## PORTABLE AIR COMPRESSORS AND AIR STORAGE TANKS

## Imperial Type XII

Portable Air Compressors for Garage Service
With this type of compressor you are able to take the air Just where it is wanted, without the attendant expense of plping.

The portability of this unit, and its compactness, recommends its use to garages where a stationary plant is impracticable.


The majority of portable air compressors have heretofore been limited in air capacity. The one illustrated has been designed to meet the needs of the largest or smallest garage.

The tank is of 40 gallons capacity and is built to handle pressures up to 250 pounds. It is firmly fixed to the truck by means of a specially designed housingno matter how much this portable is handled, the tank can not be loosened.

The truck frame is a drop forging, very rugged. The wheels operate on ball bearings, making transportation very easy.

The Compressor is a standard $21 \times 3$ Type XII Air Cooled Imperial, belted to a high grade electric motor, either direct or alternating current, in any voltage, 110 , 220, 440 or 550.

This Portable is fitted with safety valve, sufficient electric cord and plug for electrical connection, pressure gauge and air hose, with automatic chuck.

We recommend this Portable Compressor to the garage needing a strong high class compressing plant of sufficient capacity for handling a large number of cars.

Price, including equipment described above:
With Single Phase A. C. Motor (any voltage),
D.P.
8467.00

With Two or Three Phase A. C. Motor (any volt-
age), D.P.
378.00

With Direct Current Motor (any voltage), D.P. 389.00

## High Pressure Air Storage Tanks for Compressor Service



Electrically Welded
One of the chlef and most important elements in connection with the stationary compressor plant is a sultable and strong air recelver or tank, We carry a complete line of Alr Storage Tanks for the purpose of storing the reserve alr. These tanks are without exception the very highest grade in material design and workmanship They bave been built for this particular purpose and every care bas been exercised to obtain a recelver that would be entirely safe at extremely bigh pressures. They are made of the very best unlform basle open hearth steel plate, all seams welded, making the tank virtually one piece of metal. Our tanks eliminate the possibility of any leaks as the spectal process of electric welding imparts the full strength of the material at the welded joint. In otber words, the welded tank Is greatly superior to and stronger than a riveted tank of twice the thlckness. There are no rivet holes through which the air can escape.


Prices of Tanks


# The GIBSONGOMPANY 

## ACCESSORIES FOR AIR COMPRESSING PLANTS

There are certain fittings necessary when a compressor plant is installed. These consist of valves, gauges, etc. We carry a complete line of these fittings, all manufactured expressly for air service. They are made of the very best bronze, with seats ground true. The gauges are calibrated and accurate. The safety or pop valves will relieve at any determined pressure.

Those articles absolutely necessary in fitting up a compressing plant are:
1 Air Pressure Gauge, for determining pressure in tank.
2 Needle Valves, one between compressor and tank, and one at tank outlet.
1 Needle Valve with swivel hose coupling, for attaching hose at line outlet.
1 Pop Safety Valve, to be placed on tank as a matter of safety and to prevent accumulation of pressure.
1 Check Valve, to be placed between the compressor and tank. This relieves the compressor when idle and prevents leakage from tank at the same time.
Hose, Air Chucks and Hose Clamps.
We also suggest, if the Compressor is to be electrically driven, one of the special Electric Compressor Controllers shown on another page.


## Air Pressure Gauge

This is a thoroughly dependable tested gauge with an iron case, and a guaranteed hand calibrated movement, especially designed for garage service. It has a 21 inch face, and a $\frac{1}{b}$-inch male pipe thread.
Each $\qquad$ D.P. $\$ 2.75$

Tank Safety Valve

No. 656 Safety Valves are well made in every respect, are heavy, durable and positive in operation; can be set to blow off at any desired pressure up to 175 pounds. Each.
D.P. $\$ 6.22$


## Check Valves, Vertical



No. 418 Lunkenheimer Vertical Ball Check Valve meets fully the requirements of users of valves of this type. They are reliable and strong and the check balls are perfectly true, will at all times properly seat and a light valve is insured. Threaded for $\frac{1}{4}$-inch pipe. .Each D.P. $\$ 1.66$

$$
\begin{aligned}
& \text { No. } 418 \text { Check Valve, threaded for } \frac{1}{8} \text {-inch pipe, } \\
& \text { each ....................................................... }
\end{aligned}
$$

No. 418 Check Valve, threaded for $\frac{1}{2}$-inch pipe, each ..... 2.66

## Bronze Needle Valve <br> No. 83

This is a heavily constructed, quick-seating brass valve with a 8 -inch or $\frac{1}{3}$-inch female thread on both ends for the pipe line, and one should be placed in the pipe line close to the tank, both on the inlet and the outlet pipe, for use in case of emergency. These valves are made for high air pressures and are guaranteed to do the work just the way you want it done. It pays to conserve your air supply, and these valves will do it.
Each

D.P. $\$ 2.75$

Bronze Needle Valve with Hose Coupling
No. 82


This is a heavy brass, quick-seating needle valve with a $\mathbb{g}$-inch or $\frac{1}{4}$-inch male thread on one end to screw into the pipe line terminal on one end, and a swivel hose coupling for the hose line on the other end, and will improve any garage air line. Made especially for garage service and guaranteed right.
Each
.D.P. $\$ 3.33$

## GASOLINE PUMPS AND SYSTEMS

The selection of the gasoline storage system for the garage is of the utmost importance and should not be passed over lightly. The laws governing the method of handling gasoline have become more strict each succeeding year, until now practically every locality is governed by the requirements of the National Board of Fire Underwriters and all apparatus must be of approved design.

Our years of experience have enabled us to wisely select such equipment, and in offering this line of Kinsey Pumps and Tanks, we believe we have the best from all points of excellence. As shown in the illustrations, the Kinsey Pump is extremely simple in construction, with very few wearing parts. The cross head construction has many points of advantage over the old style rack and pinion type, notably the lack of excessive wear and rattle in the gears.

The discharge register and meter are directly connected to the cross head and operate accurately to the slightest movement, which means a registering of every bit of gasoline. These exclusive features are embodied in all Kinsey Pumps and all are of the same simple and rugged construction, insuring years of satisfactory service. The C300 Pump is the standard curb pump and is equipped with a. 100,000 gallon season meter and discharge register. The C300E is the same pump, but furnished with electric light and standard. The No. 50 is intended for inside use only, but may be locked to prevent tampering with, the same as the curb pumps. One revolution of the handle in either direction discharges one quart, or four turns to a gallon. Discharge register indicates gallons and fractions thereof up to twenty gallons and repeats. 100,000 gallon season meter registers continuously and is optional, deduction in price made as given below when not wanted.


Cap. Cap.

|  | вияк. | Galk. | Sixe |  | Price |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 30314 | 3 | 120 | 321x 3 ? | D. F . | S383,30 |
| 30414 | 1 | 920 | 371×48 | D. F . | 111.10 |
| 30614 | 6 | 345 | $37!\mathrm{x} \frac{5}{}$ | D. P . | 455.10 |
| 30814 | $\stackrel{ }{*}$ | 45. | $37 \pm \times 108$ | D.1. | 500.00 |
| 30014 | 10 | $57 \%$ | $372 \times 12$ | D.1. | [15.00 |
| C-300 | Pump | only |  | 1 B . | \$967.00 |
| Deylu |  | 100 | gallon | me | if |

Equipment includes: C-300 Kinsey Pump. 1ros, 0 at Gatlon Meter.
Itischarge Itegistor.
Two-Wny IMscharge.
Two Noxzles.
Howe with conuections,
Three Filters.
Double Horizontal Cheek Valve.
Sidewalk Valve Cover,
Tank ans seleeted.
Itall Jolnt Visoo.
EIII pipe with lock amil
Suction bipe and fittings.
Gange stictc, Lag Screws, Iump
Wrameh Titharge, alyeetn Wrench, Litharge, Glycerin for pipe conncetions.


Cap. Cap.
Out fit Bbls. Gals. Size Price
30311 E , Gils. Size Price
$30414 \mathrm{E} \quad 4 \quad \underset{ }{2+30}$
30GAE - 6 सी

$\begin{array}{llllll}41014 \mathrm{E} & 10 & 520 & 37 \frac{1}{2} \times 1 \geq 2 & \mathrm{D}, \mathrm{P} . & 626.46\end{array}$

Werlmet for 100.000 kallon meter if
not wanted, ID.P. ※i: 010
Dealnet for clectric light if not wanted, D. P. 8+4), 00

Eथ1:Iptornt inclates:
C-200E Kibsey Pumip.
Eluctric Light nnal fitimgs.
140,0010 Giallan Meter.
Discharke Itegister.
Overliead Drain with auta valve,
T'wo Nozxles.
T'wo-Way Discharge
Hase with connections.
Three Filters.
Touble Horizontal Choek Valve.
Sidewalk Valve Cover.
Tank as selecterl.
Eall Joint Nolon.
Fill Pipe with lock, cover, suction pipe


No. 50 Inside Pomp

[^14]
# The GIBSONCOMPANY言POLIS 

GASOLINE STORAGE SYSTEMS

"SAFETY FIRST" is in no place more applicable than in the handling of gasoline. Any container holding gasoline which is left above ground is subject to constant evaporation and is a menace to public life and property.

Fire insurance underwriters do not permit storage of gasoline, except in very small quantities, in anything but underground tanks.

The line of pumps here offered are "Safe and Sane" and fill the need for small systems, such as are required for private garages and public garages where the demand is not sufficient to justify the installation of the larger sets.

The construction of these pumps is high grade in every particular, all parts coming in contact with the gasoline being brass. Located in the base of the pump is an all-brass trip valve, ground onto a brass seat, which is operated to drain the pump after using.

Complete outfits may be made up by choosing the pump and tank desired and adding the filler pipe. One inch galvanized pipe should be used between tank and pump and is not furnished by us.

## DESCRIPTION AND PRICES

| Fig. | No. | Diameter Cylinder Inches | Stroke <br> Inches | Per Stroke | Suction Pipe Incbes | Price | Retail Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2422 | 2 | $21 / 2$ | 6 | 1 Pt. | 1 | D.P.812.22 | \$7.00 |
| 2422 U | 2 | 21.2 | 6 | 1 Pt . | 1 | D.P. 14.44 | 8.50 |
| 386 | 2 | $21 / 2$ | 5 | 1 Pt . | 1 | D.P. 19.42 | 11.60 |
| 386 U | 2 | $21 / 2$ | 5 | ${ }_{1} \mathrm{Pt}$. | 1 | D.P. 2222 | 13.00 |
| $386$ | 6 | $31 / 2$ | 5 | 1 Qt . | 1 | D.P. 24.50 | 15.00 |
| 386 U | ${ }^{6}$ | 332 | 5 | 1 Qt. | 1 | D.P. 27.80 | 17.00 |
|  | 2-inch | r Cap an | Strainer |  |  | D.P. 7.80 | \$5.00 |

Use 1-inch galvanised pipe for suction line.
We do not furnish suction pipe or install systems.
U All pumps so marked are approved by the National Board of Fire Underwriters and has Inspectors' brass label attached.

## GALVANIZED WELDED TANKS

| Size | Capacity | Sbell | Price | Fetail |
| :---: | :---: | :---: | :---: | :---: |
| $24 \times 30$ | 1 Bbl . |  | D.P. $\$ 21.11$ |  |
| $30 \times 40$ | 2 Bbls | No. 14 Gauge | D.P. 35.55 | 21.00 |
| $36 \times 40$ | 3 Bbls | No. 14 Gauge | D.P. 50.00 | 30.00 |
| $36 \times 54$ | ${ }_{5}{ }^{2} \mathrm{Bbls}$ | No. 14 Gauge | D.P. ${ }^{\text {D }}$. 62.22 | 35.00 50.00 |
| $36 \times 66$ $42 \times 92$ | 5 Bbls. | No. 14 Gauge No. 12 Gauge | D.P. ${ }_{\text {D. }}$ P. 14.74 .44 | 50.00 85.00 |
| +2x92 | 10 Bits. | No. 12 Gauge | D.P.144.44 | 85.00 |



U-S-L BATTERIES-MACHINE PASTED PLATES-GUARANTEED

# OKC CIBSONCMANY 

## MOTOR GENERATOR SETS

For Charging Lighting and Starting Storage Batteries

(Built by General Electric Company)



750 Watt Motor Generator Set
72 Volts .......... 101 Amperes Will Cbarge 12-6 Volt (3 Cell) Storage Batteries


500 Watt Motor Generator Set
48 Volts ............ $10 \frac{2}{2}$ Amperes Will Charge 8-6 Velt (3 Cell) Storage Batteries

Seventy per cent. of all cars costing $\$ 600.00$ or more built in 1914,95 per cent. built in 1915 , and about all those manufactured in 1916, are equipped with Electric Lighting and Starting Systems. A number of earlier models have been fitted with these systems, some having lighting equipment only, while others have installed storage batteries without the addition of an electric generator. In every case, whether a recent or old model, a storage battery forms a part of the system. This "over-night" popularity and growth of the use of storage batteries has confronted the garage and repairman with the problem of finding a successful, economical and efficient means of recharging the storage batteries brought to his door. Many methods have been resorted to, including rectifiers, city current with certain forms of resistance, vibrating battery charging machines, etc.; all these appliances and forms of charging have proven expensive, the initial cost of the current being greater than the payment received for the work.

Here at last is the solution. This is a Motor Generator Set built by the largest manufacturer of electrical equipment in the world-a concern more familiar with the requirements of electrical apparatus and with better facilities for its production than any other builder of like equipment.

This Motor Generator Set consists of a small single phase alternating current motor on the same shaft and in the same housing with a small direct current generator, which produces current at the rate necessary to charge the storage batteries. Fixed to and a part of the set is a complete switchboard, having an ammeter, voltmeter, rheostat, and switches for reading and controlling the current flow from the generator.

In setting up this plant all that is necessary is to connect with a convenient lamp socket, with a plug provided for that purpose, then attach to your batteries, get the proper ampere and voltage reading, turn on your current and the battery or batteries commence charging.

This is one of the greatest money-making devices ever offered the garage and repairman. Every storage battery requires recharging occasionally, and this work is sure to come to your door. The usual charge for building up a battery is from $\$ 1.00$ to $\$ 1.50$; with this machine the usual cost is between 20 and 40 cents for a threecell six-volt battery, where the current rate is less than eight cents per kilowatt hour.

# The GIBSONCOMPANY 

## MOTOR GENERATOR SETS-Continued

For Charging Lighting and Starting Storage Batteries

(Bullt by General Electric Company)


375 Watt Motor Generator Set 36 Volts ......... 103 Amperes Will Charge 6-6 Volt (3 Cell) Storage


250 Watt Motor Generator Set
24 Volts .........103 Amperes Will Charge 4-6 Volt (3 Cell) Storage Batteries


175 Watt Motor Generator Set
24 Volts ..........7노 Amperes will Charge 4-6 Volt (3 Cell) Storage Batteries (at slow rate)

During the 1915 season we sold upward of 1,000 of these General Electric Company Battery Charging Motor-Generator Sets. They are used in garages all over the world. Designed and built by specialists in the electrical apparatus field, this set has features not found in any other set on the market. The switchboard is an integral part of the set-there are no unsightly wires exposed to chafing or breakage. The switchboard panel has Voltmeter, Ammeter, Field Rheostat, and six-point compound switch. This switch cuts out motor and generator simultaneously. All instruments and the equipment itself is fully protected by fuses. With this set there is practically no wiring necessary, except to bring the city current to the switchboard and take two lines to the batteries.

The commutator, which is the life of every generator, is of very liberal proportions-larger, in fact, than is found on any other generator of equal size on the market. The brush holders are of the self-adjusting type, and are of excellent construction.

This Motor-Generator Set is built with the same care and adjustment as is employed in the construction of the finest generators and motors. Every part is perfectly balanced, and the entire unit is thoroughly tested under actual operating conditions before shipment is made from the factory.

Most all the motor-generators offered heretofore for battery charging purposes have been makeshifts -a combination of a separate motor and a separate generator on an improvised base. The one illustrated here is not of that kind. It is a specially designed unit, made for this particular purpose, and is the result of many years' experimenting in the electrical and storage battery field.

The bearings are of the self-oiling type, and as the machine is a self-contained unit, it will, with ordinary care, last a lifetime without repairs, other than the occasional renewal of the brushes. In fact, your only expense is the first cost-after that, your profits are constant.

This Motor-Generator Set is built in five sizes-one for every demand and every dealer. Consult the row at the top of this and the preceding page, where the various capacities are shown. Prices and further information will be found on the following page.

The General Electric Company has rated these sets very conservatively, and have not, like all other manufacturers, placed their rating at the extreme capacity of the unit. The sets we offer can be moderately overloaded without danger to the apparatus.

We also furnish small generators of the same type as the generating end of these sets; these are for beltdriven purposes. Very often electric current is unavailable, in which event the M. C. Generators can be used with very good results driven by belt from a lineshaft or by a gas or gasoline engine.

A book of instructions is shipped with each set, giving full details covering the operation of these machines and also valuable information on the charging of storage batteries.

If interested in equipment for charging batteries for electric vehicles, see those pages on which large MotorGenerator Sets are described.

## MOTOR GENERATOR SETS-Continued

## For Charging Lighting and Starting Storage Batteries (Buith by General Electric Company) SELECTING THE MOTOR-GENERATOR SET



In order that the proper set be installed to meet any possible special conditions we prefer to make recommendations in each particular case, but as an aid in determining the approximate size the following rules may be observed:

First, we must know that a storage battery can not be charged with alternating current and that direct current must have certain characteristics.

The Motor-Generator is built to operate on either single or polyphase alternating current and on commercial direct current and to deliver suitable direct current for battery charging.

First, determine from your power company the kind of current that they deliver at your line; if A. C. (alternating current), you must know the voltage, frequency or cycles, and whether single, two or three phase. If direct current is furnished only the voltage

A storage battery is made up of one or more cells, each having positive or negative plates surrounded by a solution known as electrolyte.

Each cell is capable of delivering two volts when charged, and the voltage of a battery of a number of cells is equal to 2 volts for each cell; thus a 3 -cell battery has a total of 6 volts, while a 6 -cell has 12 volts, a 12 -cell 24 volts, etc.

Thus we see that the combined voltage of a number of batteries when connected in series will be the number of cells times 2 . Thus 46 -volt batteries would have a total voltage of $4 \times 3 \times 2=24$ volts, as each 6 -volt battery has 3 cells of 2 volts each and there are 4 batteries in series.

In battery parlance the term "volt" means the pressure at which the battery is capable of delivering current. The quantity of current (amperes) which a given battery may safely deliver in a given time is computed per hour and is called ampere-hours - the ampere-hour being equal to one ampere flowing continuously for one hour at a given voltage.
The ampere-hour capacity of a battery is markel on the battery by the makers, as is also the ampere charging rate This charging rate is usnally a little less than the discbarge rate at 8 hours. Our small or 175 -watt charging set is indicated as it amperes, while the larger sets are $10 \frac{1}{2}$ amperes.

In speaking of gas or steam engines, we nse the term horsepower to denote its capacity, and in motor-generator sets
use the term wats-one watt being equal to $1-746 \mathrm{H}$, P., or one kilowatt ch, hio watis) equal to we use the term watts-one watt being equal to $1-746 \mathrm{H}, \mathrm{P}$., or one kilowatt ( 1,000 watts) equat to $1,34 \mathrm{H}$. P.

Thus our small set equals 175 watts capacity, 1 K . W. equals 1,000 watts capacity, etc.
Volts (E) =Pressure
Amperes (I) $=$ Rate of flow of current
Watts $(\mathrm{P})=$ Power or capacity
We have Volts $\times$ Amperes $=$ Watts
$\mathrm{E} \times \mathrm{I} \quad=\mathrm{P}$
Assoming that we shoull wish to cbarge 12 b-volt batterles at one time and want to know what size motor-generator set to select to do this, we would proceed as follows: As each 6 -volt battery contains 3 cells it 2 volts cach, we wonld have;
$12 \times 3 \times 2=72$ volts required
Volts $\times$ Amperes $=$ Watts
$72 \times 10^{1}=756 \mathrm{Watts}$
We wonld choose a 750 -watt set. Tbis would fully cbarge the 6 batteries at 102 amperes in about 10 to 12 hours, wbicb is good practice.

PRICES $\begin{gathered}\text { (Complete Motor-Generator Sets) } \\ \text { (Complete }\end{gathered}$
(Complete With switchboard)
175-Watt Set (Single Phase Only)
D.P. $\$ 122.30$ (0100-Watt Set (Single or Three Phase) $\qquad$ D. P. surs 80 2at - Watt Set (Single or Thmee Pbase) D.P. 2 S 2.16

Tho-Watt Set (Single or Three Phase)
. D.P. 427.80

355-Watt Set (Single or Three Plase) ID. P . 23.00

## PRICES (Generators Only), for Belt Drive, Including Rheostat and Pulley

(Does Not Include switehbeard)


# The GIBSONCOMPANY高POLIS 

## MOTOR GENERATOR SETS-Continued

For Charging Electric Vehicle Storage Batteries

Manufactured by General Electric Company For Public and Private Garage Use

The Motor Generator Sets described on this page are without exception the highest developed units of their type ever built. They are of various capacities and for that reason can be furnished for a garage of any size. They are built to General Electric Company's standards, which guarantees the purchaser the highest grade in electrical equipment.

These Motor Generator Sets consist of a Direct or Alternating Current Motor connected on the same shaft to a Direct Current Generator. It is practically a single unit, and as but one housing is used, the base forms a part of the equipment, and no sub-base is required. The Motor is connected to your city current and drives the Generator, thus producing direct current for charging the batteries.

The prices shown include field rheostat for reducing the generator voltage, with a range of from 125 volts (normal discharge) to 60 volts. It also includes a Starter for the Motor.

While we list only the 125 -volt type, and recommend that size for Battery Charging, we can furnish other voltages on special order and at extra cost.


The use of electric power in the modern Garage and Machine Shop has created a demand for a high-class economical and efficient motor. We have been making a series of exhaustive tests that have extended over a period of fifteen months. In this test we used one or more of all the popular makes of motors. They have been used in connection with Air Compressors, Machine Tools, driving all kinds of shop equipment, etc., and the net result of our investigations has been that the product of the General Electric Company is superior in every way to any other motor on the market.

General Electric Motors will give the longest life, with the lowest current consumption per HP delivered, and will show the highest "day-in-day-out" efficiency. The General Electric Company is the recognized authority in the manufacture of electrical apparatus. Their motors are used in every industry on the civilized globe. They have built the largest units ever produced, and in competitive tests show that their motors have the most uniform starting torque, require fewer repairs, are heavier in construction and are better adapted to perform constant service at low operating cost than any other make of motor.

General Electric Motors are built in the largest and best equipped shops in America, designed by the world's foremost electrical engineers, and their success is justly due to a combination of correct design, excellence of material, superior shop facilities, conscientious workmanship, and, finally, most painstaking care in inspection and test.

We carry a complete stock of motors, in all sizes, and for every kind of current, in either constant or variable speed, with or without starting mechanism, arranged for either belt or direct drive and for any service you may indicate.

On this and the following page we describe and list the three most popular types, for regular Garage and Repair Shop service. In addition to the ones shown we can furnish units of any other size or type desired. Prices shown are invariably f. o. b. factory. No extra charge for boxing. We reserve the right to change the prices shown without notice.

## Alternating Current Motors



In the majority of towns and cities Alternating Current is furnished by the power companies. It naturally follows that this type of motor is used to a greater extent than the direct current. Current is furnished in $25,40,50$ and 60 cycles (frequency) and in voltages of $110,220,440$ and 550 -in some cases higher voltages are used, but these cases are rare. Another important feature in current of this kind is the number of phases employed, some cities have polyphase, a term used for two and three phase systems, while others furnish single phase.

We are in a position to furnish motors in any of the voltages specified, and in any number of phases or cycles.

We have selected and show the two most popular types of Alternating Current Motors, known as the Type RI Single Phase and Type K polyphase. These motors are the highest grade built and are guaranteed to give excellent service with small operating expense.

## Direct Current Motors



The demand for this type of motor is confined to large cities and towns, and in isolated sections. Current is furnished in either 110,220 or 550 volts. We offer the Type DSD as being the best adapted to service of this character. They can be furnished in either shunt or compound wound and can provide series-wound motors on special order.

One of the principal factors in the successful operation of Direct Current Motors is proper ventilation. Unless properly designed in this regard, over-heating and consequent loss of power will follow. The peculiar construction of the General Electric Company's Direct Current Motors prevent undue temperature rises, through special ventilating ducts and large air spaces. DSD and CVC Motors are furnished with ring oiling devices which guarantee uniform and ample lubrication. The Brush Holders are special automatic clock-spring type and self-conforming.

# The GIBSONGOMPANY $\overline{\overline{A P O L I S}}$ 

## ELECTRIC MOTORS

To facilitate the correct filling of orders for Motors, the following directions for ordering should be carefully noted and followed:

1-Give type desired-horse power, speed (R.P.M.), voltage.
$2-$ For alternating current circuit give frequency (number of cycles) and whether single, two or three phase, also voltage.
3 -For direct current give type of winding, whether series, shunt or compound, also voltage.
4-Whether pulley, base and compensator (starter or rheostat) is to be included. If special pulley is desired, give diameter.
5-Always order by type, as Type DSD, Type K, etc.
6 -If special proposition has been made you for motors in connection with other equipment, please refer to that letter, giving date.
7-Give full shipping instructions.
8-Indicate the service in which the motor is to be employed and whether for continuous or intermittent operation.

Alternating Current Motors


Type RI, 60 Cycles
Single Phase-Constant Speed
This line of Single Phase Motors are the highest grade in design, construction and workmanship. Horse power ratings are based on the actual horse power delivered at the pulley when operated on a circuit corresponding with the figures shown on the names plate.




Type K, 60 Cycles
Two and Three Pbase-Constant Speed
The Polyphase Induction Motor is considerably cheaper than the single phase; however, the two and three phase motors will operate only on two and three phase systems and cannot be driven by single phase current. The latter requires special and extra heavy windings which increase its cost. The two and three phase will be found just as efficient and of the same excellent design, material and workmanship as all other products of the General Electric Company.


For starters for sizes from $1 / 4$ to $10 \mathrm{H}, \mathbf{P}_{\text {. }}$ inclusive, add \$66.08 list. For starters for 15 H . P. add \$91.02 list.

Prices for higher voltages on application.
Prices for 25.40 and 50 cycle motors on application.

## Direct Current Motors



Type DSD up to and Inclading 1-HP Type CVC from $11 / 2$ to $15-\mathrm{HP}$
Constant Speed-shunt and Compound Wound-Continuous Service

The line of Direct Current Motors listed below is selected for their size and speed as being the best sulted for the average garnge and machine shop. They are the very highest average garage and machine shop. are rated very conservatively in power dellvered.
HP $\begin{gathered}\text { Speed } \\ \text { RPM }\end{gathered}$ Volts Motoronly $\begin{gathered}\text { Price }\end{gathered} \underset{\text { Extra }}{\text { for Pulley }} \begin{gathered}\text { Extra } \\ \text { for Base }\end{gathered} \quad$ Wt. Type DSD-

| $3 / 4$ | 1150 | 115 | \$95.26 | D.P. | \$2.2\% | D. P. | 86.66 | 140 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/4 | 1150 | 230 | 97.68 | D.P. | 2.29 | D.P. | 6.65 | 140 |
| $1 / 2$ | 1700 | 115 | 90,43 | D.P. | 2.29 | D.P. | 6.66 | 140 |
| 1/2 | 1700 | 230 | 95.84 | D.P. | 2.22 | D. P. | 6.86 | 140 |
| 3 | 1700 | 115 | 100.10 | D. $\mathbf{P}$. | 2.22 | D.P. | 6.66 | 163 |
| 14 | 1700 | 330 | 102.fi3 | D.P. | 2.23 | D.P. | 6.f.6 | 163 |
| 9 | 1475 | 115 | 107.47 | D.P. | 2,22 | D.P. | 6.66 | 175 |
| \% | 1475 | 230 | 110.00 | D.P. | 2.82 | D.P. | 6.66 | 175 |
| 1 | 2000 | 115 | 110.06 | D.P. | 2.29 | D.P. | 6.66 | 175 |
| 1 | 2000 | 230 | 112.42 | D.P. | 2.28 | D.P. | 6.66 | 175 |
| 1 | 1700 | 115 | 112.47 | D. P. | 2.29 | D.P. | 7.77 | 200 |
| 1 | 1700 | 230 | 121.00 | D.P. | 2.32 | D.P. | ช.7ร | 200 |
| 1 | 1150 | 115 | 135.52 | D.P. | 2.22 | D.P. | 7.77 | 225 |
| 1 | 1150 | 230 | 188.05 | D.P. | 2.22 | D.P. | 7.77 | 225 |
| 1 | 500 | 115 | 810.10 | D.P. | 2.22 | D.P. | 8.88 | 390 |
| $11 / 2$ | 750 | 115 | \%10.10 | D.P. | 2.29 | D.P. | 8.88 | 390 |
| 11/2 | 825 | 230 | 310.10 | D.P. | 2.22 | D.P. | 8.88 | 390 |
| 2 | 1700 | 115 | 147.84 | D.P. | 2.22 | D.P. | 7.77 | 925 |
| 2 | 1700 | 230 | 150.26 | D.P. | 2.22 | D. P. | 7.77 | $2{ }^{2} 5$ |
| Type CVC- |  |  |  |  |  |  |  |  |
| 2 | 1250 | 115 | 214.94 | D. $\mathbf{P}$. | 2.29 | D.P. | 8.88 | 395 |
| 9 | 1350 | 230 | 214.94 | D.P. | 2.22 | D.P. | 8.88 | 395 |
| 3 | 1650 | 115 | 210.10 | D.P. | 2.22 | D.P. | 8.88 | 460 |
| 3 | 1600 | 230 | 810.10 | D.P. | 2.22 | D.P. | 8.88 | 400 |
| 3 | 1950 | 115 | 264.00 | D.P. | 2.22 | D.P. | 11.10 | 540 |
| 3 | 1250 | 230 | 264.00 | D.P. | 2.22 | D.P. | 11.10 | 340 |
| 3 | 1000 | 115 | 271.15 | D.P. | 2.28 | D.P. | 11.10 | 540 |
| 3 | 1000 | 230 | 271.15 | D.P. | 2.22 | D.P. | 11.10 | 540 |
| 5 | 1650 | 115 | 256.41 | D.P. | 2.22 | D.P. | 11.10 | 546 |
| 5 | 1650 | 230 | 20.5 .94 | D.P. | 2.29 | D.P. | 11.10 | 545 |
| 5 | 1350 | 115 | 317.46 | D.P. | 2.28 | D.P. | 11.10 | T20 |
| 5 | 1260 | 230 | 319.88 | D.P. | 2.88 | D. $\mathbf{P}$. | 11.10 | 730 |
| 5 | 1100 | 115 | 310.80 | D.P. | 2.22 | D.P. | 11.10 | 780 |
| 5 | 1100 | 230 | 313.68 | D.P. | 2.28 | D.P. | 11.10 | 730 |
| $711 / 2$ | 1525 | 115 | 312.62 | D.P. | 2.22 | D.P. | 11.10 | 860 |
| $71 / 2$ | 1505 | 230 | 319.88 | D.P. | 2.32 | D.P. | 11.10 | 820 |
| $711 / 2$ | 950 | 115 | 463.98 | D.P. | 4.44 | D.P. | 15.54 | 1060 |
| $71 / 2$ | 950 | 230 | 471.35 | D.P. | 4.44 | D.P. | 15.54 | 1090 |
| 10 | 1250 | 115 | 459.14 | D.P. | 4.44 | D. P . | 15.64 | 1070 |
| 10 | 1250 | 230 | 468.93 | D.P. | 4.44 | D.P. | 15.54 | 1095 |
| 10 | 700 | 118 | 539.66 | D.P. | 6.68 | D.P. | 17.76 | 1370 |
| 10 | 760 | 230 | 540.45 | D.P. | 6.66 | D.P. | 17.76 | 1410 |
| 15 | 925 | 115 | $54 \geq .19$ | D.P. | 6.66 | D.P. | 17.76 | 1430 |
| 15 | 925 | 230 | 534.40 | D.P. | 6.66 | ${ }_{\text {D. }}$ P. | 17.76 | 1480 |
| 15 | 700 | 115 | 723.92 | D.P. | 8.88 | D.P. | 17.76 | 1850 |
| 15 | 700 | 830 | 235.1? | D.P. | 8.88 | D. P. | 17.76 | 1910 |

The above prices do not include rheostats. These can be furnished for the sizes indicated at the following prices: 1-HE
to 3-HP inelnsive
5-HP
71-HP
10-11P
We bare listed Direct Current Motors for 115 and 20 . woll exclusively, atthougho spepd. Those althogh we can furnish them in any voltage abd speeds bave been selected na belag the best adaptable for regolar garnge and machine shop service.

The motors listed are for mervice on 110 and 220 -volt circuits. If we do not show what you require send us your specifications. We cas name you satisfactory prices,

We carry a line of Switcbes, Cut-outs, Fuse Blocks and Fuses, selected for their adaptability to garage wiring. In addition to those listed we can furnish any size, type or capacity switch desired.


Double Pole Single Throw, with N.E.C. Fuse Connections-
No. Amps
1130

$$
\begin{aligned}
& \text { Throw- } \\
& \text { No, Amps, } \\
& 1120
\end{aligned}
$$

$\begin{array}{lll}1130 & 30 & \text { D.P. } \$ 1.78 \\ 1121 & 60 & \text { D.P. }\end{array}$
$\begin{array}{lrlllll}1121 & 60 & \text { D.P. } & & & \\ 1133 & 100 & \text { D.P. } & \text { 6.10 } & \text { For } 250 & \text { Volts D.C. or } 500 & \text { Volts A.C. }\end{array}$ $1124 \quad 300$ D.P. 11.27

Kappa Switches in single, two and three poles, for lines carrying 30 amperes and less. These are suitable for charging systems.


For 250 Volte

Without Fuse Connections-

| No. | Poles | Amps, |  |
| :---: | :---: | :---: | :---: |
| 30 | 1 | 30 | D.P. \$1.27 |
| z2 | 2 | 30 | D.P. 1.78 |
| 23 | 3 | 30 | D.P. 2.8 ? |
| Witl | Fuse | Conne | lons- |

No. Poles Amps.

Edison Plug Cut-Outs and Fuses
We can furnish all sizes and types of Edison Plug Cut-outs and Fuses. No. 2509 single Pole Main ...D.P. S0.s1 No. 2965 Denble Pole Main , D.P. 89 No. 8165 Triple Pole Main ...D.P. 1.20 No. 1935 Double Pole 1 Branch. D.P. 90 No, 804? Triple Pole 1 Branch.D.P, 1.54 No. 2587 Double Pole ? Branch. D,P, 1.79 No. 81501 to $\%$ Wire 1 Branch.D.P. 1.22 No. 2199 is to Wire \& Branch.D.P, 1.91 No. 2135 Triple Pole of Branch, D.P. \&.69 No. 2135 Triple Pole ? Branch. D.
Braneh …........................ 1,27
Fuse Plugs


3 Amp
6 Amp
10 Amp
1\% 1 Аmp
$\qquad$

| D.P. | $\$ 0.13$ |
| :---: | :---: |
| D.P. | . 18 |
| 1).F. | . 13 |

15
Amp
90
Amp
95
Amp


17

| D |
| :---: |
| $\ldots \mathrm{D}$ | | D.P. $\$ 7.33$ |
| :--- |
| D.P. |
| 1.77 | D.P. 17.10 D.P. 26,R6

D.P. 31.74
D.P 11.51
th Amp, Single Pole Main Line ................................ D. $\$ 1.99$
30 Amp. Donble Pole Main Line ................................... D. 1.62
30 Amp. Triple Pole Main Line D.1. \&,80 to Amp. Triple Pole Main Line 30 Amp. Double Pole \& Branch 60 Amp, Single Pele Main Line 60 Amp, Single Pole Main Line
60 Amp. Single Pole Main Iine 69 Amp. Triple Fole Main Line 60 Amp. Weuble Pole 1 Branch D.P. D. $\mathrm{P}=\frac{2.05}{\text { D. }}$ D.P $=8.70$ D.P. 2.05 $\begin{array}{ll}\text { D.P. } & 3.96 \\ \text { D.P. } & \mathbf{5 . 6 1}\end{array}$ 60 Amp. Double Fole of Branch D.F. 4.97 We can furaish these blocks in any size for any combinntion.

Union Non-Arcing Enclosed Fuses

From 3 to 30 Amps, in= clusive . ............... P. 80.90 From 35 to 60 Amps . inelusive ..........D.E. 1,10

## The GIBSONGOMPANY

## SWITCHBOARD INSTRUMENTS

## Voltmeters and Ammeters

We show on this page a line of voltmeters and ammeters for switchboard service, or for use where it is necessary to measure the volume of current passing through the lines. For the benefit of those not familiar with electrical terms: Volts means pressure or speed at which the current is flowing. Amperes means volume or quantity of current consumed.

The line of instruments shown are built on the famous D'Arsonval principle, which time and experience has proven the best. The development of this line of meters has been governed by the experience of thousands of users and the requirements in this service. A permanent magnet of circular form is used in all these instruments, this being the best form to prevent leakage of the magnetic flux. Only the best Tungsten steel adaptable for the purpose, properly treated and aged, is used.

The entire moving system is mounted pivotally between two sapphire bearings, highly polished. This takes care of climatic changes.

The essential characteristics of these instruments are:
The very small number of parts.
The parts are designed in a simple and substantial manner. There is an entire absence of complication of parts which might cause the instrument to get out of order or become erratic.

These instruments are the most accurate manufactured and are at the same time the lowest in price.

## Switchboard Instruments



Size. $\qquad$ .38 inches diameter
Scale length. $\qquad$ .2 inches
Maximum scale divisions. 50

This shows the smallest size switchboard instrument.

Recommended for small switchboards, for storage battery use and charging boards.

## Ammeters Model No. 50

| cat. | Amp. | Price |
| :---: | :---: | :---: |
| 50-10 | 0-10. | D.P. $\$ 15.00$ |
| 50-25 | ....0-25. | D.P. 16.00 |
| 50-50 | ....0-50. | D.P. 17.00 |
| 50-100 | ....0-100 | D.P. 19.80 |
| $\begin{array}{r} \text { Can } \\ 0-150, \end{array}$ | $\begin{aligned} & \text { also be } \\ & 0-200, \end{aligned}$ | urnished in 250 |

Voltmeters Model No. 51

Standard finish dead black enamel. In nickel, brass, copper or gun metal to order-no extra charge.

## Switchboard Instruments

Ammeter -Model No. 56
Voltmeter-Model No. 57


Size 75 inches Diameter Scale Length 5 inches Maximum Scale Divisions 150

This shows the largest switchboard instrument we carry. It is used in motor service, or in connection with panels used for charging vehicle batteries.

Ammeters Model No. 56
Voltmeter Model No. 57
Cat.
Cat. Amp.
No. Range
$56-50 \quad \ldots 0-50 \quad \ldots$. D.P. $\$ 26.40$
56-100_...0-100 ....D.P. 29.30
56-150 ....0-150 ...D.P. 30.20 56-250...0-250...D.P. 32.00

Can be furnished for any range from $0-5$ up to $0-1000$ and in any division between.

Cat. Volt
No. Fange Price
57-50 ....0-50 ....D.P. $\$ 25.50$
$57-120$ …0-120 …D.P. 26.40
57-250...0-250...D.P. 29.30
57-600...0-600....D.P. 32.00
Can be furnished for any range from $0-3$ up to $0-750$ and in any division between.

Standard finish dead black enamel. Raised parts polished nickel. All nickel, brass or gun metal finish to order-no extra charge.

While we show only direct current instruments on this page, we can furnish alternating current instruments for any amperage or voltage, and in any scale you may desire.

When ordering be sure to specify whether direct or alternating current is used. Give the catalog number and the finish desired.

## ELECTRIC DRILLS AND GRINDERS

## Type "U" Electric Drills



Every garage and repair shop has a constant need for an Electric Drill or Grinder. They are the handiest tools ever invented. they enable the operator to drill and grind in the corners and places where it would be impos sible to work witb any ot her kind of Arill or gribder. They are economical to operate and the initial cost is small. The line we show is produced by a concern wbo bas been making this class of machinery for many years. These machines are as ight a. possible consistent with the power developed.
Each machine is guaranteed covering operation material and workmanship for one year from date of purchase.
Tbese grinders and drills are ball-hearing throughout, these bearings are enclosed in dustproof grease chambers, this prevents chattering and wear. All motors are impregnated witb Bakelite, which prevents short-cireuits and magnetizing.

Motors are force-ventilated by means of fan mounted on armature shaft which expels warm air that is replaced by cool air.

All grinders are thoroughly tested at the factory under sctual working conditions before shipment. All drills are subjected to the same test


Note the fllustrations on this page covering the series "U" drils. They are the best drills of this type ever offered.
of tyis type ever orrered. Direct or Alternating Current of Direct or Alternating Current of
60 cycles or less. Eltber 110 or 220 volts. Variable speed.

## Drills in

Type Steel Reams
 (U) $\quad \frac{\mathrm{in} \text {. }}{}$
$i \mathrm{in}$.
in.
in.
Speed Welght Price


Type 3U, 4U,


These are the beavier of the "U" series. They have larger capacities abd are designed for handling large volumes of work.

Type "U" Drills will operate on Direct or Alternating Current of 60 cycles or less, Either 110 or 220 volts. Varlable speed.

Type $5 \mathrm{U}, 6 \mathrm{U}, 7 \mathrm{~J}, 8 \mathrm{se}, 10 \mathrm{~V}$.
Drills in
Type
50
$6 U$
$7 U$
$8 U$
100

Speed Weight Price
ight Price R.P.M1. Lbs D.P.


Type S1 High Power Direct Current Drills
For 110 and 220 Volt-Variable Speed.


## Type SA1 High Power Alternating Current Portable Drills

For 110-220 Volt, 60-Cycle Current.
This line of drills is exactly the same in appearance as the S1, but as the S1 will operate on Direct Current only, the SA1 will operate on Alternating Current only



## Electric Grinders <br> Type 3B, 6B, 2Ba, 3Ba for Bench Service

This is one of the handiest tools ever placed in the the bench at any desired point and is connected to a pomp socket One end can be used for buffing, if so desired. These grinders are ball bear ing, noiseless and very efll cient.
Type B-For direct current only.
Type Ba -For alternatlag current only.
$\begin{array}{lcc}\text { Speed } & \text { Size of } & \text { Price } \\ \text { R.P.M. } & \text { Wheel } & \text { DP }\end{array}$

| 4000 | Wheel | D.P. |
| :---: | :---: | ---: |
| 2600 | $8 x$ | $\$ 77.70$ |
| 3400 | $5 x i$ | 122.10 |
| 3.0 | 82.20 |  |

Typ
3 B
6 B
2 Ba
3 Ba
3400
3400

## Tool Post Grinders

Type 3T, 6T, 2Ta, 3Ta
This Type Grinder is very useful in grinding work in the lathe and for center grinding. They fit into the tool post and, as will be noted by the cut, can be used noted by the cut, can be used for grinding the interiors of pleces that would otherwise
be machined.
Type T-For direct current only
Type Tn-For alternating current only. Weight
 Type Weight
H.P.
$1 / 4$
$1 / 2$
$1 / 6$
$1 / 4$

When ordering any of the tools shown on this page it is
cessary that you give-Voltage. Whether direct or niternating becessary that you give-Volfage. Whether direct or alternating
current. Number of cycles. Whether single, two or three pbase.

# The GIBSONGOMPANYA 

## MACHINE TOOLS

Grinding Machines Nos. 1, 2 and 3
 line of Grinding Machines on the market and represents the bighest possible value for the investment. These machines bave selfoiling bearings, .40 carbon steel arbors and pulleys pressed on instead of screwed on, as is usual with most other grinders. The fast collars are all earefully faced and arbors are carefully straightened. The threads are square, of coarse pitch. The bearIngs are lined with first quality babbitt.


Prices Nos, 1, 2 and 3 Grinders.
Rests are regularly furaished on these sizes.


## No. " $O$ " Grinding Machine



The No, "O" is the smallest of this line. It bas the same excellent features as the Nos. 1, 2 and 3 . It can be furnished with tight and loose pulleys, column and countershaft.

Price No, "O" Machine Rests Not Included.

[^15]No. 10 Single Head Grinding Machine


This little tool is one of the best ever manufactured. It fills the wants of those small garages and repair shops not baving a large volume of work. Note the very long bearing, the system of olling and the convenient rest. This machine can be furnished with tight and loose pulleys, column and countershaft.

Price No. 10 Machine.
Rests Included in This Price.
No. Macbine . ............................................................ . . 10
Head with Plain Pulley .................................. . . D. P. $\$ 8.88$
Column . ....................................................... . . . . . . . 14.45
Countersbaft ......................................................... D.P. 10,00
Complete . ........................................................ . D.P. . 33.30
Extra for T, \& L. Pulley . . . . . . . . . . . . . . . . . . . . . . . . . . . D.P. 3.90
Wheels Recommended, inches ............................... 10x2 or 12x1
Diameter Between Collars, inches ................................. $\frac{q}{f}$
Weight of Head, lbs. . ................................................. . . 25
Weight of Column, lbs. . ........................................... . . . 95
Weight of Countershaft, 1bs. ...................................... . 55
Weight Complete Machine, lbs. ............................... 175

## Countershafts



The above cut illustrates the countershafts furnished with grinders shown on this page. Prices are listed under each machine. They can also be furnished separately for use in connection with other tools. They are well and substantinlls made, and bave , 40 carbon steel shafts.

## Wheel Guard

Some states bave enacted laws requiring guards over all types of grinding wheels. We illustrate our open type wheel guard, which we know to be the most simple and effective on the market. It consists of a steel channel rolled to a segment of a circle as sbown. This is very stiff and unbreakable, and is further reinforced by a heavy cast-iron
 bracket riveted to the inside flange of the cbannel. This guard is light, convenient and easy to adjust backward, so that the lips of the guard can always be kept close to the wheel, out of the operator's way, eliminating the danger of dropping material between the wheel and the guard. Prices shown under the various macbines.

# The GIBSON COMPANY 

Automatic Electric Pressure Controlled Switch



For Motor Driven Air Compressors

This Switch is one of the greatest labor saving devices ever invented. It is used in connection with Motor Driven Air Compressors. This Switch prevents the possibility of getting too much pressure in the tank, and also insures a constant pressure and volume of air at all times. Under ordinary circumstances, it is necessary for the garage man to watch the gauge on his tank to tell when he has sufficient pressure, and then throw off the current. In like manner when the tank gets low he must turn on the switch. Very often all the reserve pressure is exhausted before it is discovered and loss of time is certain. With this Automatic Electric Pressure Controlled Switch, your motor is started when the pressure falls to a certain point and is automatically shut off when it reaches the desired tank pressure. For instance you can have it adjusted to start the motor when the pressure falls to 100 pounds and have it shut off when the pressure reaches 150 pounds-or it can be set to handle a maximum variation of five pounds-any combination of pressures can be had.

Will operate on any motor of 3-HP or less.
Price
D.P. $\$ 55.50$

## Electric Soldering Irons

These Calorized Soldering Irons are one of the most useful and convenient tools on our list of shop equipment. They are connected direct to your lighting circuit by means of a lamp cord and socket. They dispense entirely with the necessity for the usual gasoline furnace or fire pot. All that is necessary in the operation of these soldering irons is to turn on the switch and in a very short time you have a constant, steady heat. There is no trouble from getting it too hot or the usual difficulty from cooling off and having to reheat as is the case where fire pots are used. They have a cool wire wound handle.

We recommend one of these for every garage in America. This is one of those prime necessities.

WEIGHT

| Cat. No. | Dinm. of Tip in In. |  | Tip | Complete in $\mathrm{O}_{2}$. | Watts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 153506 | $\frac{1}{2}$ | 2 | oz. | 25 | 75-D.P. ${ }^{\text {\% }}$ | 7.92 |
| 153507 | 星 | $\frac{1}{2}$ | 1 b. | 28 | $100-$ D.P. | 8.32 |
| 153508 | 1 | 1 | lb. | 33 | 150-D.P. | 8.70 |
| 153509 | 14 | 2 | 1 b . | 423 | $200-$ D.P. | 10.00 |
| 153510 | 12 | 3 | lb. | 54 | 275-D.P. | 11.25 |

95 to 125 volts only.


This Magnetizer is a simple inexpensive device that is needed in every garage. It is rsed for remagnetizing or charging the magnets used on all types of magnetos.

It consists of a powerful electro-magnet of superior design mounted on a neat wooden base o.l which a switch and two binding posts are attached, as shown in the illustration.

A well charged six-volt storage battery is connected to the binding posts and on closing the switch the Magnetizer becomes a powerful magnet, and will recharge any permanent magnet used on magnetos.

Garages will find a need for this in overhauling and repairing ignition systems. It will put new life and vigor into old magnetos.

This Magnetizer weighs 8 pounds.
Size, $7 \times 4 \frac{1}{2} \times 5 \frac{1}{4}$ inches.
Price
D.P. $\$ 16.65$

Fitted with Special Attachment for Ford Mag. netos, complete
D.P. $\$ 18.90$

## Benjamin Ford Magnet Recharger

This device is designed for re-energizing the permanent magnets on the Ford magneto. It may be operated from five or six dry cells in series, or an ordinary six-volt storage battery. Economical in current consumption and simple to operate. A large percentage of the ignition troubles on the Ford car are due to the weakening or demagnetizing of the permanent magnets on the magneto, which results in a much lower voltage output. This is more noticeable and annoying at low speed.

By the use of this re-
 charger on magnetos in this condition, the latter can be strengthened to such an extent that nearly full efficiency is again obtained.

# The GIBSONGOMPANY <br>  

## VULCANIZERS

Hill-Stage Heavy Duty Vulcanizer



Improved Type No. 5A

Here is the ideal "plant" type Vulcanizer for the garage or repair shop doing a general line of vulcanizing. It is built by an expert in that line and every possible condition that might arige in the vulcanizing industry has been provided for. Its capactty, as you will note below, is far above any plant of equal size on the market. It performs its work quickly and in a highly satisfactory manner.

This machine has a capacity of tive casings, five tubes, one motorcycle tire, two bicycle tires, in one heat. It will bandle casings up to 5 inches, tubes of all sizes, motorcycle tires all siaes, blcycle tires $11 / 2$ inches and $15 / 8$ inches.

This vulcanizer is wbolly self-contalned. Has jacketed boiler of large capacity, with either gas or gasoline burner.

Equipment includes two tread molds for casings, finely machlined, of good depth and of proper thickness to insure a perfect cure; two inside molds; one large side mold; bead molds, both elfncher and Dunlop; surface-heating motorcycle molds and steam-jacketed bicycle molds; also expansion tank for air. Only four sizes of air bags required with this plant as against twice that number on most macbines of like capacity. On account of its compactness and large capacity and low cost of operating this is without exceptlon the best money-making plant on the market.

Guarantee-Each and every plant is guaranteed to do frst-class work under proper conditions and is warranted covering material and workmanship.

All machines are tested before leaving the factory and are shipped set up. Net shipping welght, 675 pounds.

Price
D.P. $\$ 300.00$
N. B,-This plant may be enlarged at any time by the use of patent lengtbening bars, and at a very nominal cost. Be sure to specify whether gas or gasollne type is desired.

Hill-Stage Revolving Tube Vulcanizer


This is an extraordinary plant-something every vulcanIxing shop bas been looking for. It is a Special Revolviog Tube Vulcaniger of large capacity and with every possible convenlence for quick handling of the work.

This machine carries a practical porcupine boiler, which at all times insures a rapid and uniform beat.

Notice the spider or tube carrier at the top of the central post. This post and carrier revolves, permitting the operator to handle his work without changing his position.

The capacity is extremely large-six automobile tubes at once or eigbt motorcycle and bicycle tubes at once.

This macbine can be operated with gas or gasoline or with steam direct from boiler. The burner used is of large capacity, can be throttled down and is under complete control at all times.

Equipment includes steam gauge and safety valve. When ordering be sure to specify whether gas or gasoline type is. desired.

Price complete as shown above........................... D. P. \$85.50
The necessity for an up-to-date vulcanizing plant in every town is reflected in the large number of these equipments weare distributing. Vulcabizing is one of the best paying industries ever developed. The growing number of automoblles on the road and the fact that every tire at some time or other needs vulcanizing shows the need for a plant of tho types shown bere in your city.

WHY NOT BE THE PIONEER? INSTALL A VULCAN. IZING PLANT AND ESTABLISH A PERMANENT BUSINESS.


Manufacturers of Macbilie Tools have recognized the necessity for produclog a Lathe for Garage and Repair Service, with the result that within the past few years a large number of tools of this type have been offered the trade for this class of work. Some of these machines are simply "worked over" models that bave been made to answer the varying need of the Automoblle Repair Shop. In very few cases have the tools been designed for handling the different kinds of work usual to the Garage, and the result has been that the Garage Man has been compelled to take that which has been offered him

We bave been banding Machine Tools for several years, and have had an opportunity to determine the requirements of the Automobile Garage and Repair Shop. We are familiar with the class of work they have to perform, and with this knowledge at band, we had our engineers inspect the many types of machines manufactured for this trade. We found that the product of the Rockford Lathe and Drill Company came nearer meeting the variable demands of the Automobile Garage and Repair Sbop than any otber tool offered for this purpose.

These Lathes are manufactured by Lathe specialists. They are designed and built along the most modern englneering lines. Thelr construction meets the rigid requirements of the public garage and machine shop. A careful reference to the specificatlons recited below will convince you of their adaptability to your business. The raw materlals are selected from the best, and these materials are all subjected to a chemical and pbysical analysis, and nothing enters into the construction of these machines that does not show an exceptionally high tensile strength. Workmansbip is of the highest character. Assembling is done by experts, and the finished product is subjected to a series of tests that would ruin most tools of the same size and type.

Your attention is directed to the extreme ruggedness of all parts; most machine tool builders slight their product by cutting down on materials, which weakens the entire structure and shortens the life of tbe tools, The Rockford line is extra heavy construction throughout, but the weight is 80 well apportioned and distributed that the most delicate work can be accomplished Tbe machines are neat in appearance and the flnish is the finest ever placed on any line of lathes.

We recommend the Rockford Lathes for Garage and Automoble Repair Service as being the highest grade possible to construct. Every tool is guaranteed covering operation, materinl and workmanship. This guarantee of the manufacturer is supplemented by our Guarantee as thelr Distributor.

## Specifications

Beds-Are of deep section with wide cross braces wbich together with proper distribution of metal eliminates all vi gether with proper distribution of metal ellminates all videsigned. Carriages are drilled so that taper attachment designed. Carriages are dril
Headstock-Are massive and firmly bolted to the beds. Bearings are exceptionally large, of a special composition metal, are carefully machined and hand scraped to fit spindle. Spindle is of high carbon steel, accurately ground and carefally tested for flaws.
Tallstock-Is well proportioned and of the off-set type which allows the compound rest to set parallel to the bed, and is provided with set-over for turning tapers. The improved method of clamping insures the tailstock being kept in position without slipping.
Carriage-Is especially heavy with extra wide bridge whict permits a lieavy cut without chatter. Has an extremely long bearing and is provided with self-oiling felt wipers. The thread-cutting findicator which can be disengaged when not in use ennbles the operator to catch any pitch when not in use enables the oplerator to catch any pitch countershaft belts to run forward, giving 18 spindle speeds.
Apron-Apron is of heavy design, with double bearing for all shafts, which is a very essential feature for a variable duty inthe. All genrs are of wide face and coarse pltch. and belng of bisb grade alloy steel, witbstand the constant utrain whthout breaknge and with the lenst wear. All feeds are reversed in arron und interlock with lead screw nut,
makimg it limposithle to enkage feeds abd lead serew at

Gear Box-When furnisbed as standard (without the quickchange mechanism) three quick changes of feed are obtained for each cbange of gearing through Sliaing Steel Gears and Hardened Steel Clutches which give a powerful drive and an unlimited range of feed for nll classes of work-a wonderful improvement over belt-driven feeds. This gear box simplifies thread cutting, all pitches being ohtained without the troublesome compounding of gears Which has niways been the greatest disadvantage of beltdriven band change gear Inthes. Remember this style gear box is stnadard equipment-No extra charge.
Quick Change Gear Mechanism-These lathes can also be furnished with a quick change Gear Mechanism as shown on the opposite page. This is one of the simplest quick change mechanlsms ever devised. All gearg are wide face, of coarse pltcb, cut from solid steel (not cast). Index plate fives forty standari changes of feeds and threads, obtained through sliding steel gears and barileved steel clutches controlled by two large convenient handles in connection with tumbler. Lead screw and feed shaft operate tbdependently, either being engaged by lever on front of box.
Countershaft-Double friction self-olling countershaft furbished with all inthes
Regular Equipment-Includes steady and follow rests, large and small face plates, wrenches and countershaft.
P-i-n-a-1-1-y-Buy a Rockford and be assured that you have the best lathe built for your work. They give double servlee.

## TKecibsoncominy



17-in. x 6-ft. Double Back Geared Engine Lathe Equipped with Quick Change Mechanism

This is the best heavy duty lathe manufactured; it has every desirable feature known to tools of this class. Every detail in design has been carefully considered, and there is no other lathe of this size built that will do the work that can be handled on this machine. Please note the specifications given below: the heavy bearings; the extra large piece it will swing; a 38 -inch automobile wheal can be chucked on this tool; for particular specifications covering details of construction and design refer to the opposite page. This tool is the masterpiece of the lathe builder. It is particularly recommended to the garage or repair shop desiring a high grade dependable tool capable of taking care of any work that may come into their shop.

Cut shows machine equipped with quick change mechanism. Can also be furnished with regular gear change mechanism.

## Lathe Dimensions and Prices



"Eeonomy" $\begin{gathered}\text { Engine } \\ \text { E } \\ \text { E-ft, and } \\ 14-i n, ~ x ~ 6-f t, ~ D o u b l e ~ B a c k ~ G e a r e d ~\end{gathered}$
This lathe is especially designed to meet the modern demand for a small heavy duty machine of sufficient weight and power to handle all work of small and medium character, and to do precision machining. Being very high grade and extremely accurate, it is particularly adaptable to the tool room, garage and repair shop.

The argument is sometimes advanced by purchasers buying machine tools that a certain machine, although it is not of the highest quality, still is good enough for their work. This is a mistake! There is no machine work which is produced for profit that can be economically done on an inferior machine. Machine tools are not purchased every day, and the prospective purchaser should bear in mind that while a machine might do good work while new, what he must have and should insist on is continuous service for many years and absolute accuracy without constant lathe repairs for a period commensurate with the investm...t.

## Lathe Dimensions and Prices

|  | 13 -in. x -ft. | $14-\mathrm{in} . \times 6-\mathrm{ft} .$ |
| :---: | :---: | :---: |
| Standard Lathe with Compound Rest |  |  |
| Lathe with Quick Ch | D.P. ${ }^{\text {D }}$ (1.042 | D.P. ${ }^{\text {D }}$ P. ${ }^{988.60}$ |
| Taper Attachment. | D.P. 146.64 | D.P. 146.64 |
| Draw-jn Attachment with one Collet | D.P. 90.24 |  |
| Extra for each | P. 1066 |  |
| Turret on Carria | 159.84 | DP 15984 |
| Turret on Shears | D. P. 280.80 |  |
| Power Feed to Tur | D.P. 133.20 | D.P. 133.20 |
| Fitting Chuck and Pl | +13.32 | D.P. 13.82 |
| Swings orer Ways | 14/9 in. | 164 in . |
| Swings over Carria | 8 in . | 92 in . |
| Distance between Centers 6-ft. Bed. | 37 in . | 36 n . |
| Size of Front Bearing | 2\% $\mathrm{x}+\mathrm{in}$. | $x 4$ in. |
| Size of Back Bearing | $17<\times 3$ in. | in. |
| Diameter of Hole in Spindle....... | $15 / 16 \mathrm{in}_{3}$ | $1 / i^{\text {in. }}$ |
| Centers Conform to Morse Taper.. |  | . |
| Diameter of Nose of Spindle | 21/8 in. | 21/2 in. |
| Number of Threads on Spind | f per in. | per in. |
| lam. of largest step. Cone Pulleg. | $81 / \mathrm{in}$. | $91 /{ }^{10}$. |
| Diam. of smallest step, Cone Pulley | 6 in. | $41 / \mathrm{in}$. |
|  | $21 / 210$. |  |
| Ratio of Single Back Gears........ |  | 12, to 1 |
| Ratio of Double Back Gea | 3.42 to 1 |  |
| Dlameter of Lend Screw | 11/ in. | 11/4 in. |
| Threads on Lead Screw |  |  |
| Tbreads, will cut per inch, standard | 4 to 46 | 96 |
| Feeds for each gear cb |  |  |
| Standard ${ }_{\text {Threads }}$ will eut per inch, Quick | 3 |  |
| Change will | 4 to 56 |  |
| meter of Tail Stock |  |  |
| Length of Carriag |  |  |
| Slze of Cutting Too | 1/2xi ln . | $5 \% \times 11 / 4 \mathrm{in}$. |
| re of Friction |  |  |
| rsha | 5 |  |
| Speed of Countersha | and 275 | 150 nnd 200 |
| Weigh | 1425 lhs. | 1700 lbs |
| pping | 1600 lbs . | Ap. 18501 lbs |
| eigbt, extra 2 ft . of | 180 lbs . | 240 lbs |

On account of the extraordinary conditions due to the European conflict, all prices are subject to withdrawal without notice and delivery cannot be guaranteed.

# The GIBSONGMPANY <br> MACHINE TOOLS 



No. 205 Sensitive Drill

This is an excellent little tool for small work. It can be used for drilling the ends of very long pieces, such as axles, propeller shafts, engine shafts, etc. It is sturdily built and has every convenience demanded in a tool of this type.

This drill is equipped with a square or upper table which swings around the column and can be tilted to any desired angle, while the round or lower table is adjustable vertically and fitted with a new and convenient centering device, a combination of three centers in one. The square table also has bracket or gauge for angular drilling, and is provided with stop pin and locking bolt.

The spindle is of high carbon steel, forged and ground, with ball-bearing thrust and is balanced by weight and chain.

Driving cone has four steps of liberal size, and the lower cone is provided with vertical adjustment to take up slackness of belt.

Stop collar at top of spindle will be found very convenient for duplicate work, or for drilling to fixed depths.

A separate countershaft is furnished with each machine, but no belt.

This is another of the excellent "ROCKFORD" produets, and a tool worthy of any shop.

## Drill Dimensions and Prices, No. 205

Price of machine
D.P. $\$ 153.30$

Number of spindles. $\qquad$ Swing ................................................................. 14 inches Distance from column to center of spindle.... 7 inches Maximum distance, spindle to table............... 42 inches
Size of square or round table........................11×11 inches
Vertical adjustment of head.............................. 9 inches
Vertical travel of spindle................................ $5 \frac{1}{2}$ inches
Diameter of spindle ............................................ \& inch
Diameter of sleeve......................................................... inches
Hole in spindle, Morse taper............................ 2 inches
Diameter of large step on cone........................ 58 inches
Diameter of small step on cone....................... $4 \frac{4}{4}$ inches
Width of belt on cone pulley...
13 inches
Size of tight and loose pulleys.
$8 \times 2 \ddagger$ inches
Speed of tight and loose pulleys................................. 450
Capacity of machine
Net weight, pounds. .375
Shipping weight, pounds

## The GIBSONGOMPANY $\bar{A}$

## CHAMPION POWER DRILLS

## Champion Sensitive Bench Drill No. 50 <br> For Light and Rapid Drilling



Adjustable Spindle Stop.
The Champion Sunsitive Bench Drill is exceerlogly $\begin{aligned} & \text { substantial, } \\ & \text { strong and } \\ & \text { Well built. }\end{aligned}$, and is particularly adapted for limht, ac curate and rapid drill. ing. in garages, patsbops. This Arill is drives exclusively by helt and with the nid helt and with the nid
of cone pulleys two separate and distinct speeds ean be furnisbed. The conntershaft is furnished with a belt shifter on the tight and loose pulley and the feell lever can be returbed without af the bit by a patenteal the lit by a patenten
automatic dovice io the reed lever hub. This drill is made in the best possible mannor and guaranteed in every respect.

SPECIFICATIONS
Double Flange Top Cone.
Tuble swinging 180 degrees horizontally.
End Thrust Ball Bearing.
Greatest distance from spindle to table $\geqslant 3$ inclies
Up and down movement of the spindle is inches.
Up and down movement of the table ? inches.
Diameter of table 8 inches.
Drills to center of 10 -inch cirele.
Drilling capacity it inch.
Size of tight and loose pulley $4 \times 13$ inches.
speed of driving pulley $550 \mathrm{R} . \mathbf{P}$. M.
Extreme height 258 inches.
Weight 65 pounds, fitted complete with star Chuck..D.P. 883.23
20-Inch Back-Geared Upright Power Drill Height of drill... .75 in.
Distance
between Distance between table and spindle ...... 27 in. Distance between spinAle and base ....494 in. Distance from column to center of spinumn to center of spin
dle
lle. Diameter of columin. 51 in . Traverse of table on column $\ldots . . . . . .18!$ in. Diameter of table .16 in . Diameter of spindle $1 ; \mathrm{in}$. Traverse of spinalle 8 in . Sixe of tight and loose pulleys $\ldots . . . .8 \times \geqslant 9$ in. Size of cone pulleys ( 4 step) $4,5^{3}, 7 \frac{3}{2}, 9 \times 2 \mathrm{in}$, face speed of driving pulleys Floor space required in
Horse power reguired
Weight-net


Crated weight 800
Hole in spindle bared to fit Morse taper No. 4. The S0-inch Back Geared Power Drill is a most thoroughly modern ant
up-to-date
Power Drill. It drills with perfect accuracy from the smallest bole up to 17 inch. The cbange from a plain drill to a back geared drill is done in an instant. Has eight speeds with three feeds-power feed, hand
wheel feell, and lever feed, The spindle is connterbalanced; has automatir stop with quick retura lever. Has quick action serew for raising and lowering the table.
Champion $90^{\prime \prime}$ Back Geared Upright Power Drill complete, less belts, weight 185 pounds, each ............. D. 1 . $\$ 18$ Champion 20 epright Power Drill with lev belts, weight feed, only not back-geared. complete less belts, weight
770 poands, each ...............................................4.

The Champion 14-Inch Upright Power Drill


The Champion 14-Inch Upright Power Drill is a gear-driven drill of the best and most improved construction. It combines the simplicity, speed and ease of operation of a sensitive drill with extreme power not usually found on drills of this kind.

All beveled gears are planed, guaranteeing a perfect and smooth running drill. The bearings are large and powerful, the upper bearing being split to take up wear when necessary. The spindle made of high carbon steel is graduated, ground and fitted throughout with ball bearings, and is counterbalanced by a weight in the hollow column.

The table is tilting and can be clamped permanently at any angle and with the angular bracket makes it very convenient for complicated work. It has a screw for raising and lowering the table, which is quick acting, the table remaining firmly where it is placed. All gears are carefully guarded.
Height of Drill. . . . . . . . . . . . . . . . . . . . . . . . . . . 69 inches Distance between table and spindle. ......... . . 34 inches Distance between spindle and base........... 45 inches Distance from column to center of spindle.... 74 inches Diameter of column......................... . . 4 inches Traverse of table on column.................. 27 inches Size of table............................. . $11 \times 11$ inches Diameter of spindle.............................. . . . inch Traverse of spindle........................... . $6 \frac{1}{2}$ inches Size of tight and loose pulleys............ $7 \times 21$ inches Size of cone pulley (four steps) 715, $6 \frac{10}{9}, 5 \frac{1}{6}, 818 \times 18$ face Speed of driving pulleys. . . . . . . . . . . . . . . . . 225 R. P. M. Floor space . . . . . . . . . . . . . . . . . . . . . . . . . . . $16 \times 18$ inches Capacity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 inch Horsepower required ............................ 1 H. Hole in the spindle bored to fit No. 2 Morse Taper.
The Champion 14-Inch Upright Power Drill, complete; weight, crated, 4,901 lbs. D.P. $\$ 111.11$

# Ghe GIBSONGOMPANY 

## POST DRILLS

## The Champion No. 101 Self-Feed Blacksmith Post Drill

Made With Ball Bearings



No. 101 Champion Post Drill is built to furnish an automatic self-feed drill at the lowest price possible. It has back gears and is a nicely made little drill with slotted lathe-turned table. It will drill to the center of a 12 inch circle. It has one speed for the crank. The spindle is ${ }^{3}$-inch in diameter. It drills holes up to 9 -inch and has an up-and-down run of 3 inches. The spindle is bored like Never Slip Chuck for $\frac{1}{2}$-inch straight shank drills, or when especially ordered, \& or $41 / 64$.

No. 101 Champion Self-Feed Blacksmith
Post Drill, weight 80 lbs .
D.P. $\$ 12.00$

## The Champion No. 91 Self-Feed Blacksmith Post Drill

Made With Ball Bearings
No. 91 Champion Self-Feed Blacksmith Post Drill is built with ball bearings with cups and cones made from tool steel and highly finished, which will save from 20 to 50 per cent. in power, depending upon the size of the hole being bored; the larger the hole the more power saved. It is a strong, stout-proportioned drill for a drill of this size. It has full back gears. The bearings of this drill are all ground from the solid metal and is built in the same perfect mechanical manner as the better grades. The slotted table is lathe turned. Drills to center of 141 -inch circle. Bores holes up to 1 inch. Spindle 1 -inch in diameter. Has an up-and-down run of 3 inches. Spindle is bored like Never Slip Chuck to take in $\frac{\lambda}{2}$-inch straight shank drill bits. If specially ordered will be bored to take in 8 -inch or 41/64-inch straight shank
 bits.

[^16]Extra for power
D.P.
5.55

## The Champion No. $951 / 2$ Self-Feed Iron Back Three-Geared Post Drill

Made With Ball Bearings


No, S5y Champion Self-Feed Ball Bearing, Iron Back, Three-Geared Post Drill is stocky in design. equipped with fron back, making it extremely rigid, and firm in conbection with doing beavier work.

It has three gears to give the same turning of the crank to the second speed as the first.

It has two speeds that turn the same direction.

All bearings are ground out of the solid motal.

No babbitt used on this drill.
Drills to the center of a 5 -inch circle. Drills from 0 to $1 t$-inch hole.
The End Thrust Ball Bearings save 20 to 50 per cent, in power and are made from the highest grade of lathe-turned tool steel.

Hus automatic self-feed.
It has lathe-turned and slotted ble.
Spindle $1 \frac{1}{6}$ inch in diameter, has p-and-down run of tbree inches.
Champion Drills are all machined jigged, therefore all parts are absolutely standard and interchangeable.

Spindle is bored like Cbampion "Patented" Never 811 p Cbuck to take in t-inch Straight Shank Drill Bits. If especially ordered, will be bored to take in $g$-inch or $41 / 64$-inch.
No. $95 \frac{2}{2}$ Champion Self-Feed Iron Back, Back Geared. Ball Bearing Fost Drill ....................................... . . . $\$ 24.44$
Extra for tight and loose pulley 6 -inch diameter. 9 -inch face for power ............................................... . . 85.55

The Champion No. 97 Hand-Feed and QuickReturn Self-Feed Blacksmith Post Drill

## Made With Ball Bearings

No. 97 Cbampion Automatic SelfFeed and Propeller Wbeel Hand Feed and Quick Return Tool with both speeds is a simple and very substantially built Drill

It bas quick-acting features and points of simplicity never found on a drill of this price before.

It has End Thrust Ball Bearings.
All Bearings are ground out of tbe golid metal.

No babbitt used on this Drilt.
Drills to the center of 10 -inch circle.

Drills holes from 0 to 13 inches. The Fid Thrust Ball Bearinas save 20 to 50 per cent. in power and are made from the highest grade of lathe-turned toot steel.

It bas latbe-turned and slotted table,

Stoindle $1 \frac{1}{k}$ inches in diameter: has up-and-down run of $5 \frac{1}{2}$ inches. Champion Drills are all machineflgged, therefore all parts are absolutely standard and interchangeable.

Spindle bored like Champlon


Extra for Tight and Loase Pulleys, 6 Inches
in thameter, and $9-\mathrm{in}$, face for power D.P. $\$ 0.55$

# The GIBSONGOMPANY 

## Lathe Milling Attachment <br> Motor Driven



This is the first Practical Milling Attachment ever devised. It can be attached to any lathe, and will do the various classes of work that can be done on a regular milling machine costing anywhere from $\$ 300$ to $\$ 700$. This attachment is simple, rigid, powerful and accurate.
By using the standard types of cutters commonly used on regular Milling Machines all classes of work can be performed, such as-

Woodruff Key-Seats.
Key-Ways.
Surface Milling.
End Milling.
Sawing.
Slotting.
Gear Cutting (when special index is attached).
The machine fits into the tool slide of the lathe, and requires no change of bed or apron.

Note in the illustration the heavy round column on which the sliding arm is carried. This arm is provided with vertical adjustment, thus raising or lowering the cutter, according to the work to be done.

The vertical screw connected with the arm permits micrometer adjustment. Cross and longitudinal adjustment is taken care of by the carriage and cross-feed movement of the lathe and consequently inaccurate work is impossible.

This machine is regularly furnished with a $\frac{1}{\frac{1}{4}} \mathrm{H}$. P. Motor, which with the ratio of gearing through worm and worm wheel of 72 to 1 gives ample power for all average work. Motor is attached to any lamp socket by cord and is then ready to operate. We can furnish motors of any current, and have in stock milling attachments fitted with A.C. and D.C. motors of 110 and 220 volts.

In ordering BE SURE TO SPECIFY KIND OF CURRENT USED AND VOLTAGE.

This entire machine is fitted with ball bearings. Complete with Motor, each................D.P، $\$ 244.00$

Turning, Threading, Cutting-off and Boring



Williamst Agrippa Lathe Tool Set
Can be furnished in sets or separately. Price of sets as follows. Tbese sets are identical with the engraving shown above:

| Set | Holder | For Lathe of |  |
| :---: | :---: | :---: | :---: |
| Aumber | Size | Sproximate | Pwing. Inches |

All holders are furnished with self-bardening gteel cutters.
For larger size sets, write our Machine Tool Department.
Prices on Single Holders With Cutter
Turning tool holders either right or left hand.
Price for straight shank same as off-set shanks.
Price for cuttiog-off tools same as turning tools.


|  | Each |
| :--- | ---: |
| D.P. | 3.66 |
| D.F. | 4.00 |
| D.F. | 6.10 |
| D.F. | 6.66 |
| D. | 8.44 |
| D.P. | 10.50 |

Prices on Boring Bars

| Number | Holder | Holder Capacity |
| :--- | :---: | :--- |
| Size Barg, Size |  |  |


| amber | Sise | for Barg, Size | Each |
| :---: | :---: | :---: | :---: |
| 80 | $3 / 6 \times 3 / 4$ | 1/4 to 5/4 | D.P. $\$ 7.65$ |
| 81 | $1 / 2 \times 11 / 4$ | 1/4 to $3 / 4$ | D.P. 9.80 |
| 88 | 5/6x $\times 13 / 6$ | \%/4 to 15/16 | D.P. 12.30 |
| 83 | $38 / 4 \times 18 / 8$ | $1 / 2$ to $11 / 8$ | D.P. 17.40 |

## Prices for Extra Bits or Cutters

Lathe Tools, per dozen....
Cutting-OIf Tools, per dozen
Cutting-Oir Tools, per dozen
Boring Bars, per dozen....
D.P. 15.50
$\begin{array}{ll}\text { D.P. } & 8.70\end{array}$

## FORGES

We carry a complete line of Forges. All modern Repair Shops and Garages have constant need for one of these appliances. Can be used for heating forgings, preheating parts before welding and for those purposes usual to all blacksmith work. The line we offer is the best on the market, strongly built, and designed with a view to giving long and efficient service.

## No. 931 Four-Leg Lever Forge With Hood

This Forge, while low in price, is very strong and durable. It is neat and symmetrical in design, is made of cast iron with 9 -inch pipe legs, which are firmly screwed into the hearth and are tied together with wrought iron bands to insure rigidity while in action.

The lever operates a segment gear on a ratchet, permitting a reverse motion while the drive wheel revolves rapidly, giving a steady blast.

Height of forge, 30 inches.
Diameter of hearth, 18 inches; $3 \frac{1}{4}$ inches deep.

Diameter of fan case, 8 inches.
Floor space over all, 20 inches


No. 931 by 23 inches.
Each...............................D.P. \$14.00

## No. 905 Portable Forge With Hood

This Portable Forge is of somewhat heavier design than the one shown above. The lever, supported on a swivel, follows the motion of the arm while in use. The clutch is of special design that insures positive action. The boxes are provided with oil
 cups and the shafts are correctly fitted into the bearings. The shaft is provided with ball bearings, which lighten the draft and save wear. The fireplace is separate from the hearth, which saves breakage in expansion and shrinkage of these parts.
Height of forge, 30 inches.
Size of hearth, 22 inches diameter.
Size of fan, 9 inches diameter.
Floor space over all, 24 inches by 36 inches.
Each. D.P. $\$ 23.40$

## No. 943 Portable Steel Forge With Mechanical Blower

This Forge is built with a hearth 22 inches diameter. It is a light, stiff tool, easily handled and extremely durable. A general allpurpose forge for all garage work.

The tuyere (blow) pipe is cast solid with the special clamp for the legs and forms a support at one end for the mechanical blower. The fire pot is heavy and has shaker, also ash outlet.

The gears revolve in a bath of oil and the blower is almost noiseless. This machine has a strong, steady blast and is adaptable for the heaviest class of work.

Height from floor, 30 inches.
Spread of legs, 32 inches.


Ne. 943

Diameter of fan, 10 inches.
Floor space, 36 inches by 41 inches.
No. 943 without hood, each.
D.P. $\$ 41.00$

No. 944 with hood, each
D.P. $\quad 46.60$

## No. 948 Square Steel Forge With Mechanical Blower

We suggest this forge where a large amount of work is handled. Attention is called to the very heavy construction, large hearth 24 x $24 \times 6$ inches, which will accommodate the largest pieces found in the average garage and machine shop.

The hearth and hood are of the very best heavy gauge sheet steel, well and neatly put together. The tuyere (blowpipe) is cast with a heavy firepot and has ash shaker and ash pit as shown. Is equipped
 with the same style high

Height from floor, 30 inches.
Diameter of fan, 10 inches.
Floor space, 31 inches by 39 inches. grade blower as shown in Figure 948.
No. 947 without hood, each
D.P. $\$ 48.80$

No. 948 with hood, each.
D.P. $\quad 54.40$

# The GIBSON OMPANY <br> MOTOR STANDS AND CYLINDER GRINDERS 

The Universal Motor Stand


This represents one of the most needed appliances in the garage and repair shop. It was invented by a practical repair man and is a device that will reduce labor and expedite the work of motor repair and assembling to a wonderful extent.

## The Acme Cylinder Grinder

The Acme Cylinder Grinder has been designed especially for grinding muitiple automobile engine cylinders that cannot be rotated conveniently on an engine lathe of average swing,

In combination with the lathe it possesses all the features of the bigh priced manufacturing grinder, such as longitudinal and vertical adjustment of the work, varlable speeds for rotation of the head, variable feeds for table travel, convenient arrangement for feeding the work to the wheel and micrometer readings for close adjustment. The travel of the lathe carriage feeds the work to the wheel, and the travel is regulated by feed gears at headstock end of lathe. On the carrlage of the lathe is mounted a flat plate in a vertical position to which the crank end of the cylinders is bolted. This plate has a vertical and cross-wise adjustment, which permits of readily centerlag the hole to be ground.


It will accommodate any size motor, two, four, slx or eight cylinder. By aid of the adjustable corner plates, the motor can be placed at any angle. It bas a large pan od which tools can be placed. The casters are large and by their use the stand can be moved about the garage at will. These casters can be locked at will and the stand is made immovable.

Is beavily constructed of seamless steel tublog and is very rigid.

This Universal Motor Stand will pay Its first cost in a short time. It is convenient for displaying motors when used in sales rooms for exbibition purposes.
Price
D.P. $\$ 53.30$

A countersbaft with pullegs of proper dimensions to give the best cuttiog speed is furnished as part of the regular equipment. The cut shows the detall construction.
Each
D.P. \$311.11

This includes counter shaft, six grinding wheels and diamond wheel dresser.

# Gibson Quality Combined Welding and Decarbonizing Outfit 





The only practical method of welding is by the use of oxygen and acetylene gas. . For many years engineers have been experimenting with this combination and the net result has been the development of equipment that gives maximum efficiency with minimum labor and expense.

In former years the usual method of welding has been by the use of forges or heating furnaces, in which the metal has been raised to the highest heat possible, and the weld was then made by the aid of hammers, either steam or hand.s This was both unsatisfactory and expensive. As a rule the metal cooled before the weld was finished and the result would be that a "pipe" or unwelded streak would exist at the point welded. With the oxygen-acetylene process the edges of the metal are melted under a heat averaging 6500 degrees Fahrenheit. As these edges are brought to the proper heat, new metal is melted into the molten mass and the whole allowed to cool. This, therefore, makes the welded parts as one piece, and it is impossible for flaws to exist at the weld with ordinary care in the handling.

The Gibson Quality Combined Welding and Decarbonizing Outfit is the highest developed equipment ever manufactured for this purpose. It represents years of experimentation and test. It has been simplified to the last degree and can be successfully operated by any average mechanic. It will weld any metal and will take care of the smallest kind of work or weld the heaviest engine base.

It comes complete in a neat carrying case, as shown in the above illustration. Everything necessary to perform any kind of welding is included. It is one of the greatest discoveries of the age and has proven a great money-maker for the garage or repair man.

The Gibson Quality Combined Welding and Decarbonizing Outfit is fully guaranteed, covering material and workmanship. A book containing full instructions for operating is furnished with each equipment.

This outfit has a carbon-removing attachment (decarbonizer) for removing encrusted carbon from automobile cylinders. This is, without doubt, the only practicable and scientific way to perform this work. This equipment is fully described on another page.

The Gibson Quality Combined Welding and Decarbonizing Outfin will do the work of a $\$ 1000$ plant. It is perfectly safe to handle, as every part is made extra heavy, and special precaution has been taken in the design of the torch and reducing valves to avoid back-fire.


# Gibson Quality Combined Welding and Decarbonizing Outfit 

OLEASE refer to the engravings shown on this page. The reducing valve is the most sensitive built for this class of work, at the same time it is extremely heavy for the purpose of taking care of the high pressures found in Oxygen tanks. The gauges are calibrated and accurate. One of these valves is used on the Acetylene tank and one on the Oxygen tank. They regulate the pressure coming from the tanks and used for the welding flame.

The Torch shown below is our own special design and the most convenient ever built. It has special regulating valves of the needle type. These valves are operated by the thumb, and both gases are regulated by the hand using the torch; it is unnecessary to lay down the welding rod to adjust the gas, as is the case with all other torches. These valves have right and left-hand threads and turn in the same direction-confusion in handling is therefore impossible. The head of this torch is so constructed that back-fire is impossible. By arranging a series of chambers, the temperature of the gases is preserved, but cannot ignite in the torch head. The tips are patented non-fusible copper, of a special composition, and will resist 7500 degrees of heat.

The outfit is used in connection with Prest-o-Lite or Acetylene Gas tanks, and compressed Oxygen tanks. Prest-o-Lite can be obtained in any section, and Oxygen can be purchased from us in special tanks which we sell direct to the garage and will refill, or they can be leased from the Linde Air Products Company, who have stations in all parts of the United States.

This outfit comes complete in every detail. Fluxes for handling different kinds of metals, and welding rods of iron, steel, brass and aluminum are included. It will do every class of welding and every up-to-date shop should have one.
$\qquad$
And the best investment you ever made.
Price . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . D.P. $\$ 77.70$

FLUXES FOR USE IN WELDING

| Cast Iron . . . . . . . . . . . . . . . . . . . D.P. $\$$. 88 |  |
| :---: | :---: |
| Drass | D.P. 1.00 |
| Copper | D.P. 1.11 |
| Aluminum (cast) | D.P. 4.44 |
| WELDING RODS |  |
| Cast Iron, ${ }^{\prime \prime}$ R Rod | D.P. \$ . 24 |
| Norway Iron Rod | D.P. 26 |
| Nickel Steel Rod | D.P. 53 |
| Mild Steel Rod | D.P. $\quad 17$ |
| Brass Rod | D.P. 1.42 |
| Phos. Copper Rod | D.P. 1.40 |
| Aluminum Drawn Wire Rod | D.P. 2.33 |
| Aluminum Cast Rod | D.P. 2.78 |


$\sqrt{5}$


# Gibson Quality Oxygen Carbon Remover 


 HE laborious method of scraping carbon from motor cylinders is a thing of the past. Science has finally discovered an efficient process ior removing all the carbon from cylinders, cylinder heads and valves, in a remarkably short space of time, and at very small expense. By the old method the work was laborious and unsatisfactory; it was impossible to get at all the parts of the cylinder, and the result was that much incrustation remained. Carbon is a great problem; it means less mileage per gallon of gasoline, it means loss of power, it means lubrication losses; and in fact any number of things that create trouble for the motorist.

The Gibson Quality Oxygen Carbon Remover has solved the most troublesome problem the motorist and repair man must face.

Do not confound this appliance with the many cheap outfits offered. The Gibson Quality Decarbonizer is designed along the most approved engineering lines.

A man can clean a four-cylinder car in thirty minutes. The usual charge is 75 cents per cylinder, or $\$ 3.00$ for the job. Price
D.P. $\$ 28.90$

Oxygen for use in connection with this carbon remover can be obtained from us by purchasing an Oxygen Tank, which when empty will be refilled at a nominal cost.

## Oxygen for Use in Connection with Welding Outfits and Carbon Removers

We carry a large stock of Oxygen Tanks in three sizes. These tanks are filled with the highest grade oxygen obtainable. Oxygen is obtained by three processes-extraction from the air, by precipitation of chem-
 icals, and by extraction from water. We handle the latter, as it is conceded the purest of the three. It contains no impurities whatever, and will give better results with less gas expense than either of the other kinds.

When a tank is purchased it is charged to capacity. When this gas has been used, the tank can be returned to us, charges prepaid, and a refill will be furnished. The tank remains your property and there are no rental charges as is the case when this gas is purchased from other concerns.

| 60 -foot Tanks | Each | Prices |
| :---: | :---: | :---: |
| Refills |  | D.P. ${ }^{\text {P }}$. ${ }^{\text {P }}$ |
| 100-foot Tanks | Each | D.P. $\quad 41.10$ |
| ${ }_{200}$-foot Ta | Each | D.P.D.  <br> D. 54 <br> D. 40 |
| Refills |  | D.P. ${ }_{8}{ }^{\text {d }} 90$ |

Prices of tanks include first charge of Oxyeen, Prices are f. o, b. Cincinnati.
If Oxygen is detivered from Indianapolis add $1 / 4$ cent per cubic foot net.
All tanks should be carefully tagged, giving name and address of party returning them.

## HYDROGEN LEAD BURNERS

Uned and Recommended by All Manufactarers of storage Batterien

These outlits are for use in storage battery work and are the same as used and recommended by the manufacturers of storage batteries.

Hydrogen gas produces the obly flame that is suitable for lead burbing, such as terminals on hatterles.

Hydrogen gas may be prodnced in generators by the action of sulphuric acid on xine, but aside from the tronble and waste the zas obtained is not nearly so pure as the water gas process hydrogen, which comes compressed in steel tanks.

Pure bydrogen enables the operator to work much faster and produce a better finished prodnct

The outfits shown on this name are sold complete and incude the hydrogen tanks as the pronerty of the pmrehaser

We furnish also with the tanks un oxygen regulator which may be used in conjunction with the hydrogen tank where compressel air is not available. The use of compressed oxpgen is not necessary, nor do we recommend its use except in cases where it means conventence. The tarage that is equipped with an alr mompressor out use the alr from this source with the hydrogen ontfit. Com pressed air may be purchased in loancd tanks of 50.100 and 200 euble feet capacity.


1 Hydrogen Burning Torch, 3 Tips.
$13-\mathrm{Ft}$. Pressure Hose and Connections.
Hydrogen Pressure Regulator.
Oxygen (or Air) Pressure Regulator,
1 sj-Cu, Ft, Hydrogen Cylinder.
55 Cu . Ft, Hydrogen.

## Price for above Outht

D. P. $\$ 37.80$

Reflls for above Cylinder consecutive hours of burning.

Full Cylinders shipped immediately upon receipt of bill of lading covering empty returned.


1 Hydrogen Baraing Toreh, 3 Tigs.
13-Ft. Preanure Hase and Connections. Hydrogen Preswure Regulator.
1 Oxygen (er Air) Pressure Rpeulater
1 200-Ft. Hydrogen Cslinder,
500 Cu. Ft. Hydrosen.
Price for above Outht
D.F. 870.00

Keflls for above Cylinder
This Cylinder contains sufticient Hydrogen for 26 to 40 consecutive bours of burnins

Full C'ylinder shippeal wpon receipt of bill of lading covering empty returned

## Accessories and Parts for Ford Cars

In the following pages we have shown only such accessories as our seasoned experience dictates as suitable for their respective uses.
Our far-reaching and unlimited resources enables us to obtain the pick of the market and to name the lowest prices consistent with high quality.
In this section as in the rest of our Catalog we present for your consideration only the best of a kind, and we have eliminated the undesirable and freak goods from our pages.
Each and every article herein illustrated has received the approval of our testing and engineering departments, and while similar goods may be obtained at lower prices in some instances, we request that it be borne in mind that quality has received first consideration in our selections.

THE GIBSON COMPANY

# ACCE 



## No. 0201. Panel Top Commercial Body FOR FORD CARS ONLY

A commercial body that, in addition to its splendid characteristics as a delivery vehicle, will advertise any business in a high-class, dignified and thoroughly pleasing manner. Especially adapted for department stores, cleaners, bakeries, laundries and florists. In fact, it fills the bill for all classes of merchants who require a highgrade, durable and thoroughly weather-proof body for their deliveries.

The lines are carefully designed with a two-fold purpose in mind, i. e., SERVICE and APPEARANCE. We stand back of the Service idea with a binding guarantee that has been established in all our dealings with the trade. So far as Appearance is concerned, we leave the decision to you.

The big field for the commercial body lies in the increasing number of cars that are getting to be "old machines" every year. In many cases a scarred or out-of-date body or a shabby top constitute the only excuse for the discard. Frequently the chassis and engine are good for several months-maybe years-of service. In such a case the purchase of a commercial body to meet the requirements of the business for which it is intended is one of the best paying "economies."


#### Abstract

BODY-Solid side panels of heavy gauge sheet steel, fully slatted on the inside. Glass window on either side of the driver's seat, hinged at the top and can be fastened up against the roof. Deck is covered with black oil duck. Double doors of steel are furnished in the rear as lllustrated, with two large oval glass windows. This body is built on our standard sill construction, ready to fasten on a Ford chassis. All corners are securely braced so as to prevent racking. Seat is full width and covers a box that can be used for tools, etc. Stationary fore door on driver's sifle regular on Nos, 0201 and 0202,


THIMMING-Full width cushton of good artiticial leather. Folding lazy back on driver's side of seat.
PAINTING-Dark green witb neat striping, regular. Any lettering desired can be furnisbed at extra cost.
LOADING SPACE-(Back of seat) 43 incbes wide, 56 incbes long, and 56 inclies high,
SHIPPING WEIGHT-Knocked down and crated under 34 inclies, s00 pounds.
EQUIPMENT-Includes fore door on driver's side, rear lamp bracket, toe boards and irons, all frons necessary for attaching to chassis.taching to chassis.
No. 0201-

相 $\$ 70.00$
D.P. $\$ 122.22$
No. 0200 -Same style body as No. 0201 except has no fore door on driver's side. Price
D.P. \$122.22
No. 0202 -Same style body as No. 0201 except with high end gate and screen combination furnished in the rear instead of the double doors. Roll-up curtain of heavy black duck. Price.
70.00
D.P. $\$ 122.22$

## EXTRAS

Applying on Our Line of Commercial Bodies

Stationary fore door on driver's side, price. . . . . . . . . . . . . . $\$ 2.00$ D.P... $\$ 3.33$

Special rear fenders, per pair, price........................... . . . 7.00
D.P... $\$ 12.22$

Built in windshield on top bodies, price. ................. 11.00
D.P.. $\$ 20.00$

Windshield braces, price............................................ . . 50
D.P... $\$ 0.77$

1915-16 Filler brard, price. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.00$
D. P... 83.33

Painting other color than regular. Nos. e800, 0201. 020z,
price... .......................................................... 5.00
D.P... 88.85

Painting other color than regular, Nos, 0205, 0207, price... 3.50
D.P... \$ $\$ .11$

Storm eurtains, price.................................................... . . 5.00 D.P... $\$ 8.23$

COMMERCIAL BODIES FOR FORD CARS

For List of EXTRAS
See Page 317

## No. 0205. Commercial Body with Express Top <br> yor ford cars only

This express top commercial body is one that can be used by a wide variety of business men. Grocers, butchers, plumbers, gas and telephone companies and practically any kind of business that calls for general trucking or delivery car.

TOP-Heavy, well-ironed, six-post express top. Special heavy brace irons designed to withstand the rough driving that's bound to come to a car used for commercial purposes. Deck is full-slatted and covered with heavy black auck. Roll-up curtains, sides and back, of same material. Separate roll-up curtains with large mica lights on either side of driver's seat.
BoDy-Constrncted on our standard frame for Ford chassis Sills and sub-sills of carefully selected and seasonml bardwool. Will give the maximum of CARRYING STRENGTH without adding unnecessary welgbt to your car. Every precaution is taken in its construction to provide a body that will "stand the racket" of commerclal use. Panels are 10 inches bigh inside. Heavy flare boards regular. Seat is full width.

TRIMMING-Full width eushion of good grade artifial leather. Folding lasy hack on driver's side of seat.
PANTING-Dark green, regular. Any lettering desived can be furnished at extra cost.
LOADING SPACE - (Back of sent) $43 x 63$ inches. Full widtb vear end gate with chains enables one to adjust the body to practically any style of load.
sHIPPING WEIGHT-Knocked down and crated under $3 t$ inches, 725 pounds.
EQUIIMENT-Inclurles rear lamp bracket, toe boards and frons, all irons necessary for attaching to chassis.

No. $0205-$ As shown above. Price.
. $\$ 55.00$
D.P. $\$ 95.55$

No. 0206-Same style body as No. 0205 except has screen sides of heavy wire and no flare boards. Price. 62.00 D.P. $\$ 106.66$

These commercial bodies have both town and country sales possibilities, and among the Ford owners in your town and community you have a profitable field of prospects ready for you. Many Ford cars get ready for the "scrap heap" every season-so far as use by passengers is concerned. The chassis is still ready to WORK.

The problem of the owner is to get a suitable body-at a reasonable price-so that he can get some use out of the chassis of the car.

In this line you will find a good variety of bodies that will enable you to supply his needs at from $\$ 35$ to $\$ 70$, and you'll make a nice profit on the deal, too.

Prompt delivery can be made after we receive your orders. The thing to do is to get some samples on your floor right now to sell from. The amount of money necessary for two or three of these sample bodies is smalland would be a mighty wise investment.

The models are designed by men with years of experience in the building of commercial vehicles and they are thoroughly familiar with the construction and capacity of the Ford chassis. You'll find all of these bodies especially well built so as to more than stand the hard treatment that's coming to them in commercial use.

# ACce 

The commercial bodies and trailers shown on these COMMERCIAL BODIES FOR FORD CARS

No. 0207. Open Commercial Body
FOR FORD CAKS ONLX
No. 0207
Price. . $\$ 35.00$
D.P. $\$ 60.00$

For List
of EXTRAS
See Page 317

A business body for Ford chasses that will give the maximum of service, and the large quantities in which they are produced enables us to make a price that is particularly reasonable. Farmers, dairymen and transfer men can use this body to good advantage.

BODY-The body is constructed on our standard hardwood frame, flesigned to fit any model Ford classis. The big fidea that we have had in mind is to produce STRENGTH, Witbont adding unnecessary WEIGHT. Pabels are 10 inches high, insisle. Corners, metal bound and the entire body exceptionally well ironed and braced, Floor protected by Iron strips running lengtbwise. Five-inch flare boards with beavy elge irons and braces, regular. Special seat with hand ralls.
TRIMMING-Full width cushion of good grade artificial leather. Folding lazy back on driver's side of seat.

PAINTING-Dark green, regnlar, Any lettering desired can be furnished at extra cost.
LOADING SPACE-(Back of seat) 43 x 63 Inthes. Full width rear end gate with chains enables one to adjust the body to practically any style of loat.
SHIPPING WEIGHT-Crated under 34 inches, 425 pounds.
EQUIPMENT-Includes rear lamp bracket, toe boards and irons, all irons necessary for attacbing to cbassis.

No. 0208. Slip-on Body FOR FORD ROADSTER
A body designed to meet the business requirements of such people as farmers who want to take produce to market or implements to the shop for repairs, salesmen who want to carry sample cases or machines with them, dairymen, oil field workers, plumbers, telephone repairmen, cleaners, butchers, or any business that calls for the carrying of small packages.

SPECIFICATIONS
A mighty well-built body, with loading space $3 t$ incbes wile by 59 iuches long, Side panels are $8 \frac{1}{\text { inches high in. }}$ side, and topped with hardwood rails. Outside body braces. Five-inch tlare boards, regular. Drop end gate as illustrated. Painted solld black. Easily put on or taken off as it weighs less than 100 pounds. less than 100 pounds.
Shipping weigbt, approximately 175 pounds. The necessary bolts for attaching to the car, also special lamp brack: et, are included with each body. No chavge of rear penders is necessary for this style body.

No. 0208
Price. . $\$ 12.00$
D.P. $\$ 18.33$

## AUTO TRAILERS

The trailer offers a splendid new field of usefulness for the automobile that would frequently have to be "tied up" in the garage when the owner needs a conveyance for delivery or produce hauling.

With a trailer be can make his automobile WORK, without damaging the car ftself by piling in boxes, bags, crates, milk cans, etc. In other words, when be has "rougb work" to do in the transportation line, and wants to do it quick-HOOK ON A TRAILER.

With plain bearings and steel tires. Price. ......... $\$ 80.00$
D.P. $\$ 151.11$


No. 0300 . Four-Wheeled Traner

With plain bearings and rubber tires. Price
p.P. 8177.77

With ball bearings and rubber tires. Price $\ldots \ldots . \$ 110.00$ D.P. $\$ 202.22$

With T. R. bearings and rubber tires.
Price ..... $\$ 125.00$
D.P. $\$ 23.33$

Extra for spring wagon seat. Price
$\$ 5.59$ ${ }^{\text {D.P. }}$ Extra for spring wagon shafts. Price D.P. $\$ 11.11$

Extra for jack clips for shafts. Price
D.P. $\$ 1.11$

SPECIAL GEAR FEATUKEX-Heavy hickory reach ironed on two sides. Extra heavy fifth wheel used on both front and rear axle. Cross-truss rods of special design are used to keep botl front and rear wheels of the traller in perfect keep both front and rear wbeels of the trailer in perfect and permit of a complete turn in a circle with a diameter of about 25 ft .
WHEELS-Sarven patent with 1 -in, spokes and 14 -in, riveted rims, No, 13 flange, specinily high and riveted between every spoke. 32 in , bigh. Absolutely best grade bickory. $5 / 16-i n$. oval edge steel tires regular.
CONNEOTION-See illustration above.
PAINTING-Dark greed.
CATACITY-About 1.200 pounds,
SHIPPING WEIGHT-About 725 pounds.

BODY-45x90 inches outside: 9 -in. panels with bardwood rails. Three extension cross-8ills with outside body braces. Specially well ironed throughout, Carefully selected and sensoned bardwood used for sills. Floor boards run lengthwise and are protected with wear irons. Drop end gate front and rear with top edge protected by a beavy strip of steel. Good heavy flare boards, well braced, can be furnished at extra cost.
sPRING8-Triple Hayes springs, front and rear.
AXLES-1!-in. witb extra heavy hickory caps and heary clips. Furbisbed regularly with lobg distance wagon spindles. However, if the serrice expected of the traller is poing to
be heavy or if it is to be pulled at excessive speed, we recommend ball- or roller-bearing spindles which we can furnish at extra cost.
TRACK-Narrow (4 ft. 8 in.) or wide

## No. 0301. Two-Wheeled Auto Trailer

BODY-40x84 Inches outsifle, with 10-inch panels. Hardwood sills and hardwood rail on top of panels. Bottom of body protected by iron strips runining lengthwise. Drop end gate, front and rear. Body strongly built, extra well ironed and braced throughout. 5 -incb flare boards can be furnished at extra cost.

SPRINGS- 1 -inch, 5 and 6-leaf platform springs, bung under axle.
AXLE- 1$\}$-Inch, coached.
TRACK-Narrow ( 4 feet 8 inches) or wide ( 5 feet 2 inches).
Narrow furnished unless otherwise specitled.

BEARINGS-Furnished witb common long distance wagon spindles regularly, Ball- or roller-bearings at extra cost.

WHEELS-Sarven patent with $1 \quad 3$ - 8 -inch spokes and $1 \nmid$-inch riveted rims. No. 13 flange, specially bigh and riveted between each spoke. Absolutely best grade bickory, 32 inches high. 5-16-inch oval edge steel tlres regular.
CONNECTION-Special swivel hitch for attaching to the rear spring of Ford car is regular on this trailer. Simple and easily manipulated.
PAINTING-Dark green,
CAPACITY-About 800 pounds.
SHIPPING WEIGHT-About 550 pounds.


A special hitch can also be farnished, cor attaching either of these trallers to the frume of Over and cats this places all the strain on the frame of the car and absolute narety to the axte of the car is guaranteed, Price
D.P. $\$ 5.55$

With plain bearings and steel tires.
Price
D.P. $\$ 71.11$

With plain bearings and rubber tires.
Price
.$\$ 48.00$
D.P. 82.22

With ball bearings and rubber tires.
Price
0.00
D.P. $\$ 100.00$

With Timken roller bearings and rubber tires. Price. . $\$ 65.00$
D.P. $\$ 111.11$

# ACce soko iel <br> <br> SUMMER AND WINTER TOPS AND RECOVERINGS 

 <br> <br> SUMMER AND WINTER TOPS AND RECOVERINGS}

## Gordon Convertible Summer and Winter Top



Ford Touring 1915. 1916
With side walls attached making a completely weather tight body.

Absolute protection from rain, snow, sleet and cold. but Fasily converted into an elegant one-man top within ten minutes' time,

The Gordon Convertible Summer and Winter Top is just what its name implles, either a leantiful one-man top for summer or an ahsolutely cold-proof top for winter, easily changeable from one to the otber within ten minutes time.

The sifle walls which are used to convert the open oneman top into a winter top are arranged in one piece and fastened on with but few fastenings so that they can be attached in a very few minutes.

No limousine or sedan top huilt especially for the Ford ear eguals the Gordon Convertible Top in appearance.

Made with the heautifnl rounded effect in the rear and finished with the finest finish as used on bigh class jobs it presents a very handsome apnearance.

## Price

$\$ 55.00$
Price. .D.P. 897.77

Gordon Convertible Summer and Winter Top


Ford Runabeut 1915, 1916
With side walls attached, making a completely weather tight bodx

The side walls can be getached or pat on in a very few minntes and are arranged with very few fastenings, thos making it easy to put on or remove the side walls,

It is not necessary to put on a great number of frons or to make any alterailons in the body. All fastenings used ore attached to the side walls berore belag shipped, thins making it easy for anyoue to attach very ensily and quickly.

These side walls are made of a fine hard wood, finished With a beautiful black lustre, the same as on tine automobile bodies and are not made of cheap metal stampiags, which are bound to rattle and prove unsatisfactory.

The glass is so arranged that the sash can be raised or lowered, thas affording ventilation whenever desired.

Note the fine, clear view which these side walls afford to both the driver and the occupants of the rear seat.
Price
$\$ 55.00$ Price. . D. P. $\$ 99.77$

Gordon One-Man Top


Gordod One-Man Tops are exactly what the name implies: a really "one-man top" easlly operated by one man.

Gordon One-3lan Tops are not like the ordinary top. With simply the obe-man feature, but are made with a bean. tiful rounded effect in the rear like on tops for higb priced cats.

The Gordon One-Man Top for Ford rars far excel in appearance aby other top offerci on the market, baving in addition to the counded effect in the rear, distinctive lines,

Instean of using the ordinary straps in the front at the wiml shield, a pair of especiallx made steel rods are furnished, which attach to the wind shimd and the body without any extra preparation and by using the original bolts and fastenextra predaration and by using the oricinal bod

The Top is fastened to these arms by means of a thumb serew, similar to the mettond used on all higher priced cars. This gives the Top a rigidity which cannot he had by auy other means and prevents rattling and unnecessary noise.

Aention year and bomel when ordering.
No. 1500 Ford Touring Car One-Man Top, made of rubber.
complete with regnlar side curtains ........................ . . D.P. St 4.4

No. 1501 Ford Touring Car One-Man Top, made of rubber, complete with Jify side curtains . . . . . . . . . . . . . . . . . . . 28,00 I. P. $8.0 .(0)$

No. 15e? Ford Touring Car One-Man Top, made of mohair. complete with regular side curtains ............. 25.00 D.P. 844.4

No. 150 F Ford Touring Car One-Man Top, made of mo-
hair. complete with Jiffy side curtains ............ 98.00 D. P. \$50.00

## Gordon Recovering for Ford Tops



Note the change in appearance in the old top by using a Gordon recovering. Makes the ton like new.

There is no need for a new top when your bows and padllings are in good sbape; simply put on a Govilon Necovering and your top will be hike new,

Gordon Recovering for Ford tops furaished for any 1912 1913, 1914, 1916 and 1016 Ford Touring or Runabout,

Complete outhit consists of roof, quarter, backs, stays and back cursain. which are made up of the same grade and cuality of rubber as nsed in the origioal Fors top. and come complete with all necessary fastenings, ready to put on.

Dention year and model when ordering.
No. 1410 Recovering for Ford Touring Car Top ......... 810.50 D.P. $\$ 15.55$

No. 1411 Recovering for Ford Runabout Top

## IMPROVED GENEMOTORS

The Improved Genemotor
Electrie Starting and Lighting system for Ford Cars Built by the Geberal Kleetrie Compans


During 1914 and 1915 over two hundred types of starting devices for Ford Cars were offered. Some of these were mechanical and some electrically operated. In the latter year the market was flooded with numerous electric systems-in every case they operated through a chain drive, which in the end gave trouble. The Ford car is unlike any other Automobile built, in that it has no fly-wheel and for this reason the element of compensation through engine momentum presents a pretty problem-one which most engineers overlooked when designing these various Ford Electric Starting and Lighting Systems. In consequence of this peculiarity, chain breakage, noise and various other attendant troubles followed the installation of these Systems.

The General Electric Company, who are recognized as being the largest and most advanced manufacturer of electrical equipment of all kinds, have been building starting and lighting apparatus for Automobiles for many years, and have the largest department devoted to that class of equipment extant. They built and marketed a chain drive system in 1915, one which had many features not found in other Chain Driven Systems. That Genemotor found a ready sale, and was, without question, superior to any other starter of this type. Thousands are in daily operation and giving uniform satisfaction.

In line with the usual progressive policy of the General Electric Company, they sought a method that would eliminate the chain entirely, and early in 1915 made several types having different forms of gear drives. They finally perfected the system illustrated at the top of this page-a Unit that is without exception the most perfect, most simple, most efficient, most silent, and most economical ever devised. It is TEN YEARS AHEAD OF EVERY OTHER ELECTRICAL FORD STARTING AND LIGHTING SYSTEM.

The GENEMOTOR is installed on the Ford car without the least change in any part of the chassis, engine or body.

THE EXCLUSIVE AND OUTSTANDING FEATURES OF THE GENEMOTOR ARE:
IT IS SHAFT-DRIVEN-There are no chains or complicated adjustments. No spring pulleys. No grinding. No noise.

IT IS A TWELVE-VOLT SYSTEM-Every engineer will tell you of the advantage of high voltage in small electrical units. It lessens the weight, requires lower speeds and takes less power to operate.

IT IS A SINGLE-UNIT MACHINE-This reduces complications to a minimum. The winding is of special design and gives exceptionally high starting torque. It will spin a Ford motor at 175 revolutions per minute in the coldest weather.

IT CHARGES THE BATTERY AT LOW CAR SPEED-This system starts charging the battery at a speed of 8 to 10 miles per hour.

IT IS GUARANTEED-With the largest manufacturing facilities for material of this class and a reputation that is world-wide, the General Electric Company guarantees this system against defects or inoperation. This insures positive SATISFACTION.


# ACCFERSOSO RARSIES <br> FOR FORD CARS 

The Improved Genemotor
Electric Starting and Lighting System for Ford Carn-Buitt by the firneral Elvetric Compans
In the Improved Genemotor a gear drive has been substituted for the silent chain previously used. This does away at once with the objection that has sometimes been raised to the large number
 ing wear and stretch, requiring adjustment from time to time.

Again, by reason of improved electrical design, the Genemotor has been materially reduced in size and weight, while preserving the same starting torque.

Another advantage is found in the fact that the Genemotor cuts in, or commences to charge the battery, at 8 to 9 miles per hour, which will insure a charged battery even when the car is run at a reduced speed.

The smaller diameter of the motor permits it to be mounted at the left rear side of the engine, thus carrying the weight farther back than heretofore, and in no way interfering with circulation of air around the cylinders.

The driving shaft of the Genemotor which is provided with a flexible coupling, extends diagonally forward to a bearing at the front of the engine. This bearing with its supporting casting is substituted for the cam-shaft cover of the standard Ford engine. Mounted on the end of the Genemotor shaft is a "Fabroil" pinion having skew bevel teeth of special design which engage with the teeth of a gear mounted on the crank shaft within the nose pan of the engine. The "Fabroil" material of the pinion, together with the special form of teeth employed, insures efficient and quiet operation at all times, together with long life. A metal gear cover is provided to protect the gearing from dirt or other obstruction.

The Genemotor itself is mounted on a simple bracket secured to the engine and chassis with a strap clamp, and can be readily removed, if necessary.

The flexible coupling compensates for any slight misalignment between the motor shaft and the driving shaft, and also absorbs any uneven impulses transmitted from the crank shaft when the Genemotor is being run as a generator.

Quiet operation is a notable feature of the Gear Drive, and the fact that no adjustment is necessary after the set is
 once installed is a valuable feature.

The battery is placed on the right running board as heretofore, but the starting switch has been located under the footboard to be operated by pressure of the heel. This does away with the push rod on the dash and removes the switch from under the hood, giving a cleaner cut appearance to the outfit.

The reverse current relay is mounted in the switch casing and is very accessible. This relay is of improved design and cuts in at substantially the cross-over point of the Genemotor.

The lighting switch is mounted on the steering post and gives the following combinations of lights:
Off; headlights in multiple and rear light; headlights in series and rear light.
The set has been especially designed with a view to facilitating its assembly on the car without the necessity of delicate adjustments. A gear drive of this character is unique and original.

Note the general clean-cut and compact makeup of this system. It is of small size, is installed with much greater ease than any other type, gives higher efficiency, there are no adjustments necessary after it is installed, operates with absolute silence, and presents so many marked improvements over the chain-drive type that a comparison is impossible.

The Genemotor is furnished complete with Storage Battery, Battery Box, Lignting Switch, Sprockets, and wiring cut to length. It is very easy to install, the average time required by a good workman being four hours -in some cases longer, depending on the condition of the car.

This is the ONLY PERFECT, SUCCESSFUL STARTER, and is guaranteed by the largest manufacturer of electrical equipment in the world. It fills a demand that has always existed since the first Ford car was built.

We are distributors for a large area and there may be open territory in your section-better write or wire us at once.
Genemotor, f. o. b. factory, each.
$\$ 85.00$
Each.. D.P. $\$ 160.60$, f. o. b. factory.

Weed Anti-Skid Chains



The only absolute insurance against skidding on all kinds and conditions of road. The cross chains being made of a special steel and smoothly welded give long service under the most exacting use.

Weed Chains creep about the tire in use and consequently do not injure the casing or the wheel.

Avert the possible collision or skid by putting on Weed Chains on slippery roads or streets, whether you use non-skid or plain tires. Carry them in your car when touring; they will give your tires a grip on muddy roads.
$30 \times 3$ Per pair ..... 84.50
$30 \times 3 \frac{1}{2}$ Per pair ..... 5.00
$31 \times 4$ Per pair ..... 6.00
Rid-0-Skid Tire Chains


Rid-O-Skid Tire Chains are offered as an anti-skid device to meet the requirements of those to whom initial cheapness is the chief consideration. They are necessarily of inferior quality-are not made as carefully or of diamond-hard material as are Weed Tire Chains. If you ignore the maxim "Initial Cheapness is False Economy" and purchase Rid-O-Skid Chains instead of Weed Chains, you will at least be much wiser than the motorist who insists upon taking chances by "depending on rubber alone," and later experience will show you that Weed Chains give much greater mileage and are, therefore, cheaper in the end.
$30 \times 3$ Per pair . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.50$
$30 \times 31$ Per pair. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.65
$31 \times 4$ Per pair.
2.90

## Falcon Casings and Tubes for Ford Cars



We list bere the particular sizes and styles of casings and tubes suitable for Ford cars.

The front wheels are smaller in size than the rear, so that each pair of wheels require their own size of tives. A great many drivers are changing to the $30 \times 3 \mathrm{z}$ size in front, enabling them to use one sixe casing on all wheels, while others are using oversize tires on account of severe service such as on trucks, etc,

We give on this page just the sizes used on Fords with standard wheel equipment, their respective overslzes and the sizes used with $30 \times 32$ wbeels all round.

The Falcon Tires bave proven their superiority to all others by reason of service over a term of years and are offered to the critical tive burer as the most economical tires to use.

| Sise |  | Plain | Non-Stiol |
| :---: | :---: | :---: | :---: |
| $30 \times 3$ | Front wheel sixe | \$11.70 | \$18.50 |
| \$1x31 | Oversize for front wheels | 16.45 | 1890 |
| $30 \times 31$ | Hear wheel size | 15.20 | 17.00 |
| $31 \times 4$ | Oversize for rear wheels | 23.85 | 27.45 |
|  | FALCON TUBES | Gray | Red |
| $30 \times 3$ |  | \$2.80 | 3.20 |
| 31x 3 3 |  | 3.45 | 53.95 |
| $30 \times 3$ ? |  | 3.35 | 3.85 |
| $31 \times 4$ | ..................................... | 4.05 | 5.30 |

## Falcon Combination Inner Tubes

## FOR FORD CARS



These tules are made of a correct size to fit either the front or rear whecls of the Ford car, eliminating the necessity of earrying tubes of two sizes. Falcon tubes are of the very finest quality rubber and are made extra heavy to withstand bard usage and the chance of blow-outs.

In proflucing the Combination Ford Tube we have borne in mind the usual hard service which Ford tubes are frequently called upon to glve and have built them to give satIsfaction and maintais the good reputation of Falcon products.
Falcon Gray Combination Tube, each
.83 .91
Falcen Red Combination Tube, each . . . . . . . . . . . . . . . . . . . . 3.80

# ACCESORORIES 

## VIBRATORS, COILS, MANIFOLDS AND TIMERS

## Connecticut Master Vibrator


"The Vibrator of Quality"

The principle used in the operntion of the Connecticut Master Vibrator is the same as with our other type of master vibrator coils, but the method of attacbing is different. With the Connecticut Master Vibrator the coil is concealed bebind the dash, only the flush switch being visible, making a very neat appearance and not obstructing the dasb as with some of the otber types. This vibrator will give the same satisfaction as our other types of vibrators: that is, it unifies the spark control, insures proper timing and gnarantees a uniform current fow from the magneto to the spark plug.
Each
$\$ 9.00$
Each..D.P. \$12.21
Doz. lots, each. . D. P, $\$ 11.10$

## New York Master Vibrator

Smaller in size than our high-duty type, but the same care is taken in its construction. Particularly suitable to Ford cars and is guaranteed to give satisfactory service. Handsome mahogany case, ready to attach to dash and may be wired to ignition system without cutting dash.
Each
$\$ 8.00$
Each. .D.P. $\$ 11.11$
Lots of 12 , each. .D.P. $\$ 10.55$


Gibson Quality High Duty Master Vibrator


The Gibson Quality High Duty Master Vibrator combines all the excellent reatures of all other vibrat. ors. It corrects the variable condition in ignition, insures proper timing, and constant, unfform flow of eurrent to the spark plugs. Gennine, bardened Iridium rlatinum points and special bigh-duty condensor used insuring good hot spark with a resulting increase in motor power. Built in handsome, polished mahogany case with polished brass brackets to attach to dash.

Special price, each
Each. .D.P. \$16.66
Lots of 6, each. . D.P. $\$ 15.55$


No. bosem four wire manifold in metal conduit, complete
with spark plug wires, each .........................................
Ench, D.P. $\$ 1.33$ In toxen lots, each., D, P, $\$ 1,22$
No. Jesol. four wire manifold in flexible loom, complete
with spark plug wires. each ...........................
Eacb..D.P. $\$ 1.23$ In thozen lots, ach..D.P. $\$ 1.28$......... . 1.00 No, 6089 M tive wire manifold only, metal covered, each,.. ,85 Fach..D.P. $\$ 1.11$ In dozen Iots, each..D.P, \$1.4nt No. 6610 M four wire manifold only, metal covered, each... .75 Finch..D.P. $\$ 0.88$ In thozen lots, each.. D.P. $\$ 0.83$ No. 508fL four wire manifold only, flexible loom, each ... . . 5 Each..D.P. S0.Ss In doxen lots. each..D.P. 80.83



## For Ford Cars

Absolutely tiret class in construction and material. WearIng parts matle of spectal to degree dynamo steel, rollers and contacts hardened and grounit. Will fit model T Ford cars withont change and may be attached in a few minutes. Long ecrvice ant an necurate running engine are attainable with the use of thi timer.
Each
Each. D.P.s.2.2 In dozen lots, mach. D.P. \$200


Timers


Milwaukee Ford Timers for 1913 to 1915, each...... $\$ 2.00$ Each. . D.P. $\$ 3.00$

## SWITCHES, LAMP BRACKETS, PUSH BUTTONS AND BULB CASES

## Cutler-Hammer Push and Pull Switch

The Push and Pull Switch, while designed primarily for automobile service, may be used on low voltages wherever a small, compact switch is desired. In spite of its small size it has a larger currentcarrying capacity than any other switch of its class, being rated at 10 amperes at 80 volts. It operates with an absolutely quick "make and break."
No. 7160 Single Switch, com-
plete with plate, each..... $\$ 0.60$ Each. .D.P. $\$ 0.75$


## Type N. F. Lighting Switch



This is a neat, serviceable switch and is easily installed by simply boring a hole in the dash to take the barrel of switch. Highly insulated to withstand intense heat and rough usage.
Size $1 \frac{1}{\mathrm{y}}$ inches high by 1
inch wide, nickel
plated; each
.... 80.50
Each. . D.P. $\$ 0.56$

## Acme Switch

This is a bigh arate, rubber hase Switcb, for any purpose where a switch is to be used for controlling electric cirenits sheh as fas antomobile, botor boat, stationary evgloe, bile, biotor boat, stationary edotue:
electric lighting and for innumer: able otber purposes. It bas a strong base, phosphor bronze lever: heavy contacts and robber lintion. I classy article Nickel-plated.
vo. 1. Acme swith, each ......s0.25 Each ., D.P. $\$ 0.33$ Dozen.. D.P. 83.33 Levern for Acme switches, each, is
 Each, Th. P. © , 15 Imox-11. T. P. S1.14

## 1915-1916 Lamp Bracket



This bracket for use on a Ford car that employs the single-part bracket for head lamps. Drop forged of heavier material than the standard.
Per pair
.81 .60
Pair, D.P. \$1.66

## Presto Push Buttons

A large-size horn button operating by the slightest touch, making contact by a tipping motion. Always easy to locate and can be operated with gloves on or a touch of the arm or knee. Special Type for Fords, each
.80 .25


Each. . D.P. $\$ 0.42$
Fore-Door Mounting

Dozen. .D.P. $\$ 4.44$

## Plug and Cap



No. 221 C Plug and
Cap, twin wire; each ............... .80 .25
Each. . D.P. $\$ 0.33$
Dozen. . D.P. $\$ 3.55$

Elbow Plug and Cap

A 8 Elbow Plug and Cap,
twin wire; each.
. $\$ 0.45$
Each. . D.P. $\$ 0.55$
Dozen. . D.P. $\$ 6.10$

The Dover Bulb Case


Made of cold rolled steel and fitted with a removable cap on each end. Each cap is provided with a socket for securely holding a headlight bulb in place.

The handiest way to carry extra electric light bulbs. Size $21 \times 7 \frac{1}{2}$ inches long.
Price, each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 80.35
Each. . D.P. \$0.55
Harness and Switch

All wiring necessary together with plugs, terminals and switch for wiring for head lamps.
Per set … . . . . . 80.75
Set. D.P. \$1.11



ELECTRIC HEADLIGHT REGULATORS

The Waynelite Transformer

For Ford Lighting Systems.



The Ford cars equipped with electric headlights at the factory, have tbeir lights connected directly to the magneto, which depends on the speed of the engine for the amonnt of current delivered.

Due to the amount of current demanded for igoition, this results in very dim ligbts at low engine speeds and such excessively strong current at high engine speeds that the lights are frequently burned out.

Many devices have been placed on the market to regulate the variable electric current, but none have met with complete success, depending as they have upon resistance to use up the excess current at bigh engine speeds and neglecting the dim excess current at high engt
lights at low engine speeds.

The Waynelite Transformer is offered to the Foril user as the only scientifically correct light Ikegulator. It is manu factured by the General Electric Company, who are the largest manufacturers of electrical appliunces in the world and who bave devoted several years to experimentation and research to produce this much-needed device. It does not depend upon resistance, series switches or choke coils to do its work, consequently it does not rob the spark plugs of their beeded amount of current. There are absolutely no moving parts or adjustments to require attention and to get out of order, but it is a simple, rugged, beavy duty transformer coll, which de. pends on reaction to prevent the A. C. Magneto current from reaching such a high value as to be injurious to the lamp bulbs and also to maintain a sufficient flow of current to give the lamps the required amount at low speeds.

This little device may be mounted in any convenient place about the car and comes equipped with terminals and bracket for mounting and connecting to the lighting wires. It requires but a few minutes to attach and demands no mechanical or electrical knowledge to install or operate, Guaranteed to give perfect satisfaction in use and continned operation.

Each
88.50

Euch
D. P. $\$ 6,11$

Dozer. each...D.P. 85. 5


The Regulite is a combination of switch and coutroller Its most important function is to choke or impede the fow of eurrent from the magneto to the lamps at excessive speeds.
Kach
Each. D. I', $\$ 3,88$

## Evenlite Regulator



Constant Kven Light at six Miles ar 大ixis.
The Erenlite is a simple, rugged coil designed to eyunlize the electric eurrent in the ligbting sgstems of Ford ears and produces steady, full power llshts at all ebrine speeds. Slow gour engine down at strvet corners of on bad roads and your ligbts remain bright: speed up to the limit if you like and there is no cbange in your lights and no danser of buraibe out your lamps. Quickly and ensily installed and fully guar antecd to give gtesdy, bright lights ut all engine speeds with antect to give shesuly, bright lights it all engine speeds with
an actual saving in current. Full instrutions packed with each coll. Price complete, without lamp
Each

I). P. 85, (6)

## New York Light Regulator

These connections are all made at our factors.

WIKING DIAGKAM


This is a very simple device for controlling tbe variable lights on Ford cars Can be attaclued in a few minutes by
any one by bolting on to front cyllater head using one of any one by bolting on to front cylbider head using one of
the regular cylinder bolts. The head lights on Ford cars the regular cylinder bolts, The head lights on Fori cars
burn very dimly at low engine speeds, while at high speeds the blgh voltage produced often burns ont the lamps. Tbis device operates te eliminate these tronbles, and sives a powerful, steady light at low speed and protects the lamps from burning ont at high speeds.

When installed, the swinging arm is about eight incbes tack of the fan and hames normally to obe sinle, ju such position that a switeb monnted fir the head of the instrament is closed sunf directs all of the lighting current to the left vide lamp, which burns full brightness at low speed; as kide lamp, which hurns full brightimss it fow speed as
engine sped is increased, the increasing draft of air from engine spacd is increased, the increasimg itaft of air from
the fan fausiss the swinging arm to sying over and cuts looth lights into cireuit, giving full lirillaney in botb lamps it all normal drivina speeds, Again when high engine speeds ire reached, the nrm swings still further, liringing into cir. cuit a resistance or rlamping coil wbich takes the excess voltage and savas the lamp from birning ont. Simple to install and reauires no attentlon. Strong. bright liehts at all speeds. Fully guaranteul
Each
85.011

## Atwater Kent Ford System

The Ford owner who wishes to obtain the best possible power and efficiency from his motor can now install the same high grade ignition equipment used by such well-known car manufacturers as Chalmers, Peerless, Hupmobile, Regal, King, Imperial, Velie and many others.

The Atwater Kent Ford System is made in two forms: Type "K-2" with automatic spark control and Type "H" for use in connection with the regular spark lever.

The automatic spark control greatly improves the performance of the car, and in addition makes it safer, easier and pleasanter to drive.

A few of the many advantages of Atwater Kent ignition on a Ford are as follows:

1-Perfect synchronous ignition at all speeds.
2-Smeoth running without missing or uneven firing, no matter bow slow or bow fast the motor is running.

3-Easier starting in cold weather.
4-Will idle at lowest possible speed and throttle down to three miles per bour on high gear.

5-All vibrator and magneto troubles ellminated. There are no vibrators and the magneto is not used.

6-Leaves magneto free for electric lighting.
T-Increased gasoline economy due to the bigher efficiency of the motor when the spark is always properly timed.

8-Improved acceleration.
9-Safe starting. the spark being automatically retarded so as to prevent back-firing.

The Atwater Kent Ford System is quickly and easily installed without alterations or machine work. It will give better results on the Ford cars than any magneto and at a beter resuits on

The Atwater Kent Ford System consists of:
1-Unisparker complete with necessary equipment for mounting

2-Coil and switch.
The Atwater Kent coin can be furnished with elther a substantial kick switch. Which may be operated with the foot, or with a plate switch somewhat simpler and cheaper in con-
struction if desired.


Type K-z Ford Unisparket Complete


Kick Switch Coil on Ford Dash K-2 Atwater Kent System with automatic spark advance, including kick switch, each $\qquad$

K-2 with plate switch coil, each............................ 28.00
Each....D.P. \$46.62


Type II Atwater Kent System. without automatic npark advisnce, for connection to nwiteh lever, includise kiek switch coil, each ................................... 00 Vach., D.P. $\$ 39,96$
Type II with plate switeh coll.
Eacb , 1 P , $\$ 36.63$

## Splitdorf Dual System for Ford



The Splitdorf Ford Dual System comprises a magneto of tried and tested design and construction and a perfected TS transformer for the dash, and, with its installation Ford owners are equipped to meet every emergency-the battery for starting and high-tension current for the running of the engine.

It has a noiseless, enclosed gear-driven installation, and, once on the car, the nuisance and expense of vibrators and the cumbersome box coil give way to an ultra-modern equipment more enduring than the motor.

Easy starting on the battery is advantageous at all times, and the merits of high-tension current for running are recognized in the operation of the highest priced automobiles.

It gives Ford motors a "punch" hitherto unknownthe kick goes into every cylinder synchronically and imbues the motor with a "life" and "pick-up" sweet indeed to the motorist's heart.

Magneto, base, gears and gear housing, TS transformer, wires, terminals, spark-advance rod, plate for dash and all bolts and screws necessary are put up in single box with full installing instructions.

No machine work is necessary. The comparative novice, by following simple instructions, can install a Splitdorf Ford Dual System.
Each

## D.P. $\$ 88.80$

Splitdorf Ford Special Waterproof High-Tension Magneto


Increases motor efficiency; saves its cost in less gasoline consumption; assures constant electric lighting; installed easily, quickly and inexpensively.

It is just what its name implies-a high tension magneto of special construction to meet the special needs of Ford cars. Its general construction, wonderful effectiveness and natty appearance place it in the highest class. With noiseless enclosed gear-driven installation is assures a high tension ignition system second to none. No need for vibrators, coils or batteries -just a clean dash with a single switch, that is a joy to the modern motorist's heart.

The installation is very simple and can be accomplished in a very short time by any one. We furnish everything you need-magneto, base, gears and gear housing, switch wires, terminals, spark-advance rod and all screws and bolts necessary.

The entire outfit is packed in a single box with full instructions for installing.
Each
.$\$ 45.00$
Each . D.P. $\$ 79.92$

# ACCFERFOSD CARSIES 

## IGNITION SYSTEMS

Rhoades Unit Spark<br>Ignition for Ford Cars.



In announcing the Rhoades Cnit Spark System, built for Model "T" Ford cars, we are enabling the Ford owner to equip his car at low cost with an ignition system equal in performance and service to best systems on higb-priced cars.

Of the many desirable features, perhaps the most important is the positive large size bot spark obtnined at all engine speeds. This condition is not found in vibrating coils or magnetos even of the most expensive type, which is responsible for the small spark wben the engine is cranked at startiog

This condition is existent in the Ford magneto and is an unfortunate fact, as this is the one time when, as every motorist knows, a large, bot spark is peeded for easy starting.

This Unit Spark System produces but one large spark at exactly the proper instant instead of a number of small, weak ones coming either too early or too late and eliminates the use of the Ford timer with its four contacting points and also the Ford vibrator with eight contacting points with their resultant variations in timing.

The Rhoades Unit Spark System uses no vibrating coils or timers and breaks the circuit at but one point, this point being absolutely the only afjustment in the entire system.

Provision is made in the mechanism so that no spark is produced if the englne turns backward, nor is it possible for the contact points to remain together at any time 80 that even should the switch be left turned on with the engine idle there will be no drain on the battery.

This system is long past the experimental stage, having been in use for several years on a great many of the bighpriced cars, where it was used in preference to the best magnetos.

Cover cap of mechanism is made of a high-grade insulatfog material, both handsome in appearance and practically indestructible. Contact polnts are Iridium Platinum and guaranteed not to stick, and all working parts are accurately made and floished.

Requires no expert knowledge to install and satisfactory service is guaranteed.

The coll box is monnted on dash in place of standard Ford box and is provided with a button, which when depressed produces a large spark for startiog engive on compression.

This coll has no vibrating parts or other moving parts and requires no attention after installation. A large kick switch is included and attached to coil box.

Compare this simple rugged system with magnetos, viorators, timers, etc., and don't forget that it operates perfectly on dry cells even when down to two amperes, and that 2,000 to 4,000 miles' running is obtained from six ordinary dry cells.

Price complete, with fittings. . . . . . . . . . . . . . . . . . . . . . . . . . . . 820.00
Each..D.P. $\$ 83.33$

## Connecticut Ignition System

For Ford Cars



Connecticut Automobile Ignition for Fords. A system of ignition that brings the Ford car up in etliciency and performance equal to any of the high-priced cars, and surpasses anything that is possible with magneto or vibrator ignition.

It is extremely simple in construction and operation, both mechanically and electrically, consisting of a coil, an igniter and an automatic control switeb.

In operation the current flowing from storage batteries or generator enters the coil, which, due to the primary circuit being closed, thorongbly saturates the coil between the suc. cessive interruptions, delivering the low tension battery or magneto current to the spark plugs bigbly increased in power and full of snap and life.

As the circuit in tbis system remains closed except at the instant of interreption, and, as the interruptions are fartber apart at low speeds, it follows that the period of saturation is larger also at low speeds. This results in the maximum bot spark at lowest engine speer, whicb is by far the most desirable time, as carburation is poor at slow speeds and the engine generally is least eflicient,

By a live, bot spark at slow speed we gain easy startiog, slower speeds in high gear, more power and full on hills and bad roads and rapid acceleration and getaway.

A closed circuit system bas always been considered prefcrable to any other, but it must not remain closed while the engine is idle or batteries would soon be drained.

In the Connecticut System this hazard is very ingeniously taken care of and requires no attention or thought from the driver, as the automatic switch will of its own accord open the circuit by means of a thermostatic regulator should the driver forget to to so bimself.

Installation is very simple and replaces all of the ignition Wiring on the standard Ford car together with the timer and coil box on the dash. Fits exactly on the forward end of crank case, and replaces the timer gear case cover. New plate bolts on in place of old one and contains new timing gears ready set in place. The igniter and coil are attached to this place and require no adjustment. Switch attaches to dasb in place of old coll box and presents an attractive appearance on car.
Price, each $\qquad$
Each., D,P. $\$ 50,00$
Lots of 6, eacb..D.P. \$42.22
Lots of 12 , each. ..D.P. 838.00

## LAMPS



10-ineh Bullet

No. 310 Electric Headlight, 10 inch front, 7 -inch prop centers, black and nickel; per pair..... $\$ 6.50$ Per Pair. D.P. 89.44
No. 410 Electric Headlight, 10inch front, 7 -inch prop centers, all black; per pair
Per Pair. . D.P. \$9.44
No. 1310 Electric Headlight, 10 inch front, 7 -inch prop centers, black and nickel; equipped with 8 mall bulb in upper part of reflector to act as dimmer; per pair
Per Pair. . D.P. $\$ 11.55$
No. 1410 Electric Headlight, 10inch front, 7 -inch prop centers, all black; equipped with small bulb in upper part of reflector to act as dimmer; per pair... 8.00 Per Pair. . D.P. $\$ 11.55$

No. 206 Electric Side Lamps, 6-inch front, black and nickel; per pair............ $\$ 5,00$
Per Pair. .D.P. $\$ 7.77$
No. 306 Electric Side Lamps, 6 -inch front, all black; per pair
Per Pair. .D.P. $\$ 7.77$

No. $204!$ Electric Side Lamps, 4! . inch front, all black; per pair. . $\$ 3.50$ Per Pair. .D.P. $\$ 5.55$

No. 32 Electric Tail Lamp, red semaphore glass, each....... $\$ 1.25$
Each. . D.P. $\$ 1.66$
In dozen lots, each.. D.P. \$1.55


The Bullet Type
1916 Ford


Our Builet lamps are made of the very best material and workmanship, quality being the watchword all along the line. They are the finest lamps which we know how to make and each and every one is carefully focused before leaving the factory.
No. 916 Electric Headlight, $\mathbf{1 0 - i n c h}$ front, single prop for 1916 Fords, all black; per pair. ...... 86.50 Per Pair. . D.P. $\$ 9.44$


No. 304) Electric Side Lamps, $4 \frac{1}{2}$-inch front, stud bolt and nut attachment for 1915-1916 Fords, all black; per pair.
Each. . D.P. 85.55


No. 132 Electric Tail Lamp, red semaphore glass. Each
Stud, bolt and nut attachments for 1915-1916 Fords Each. . D.P. $\$ 1.66$ In dozen lots, each. . D.P. $\$ 1.55$

# ACce fikigies 

## Oil Side Lamps



Nos. 426 and 126


Nos. 526 and 326

This new type lamp is beautiful in design, die work construction throughout, all parts interchangeable and fitting perfectly.

Oil pot locks with a simple turn of the wrist. Semaphore lens used, retained by a snap ring; door fastened by a spring catch and a knurled nut.

Height over all, $8 \frac{1}{1}$ inches; body $4 \times 4 \frac{1}{2}$ inches. Fitted with red jewel in rear.
No. 126 Oil Side Lamp, black and nickel; pair. ... $\$ 4.00$ Pair. .D.P. \$6.66
No. 326 Oil and Electric Combination Side Lamp,
black and nickel; pair . . . . . . . . . . . . . . . . . . . . . . . 5.00 Pair. . D.P. $\$ 8.33$
No. 426 Oil Side Lamp, all black; pair . . . . . . . . . . 4.00 Pair. . D.P. $\$ 6.66$
No. 526 Oil and Electric Combination Side Lamp.
all black; pair
5.00

Pair. . D.P. $\$ 8.33$

## Oil Tail Lamps



Nos, 424 and 124


Nos, 524 and 324

Height over all 83 inches, body $4 \times 4 \frac{1}{2}$ inches; both semaphore and ruby lenses.
No. 124 Oil Tail Lamp, black and nickel; each. ... $\$ 2.00$ Each. . DiP. $\$ 3.33$
No. 324 Oil and Electric Combination Tail Lamp,
black and nickel; each
2.50

Each. . D.P. $\$ 4.22$
No. 424 Oil Tail Lamp, all black; each........... 2.00
Each.. D.P. $\$ 3.33$
No. 524 Oil and Electric Combination Tail Lamp, all black; each.
2.50 Each. D.P. $\$ 4.22$

## Gas and Oil Lamps

No. 80 Gas Headlight, 8 -inch front, 5 -inch Mangin mirror, 7 inch prop center, black and nickel.

Per pair . . . . . . . . . . . . . . $\$ 7.00$
Per pair, , D.P. $\$ 10.00$


8-inch Gas

315:3-1216 FOKD CARS
Side Lamps


This new type lamp is beantifnl in design. die work construction throughout, all parts interchangeable and fitting perfectly.

Oil pot locks with a simple turn of the wrist. Semapbore lens used. retained by a snup ring: donr fastened by a sprins catch and a knorled nut.

Mante with a stud holt and nut on lamp back to fit 19nis. 1916 Fords.
No. 6ڭ6 Oil side Lamp, all black, per pair................... . . $\$ 4.00$ Per Pair. D.P. \$6,Bi
 Per Pair. D. P. \$8, as

## Tail Lamps



No. $6: 4$


This lamp is viluration proot. It is almost indestructiblemade of beavy steel, tin-cuated to prevent rusting.
No. 624 Oil Tail Lamp, all black, each........................ $\$$. . . . . Rach. . D.P. \& $8.3:$
No, 724 Oil and Electric Combination Tail Lamp, all black, each
Eacli..IV, P, \$t.2. 2

## LAMPS AND REFLECTORS

## Lamp Outfits for Fords



These lamp outfits consist of a pair of electric lamps as shown, with bulbs, sufficient high-grade lighting cable to wire up lamps to magneto, socket, plugs and terminals attached, and a switch. Lamps will be ninevolt unless otherwise specified.
No. 2310 Head Lamp Outfit includes one pair No.
310 Lamps with harness, black and nickel. Price $\$ 7.50$ Per Outfit. . D.P. $\$ 9.50$
No. 3310 Head Lamp Outfit includes one pair No.
1310 Lamps with harness, black and nickel.
Price
Per Outfit. .D.P. $\$ 11.66$
No. 2410 Head Lamp Outfit includes one pair No.
410 Lamps with harness, all black. Price...... 7.50
Per Outfit. . D.P. $\$ 9.50$
No. 3410 Head Lamp Outfit includes one pair No.
1410 Lamps with harness, all black. Price..... 9.00
Per Outfit. .D.P. $\$ 11.66$


No. 2306 Side Lamp Outfit includes one pair No. 206 Side Lamps with harness, black and nickel. Price

## Per Outfit. .D.P. $\$ 8.88$

No. 5306 Side Lamp Outfit includes one pair No.
306 Side Lamps with harness, all black. Price.. 6.00
Per Outfit. .D.P. $\$ 8.88$
No. 1204 $\frac{1}{\text { S }}$ Side Lamp Outfit includes one pair No.
$204 \frac{1}{2}$ Side Lamps with harness, all black; for
1915-1916 cars. Price.

## Per Outfit. .D.P. $\$ 6.66$

No. $1304 \frac{1}{2}$ Side Lamp Outfit includes one pair No.
304 $\frac{1}{2}$ Side Lamps with harness, all black; for
1915-1916 cars. Price.
Per Outfit.. D.P. \$6.66

## Lighting Outfit for Fords



This outfit consists of a pair of silvered brass reflectors, sufficient high-grade cable fitted with sockets and terminals, flush turn button switch and a pair of electric bulbs. All ready to install and is intended to convert gas lamps into electric or as replacement in other electric lamps. Made in two sizes:

No. 15 has 8 -inch reflectors; No. 16 has 9 inch reflectors.
Complete outfit
Each. D.P. $\$ 4.22$

## Old Sol Spot Light



May be clamped to windshield or fastened to foredoor, side of body or any place convenient to the hand. Is a powerful $6 \frac{1}{2}$-inch searchlight, swivelled to throw light in any direction. May be connected to Ford magneto and used for road driving in place of head lights. Road-view mirror built in back of lamp shows the road behind for day-time driving. Specify nine-volt lamps when to be used with Ford magneto. Handsomely finished and with socket switch.

## Each

.$\$ 4.50$
Each.. D.P. \$6.66
Lots of 12, each..D.P. $\$ 6.11$

## Electric Searchlight

C. S. Searchlight designed to meet the demand for a powerful Searchlight of small size. This lamp is only three inches in diameter, has bigh grade lens and is furnished with an eight C. P. Tungsten bulb. Has a substantial bracket which is so designed that it can be clamped to edge of any windshield. Bracket is provided with double swivel joint so that light can be thrown in any direction. Complete with cord and attachment plag.


## Each

. $\$ 2.50$
Each. D.P. \$3.33 Lots of 12, each..D.P. $\$ 8.00$


Head Lamp Glass for Ford lamps. Made of double strength glass and of proper size for standard Ford lamps. Sizes 73inch or 84 -inch diameter.
Each
.$\$ 0.15$
Each. . D.P. $\$ 0.22$
Dozen. . D.P. $\$ 2.00$

## Mangin Mirror Reflectors

Extra heavy ground and polished reflectors, highly silvered for back of gas lamps. The same mirror as used in highest priced gas lamps and should not be confused with the common, cheap, thin glass mirrors.
Each
. $\$ 1.00$
Each. . D.P. $\$ 1.44$
Dozen. .D.P. $\$ 16.00$


# ACCESKORIES <br> CARBURETORS, ETC., FOR FORD CARS 



Model L Schebler Carburetor for Ford Cars
Can be installed with very little trouble. The outfit for Ford cars consists of one only l-Inch Model L Scbebler Carburetor, one manifold, one priming cup one gasoline connectlon, tubing and throttle rods.
Price complete, as above. $\$ 18.00$ Each..D.P. $\$ 33.30$


In this Carburetor are embraced the very latest features of antomatic carharetor construction, serving to make up a combination which is absolutely witbout parallel where power, speed, etticiency and especially easy starting in cold weather are requíred.
This Carburetor will, without auy extra tittings, perfectly fit the Ford Model T manifold and operatiog rods.
Model "L" Kingston
Ford, each …......87.50 Each... D.P. 812.29


## New

 Stromberg for FordsReady to install on regular Ford manifold and gasoline line. Equipped with economizer and new priming plunger, starts easier in cold weather and operates on less gasoline per mile at all speeds. In-Iuded with Carburetor is bot air bousing tubing, primer plunger and steering post control.

. . . . . . . . 818.00


Special Rayfield Carburetor for Fords



This Gosoline Fconomizer, especially atlapted for Ford cars, will save 20 per cent of gasoline Can be attached in ted minutes. Lever is attached to steering post By moving the lever you increase the air supply to cylinders at will. The air is broken up into a fine spray and mixes witb the gasoline, thus enricbing the mixture. The mixer screws into the manitold. A child can operate it Complete outbt, bighly polished, bickel finish, with flexible shaft connecting from steering post to manifold in strong box with full directions for attaching.
Gasoline Economizer, complete, each........................... 82.50 Gasoline Econom
Each..D.P. $\$ 3.89$


## "Nyco" Accelerator and Power Adder

The "Nyco" Accelerator and Power Adder for Ford cars only. A 20 per cent increase in power: a 25 per cent gaving in gasoline. Prevents carbon, stops engine Prevents carbon, stops engine
overheating, keeps spark plugs overbeating, keeps spark plugs
clean, saves brake lining. Instantly installed between carburetor and inlet pipe. It affords a convenient and positive means of priming, as the valve is easily beld open so that gasoline may be injected by means of a squirt ean directly into the air chamber. from which it is drawn to ali four cylinders at the first turn of starting crank. This saves buying spark plugs with pet cock attachments and is naturally a far better method than removing plugs.
"Nyco" Accelerator and Power Adder. . . . . . . . . . . . . . . . . . . . . \$5.e0 Each..D.P, $\$ 8.33$

## New Era Ford Gasoline Reserve Valve

## Every Ford owner can

 have a reserve gasoline tank on hts car by installing, in a few min utes without cutting of soldering. a New Era Ford Reserve Gasoline Valve, which insures him of one gallon of gasoline always held in reserve. It quickly makes two tanks in one, or two compartments in one tank, one of bine gallonsand the reserve of one gallon, or eqough to go 20 to 25 miles to flad more gasoline. The New more gasoline,Era Ford Reserve Gaso Era Ford Feserve Gaso:
In Valve protects the car owner from being stalled for the want of gasoline, or paying extra for having gasoline brought to his car. As a time saver many times a year it will prove small cost of $\$ 100$. Feserve gasoline turned on without leaving the car as the valve is controllen
 by a lever tbrougb the beel board.

The New Era Ford Reserve Gasoline Valve is easlly Installed on Ford cars between the gasoline tank and sediment trap, in place of present attachment, which screws in bottom of all Ford tanks, requiring about ten minutes' time and no tool other than an ordinary wrench. It's good for the life of the car; a full paid-up life insurance against delay, bother or worry about getting stuck-sometimes that might be serious. Each

## ALUMINUM PISTONS AND RINGS



# ACCESSKORIES 



Model No, 10, $49^{\prime \prime}$ wide- $273^{\prime \prime}$ high
Model No. 10 is the regular equipment furnished the Ford Motor Company for their 1911 and 1912 cars. We do not furnish filler board with model No. 10, but all necessary parts for attaching are furnished.
No. 10-P, Plate Glass, each. . . . . . . . . . . . . . . . . $\$ 15.00$ Each. . D.P. $\$ 23.33$
No. 10-C, Coach Glass, each
10.00

Each. . D.P. \$15.55

## De Luxe Cowl Type



For 1914 Ford Cars
Model V-15-Plate glass only
tos" wide
The need for a shield and cowl combined to bring the 1914 Ford cars up to date was responsible for the designing of this model.

This shield is clear view, rain vision and ventilating, and is equipped with the best quality of plate glass only. It is easily attached and all necessary equipment is furnished. Loops for top strap snaps are provided in proper position.

The cowl is $40 \frac{1}{1}$ inches wide and will fit any car with straight dash which is of the same width from outside to outside at a point just in front of the fore doors.

It is beautifully designed, adds greatly to the appearance of the car, and gives the older Fords the stream-line effect of the late model.

Model V-15, Plate Glass only, each.............. $\$ 12.50$ Each. . D.P. $\$ 19.44$

Zig Zag Type


Model No. 12, 42" wide-292" hish
Model No. 12 is an exact duplicate of shields furnished for the regular 1913 and 1914 cars. It is made with the dividing bars used on the 1914 shield and folds toward the driver.
No. 12-P, Plate Glass, each. . . . . . . . . . . . . . . . . . $\$ 15.00$ Each. . D.P. $\$ 23.33$
No. 12-C, Coach Glass, each.................. . . . 10.00 Each. . D.P. \$15.55

## Adjustable Type

For 1913 and 1916 Ford Cars


Model 7-15-Plate glass only
Morle1 Z-16-Plate glass only $392^{\prime \prime}$ wide— $34^{\prime \prime}$ high
Model Z-15 is not provided with brackets or cross bar, and was designed to fit into the brackets on the car when the non-ventilating shield was removed. The side members fit into the brackets and are drilled when in position, for inserting the bolts which are furnished. This construction allows the shield to be attached without disturbing the brackets attached to the body.

Model Z-15, Plate Glass only, each.............. . $\$ 10.00$ Each. . D.P. \$15.55
(Order when car is already equipped with side brackets for side standards.)
Model Z-16, Plate Glass only, each............. 10.00
Each. . D.P. $\$ 15.55$
(Has side brackets included for cars not so provided.)

## ${ }_{38}$ ACCESSORORIES <br> SEAT COVERS FOR FORDS



Gordon Seat Covers are attached with glove fas-teners-these come put in-anyone can attach them to his car in half an hour's time-all you have to do is to screw in the studs. This is done with an ordinary screw-driver without injuring of marring the body in any way.

For description of seat cover materials, see Page 162

| Number of Material. |  |  | 1046 | 1000 | 1032 <br> 1050 <br> 1074 | 1027 1070 | $\begin{aligned} & 1028 \\ & 1029 \\ & 1090 \\ & 1003 \end{aligned}$ | 1021 1022 | 1033 | 1034 1035 | 1036 <br> 1037 | 1088 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ford | Touring | 5-p. 1911 | \$10.00 | \$12.00 | \$14.00 | \$16.00 | \$18.00 | \$19.00 | \$22.00 | \$23.00 | \$26.00 | \$32.00 |
| Ford. | Touring | 5-p. 1912 | 10.00 | 12.00 | 14.00 | 16.00 | 18.00 | 19.00 | 22.00 | 23.00 | 26.00 | 32.00 |
| Ford. | Touring | 5-p. 1913 | 9.00 | 10.50 | 13.00 | 15.00 | 17.00 | 19.00 | 22.00 | 23.00 | 26.00 | 32.00 |
| Ford | Touring | 5-p. 1914 | 8.00 | 9.30 | 12.50 | 14.50 | 16.00 | 19.00 | 22.00 | 23.00 | 26.00 | 32.00 |
| Ford | Touring | 5-p. 1915 | 8.00 | 9.30 | 12.50 | 14.50 | 16.00 | 19.00 | 22.00 | 23.00 | 26.00 | 32.00 |
| Ford | Touring. | 5-p. 1916 | 8.00 | 9.30 | 12.50 | 14.50 | 16.00 | 19.00 | 22.00 | 23.00 | 26.00 | 32.00 |
| Ford | Runabout | 2-p. 1911 | 6.00 | 7.00 | 9.50 | 10.00 | 10.50 | 13.00 | 14.00 | 15.00 | 16.00 | 20.00 |
| Ford | Runabout. | 2-p. 1912 | 5.50 | 6.50 | 9.00 | 9.50 | 10.00 | 13.00 | 14.00 | 15.00 | 16.00 | 20.00 |
| Ford | Runabout | 2-p. 1913 | 5.50 | 6.50 | 9.00 | 9.50 | 10.00 | 13.00 | 14.00 | 15.00 | 16.00 | 20.00 |
| Ford | Runabout. | 2-p. 1914 | 4.50 | 5.50 | 7.50 | 8.00 | 9.50 | 13.00 | 14.00 | 15.00 | 16.00 | 20.00 |
| Ford. | Runabout | 2-p. 1915 | 4.50 | 5.50 | 7.50 | 8.00 | 9.50 | 13.00 | 14.00 | 15.00 | 16.00 | 20.00 |
| Ford. | Runabout. | 2-p. 1916 | 4.50 | 5.50 | 7.50 | 8.00 | 9.50 | 13.00 | 14.00 | 15.00 | 16.00 | 20.00 |



We furnish a cover for the back of the front seat, with a large pocket.

For this an extra charge is made.

| Number of Material |  |  |  |  | 3029 |  | 5018 | $\begin{aligned} & 5012 \\ & 5042 \\ & 50035 \end{aligned}$ |  | 5057 | $\begin{aligned} & 5068 \\ & 5059 \\ & 5060 \\ & 5061 \end{aligned}$ | 5051 5052 | 5063 | 50645065 |  | $\begin{aligned} & 3066 \\ & 5067 \end{aligned}$ | 3036 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Piece to cover back of front seat with pocket for any car |  |  |  |  | $\$ 1.30$2.70 |  | \$1.40 | $\$ 2.00$4.00 |  | $\begin{array}{r} 82.75 \\ 4.25 \end{array}$ | $\begin{array}{r} \$ 3.00 \\ 4.50 \end{array}$ | $\begin{array}{r} 83.25 \\ 5.00 \end{array}$ | $\begin{array}{r} \$ 3.50 \\ 6.00 \end{array}$ | $\begin{array}{r} \$ 4.00 \\ 7.00 \end{array}$ |  | $\begin{array}{r} \$ 4.50 \\ 8.00 \end{array}$ | $\begin{array}{r} \$ 5.00 \\ 9.00 \\ \hline \end{array}$ |
| Top | Slip Cov | r, ma | ch For | ord only |  |  | 3.00 |  |  |  |  |  |  |  |  |  |  |
| 5029 | matebes | $10-46$ | Seat | Cover. | 5458 | mat | ches | 1028 | Seat | Cov |  | 5065 | mate |  | 1005 | Sent | Cover. |
| 5018 | matches | 1000 | Seat | Cover. | 5065 |  | ches | 1029 | Neat | Cove |  | gicit | match |  | 1036 | Seat | Cover. |
| 606\% | matches | 1038 | Seat | Cover. | 50081 |  | tches | 1030 | Seat | Cove |  | S067\% | match |  | 1087 | Seat | Cover. |
| 50.485 | matches | 1011 1094 | Seat | Cover. Cover | 70161 Sats |  | clies | 1031 | Seat | Cove |  | 50158 | match | es | 1088 | Seat | Corer, |
| 5057 | matches | 1027 | Seat | Cover. | 50164 | ma | ches | 1034 | Seat | Cov |  | 5058 | matel |  | 1020 | Seat | Cover. |

## Special Seat Cover for Fords

No. 1002. This Seat Cover is made of a tan color double texture waterproofed material. It will give good service, but the color is not guaranteed. Same material as No. 1000.

Trimmings are arm rests of English grain patent Ieather finish, binding to mateb on the door pleces only: attached with glove fastencrs and cleaned with soap and water and a brusb.

> For Ford Touring Car. . . . . . $\$ 5.98$
> For Ford Runabout. ............. 8.98
> Top Slip Cover, . ............... 2.28
> Piece to cover back of front seat, with pocket
> .98

No. 1004. This Seat Covering is made of a gray single texture material, can be cleaned with gasoline, as it has no leather trimmings; attached with glove fasteners; made of same material as No. 1046.


# ACcE 

## TIRE HOLDERS FOR FORDS

## Running Board Tire Holder

No. 115 Running-


No. 115 board Tire Holders for Ford cars only and for carrying extra wire wheel or demountable rim.

Made extra heavy, the top support being turned at end and fitting over the side of the body and bolted to same directly opposite the horn bulb.
No. 115 Complete
with straps........ $\$ 3.75$
Per Set....D.P. $\$ 4.44$

## Buckeye Ford Rear Tire Holder extra heavy type

Fitting any Carries one or two tires. Center support heavily ribbed and clamped to center of rear spring with "U" bolt which is furnished. The two side arms cast in pairs and securely fitted to center support.


## An exta

 replaces the one furnished with car.An extra rear license holder is also furnished, together with straps which makes the set fully complete. Packed in individual boxes.
No. 114. Price complete with straps.
$\$ 3.50$
Per Set....D.P. $\$ 4.22$


Sly Perfect Combined Lamp, Number Plate, Tire Holder and Lock ford bpectal


A Ford Specini tills up the opearear. Combination Holder for Lamp and Number Plato and Tires. A snug cradle for half the tiresavoids chatiog away with hand straps, and also combines Lamp Bracket, License $\begin{array}{ll}\text { Bracket, License } \\ \text { Number } & \text { Plate }\end{array}$ Number Plate soap lock. Looks兴00d. Is good. Does not cost much and all Ford owners are real prospective buyers because "convenience, and economy". and economy, sounds reason: able to every
man.
No. 101 Rear Tire Holder, one tire, $30 \times 3 \frac{1}{2}$; price. . $\$ 4.00$ Each. . D.P. $\$ 6.66$
No. 102 Side Tire Holder, one tire, $30 \times 3 \frac{1}{2}$; price. . 3.75 Each..D.P. $\$ 6.24$
No. 105 Rear Tire Holder, one tire, $31 \times 4$; price. . . 4.75 Each. .D.P. 87.88
No. 106 Side Tire Holder, one tire, $31 \times 4$; price. . . 4.25 Each. .D.P. \$7.11
No. 220 Rear Tire Holder, two tires, $30 \times 3$; price. 5.00 Each. .D.P. $\$ 9.44$
No. 221 Side Tire Holder, two tires, $30 \times 34$; price. 4.50 Each.. D.P. $\$ 8.33$
No. 224 Rear Tire Holder, two tires, $31 \times 4$; price. . 6.00 Each. .D.P. $\$ 10.00$
No. 225 Side Tire Holder, two tires, $31 \times 4$; price. . 5.50 Each. .D.P. $\$ 9.11$

The Ideal Way of Tire Carrying-One Size-Does It All
Sly Perfect Interchangeable Tire Holder will take 30 x $3,30 \times 3 \frac{1}{2}$, or 31 x 4 tires whether mounted on demountable rims or not. Tires are held on holders by means of a strong expansion grip on inside of tire, so that there is no rubbing or chafing. Quickly adjustable from one size
 to another and tires can be locked in holder. Provision for lamp and license plate. Quickly attached to Ford without drilling or fitting.
No. 150 Sly Perfect Interchangeable Tire Holders
for one tire, each.
.$\$ 3.50$
Each. . D.P. $\$ 5.77$

## BUMPERS AND TIRE COVERS

Ever-Good Bumpers for Fords


No. $5805 \mathrm{~N}-1 \frac{1}{4}$-inch Round, nickel rail, black side fittings. Price each
Each. .D.P. \$8.33
No. $5805 \mathrm{~B}-1 \frac{1}{4}$-inch Round, black rail, black side fittings. Price each
4.50

Each. D.P. $\$ 7.22$ Lots of 6, each..D.P. $\$ 6.66$


No. $5807 \mathrm{~N}-1 \frac{1}{4}$-inch Diamond, nickel rail, black side fittings. Price each
.87 .00
Each. D.P. $\$ 10.55$ Lots of 6, each. D.P. $\$ 9.44$
No. $5807 \mathrm{~B}-1 \frac{1}{4}$-inch Diamond, black rail, black side fittings. Price each
Each.. D.P. $\$ 8.88$ Lots of 6, each. . D.P. $\$ 8.33$
No. $5806 \mathrm{~N}-1 \frac{1}{2}$-inch Channel, nickel rail, black side fittings. Price each
Each..D.P. $\$ 9.11$ Lots of 6, each. .D.P. $\$ 8.38$
No. $5806 \mathrm{~B}-1 \frac{1}{2}$-inch Channel, black rail, black side fittings. Price each
5.50

Each..D.P. 87.22 Lots of 6, each. D.P. $\$ 6.66$
No. $6200 \mathrm{~N}-2$-inch Channel, nickel rail, black side fittings. Price each
Each. D.P. $\$ 9.77$ Lots of 6, each. . D.P, $\$ 8.88$
No. 6200B-2-inch Channel, black rail, black side fittings. Price each
Each..D.P. $\$ 9.11$ Lots of 6, each..D.P. $\$ 8.33$
The Lyon Resilient Indestructible Spring Bumper


Made to fit Ford cars without drilling the car frame and may be attached in a few minutes. These bumpers are made of high carbon spring steel, and can not be damaged by any ordinary collision. Absolutely protect the car as the blow of a collision is cushioned by this powerful spring.
No. 7-All Black, baked enamel finish. Price. . . . . $\$ 6.00$ Price. . D.P. $\$ 10.00$
No. 8-Nickel Rail, black enamel fittings. Price. . . 8.00 Price. . D.P. $\$ 12.22$

Spring and Button Tire Covers


A good, serviceable low priced tire cover, well fitted and fastened with snap glove fasteners.
No. 950 - For
tires not on
de mountable
rims. Sizes 30
$\times 3,30 \times 3 \frac{1}{2}$,
$31 \times 4$. Price
each ......... $\$ 1.00$ Each. .D.P. \$1.44
Doz. . D.P. $\$ 16.00$
No. 960 - For
tires on demountable rims. Sizes $30 \times 3,30 \times 3 \frac{1}{f}$,
$31 \times 4$. Price each
1.25

Each..D.P. \$1.66 Dozen. .D.P. $\$ 17.76$

## Spring and Button Tire Covers Black Enameled Duck

A better grade of cover, heavier and stronger than our drill cover.

Fits snugly and smoothly and protects tires from rain, sun and road dirt.

Fastened with snap glove fasteners and provided with a flat spring running around edge of cover to insure a close fit.


No. 970 -For tires not on demountable rims. Sizes
$30 \times 3,30 \times 3 \frac{1}{2}, 31 \times 4$. Price each.
81.50

Each..D.P. $\$ 2.10$ Dozen. .D.P. $\$ 24.00$
No. 980 -For tires on demountable rims. Sizes
$30 \times 3,30 \times 3 \frac{1}{2}, 31 \times 4$. Price each.
Each. .D.P. $\$ 2.10$ Dozen. . D.P. $\$ 24.00$


## Spiral Spring Tire Covers

This is an adjustable one-piece tire cover held in position by two endless spiral springs, and slips on smooth and perfect fitting, without the use of any other fastening device. Made of best quality black enamel duck.
No. 1296-For tires not on demountable rims: Size $30 \times 3$, each. $\$ 1.75$
Each. . D.P. \$2.44
Saze 30 x 31 ${ }^{2, \text { each . . . . . . . . . . . . . . . . . . . . . . . . . . . } 1.75}$
Each. . D.P. $\$ 2.44$
Size $31 \times 4$, each
Each. . D.P. $\$ 2.66$
No. 1292-For tires on demountable rims:
Size $30 \times 3$, each
$\$ 1.75$
Each. . D.P. $\$ 2.44$
Size $30 \times 3 \frac{1}{4}$, each................................ . . . . 1.75
Each. . D.P. $\$ 2.44$
Size 31 x 4, each. . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.85
Each. . D.P. $\$ 2.66$

# ACCESSORIES 

SHOCK ABSORBERS

1916 Aitchandee Shock Absorbers
Vor Ford Cars


The true cantilever principle that prevents side-slap as well as shocks. Not only adds to the comfort of riding, but saves tires and springs and keeps the car in the road. They eliminate the constant jiggle of the
 wheels; keep the wheels on the ground, which means better traction and easier steering. Made of malleable castings, with live oil-tempered springs, all parts fully guaranteed. Easily at-
tached; no holes to bore and no fittings required.
Per set
$\$ 10.00$ Per set. . D.P. $\$ 13.33$

## The Hartford Comfort Combination

Is the final word in shock absorber equipment for Ford cars. It includes one Hartford Shock Absorber on the front and two Hartford Cushion Springs on the rear. The result is riding perfection-maximum comfort. The weight of a Ford is greater at the front because of engine. The spring action at this point is more pronounced for this reason. The Hartford Shock Absorber controls it. With less weight at its rear, greater spring resiliency is needed here. The Hartford Cushion Springs supply it.


A set includes one Hartford Shock Absorber for front spring and two Hartford Cushion Springs for rear springs. Per set
Per set. .D.P. \$21.33
Price for one Hartford Shock Absorber for front, each
6.00

Each. .D.P. \$11.11
Price for four Hartford Cushion Springs, per set of four
Per set..D.P. $\$ 21.33$
Price for two Hartford Cushion Springs, per set of two
Per set. .D.P. $\$ 11.11$

## Temco Ford Shock Absorber

Temeo Shock Absorbers represent the scientific application of a systhe scientine of double spiral auxiliary springs-between the car and its body-to take and absorb the shock or jerk or jolt before it can reach the body and its occupants. The old pitching, jerking and jolting over the rough places is a thing of the past, The irritating vibration ceases. Temeo Sbock Absorbers give a gentle up and down buoyant swing on the roughest going. Tbey take up all the sbarp-jars of paved take up all the sbarp-jars of paved
streets. Stifness vanishes. They give the car great flexibility, making steering easy as on the smooth street; reduce friction between motor and running kear; preserve the alignment; save repair and upkeep expense; save tires; keep the car in better condition, thas adding
to its sales value.
Per set of four,
Per set of four, if
Pe


## Velvet Ford Shock Absorber

At last a Quality Shock Absorber for Ford cars at popular prices. A special popular prices. A special ing the well-known Velvet multiple coll princlple. Velvet Absorbers are the oldest successfu. cushion type absorbers io the world, baving beed Introdnced in 1909 , and steadily growa in popularity since that time. The multiple coll principle is exclusive with Velvets and fully protected by patents. Bacb Ford car that is equipped Ford car that is equipped absorbers rides on eight sensitive resilient little coils, thereby obtainiog at least three times as much riding comfort as can possibly be received from absorbers containing but one big, stiff, heavy coll.
Per set of four. ...... $\$ 15.00$
Per set of
four. . D.P. $\$ 24.98$
Dox. sets, per set., \$23.31

## TOURING:

For Yord Curs
GUNABOEX DELIVERY
名
Two dependable ail tempered springs form a perfect cushion at cach of the four corners of the car. Positively one fore
und aft moveu
play, tbus addplay, tbus atdlility of the regular spring equipment. So cthatruct-
ed that should a spring break while the cal
is in motion be rumbins sear is still combected, thus late safetg. Easy to imstall 1800 changes uri neevssary. Wheels infe not removed! just remeve spring shacklen from ear, slip in the beits turnislied and sbock absorbers are in place.
Made thronghont of unhreakable and malleathle castings. nicely finished in black and packed one set of fonr to a box. Be kure to specify whether for touring. ranahont or dellecery Gat. Every bet guarantecil.
Frice per set of 4
Per Sel of 4., D.P se 39
ler sel
lots of is sets, lier set . . D. I'. \$7.7

# ACCESOSORIES 

STEERING WHEELS AND STEER WARMS


## The Neville More-Room Steering Wheel

Carefully designed to give more room back of the steering wheel when getting into or out of the car. Is not a hinged wheel and is free from the danger of slipping or sticking. Just press a button and slide the wheel up out of your way and you can walk into your car and not slide in. Handsome in finish and comes ready to slip onto the Ford steering column.

17 -in h Wheel, Corrugated Rim, walnut finish, each. 86.00 Each. .D.P. $\$ 10,00$


## Neville More-Room Steering Wheel with Thief-Proof Lock



17 -inch Wheel, Corrugated Rim, walnut finish, with steering post lock, thief-proof, each........... $\$ 8.00$ Each. . D.P. $\$ 12.77$


These wheels are of the very best quality with full finished Maple rims, corrugated to prevent the hands slipping on wheel, and are not intended to meet cheap competition, but are for the man who wants a good-looking, dependable wheel.
16-inch Wheel, Maple Rim, corrugated, each...... $\$ 3.00$ Each. D.P. $\$ 5.00$

17 -inch Wheel, Maple Rim, corrugated, each. . . . . 3.50 Each., D.P. $\$ 5.55$

## Steering Wheels



The Gemco Tilting Wheel offers the Ford owner more ready access to his car; especially is it difficult to slide in back of the regular stationary steering wheel with a heavy overcoat on. This wheel tilts up out of the way and gives several inches additional room. Nicely finished and durable. The regular Ford wheel is 14 inches in diameter, while these wheels are made 17 inches, which makes steering easier. 17 -inch Wheel, Tilting, with Plain Rim, each...... $\$ 4.50$ Each. . D.P. $\$ 6.33$
17 -inch Wheel, Tilting, with Corrugated Rim, each. 5.50 Each. .D.P. $\$ 7.77$

## Steer Warms

This illustration shows a pair of steer Warms installed on a Ferd Car
Ieco Steer Warms consist of two neat leather covered grips, one for each hand, which lace on the steering wheel at convenient places for driving. The inventor of Steer Warms has very cleverly placed special resistance wires between two copper plates in such a way that a very small current is sufficient to keep the grips warm. Furthermore, after the grips reach a certain temperature, they will get no hotter, but will retain this same heat as long as the current is turned on.

Steer Warms can be attached to any make of car in ten minutes. There are no bolts or screws; no holes to bore. Lace on; wire up-that's all.
Ieco Steer Warms, for Ford, pair .85 .00 Per Pair. .D.P. $\$ 7.77$

# ACCFERSOSD CARSIES 

## STEERING DEVICES, FOOT ACCELERATORS AND CLUTCH RELEASES



A Device for the Safe and Steady Steering of Ford Cars Detail View

Easily attached to the front axle and connected to the steering cross rod. Eliminates the wobble of the front wheels and holds the car in the road. An absolute safeguard in case of broken steering knuckles or blown-out tires, as car will be held in the road. Substantially built and neat in appearance.
Each
83.75

Each. . D.P. $\$ 5.55$ Dozen, each. . D.P. $\$ 5.00$

## Dunn's Automatic Steering Device



Connecting the cross steering rod with the front axle by means of a flexible self-centering device. The two springs have sufficient tendency to hold the front wheels from wobbling and to keep the car in the road. The use of this device is a big relief to the strain of driving. Each $\$ 2.75$
Each. .D.P. \$3.33 Dozen, each. .D.P. \$2.77

## Foot Accelerator



A very convenient and practical device, which is easily attached to the Ford car. An aid in driving in crowded streets and equally useful for touring. Substantially made of good material.

## Each

$\$ 1.00$
Each. . D.P. $\$ 1.44$

## Adjustable Rear Axle Truss Rod



This Truss Rod ( $\frac{1}{2}$-inch in diameter) for Ford cars is indispensable. It keeps the bearings and gears in more perfect alignment, thus eliminating wear and noise. Fifteen minutes to attach. No machine work. Each .$\$ 1.25$
Each..D.P. \$1.66 Dozen lots, each. .D.P. \$1.55

## Auxiliary Radius Rod



Adds more than 100 per cent. to the safety of the axle and radius rod already on Ford cars, by preventing axle from bending backward, which seriously affects steering of the car. An additional advantage of the Auxiliary Radius Rod is in the fact that the Ford axle is always in perfect alignment after adjustment by means of this device. Attachment is quickly made. No machine work necessary.
Each
$\$ 1.50$
Each. . D.P. $\$ 2.22$
Clutch Release


Attached to the Ford car under the floor boards in a few minutes. Automatically throws out the clutch when foot brake is applied, but in no way interferes with the clutch pedal.
Each
.80 .45
Each. . D.P. $\$ 0.66$

## VULCANIZERS AND SPEEDOMETERS

## ADAMSON

Adamson "Ford Special" Vulcanizer Model "M"



Fatented April 1, 191\$ A Fatenteal Out万t with Repair Giam, Ready for Instant Ise

Esprecially adiapted for repuiring butateycle, bievelg. Ford and evelecat tahes.
A perfectly vulcanizedl repair It 15 minutm, anywhere, oft roasl or at loobue, fot leas thail one apnt.
It's quick. No eoment of acitl is nsent, the repair ment is phaced on the tube accord 11 g g to directions. The Vinl canizur is appllet by simply clabmins it centrally over the repaif enm und tulie as illusirated. To vuleanize the repair, ome ounce of tasoline is placed into the Vinlranixer and ig Hited.

Medel "M," mailing weight ? porands
81.511


## Adamson Universal Vulcanizer Model "U"



## SHALER

## The Ford-Kit

For Mendiag Eopd Caxines and Tabex

[^17]

A new Stewart Speedometer designed specially for Ford cars, completed with all regular Stewart equipment, including flexible shaft and the famous Stewart swivel joint, ready to install on any Ford car. Of the same magnetic type and built of the same high grade materials as in instruments that go on highest priced automobiles.

The Stewart Model 100 has rotating speed dial, 60 -mile capacityStewart Odometer, consisting of 10,000 -mile season register and $100-$ mile trip register. Mile numbers of trip register are black on white; tenths, red on white. Mile numbers of season register are black on white. Trip register can be rapidly reset to any tenth of a mile, and without disturbing the record of the season register. Speedometer has jeweled bearings, polished steel magnet, silver etched dial face, French plate dial glass. Case finished in deep jet lacquer and polished brass trim.
Model 100 Special Stewart Speedometer for Ford
cars, each
$\$ 10.00$
Each. .D.P. $\$ 13.33$
Lots of 12, each. .D.P. $\$ 12.77$

## Sears-Cross Spedindicators, Model F 15 for ford cars



Model F 15
This model is the same as was standard on 1915 Ford cars and is installed in the same manner. The Sears-Cross instruments are of the mechanical type. consequently unaffected by temperature. The face of the instrument is clear and easily read; the indicating hand or pointer gives the same advantage as the highest priced instruments. Due to the construction of Sears-Cross Spedindicator, it is impossible for the pointer to jump under any conditions.

Finished in black and brass or black and nickel. Black and brass will be sent unless otherwise specified.
Price, each
$\$ 12.00$
Each. .D.P. 812.77

# ACCFERSOSD CARSIES 

## Livingston Honeycomb Radiators

AND NTREAMLINE HOODS FOR

## FORD CARS

Grentest Bervice-Best Appearance
Peatures embodibd in Livingston Itadiators for Ford cars are ldentical with flown fonsd in radiators used on the most expensive foceign and domestic cars. Tbeir construction is vastly superior to that of ather types of radiators for Ford cars. They bave the greatest cooling etliciency, Direct radiation is obtained at every point, The length of the water tubes, being twice their beight adds greatly to the cooling capacity, The tiat cube full $3^{\prime \prime}$ deab, gives in thin volmme of water, the most quickly coolesl, Leaking, due to freeglog, is eliminnted, as the small corrugations in the thbe walls allow for expansion as the fee forms. ant return to sbape unon the ice melting.

The cooling eapacity of the Livingston Indintor for Ford cars is 80 far in excess if the demand placed upon it that it is gunranteed to cool the motor of that car under the most severe conditions. Excessive ase of tasoline and oil, as well as loss of power unil sperdi. and mmmerous other evils mased by heating up is eliminated.


Combination "Ballalog" Radiator and Streamaline Heed for 1915 and 1916 Ford Cars
The "Bulldog" Combination Itadiator und Hood. with radiator shell tapered to conform to the lines of the hood, is the only one to give true streamline appearance to the Ford car. A complete brass radiator is enclosed within a solid, one-piece pressea steel shell. An air space hetween this brass radiator and pressma sted shell furt ber protects the black enamel finish of the radiator, and assures the slossy finish remaining permanent. Hounded corners of the radiator ald the last tomel of refinement to the "halldog" Combination.
Weight 35 pounds. water capacity $3 \frac{1}{2}$ gallons, black vammel
Enish. each
Tach. D. Г. \$56.66

## Pointed Front Radiator



Liviugston Pointel Front Radiators, of wbich thousands are in dally use meet with universal approval. They are made for any morlel Ford car, inclucling 1915 and 1916, and are for use with the boods furnished by the Ford Company. They provide a pleasing relief from the stundard radiator lines everywhere encountered. Real Livingeton radiatlog efficiency enables them to greatly lucrease the service obtainable from the Ford car, while their alesign adds greatly to the appearance in many ways.
Weight 40 pounds, water capncity $4 \frac{2}{2}$ gallons, Pointed
Front German silver, each . . . . . . . . . . . . . . . . . . . . . . . $\$ 45,00$ Each. . D.P. $\$ 61.11$

Extended startiag crank inctuded.

Lawco Radiator Shell, Streamline Hood and Crown Fender


The ahove illastration shows a Ford cur equipped with Laweo fadiator Sbell, Streamiline Hood and Crown Fender. These very handsome and serviceable ace-ssoriex we can supply as listed below.

## Radiator Shell and Streamline Hood

Laweo Radiator Shell and streamine Hoom adils ervatly to the appearance of the car and is made to fit all body designs, giving the same rype construction as used on high priced cars.

Hood is marle of heavy gange automohile steel, finished in baked black enamel. Lanvres or ventliators eut in the shites afford better ventilation. The Rtadiator Sbell Lits over the regular Foral Nabator, but floes not rest against it and is hela is place by the regular farliator support bolts.

Finished an hakm black puumel. Specify whether to fit straight of cowt tasb.

No. G10 Laweo Radiator shrll amil streambine Hand, each \$17.S0 Bacb. . D. F. $\$ 29.10$
Lots of A. . D.1. $\$ 27.77$
L.ots of 12..19.1. \$26.22

## The Lawco Streamline Hood

## Without Kadiator shell


Rach.. D.P. $\$ 11.11$
Leots of 5 each. D.P. $\$ 10.55$
fots of 10 each. D.P. $\$ 10.00$

## Lawco Crown Fenders

Your Ford car fitted with a set of Lawco Crown Febders is transformed in appenrance. The beauty in the graceful lines and fine finish of these fenders is not all that commends them to the particular Ford owner, as they are so substantially made of heavy gauge steel and well fitted that thes are rattle-proof and as enduring as the car itself. All the annoyances of the regular light Ford fenders eliminated. Accept no cheap substitutes but insist on the genuine Laweo Crown Fenders. Finisbed in beavy baked black enamel.

## Price per set

... $\$ 1+.00$ Per set..D.P. 825.55

## LOCKS AND CIGAR LIGHTERS FOR FORD CARS



Each
$\$ 4.00$
Each. D.P. $\$ 6.66$

## Raylox for Ford Cars

A black enameled case that completely covers and protects your coil switch from other people's keys. Ford switch keys are as plentiful as the cars, and it is easy for the thief to have one. With your switch protected by the Raylox, he must pass your car by. Can't be removed by unscrewing until you unlock the case, as all attaching screws are covered and locked in. Cheap thief insurance.
 (Padlock not included.)

Each
Each. D.P. $\$ 1.66$ In dozen lots, each. .D.P. $\$ 1.44$

New York Kick Switch with Yale Lock


Fits Ford metal or wood coil box. Fitted with a genuine Yale lock. Securely locks switch in off position and arranged so that key can not be removed until switch is in off position. Furnished with two keys and instructions so that any one can mount it.
Each
$\$ 2.50$
Each. . D.P. $\$ 3.88$

## Presto Ford Cigar Lighter



No. 204 Presto Ford Cigar Lighter. Designed especially for the Ford car, get their power direct from the magneto. Equipped with a lighter tip which is especially suited to the Ford Magneto and is marked "Ford Special." Equipped with 10 feet silk cord.

Nickel plated holder is furnished with each cigar lighter, which can be attached anywhere in the car. The cigar lighter case is made of polished wood, ebony finish. All metal parts are heavily nickel plated.
Each
$\$ 2.50$
Each. D.P. $\$ 8.88$


For all kinds of Presto Cigar Lighters and Inspection Lamps.
No. 240 Presto Automatic
Cord Winder (only),
black rubber finish....... $\$ 2.50$
Each. D.P. $\$ 3.88$
No. 254 Complete combina-
tion, Automatic Cord
Winder and Presto Cigar Lighter No. 204, as
illustrated
. $\$ 5.00$
Each. . D.P. \$7.77
Special Platinum Tip for Cigar Lighter, 9 volt, each . $\$ 1.00$
Each. . D.P. \$1.77
Our Yale Lock Switch Without Lever


This is an extremely high grade article and can be used on any wood coil box. It does not, however, fit on the metal Ford coil box. We supply three extra keys.

The construction is such that the key must be turned to the off position before same can be removed, thus making it impossible to accidentally leave batteries connected-a feature well appreciated by the user. The combination of connections are two sets of batteries or one set of batteries and magneto.
Each
$\$ 3.00$
Each. . D.P. $\$ 5.55$

# ACce foko icies 

## MOTOMETERS AND CLOCKS

Radiator Thermometer
Boyce Motometer
(Patents Pending)


The Boyce Motometer is the only reliable radiator thermometer and truly indicates the temperature of the water in radiator while driving. With the Motometer mounted on your radiator cap you can tell at a glance whether your motor is operating correctly or not, just as a steam gauge tells the story of the steam engine. Your motometer tells you in advance of impending trouble and often saves many times its cost in avoided repairs.
Motometer Junior, each.
$\$ 5.00$
Each. D.P. $\$ 8.83$
Motometer Midget, each . . . . . . . . . . . . . . . . . . . . . . . 2.50
Each. . D.P. $\$ 4.18$

Lewis Nojar
Rubber
Retained
Auto Clock


Two factors-vibration and electrical troubles-heretofore have contributed to make your antomobile clock a useless ortament rather than what it ougbt to be-an accurate, reliable. indispensable time-plece.

A clock that is true to the second is a vitally important part of your equipment.

Such a clocls now is available. for those troublesome clements vibration and clectrical shock-are entirely done away with by the Nojar.
The Nojar is entirely encased in heavy highest quality red rubber, eliminating the possibility of shock, jar, jolt or vibration. As rubber is non-conducting. electrical disturbance positively has no effect upon this rubber retained clock.

The Lewls Nojar is guaranteed to keen accurate time for two whole years. Any clock falling to do this within the period mentioned will be repalred or replaced without expense, if forwarded, charges prepaid.

To Attach-Remove nut from top of steering wheel and attach clock at any desired angle, as rubber bolder is movable on the metal base.

## Stem-Wind

Steering Post Type, each
$\$ 2.50$
Each. D.P. $\$ 3.88$


To Attach-Drill boles in Gash at distance to mateh stationary bolts attached to steel plate embodied in rubber. Tighten nuts on bolts and clock is ready for use.
Dash Type, each
. $\$ 3.00$
Each. D.P. $\$ 4.66$

Auto Clocks

Auto No. 1
(1 day)
A neat, simple case made from heavy stock and with an additional inner casing of brass to thoroughly protect the movement. Not affected by jar or vibration; 3: inches high; 22-inch porcelain dial with second hand.


Finish, black enamel case with nickel bezel, each. . $\$ 2.25$ Each. . D.P. $\$ 8.11$

Auto No. 2
(8 Day)
Convenient to use, with outside wind and set, this clock may also be regulated from the front without removing the movement. The case, made from heavy brass stock, protects a thoroughly tested high grade movement.

This pattern adapted for Ford cars.


Finished in black enameled case with nickel bezel, size 4 inches high by $2 \frac{1}{2}$-inch face; each....... 84.50 Each. . D.P. $\$ 6.66$


## The Knockabout Klock

This little clock is finished in black enamel with white face; the numbers are large and easily read. May be mounted in any convenient place and is equipped with an adjustable base so that it may be set at any desired angle, Also useful as a desk clock, in motor boats and for the camper. Movement guaranteed by the maker for one year.
Each . .................. 82.00
Each. . D.P. $\$ 3.33$

PUMPS

Kellogy Engine Driven Pump for Ford


This Pump was designed expressly for the Ford car and though the price is considerably lower than other models of Kellogg Engine Driven Pumps, the quality of material and workmanship is the same, and it is covered by the same guarantee.

A most important point to consider in the purchase of an engine driven pump for your Ford is the manner of attaching. You should buy a pump which can be installed without removing the radiator, etc. Such work is an unnecessary expense.

The Kellogg Ford Pump is made of metal throughout and is guaranteed not to spray oil. Cast iron cylinder, piston fitted with metal rings, drop forged crank shaft, bronze connecting rod and bearings, and a simple, though efficient, system of lubrication insure long life to the Kellogg pump.

## Each

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D.P. $14.44
```


## Manzel Engine Driven Tire Pump for Ford

 en Tire Pump for Ford cars, with positive gear drive. Will inflate a Ford tire in one and one-half minutes. It is all metal and accurately built and supplies only pure air to the tires. It is attached to the side of motor, in most convenient position to operate, and is driven by gear on crank shaft (we furnish combination gear and lower fan pulley for driving).
To attach it to car it is only necessary to remove one engine cylinder nut and one gear housing bolt, place pump in position and replace nut and bolt. Then remove fan pulley and replace it with combination gear and fan pulley furnished with pump. The pump is then ready to operate. Can be installed by any one in forty-five minutes' time. No holes to be drilled and no machine work of any kind to be done.

After being attached it is always ready for use, To operate, attach hose to pump and tire, throw gears into mesh and start the engine.
Price
$\$ 7.50$
Each. . D.P. 811.66
Complete with gears, 12 feet of air hose and pressure gauge. Everything ready for immediate installation.

## Mayo Ford Pump



A diminutive Mayo Spark Plug Pump built especially for the Ford car. A real power tire pump guaranteed to give satisfaction and inflate a tire with pure, fresh air- $32 \times 3$ size to $65-\mathrm{lb}$. pressure in two minutes; $32 \times 31$ size to $70-\mathrm{lb}$. pressure in three minutes. Attached and used the same as the standard Mayo Spark Plug Pump. Construction is strong -metal piston rings and valves used. No wearing parts to break or get out of order-fully guaranteed for one year.
Fitted with $\frac{1}{4}$-inch connection and furnished complete with 10 -foot hose, accurate gauge and connections.
Each
$\$ 5.00$
Each. D.P. $\$ 8,88$


Aeolus Double Cylinder Tire Pump. Cylinders made of seamless brass tubing; absolutely non-leakable. The air intake, as well as delivery of air into tire, is at top of pump. Full length, 20 inches.
Aoelus Pumps, each
$\$ 2.25$
Each. . D.P. \$8.11
Dozen. . D.P. $\$ 33.83$

Crown Single Action Tire Pump for small size tires. Barrel made of heavy seamless brass tubing, $1 \frac{1}{4}$-inch. Full length of pump, 201 inches,

Crown Pump, each
.81 .25
Each. . D.P. $\$ 1.76$
Dozen. . D.P. $\$ 18.66$

## ACCEES FORD CARSIES

Dann Inserts


The Dann Oil Cushion Spring Insert is a thin perforated lubricant-packed strip of special metal designed to go between the spring leaves from tip to tip. It eliminates undesirable spring squeaks for all time and allows the spring leaves to slide smoothly and freely upon each other without friction from rust and dirt. Dann Ford Insert, per set. Per set. .D.P. \$6.66

## For Ford Cars



No. 3808 Front Spring Clip (with nuts), each..... $\$ 0.35$ Each..D.P. \$0.55 Dozen. . D.P. \$5.00
No. 3833 Rear Spring Clip (with nuts), each..... . 35 Each.. D.P. $\$ 0.55$ Dozen. .D.P. $\$ 5.00$


Spring Shackle for Ford With Integral Lubricator
In the spring boit labrica tion grease has many advan tames over oll.

OHI is difficult to get to all parts of the bearing surface and will not stay where needed. Grease howerer, is forced by the action of the cup to all parts of the surface and stays theve, not only insuring complete and permanent Inbriontion, but by formin in dust-proof collar at the ends of the spring eyes. prevents wear by keepiog out Erit.
Ajl holts are carefully heat. treated to give the maximum amount of wear.
Shackle is furnished absoIntely complete, ready to install in the car withont the adtilion of muts, cotter pin, or adrition of
grease cups.

Please shecify whether front or rear shuwsur is wanteal whell ardering.
No. 347 For Front Spring, with brass grease cups, each
$\$ 1.50$
No. 348 For Rear Spring, with brass grease cups, each
1.50

Each. D.P. $\$ 2.45$
No. 347 For Front Spring, with nickel grease cups, each
1.60

No. 348 For Rear Spring, with nickel grease cups, 1.60
Each. .D.P. $\$ 2.66$

## Wheels with Demountable Rims for Fords


*hipping Weight, 145 Feands
Ford Demountable Wheels, $30 \times 3 \frac{1}{2}$, solid clincher rim. The set consists of four complete finely finished wood wheels, with a fifth extra rim, lug wrench and bolts.
Stanweld Rims, wheels painted black; per set . . . $\$ 15.00$ Per set. .D.P. $\$ 25.00$
Lots of 10 sets, per set. . D.P. $\$ 23.33$
Stanweld Rims, wheels natural wood finish; per set
16.00

Per set. .D.P. \$26.11
Lots of 10 sets, per set. .D.P. $\$ 24.44$
Firestone Rims, wheels painted black; per set.... 17.00
Per set. .D.P. \$27.77
Lots of 10 sets, per set. . D.P. $\$ 26.11$
Firestone Rims, wheels natural wood finish; per set
18.00

Per set, D.P. $\$ 28.88$
Lots of 10 sets, per set. .D.P. $\$ 27.22$
Wire Wheels
With Demountable Rims far Yoril Garn


These wire wheels come complete with hubs and bail bearings and replace the regular Ford wheels without changes. Set consists of four wheels complete with demountable rims and an extra rim for carrying a spare tire. Strong, easy riding and handsome in appearance; will add a distinctive air to the car.
Price, per set
.835 .00
Per set. .D.P. $\$ 55.55$

## Heavy Duty Axle Shafts <br> for ford caks

These axles are made especially to meet the demand for a strictly high-grade axle for heavy duty, such as trucks, taxis, etc., demand. Chrome-nickel steel, accurately finished and heat treated; guaranteed to be firstclass in all particulars.
Price, each . $\$ 3.00$ Each. D.P. $\$ 5.00$

## LICENSE BRACKETS AND DETACHABLE CARRIERS FOR FORD CARS

Neverout License Brackets for front and rear license tags. Hold license tags firmly in position and illuminate rear numbers as required by law. Made for every style of car. Furnished in black enamel.


Front License Bracket
No. 36-For cars with round fllers,
attaches directly to water fller
tube, each ........................... 80.50
Each..D.P. $\$ 0.66$ Dozen..D.P. $\$ 6.66$


Combination Rear Lamp and
No. 6?-Interchangeable type, fits majority of brackets on rear of
 Each..D.P. $\$ 0.66$ Dozen...D.P. $\$ 6.66$


Front License Bracket
No. 7\%-For all cars with oval flllers, attaches directly to water Gller tube, each ................... 80.50
Each.. D.P. $\$ 0.66$ Dozen. .D.P. $\$ 6.66$


Ford Front License Bracket
No. 871-Attaches to Ford headlight bracket when tag is not ever 15 inches long, each . . . . . . . . . . . . . . 80.50 Ench.. D.P. \$0.06 Dozen.. D.P. \$6.66


## Hod License Bracket

No, 178-For attaching to any rod between headlights. Because of single grip can be used on curved or straight rods, each ........, $\$ 0.50$ Each.. D.P. 80.66 Dozen.. D.P. $\$ 6.66$


No. 97-Ford License Brackets, to be held by front spring bolts, as
shown in illustration, per puir. . $\$ 0.25$ Per Dozen Pairs.. D.P. $\$ 3.55$

Combination License and Crank Holder for Ford Cars


This Combination License and Crank Holder is made of pressed steel, black enameled, and serves the double purpose of bolding the license and crank in place. The crank is kept in an upright position, clear of dirt and road obstructions, and is kept absolutely rigid, doing away entirely with any rattle, which is a source of annoyance when crank hangs toose or is supported by a strap. The danger of crank pins being broken by a crank becoming engaged when driving uphill and jarring over car tracks or hown roads is eliminated. It is also casily installed, not taking over five minutes, and requires no alteration to the car.

## Each

.30 .75
Dosen.. D. F, \&8,00

## W-S Detachable Carrier for Ford Cars



For suit cascs, baskets, bundles, etc., size 27 inches by 22 inches by 6 inches deep inside, Made of steel and will carry a heavy load. After once fitted it can be removed or replaced in less than one minute, no tools required. Positively does not interfere with the driving vision even when londed to full rapacity. Will carry three extra large suit enses. The W-S Carrier can be fitted to any style Ford by anyone in a few moments, does not require any machine work, nothing to come loose or rattle, spark plogs can be removed and replaced withont detaching the carrier. Furnished complete with full information for installing. Finish black.
Each . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 8.50$ Ench. . D. P. $\$ 4.22$

# ACce siotieice 

## HORNS AND FOOT WARMERS



Special for Ford Cars, standard size; each....... $\$ 0.75$ Each. . D.P. $\$ 1.11$

Horn Reed for Ford Cars


No. 28. Horn Reed with double end bushing for use in center of tube, brass finish; each.
...... $\$ 0.30$ Per Dozen. . D.P. $\$ 3.77$

Hand Klaxonet


The latest and best of the low priced hand horns. Made of Klaxon quality and carrying the permanent Klaxon guarantee. Supplied in all black, black and nickel and black and brass.
Each
$\$ 4.00$
Each. .D.P. \$6.66 Dozen. .D.P. \$74.60

## Clark Heaters



Our No. 3D Heater is one of the most popular sellers, being very strong and durable. It is 14 inches long and weighs 7 pounds. Has fine asbestos lining and is covered with Brussels carpet; has braid lining. Ends are of triple strength white metal.
Each
$\$ 2.00$
Each. .D.P. $\$ 3.33$
Coal for Heaters


One cake will last sixteen hours with proper adjustment of drafts and keep up a steady heat; size $7 \frac{1}{2} \times 2 \frac{1}{2} \times$ $1 \frac{1}{4}$ inches.
Per dozen
.80 .75
Dozen. .D.P. $\$ 1.32$

## Maxim-The Perfect Buzzer Horn <br> 

The Maxim Vibrator Horn is a wonderful warning signal, excelling in its class for its sound and for its permanent and efficient service. Is neat in appearance, simple in construction and has a loud and pleasing tone.

Maxim Horn, black and brass or all black; price. . $\$ 3.00$
Each. .D.P. \$4.11 Dozen lots, each. . D.P. $\$ 3.88$

## Chime Horns



The Chime Horn has four harmonious tones combined in one loud warning blast that guarantees the right of way.

It is made entirely of brass of good quality, which will not permit rust or corrosion to interfere with its tone or operation. In fact, it cannot get out of order.
No. 10 Horn complete with 1 -inch to $1 \frac{1}{4}$-inch valve and pedal, each
4.00

Each. .D.P. $\$ 5.33$ Per Dozen. .D.P. $\$ 60.00$

## The Aermore Exhaust Horn



## Special for Ford Cars

The Aermore Exhaust Horn has large air passages and is self-cleaning. It can not clog or get out of order. Requires no upkeep.

Gives a clear, penetrating note that can be heard a long distance, or a low, musical note that warns and does not frighten.

The Aermore fastens to the tailpipe. Blows easily with very little exhaust pressure. It is a safe and sane signal.

Complete with all fittings.
Each
Each. . D.P. $\$ 8.88$
Lots of 6, each. .D.P. $\$ 7.77$

## BOW HOLDERS, REAR CURTAIN LIGHTS, ETC.

"Ever Tight" Clamp Bow Holder


This Bow Holder consists of a long perch fastened to a hanger with a set screw. The securing anchor, which has a spring washer under it, is placed through a hole in a lug on the inside of the perch.

When the top is up the thumb nut is screwed up firmly against the upper sut so it can not rattle. When the top is let down the securing anchor draws the bows tightly together by the use of the thumb nut.

No. 1 for three and four bow tops.
Finish: Hard rubber, black enamel.
No. 1 Ever Tight Clamp Bow Holders, $\hat{8}$-in. hole; per pair
. 81.50
Per pair. .D.P. $\$ 1.88$


The Anto. Heat Ikatiator is designed to fit either in the front or tonneau of the car. It makos un attractive abal heat foot rest and will readilv warm up in a few minutes after engine is started. Uses the of herwise waste exhanst from the pngine and is easily nttached to any model car. May be left in car in summer and used ns foot rest of remored is a few minutes without defacing the car

No, 1 size for roallster or front seat, 16 inches.
No. 2 size for tonncun or closed car, 24 inches.
Cobmes complete ready for attaching
Price
Price sitheh, D, 1 , \$11.11

## Adams Automatic Top Holder

The Adams offers a quick and sure method of holding the top snugiy in place when laid back. Leather pads protect bows against damage. Quickly tightened or loosened. Finished in black enamel with the chain specially treated to prevent rust or wear. Applied instantly to Fords.
Price, per pair.
Per pair. . D.P. \$2.22


Rear Curtain Light for Fords


Just the right size to replace the old broken rear curcain light, edges bound and eoripped with fasteners so tbat it enn be put in withont sewing of removing the curtain.
Price each
. .80 .75



Fits hetween the top of the windshield and the car top and prevents wind and rain blowing in over windsbield. Just one of the little things that adils to the eomfort of passenger and driver.
Price each
.80 .75
Dosen . D.P. $\$ 13.38$


## Top Prop Nut

To replace nuts lost or damaged. Well made and finished.
Price each
. 80.05
Dose日 . . D.P. $\$ 0.80$
Steering Gear Boots for Fords


Three to a set-complete with laces. Made of waterproof leather. These boots make it possible to pack the joints with grease, which does away with the wear and therefore eliminates rattle. Makes it easier to steer. Grease Boots, in sets of 3 ; per set . . . . . . . . . . . . . . 81.00 Per set. . D.P. \$1.66


Crank Boot for Fords
Crank Boots, each... $\$ 0.35$
Dozen. .D.P. $\$ 4.00$

# ACCE Soko ies 

## ROBE RAILS, FOOT RAILS, HEEL PLATES, MATS, ETC.



No. 5652 Folding Robe Rail, $\frac{3}{4}$-inch black enamel rail; price, each.
.80 .75
Price each.. D.P. $\$ 0.88$
No. 5652 Folding Robe Rail, $\frac{1}{4}$-inch nickel rail; price, each
$\$ 0.85$
Price each. D.P. \$1.11


No. 5675 Turn-over Foot Rail, 1-inch nickel rail; price, each
D. $\mathrm{P} . \$ 2.00$
.81 .50
Price each. . D.P. $\$ 2.00$

## Foot Protector



Presto Alweather Protecto insulates the floor from the excessive heat of the engine and drives the hot air back beneath the car irrespective of position of lever and in no way interferes with the free action or running of car or tal:ing up of floorboards. Each part made to fit and marked where it belongs. Average boy can attach in twenty minutes.

Made in two styles as listed below:
No. 1 Outfit consists of No. 1 and No. 2 metal and rubber pedal slot covers and No. 3 emergency brake slot cover, all steel parts finished in black japan and each set in a carton with instructions and screws for immediate attachment. Each
Each. D.P. $\$ 2.77$
No. 2 Outfit consists of all described in No. 1 Outfit and also six pieces of felt board to completely cover under side of floor boards as illustrated. Each
Each. .D.P. $\$ 3.66$

## Aluminum Heel Plates



No. 160
May be attached to floor boards where heel rests and prevents wear on floor mat. Heavy metal, $3{ }_{3}^{3} \times 5$; price each.
Each. .D.P. $\$ 0.33$

Rubber Mat for Ford



Rubber Mats for Ford Touring Car, each $\$ 2.00$ Each....D.P. $\$ 1.89$

## "Uniq" Floor Mat for Ford Cars

Made of Eenuine cork linoleum, hound with alu. minum and hacked witb sheet steel. An aluminum sheet plate is artached to heed plate is attached to
the mat just helow the pedal opening. Mat lies jerfeetly flat nail does not need i." be b alled or screwed to the floor. Gives the in sitle of the ear a nice clean ap-
pearabev
durable.


Price each
.85100
Price each. D.P. 5,75

## "Uniq" Complete Running Boards for ford cars


"Coif" Kanning Boards improve the appearance of the Ford move than any other accessory, anal are in popalar demand nmong Fort ownecs.
"Uniq" Sinoleam Running IBoards

These boards are romplete and ready to attach, bolts furnisbed.

The wood boards twen are spelally prepared and will
The wely not warn Genulne cork-linolenm is used and positively not warp. Genulne cork-linolenm is used and bound with beavy aluminum mouldiug. These running boards are durable and adil refmement to the car
Price per pair
Per Pair, D.P, \&8.84

## Pedal Pads

Positively prevents feet from slipping of pedals. Imparts a new sense of securlty to driver.
No vibration. A cushion $\frac{1 / 2}{}$-in. thick of new live rubber. They stop the jar.

Renl foot comfort. The soles of your feet will not burn from holding out elutch and applying brakes on long grades, or in driving tbrough congested traffic.

Stop trying to wear out your pedals with shoe leather. It's
 expensive.
Mason-Allen Pedal Pads for Ford, per set.
$\$ 1.50$ l'er set.. D.P. \$1.67

BRAKE LINING, BRAKE SHOES AND TRANSMISSION BANDS

## Thermoid Transmission Brake Lining

Every Ford car is
 equipped with a transmission brake made in three parts, and each part is lined with a strip of brake lining. Because this brake is located near the magneto the lining must not contain brass wire and it must contain practically no cotton or it cannot withstand the action of the oil and grease to which it is exposed.

Thermoid Transmission Brake Lining contains no wire and is composed almost wholly of long fiber Canadian asbestos. The process of manufacture is the same and it is thoroughly impregnated with the same secret friction compound used in making Thermoid Hydraulic Compressed Brake Lining.

Packed one dozen pieces ( 4 sets) to the box, complete with copper rivets.
Thermoid Transmission Brake Lining Set, price per set $\$ 1.87$
Per set. .D.P. $\$ 1.50$
Thermoid Wireless Transmission Lining, $1_{16}^{\frac{1}{6}} \mathbf{x}_{\frac{5}{5}}$ in., per ft.
.25
Per ft. .D. P. $\$ 0.27$
50 ft . lots.. per ft. $\$ 0.25$

## Falcon Ford Transmission Lining Set

The lining is cut to the proper length; 3 lengths of 23 in . each, $1 \frac{1}{1 \mathrm{~A}} \mathrm{in}$. wide and $5 / 32$ in. thick. The set includes 34 split brass rivets.

The lining supplied is Falcon Ford Wireless Brake Lin-
 ing, which will not short-circuit the magneto, and is impervious to the action of grease, oil and dirt.

Falcon Transmission Lining Set, per set......... . $\$ 0.75$
Per set. .D.P. $\$ 1.00$
Dozen sets. . per set $\$ 0.88$
Falcon Transmission Lining, per ft. . . . . . . . . . . . . . . 20
Per ft. . D.P. $\$ 0.20$
50 ft . lots, per ft. D.P. $\$ 0.18$


No. 5718, Lined, 2-piece
No. 5790. Plain, 1-piece
Duplicates of the brake shoes on the Ford Model T. Made of high-grade gray iron with ground braking surfaces. Comof high-grade gray iron with ground brakoes supplled with plete with springs. Two-piece brake shoes supplied with faces. Welgbt, per set, about $31 / 2$ pounds.
No. 571s. Lined, two-picce type, per set....................... 81.50 Per set, each., D.P. sug Dozen sets, each..D.P. No.st
No. s790. Plain, one-piece type, per set. Per Set..D.P. $\$ 1.78$

## "Ideal" Transmission Band FOR FORD CARS Fatent Pending



WITH FORGING DETACHED

A four-hour job done in thirty minutes. With the "IDEAL" you can renew your brake lining or your forward speed transmission lining in half an hour without taking off the transmission cover.
The "IDEAL" saves you dollars, or four hours' work, each time either of these linings must be renewed. Your safety depends on your transmission brake, therefore, a void impossible, dangerous imitations of the Ideal Quick Detachable Transmission Band. DIRECTIONS FOR USE.

The first time you have to renew your linings have a set of Ideal bands ready to replace the old style ones. Put them in place, lined, as you would the old style. Then when you have to renew the lining, just remove cover door; pedal; pull end rivet with pliers, remove both forgings (lugs) and pull band from housing. Rivet new lining in leaving one end lug off. Insert free end in housing, passing it around under drum. Attach remaining lug, drive last end rivet, replace pedal, etc. Job can easily be done in half an hour.

The "IDEAL" is constructed on sound mechanical principles of high-grade materials throughout and is lined with best quality of asbestos. It is the original quick detachable transmission brake band for Ford cars. Others have attempted to copy it but have produced only an impossible, impractical and dangerous substitute. IT WILL SAVE YOU TIME AND MONEY.
Price, each
.81 .50 Each. D.P. $\$ 2.22$

Packed 3 bands in a box complete, making one complete set.

# ACCFER FORD CARSIES 

FILLOMETERS, GAUGES, OIL CUPS AND GREASE RETAINERS
The Fillometer
for ford automobiles in tank ifs shown on tratietator at anit timesion Price ome Fach. D.P. s $6.6 \dot{6}$

## Challenge Gasoline Gauge

Made of steel with a brass float, all parts strongly made and accurate. Serews into the filler eap hole of gasoline tank and tells at " glance the amount of gasoline in tank.

Price each
Rach..D.P. \$1.88
 capacity $\frac{1}{2}$ ounce, each Dozen...D.P. $\$ 2.00$ capacity $\frac{1}{3}$ ou
Dozen., D.P. $\$ 3.55$

Dozen . . D. P. $\$ 2.67$ each
I loxen. D. $\dot{\mathrm{P}}$ 8ision


Installed in a few minutes without cutting or fitting enables you to fill your gasoline tank without lifting the cusbion or disturbing your passengers. Amount of gasoline

FOR FORD CARS


Grease Cups


No. 1101

No. 1101 Grease Cup, uickeled flnish, 2 -inch pipe thread,
No. 1104 Grease Cup, nickeled finish, S-inch pipe thrend,

No. 89 Compression Grease Cup, $\frac{\text { I-inch inside diameter }}{}$ 1 ounce capacity, 3 -incb pipe thread, polished brass,

No. 100 Compression Girease Cup, 1 inch inside diameter. $\frac{3}{3}$-inch pipe thread, polished brass, capacity $\frac{3}{2}$ ounce,



Oil Gauges
Oil Gauge for Ford Indlicates the correct level of oil in the crank case. To attacb, simply remove the lower pet cock from the crank ense, attach the gauge nad screw the pet cock beck Into the opening in the gauge. The bent pipe nipple glves correct angle for the gauge.

No. 40
*) 95
No. 40 Oll Gauge, each.
Each..D.P. $\$ 0.27$
No. 41 Oil Gauge, same an Ne. 40 with improved protected glass, each Fach..D.P. \$0, 2 h

No, 4 Oil Gange
A substantial solid brass gauge
with guarded sight glass, flted
with drain cock, price each....so. 75
Price Each. D.P. $\$ 1.00$
Dozen Each. D.P. $\$ 0.88$


## Dash Board Oil Gauge for Ford

No. 43
A decided improvement over the crank case oil gauge. The indicator on the dasb makes it unuecessary to almost crawl under the car. which it is necessary to do to read the crank case gauge. Installed by boring a hole in the floor board for the indicator pipe and connecting the borizontal pipe to the crank case in place of the lower pet cock. The pet cock, serewed into the other end of the pipe, acts as a drain.
Container and indicator pipes are made of heavy gauge brass. Serew cover on container and threaded joints makes it easy to take the gauge apart for occasional cleaning. Each gauge packed in a heavy cardboard box containing full instructlons. Welgbt, about $11 / 2$ pounds.
Ench
Eacb..D. P. $\$ 1.67$

FALCON BRAKE BAND LINING-THE BEST ACCIDENT INSURANCE

## RADIATOR CAPS, REFLECTORS, FAN BELT GUIDES, VALVE STEMS, ETC.

Ezyfill Radiator Cap
For Ford Cars


A handsome, highly finished, all brass cap that opens by simply pressing a button. Closes tight preventing escape of water.
Each
\$0.75
Each..D.P. $\$ 1.11$

## Radiator Cap for Fords

This bandsome cast brass cap will add a distinguished appearance to Ford cars besides being more practical for purposes of unscrewing and tightening than regular patters.


Highly Polished Brass, each. $\qquad$ Each..D.P. 80.50 Dozen, each,. D, P, \$0.4
Polished Nickel, each ... .................................
Each. D.

## Hard Rubber Radiator Cap for Ford



These Radintor Caps are made of heavy gauge brass and accurately threaded to fit fller tubes.
Top is a hard rubber composition attached securely nad takes a high flaish and makes a very attractive as well in sevvicentle cap. This top is very easy to grip and remains cool at all times
Emeh


## No. 52 Exhaust Deflector



This article clamps around end of exhaust pipe and is easily turned in any direction. It is especially desirable for deflecting oil, heat or smoke from tires when carried in rear.

Does not interfere with exhaust in any way.
Finished in black enamel.
Price
Each. D.P. $\$ 0.26$
No. 1025 Fan Belt Guide


No. 1025 Fan Belt Guide. A simple little device which will prevent the belt from slipping. Price, each
.$\$ 0.20$
Each. .D.P. 80.26

## Hub Cap for Fords



An exact counterpart of the standard Ford Model T Hub Cap, made of heavy gauge brass, with accurately machined threads; highly polished. Ten caps packed in a beavy cardboard box. Weight, each, 3 ounces.
Hub Cap, brass, each.............. . 80.30 Gach..D.P. $\$ 0.33$ Dozen..D.P. $\$ 3.36$
Hub Cap, nickel, each................. . 25 Each., D.P. $\$ 0.40$ Dozen.. D.P. $\$ 4.50$

## De Luxe Hub Cap for Fords


#### Abstract

Thls is a beavy brass casting of a design similar to that furnished with Packard and other high-priced cars, It cannot be marred with a beavy wrench or dented by an accidental bump into garage posts. Highly polished and flisisbed. A set of four De Luxe" Hub Caps packed in a beavy cardboard box. Weight, 1 pound. De Luxe Hub Cap, brass.......... $\mathbf{8 0 . 9 0}$ Each.,D.P. $\$ 1.11$ De Luxe Hub Cap, nickel. . . . . . . . . . 1.00


 Each..D.P. \$1.34

## Valve Stems

Exhust and Inlet Valve made to fit the Ford motor and give satisfactory results in service.
Each "'OW'

## Valve Springs for Ford



Ford Valve Springs made of bigh grade crucible steel wire oil-tempered.
Each . . . . . . . . $\mathbf{3 0 . 0 5}$ Dozen., D,P, $\$ 0,55$

## Valve Stem Adjuster for Ford

The adjusters are carefully made from the best materials. The shells are carbonized and bardened to insure a good wearing surface. Discs of proper surface. Diser of proper size and thicliness are provided for close adjustment. A set consists of 8 shells and approximate-
ly 48 discs. Packed in
 neat box.
Price, per set


## No. 320 Breather and Oil Filler



A convenient filler for oil, attaches to the regular crank case filler and prevents the oil from wasting and mussing up the engine.
Price, each
Price, Each. . D.P. \$1.11

# ACCESKORIES 

## BALL SOCKETS, SUPPORTS. STEERING GEAR ANTI-RATTLERS, ETC.



RADIUS ROD
No 5142. Anti-Rattling Radius Rod Ball Socket. Serew uatment to baked black enamel floish. adjustment to take up weacked in paper box
Weight, about 14 ounces; packed in paper box.
Each
Each..D.P. $\$ 0.18$ Dozen..D.P. $\$ 5.33$
No. 6155. Connecting Rod
No, 5155. Anti-Rattling Connectiog Rod Ball Socket Screw ndjustment to take up wear. Baked black ennmel finish. Screw required on every Ford car. Weight, 6 ounces; pair packed in paper box.


STEERING ROD

Pack Pair
. $\$ 0.40$ Per Pnir
Per Pair
Per Pair..D.P. \$0.d6 Dozen Pairs..D.P. $\$ 6.66$

## Brake Rod Support

Our brake rorl support takes the Dlace of the pres: ent Press Steel support on the Ford Model T cars. Ford Model narts No tepair parts No. 3470 . The steel Supports are continually breaking and the rods vibrate with tbem,
Our supports are made from bish grade malleable. The bardened steel ball is held in tension against the brake rod in me this balt thrns and does not wear the rod. Put in the car without removing rod.
Malleable, pair
Fender Braces for Fords
A clever device whicb elimibates the rattle of the fenders on Ford cars.
Can be attached by any one In a few minutes.
Made of steel and black Japanned.


No. 7 Front Fender Braces, each.
s1.11

Each..D.P. \$0.11 Dozen..D.P. $\$ 1.11$
No. 8 Rear Fender Braces, each
Each..D.P. \$0.07 Dozen..D.P. \$0.66

## Eclipse Steering Gear Anti-Rattler



This adjustment bolt is easily attached and not only stops the rattle but takes up the lost motion from wear in the connecting joints. The bolt is made tapering and fits into a tapered bushing and is securely locked in place.
Price, per set
Per Set. D.P. $\$ 1.66$ Dozen Sets. .D.P. $\$ 18.88$

## No. 312 Down Exhaust Cut-out Set



Made of high grade material and well finished, complete with cut-out, pedal, cable, pulley and spring. Packed in separate cartons. Put on without removing muffler or exhaust pipe.
Per Set
.$\$ 1.00$
Each..D.P. $\$ 1.33$ Dozen Sets. .D.P. $\$ 14.44$
Gray-Hawley Muffler Cut-Out Outfit
 Special Ford Outfit
Saves muffler in case of back fire.
Neatly designed, best material and accurately machined to be instantly attached without any fitting. Entirely different from the cheap outfits usually offered for Ford cars. It is up to the Gray-Hawley standard in every way.
Price complete as shown, only $\qquad$
Each. . D.P. $\$ 2.00$ Dozen Lots, each. . D.P. $\$ 22.22$

## Cut-out Outfit for Ford



A cut-out is is
very necessary adjunct to any car, as it enables the driver by simply press. by simply press. log a small root pedal whether bis motor whether his motor is work ing perfectly and firing properly. It is also claimed that by allowing the gases to escape treely through cut-out on a bil or grade that the power of the engine is increased. The above eut illus. trates a complete outflt we have absembled especially for trates cars, which are not equipped at the factory with this Ford cars, which are not equipped at the factory with this device same consists of an iron cut-out $\begin{aligned} & \text { size, a foot pedal, spring and cable cbaln. The entire outfit }\end{aligned}$ is packed in a neatly labeled box.
Outflt No, 1, complete with plain pedal, cach............... . 80.75 Each..D.P. $\$ 1.11$ Dozen.. D.P. $\$ 11.11$
Ontflt No. 2, complete with locking pedal, each............ . . 75 Each. .D.P. \$1.11 Dozen..D.P. \$11.11

## LUBRICATORS, DIFFERENTIAL AND RADIATOR ACCESSORIES



Tbis is a positive and mechanically correct oiliog system for Ford cars and is provided with a glass gauge to mount on the dash which shows at all times the circulation of the oiling system. Is installed on the Ford engine without changes and requires ouly a few minutes' time, all working parts covered and kept free from dirt. No additional oil tanks used and no phanges in engine adjustment required. No parts interfere with standart engine and loes not limit the addition of other accessories. simple and rugged in construction and certain in operation. Notbing to get out of order or nlemand attention.

Price, each
.85.40
Fach ............. D.P. 88.33
Leots of 6, eacl...D.P. 7.77
Lots of 12, each.. D.P 6.64

## Radiator Support



The weight of the radiator is carried by the thin brass sides that soon become broken by the constant vibration and road shocks. When these sides break, the radiator sags, allowing the tubes to move up and down and rab agatost the and down and rub asainst the
tying sbeet whicb extends tying sheet whicb extends
across
between the brackets. across between the brackets.
This soon breaks the tubes and it is good-bye radiator. Prevent this by putting on the Martens Radiator Sup. port hefore the sides break, or, if the side is broken, put the support under the radiator and prevent the tubes from wearing in two.

Each . . . . . . . . . . . . . . . . 81.25
Ench . D.P. \$1.GA

## The Bailley Gearless Differential For Ford Cars

Hanishes forever all rear axle troubles. Replaces the standard geared differential without changes and is finished complete ready to install.
The Bailley Gearless Differential will prevent skidding, slidesway, slipping and stalling on bad roads. It gives a positive drive on both wheels fust the same as if both wheels same as if both Wheels
were on a solid undivided were on a solid undivided ing device bolds the naxe as a unit exeept when turning eorners, thas preventing the spinning of one wheel when on rongh roads or in tmud or samil.
 Your car will ride stead-
ier. your brates will be more effective, you will save oll, gaso !tse and lices, and enjoy freedom from skiblling

# ACCESGORIES 

## PISTON RINGS AND FAN BELTS



There is only one genuine "Leak Proof" Ring and it has the name "Leak Proof" stamped on every ring. Made of special soft gray cast iron accurately turned and individually ground to size.

Does your engine fill up with carbon?
Do your spark plugs get foul with oil?
Does your engine hold compression?
Does your engine smoke?
Are you using too much gasoline per mile?
Is your oil consumption excessive?
Does your engine deliver full power?
Such faults are the result of poorly fitting or worn piston rings and can be corrected by the use of "Leak Proof" Rings.

Leaky rings are responsible for a major portion of the engine troubles and it is safe to say that 90 per cent. of all engines have leaky rings after 4,000 to 5,000 miles running.

Fit your car with the genuine "Leak Proof" Rings and get full power and full mileage.
Each
Price, each. . D.P. $\$ 2.66$

## Standard Piston Rings



Our No. 77 Piston Rings are carefully made of a special soft cast iron and finished accurately to size. Every ring perfect, of proper size for the piston and cylinder for which it is intended. The lap dovetail joint makes a gas-tight fit and insures good compression.

Size, $3 \frac{1}{4} \times \frac{1}{4}$ in., each
Each. . D.P. $\$ 0.26$
Dozen. .D.P. \$2.66
Oversize, $3 \frac{1}{4} \times \frac{1}{4}$ plus . 030 in., each . . . . . . . . . . . . . . . 15
Each. . D.P. $\$ 0.26$
Dozen. .D.P. $\$ 2.66$

## Leather Fan Belts for Fords



No. 1 Leather Fan Belts, each.
80.35

Each. . D.P. $\$ 0.44$
Dozen, each., D.P. $\$ 0.40$


No. 6 Latigo Leather Belt
Latigo leather is really rawhide with the stretch tanned out. It contains no mineral tannage, but is tanned like leather was tanned in Mexico when Cortez landed there. It is impervious to the elements that usually destroy fan belts and should last indefinitely.
No. 6 Latigo Leather Belt, each $\qquad$ $\$ 0.50$ Each. . D.P. $\$ 0.55$
Dozen, each..D.P. $\$ 0.50$


This belt is made of high-grade fabric, oil and water proof and free from stretch and is faced on pulley side with leather to prevent slipping.
No. 4 Blue Streak Fan Belt, each
. $\$ 0.60$
Each. . D.P. $\$ 0.66$
Dozen, each. .D.P. $\$ 0.60$

## No. 5 Fabric Open Belt



A close woven, non-stretch fabric belt, specially treated to exclude oil and water, made open to add to the ease in putting on. The belt fastener is quick in operation and holds tight.
No. 5 Fabric, price, each
Each. D.P. \$0.26
Dozen, each.. D.P. $\$ 0.24$

## G. Q. Fan Belt



Gibson Quality Fordoid Fan Belt is constructed of six plies tightly woven special army duck of very great strength. Well treated with a special compound which increases the friction and makes the belt impervious to the action of oil, water and heat. All stretch is taken from the fabric before this treatment. Made endless, the splice being sewed above and below, eliminating all chance of opening. Sewed with specially treated thread. The material and construction are such that the Fordoid Fan Belt will give long and satisfactory service. We recommend and guarantee this belt. G. Q. Fan Belt, each. $\qquad$ Each. .D.P. \$0.44
Dozen, each. . D.P. $\$ 0.40$

JIG AND REAMER, MAGNET RECHARGERS AND VALVE GRINDERS

## The Davis Cylinder Reboring Jig and Reamer



Don't scrap old worn and scored Ford cylinders-rebore them with the Davis Cylinder Reboring Jig and Reamer.

It is an established fact that old cylinders that have seen months of alternate expansion and contraction due to the heating and cooling in service are seasoned out and are much superior to new castings.

We will furnish pistons 1-32 inch oversize and the Davis outfit rebores to fit these pistons and makes the motor better than new.

This will enable the smaller shops and garages to rebore cylinders equally as good as the larger shops with their expensive machinery.

One man can rebore a set of four cylinders in sixty minutes. This includes all setting up, the tool centers itself and an inexperienced man can do as good a job as an expert machinist.

Reamer is adjustable for size. Weight, net, 45 pounds. Blades can be set out and reground when worn at small expense.
Price
D.P. $\$ 100.00$

Connecting Rod Babbitt Jig


Do your own babbitting on Ford connecting rods with this labor-saving jig. Does the work perfectly and produces smooth, true bearings. Save time and make some extra money instead of returning or scrapping connecting rods that only need new bearings.
Price, complete
.$\$ 4.00$ Complete. .D.P. 86.33

## Benjamin Ford Magnet Recharger

No. 8306A


Tbis device is designed for re-energizing the permanent magnets on the Ford Magneto. It may be operated from fre or six dry cells in series, or an ordinary six-volt storage battery. Economical in current consumption and simple to operate. $A$ large percentage of the ignition troubles on the Ford car are due to the weakening or demagnetizing of the permanent magnets on the magneto, whit magnets on the magneto, which resuits in a much lower
voltage outrut. This is more voltage outrut, This is at low noticeable and annoying at low
speed.
By the use of this Recbarger on Magnetos in this condition. the latter can be strengthened to sucb an extent that nearly full efficiency is agatn obtained.
Price ............................. . $\$ 9.00$ Each.. D.P. $\$ 15,00$

## Detco Valve Grinders

FOR FORD MOTORS
The Detco Valve Grinder is a machine which its on the cylloder block chine which Iits on the cylinder block of a Ford motor and brinds fout valves at the same time by a single
movement back and forth of the hand lever

It is easily attached ready for business, in less than five minutes. There are no holes to drill or alterations of any kind necessary, as the machine is attached to the boles al-


The Detco Valve Grinder will seat a set of valves more perfect than is possible by the most skilled mecbante in less than one-sixth of the time and the work can be done by a boy or anyone who is able to pull the hand lever back and forth.

The seats are ground more perfect than can be done by linnd as the valves are held in perfect alligument and absolutely centered while being ground. This feature adds 25 Der cent. greater etticiency to the motor.

The action of the grinder is the same as a valve, being ground by hand. That is, the valves are rotated $1 \frac{4}{4}$ revolu. tion and reverse, also, lifted from the seat in an up and down movement, all of which is done by pulling the band lever back and forth.

The Detco Valve Grinder is an absolute necessity in every garage and to owners of tleets of several cars, for it will pay for itself in no time and add wonderfully to the efflelency of the motor whose valves it grinds.
$\underset{\text { Price, D. P. } \$ 2000}{ }$

# ACce foko icil 

## GASKETS AND FELT WASHERS

## Victor Ford Gaskets



This Box Contains 12 Cylinder Head Gaskets
No. J. V. 29. Box of 12 Ford Cylinder Head Gaskets, per box
$\$ 9.60$
Per box..D.P. $\$ 8.88$
Less than box, each. . D.P. $\$ 0.84$

## Victor Ford Gaskets



This Box Contains 12 Complete Sets Less the Cylinder Head Gasket

No, J. V. 9. Box of 12 Set Ford Gaskets. Less Cylinder Head Gaskets, per box. ................ $\$ 3.20$
Per box..D.P. \$4.44
Less than box, per set. .D.P. $\$ 0.44$

## Victor Ford Gaskets



No. J. V. 25. Box of 12 Complete Sets Ford Gaskets, per box
$\$ 12.00$
Per box.. D.P. $\$ 12.88$
Less than box, per set. .D.P. $\$ 1.22$
1 complete set of gaskets consists of:
1 No. 1 Cylinder Head Gasket No. 3002 ,
1 No, 2 Cylinder Head Outlet Gasket No, 3005.
1 No. 3 Cylinder Head Inlet Gasket No. 3018.
1 No. 4 Cylinder Head Flange Gasket.
6 No. 5 Inlet and Exbaust Pipe Gaskets No. 3063.
1 No. 6 Trans Drain Plug Gasket No, 30s0B.

Felt Washers and Gaskets
For Ferd Cars


Carton contains one complete set of 80 Felt Washers as used on the Ford car. Per Carton ..............................75 Per Carton..D.P. $\$ 1.00$


Carton contains 6 Felt Washers for wheels, crank shaft and steering bracket, per carton . ...................... . $\$ 0.15$
Per Carton..D.P. $\$ 0.22$

## Felt Washers

These Felt Washers are made of good quality pressed felt and are the correct sizes for thelr respective places on Ford cars. Numbers glven correspond to same parts is Ford part lists:


No. Required for Car Per Doz.


# ACCESSKORIES <br> TOOL BOXES AND TOOLS 

## Valve Grinder for Fords



No. 606

|  |
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Piston Ring Compressor


With this Compressor, Piston Rings can be set in just a fraction of the time ordinarily consumed. A slight band pressure on bandles produces a leverage strong enough to compress even the new and stiff rings with rery little effort. Price

80,50
Each.. D.P. 80.77
Dozen. D.P. 87.77

## Ford Style Boxes



Substantial, well made tool or battery boxes of the right sizes to ft Ford cars. Heavy gange pressed steel binished in baked black enamel and fitted with spring catehes and key tock. Our extremely large volume of business on these boxes permits us to supply our trade at exceptionally low prices. Do bot confuse this line with the many cbeap. light-weight loxes on the market.
 wide and 62 inches deep. each
s2.15
Each.. D.P. $\$ 2.88$
Dozen each, D. P. $\$ 2.55$
No, R-18s6 Ford Box, size inside 172 inchen long, 8 inchen
wide and 61 inches deep. vach
2.10

Each ., D.P. $\$ 2.66$
Dozen each.. D.P. $\$ 2.40$
100 lots eacb. . D.P. $\$ 2.11$
No, R-2396 Ford Box, size inside z? inchem long, is inchen wide and 61 inches deep, rach

2,15
Each, D.P. $\$ 2,6 i$
Dozen each.. D.P. $\$ 2,40$
100 lots each..D.P. \$2.1]
No. B-2416 Ford Box, size inside 94 inches logg, 92 inclien wide und $6 \frac{1}{2}$ inehes deep, each
Kach. . D.P. $\$ 4.22$
Dozen eacb..D.P. \&3.84


Made of malleable iron with hardened bolt and nut. This puller is made with s lose nut inside, instead of the shell being tapped to receive the bolt. This permits of the hardened bolt fitting into hardened threads instead of the soft shell.

Price, each
.80 .50
Each. .D.P. \$0.56
Dozen, . D.P. $\$ 5.00$

## No. G 7. Buckeye Clincher Tire Tool

The easiest and quickest method of removing or attaching clincher tires. Even tires that have rusted to the rims come off in a jiffy with this tool.
Complete .... $\$ 1.00$
Each. . D.P. \$1.11
In dozen lots,

each. . D.P. $\$ 1.00$


This very necessary tool is made particularly for Ford valves and is the one tool that actually fits its place. It is strongly made and the jaws are thin and curved to the correct shape. Self-locking and rapid in operation.
Price, each
$\$ 0.50$
Each. . D.P. $\$ 0.66$

# ACCESOKORIES 

## Alvord Special Reamers for Ford Cars

No. 2713-2714-Ford Spindle and Spindle Arm Bushing. This reamer is made the exact size to ream these two bushings and is almost indispensable for this particular use, price. $\$ 2.00$ Price, each. .D.P. $\$ 2.88$


No. 3022 -Ford Wrist Pin Reamer. This reamer is made especially to ream both bushings for the wrist pin at one operation and puts them in perfect alignment for the wrist pin, price...... $\$ 2.0$
Price, each. D.P. $\$ 2.77$


No. $3314 \frac{1}{2}$ Transmission Gear Bushing, price.... $\$ 2.00$ Price, each. .D.P. $\$ 2.77$


No. $2540-$ D. S. Housing Front Bushing, price. . $\$ 3.00$ Price, each. .D.P. $\$ 4.00$
No. 3820-Front Spring Perch Bushing, price. . . 2.00 Price, each. .D.P. $\$ 2.44$
No. 3844-Rear Spring Perch Bushing, price. . . . 2.00
Price, each. .D.P. $\$ 2.44$
No. 2525 B-Differential Pinion Bushing, price. . . 2.00
Price, each..D.P. $\$ 2.44$
No. 3044-Cam Shaft Rear Bearing, price. . . . . . . . 2.50
Price, each. .D.P. $\$ 3.00$
No. 3042 -Cam Shaft Front Bearing, price. . . . . 2.50
Price, each. .D.P. $\$ 3.00$
No. 3521-Steering Gear Pinion Bushing, price. . 1.50 Price, each.D.P. $\$ 1.88$
No. 2559-Hub Cam Shaft Bushing, price....... 1.50
Price, each.. D.P. $\$ 2.00$
No. 3545-Steering Post Bracket Bushing, price . . 2.50
Price, each. .D.P. $\$ 3.00$


No. 2527-Differential Spider Bushing, price. .... $\$ 3.00$ Price, each..D.P. $\$ 4.00$
No. 2517-Differential Case Bushing, price...... 4.00 Price, each. .D.P. $\$ 5.38$


No. 3031-2-3-Crank Shaft Bushings. This reamer is designed to ream the three bushings of the crank shaft at one operation and by this means you secure perfect alignment of these bearings, which not only saves three-fourths of the time in reaming, but also saves an unusual waste of time in the alignment. Price
$\$ 15.00$
Price, each. . D.P. $\$ 18.88$
The above list of reamers is designed to cover all the parts of a Ford automobile that need reaming, and they are all made the exact size necessary for these different bushings and will be found very convenient and highly useful tools for all garages.


No. 3000-Cylinder Reamers. These reamers are made with inserted high-speed blades and are the exact size to be used in reaming cylinders that are slightly worn and will fit the oversize piston, which are furnished by the Ford company and is to be used on rebored cylinders.
Price
Price, each. . D.P. $\$ 41.66$

## Set in Hardwood Cases

We also put up in hardwood cases the following reamers, which will make a complete set of the reamers that are most often needed in garages, consisting of eleven different sizes. In this set you will note that Nos. 3820 and 3844 are of the same size and one reamer takes care of the same bushing. Also Nos. 3044, 3042 and 3545 are the same size reamers and one reamer takes care of these three different bushings:


No. 2713-2714-Ford Spindle.
No. 30221-Wrist Pin.
No. 33142-Transmission Gear.
No. $2540-$ D. S. Front Housing.
No. 3820-3844-Front and Rear Spring Perch Bushing.

No. 2525B-Differential Pinion.
No. 3044-3042-3545-Rear and Front Cam Shaft and Steering Post Bracket Bushing.

No. 3521-Steering Gear Pinion.
No. 2559-Hub Cam Shaft.
No. 2527-Differential Spider.
No. 2517-Differential Case.
Price, per set . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 25.00$
Per Set. .D.P. \$84.44

No. G 1 Valve Seating Tool

FOR FORD CAKS
These Valve Seating Tools are made from the finest grade of high speed steel and are guaranteed for one year from defects in material and workmanship.
No. G 1 Valve Seating Tools, Ford size (for Ford only), complete with handle, guide and cutter, each.... 81.00 Each..D.P. \$1.66

No. G 2 Sioux Valve Reamer

An exceptionally well made and heavy valve tool, cutter is hardened and ground tool steel capable of standing up to hard garage service.
Price, each $\qquad$ . $\$ 2.50$
Each. .D.P. $\$ 3.88$


Valve Reseater and Refacer


A thoroughly reliable set of valve tools for Ford valves. Cutters are made of high carbon steel hardened and ground. With the aid of this set the valves and seats may be quickly seated.
Price, per set. . . . 82.50 Per Set.. D.P. $\$ 3.66$

For the use of the car owner or garage man who desires a cheaper set we furnish a reseater and refacing tool similar but not of such good quality.
Price, per set.
$\$ 1.11$
No. G 5 Drill and Tap Set for Fords


For removing broken cylinder head bolts. The drill and tap set is provided with a guide to insure drilling the proper depth. The hardiest set for the repairman for getting the broken end of cylinder bolts out and making a clean thread for a new bolt.
Per set
Per Set. D.P. $\$ 1.66$

Ford Type
No. 2500
Arranged with special reference to seresw threads found on Ferd Automebile, Medel T. This assertment is also peculiarly adapted to a great variety of cars.


To fit 6 -inch stock and 4 -inch "T" tap wrencb:


Price, leather case
.818 .50 Ench..D.P. $\$ 26,61$

## Lightning Garage Repair Set for ford cars



## No. 8501

This assortment of taps, dies and reamers bas been selected to meet the demand from garages and redair shops, and is hased on thelr experience in handling repairs on Ford Cars, The tools are of the celebrated Ligbtning quality which lias been in the front rank for nearly 45 years.

## CONTAINS:

Screw cutting sizes $4-28,5 / 16-24, \frac{1}{2}-24,18 / 32-16,7 / 16-20,7 / 16-14$, 3-20.
Pluc Taps and Round Adjastable Dies.
Spiral Fluted Reamerg.
2-in-1 for spindle body and spindle atm buslifog.
$2-i n-1$
1 for piston pin bushing.
Stock for Round Adjustable Dies,
"T" Tap Wrench (Adjustable).
Velght if pounds.
Price
. 814.50
Each. . D. F. $\$ 20.00$

# ACCESSORIES 

TOOL KITS


No. 675 Repair Kit. Just the tools needed for a quick repair, and packed in a waterproof duck kit that can be carried under the seat. Contains valve grinder, triple end wrench, connecting rod wrench, hub cap wrench and double end general service wrench.
Per Set
.$\$ 1.20$
Per set. . D.P. $\$ 2.00$


No. 630 Triple End Socket Wrench. Will fit the cylinder head and rear axle housing bolts. The long handle gives good leverage for starting stubborn bolts. Price, each
$\$ 0.44$
Each. .D.P. $\$ 0.44$
Dozen, each. . D.P. $\$ 0.40$


No. 645 Reverse and Brake Pedal Tension Springs. The one wrench that reaches these parts for needed adjustment. The ratchet permits action in limited space.
Price, each
. $\$ 0.50$
Each. D.P. $\$ 0.84$
Dozen, each.. D.P. $\$ 0.78$


No. 650 Hub Cap Wrench. This is not a cheap makeshift, but a real tool made of good material and made to fit. Also fits spark plugs and several other places on the car.
Price, each
$\$ 0.10$
Each. D.P. \$0.18
Dozen, each. . D.P. $\$ 0.16$


No. 623 Connecting Rod Wrench. Made to reach the No. 4 connecting rod bolts. Its use will save many times its cost, as it eliminates the necessity of taking down the engine to reach these bolts.
Each
. $\$ 0.28$
Each. .D.P. $\$ 0.46$
Dozen, each. . D.P. $\$ 0.44$

## Tool Kit



This kit is made up of tools specially adapted to use on Ford cars. They are selected from the wellknown Billings \& Spencer drop forged line, insuring quality and durability. The bag is made of good quality of canvas, bound edges, and leather strap. The tools are as follows:

18 -inch Auto Wrench.
16 -inch Combination Pliers.
19 -inch Screw Driver.
1 Double Head Wrench, openings $\mathrm{H}_{1}-\mathrm{in}$. and $1 \frac{1}{1}-\mathrm{in}$.
1 Double Head Wrench, openings $\frac{3}{}-\mathrm{in}$. and 3 -in.
1 Double Head Spark Plug Wrench, $\frac{z}{3}-\mathrm{in}$. and $\mathrm{r}^{2}-\mathrm{in}$.
1 Double Head Hub Cap Wrench, $1+\frac{1}{6}-\mathrm{in}$. and $1 \frac{1}{2}-\mathrm{in}$.
1 Socket Wrench, opening $\mathrm{g}_{\mathrm{g}}-\mathrm{in}$.
18 -ounce Ball Pein Hammer.
1 Chisel, 1 Punch, 1 Cotter Pin Tool, 1 File.
Each, including bag and tools as above........... $\$ 4.50$
Each.. D.P. $\$ 7.22$ Seven-piece Tool Kit for Fords


This set contains all of the tools originally sent out with a Ford car and some additional tools that are very convenient to have. Consists of the following tools:

No. 27 Semi-finished 15degree Angle Drop Forged Wrench.

9 -inch Black Automobile Wrench.
3-inch Electrician's Round Shank Screw Driver. 6 -inch Black Adjustable Combination Pliers. -inch Cold Chisel, natural finish.
5 -inch Offset Screw Driver.
8 -ounce Ball Pein Hammer.
7-Piece Ford Tool Kit, each . $\$ 2.00$
Each. .D.P. $\$ 3.00$ No. 1 Handy Three-Piece Set


Just the tools most needed and which you want to keep within easy reach in the car. Set consists of:

14 -inch Screw Driver.
1 6-inch Adjustable Wrench.
1 6-inch Pair Pliers.
Price, per set
Per Set. D.P. $\$ 1.33$

## WRENCHES FOR FORD CARS

No. 33 Mossberg Socket Wrench Set for Ford Cars


Just the sizes Beeded to fit the Ford lroils and nuts that require socket wrenches, Consists of 5 sockets and beavy bandle.
Price per set
$\$ 1.10$
Bacb. D.P. $\$ 1.7$
No. 17 Mossberg Heavy Duty Set for Ford Cars


No. 17 Socket Wrench Set
Consists of 5 sturdy steel bars eight inches isur ove: all witb a socket on each end. Fits tbe stansiand Ford bolts and nuts. Paeked in a canvas kit.
Per set
Fach, D.P. 82.22
No. 30 Mossberg Socket Set for Ford Cars


Contalus all the sizes of sockets needed to fit all Ford bolts and nuts together with one No. 365 ratchet bandle, extension tube, universal joint and serew device bit.
Price per set
Each., D,P. $\$ G, 06$
No. 15 A Mossberg
 Set is for excluxive use on Ford cars and $c$ o m . plets all covjustmests that are to be found on these machines
wood case
contain.

contain-
ing Mossberg ratclet socket wrench No, Sin, tubular extension bar, universal joint, serew driver bit, spark plug socket, nine regular, mottled, thoroughly hardened pressed steel sockets, fitting stantard sizes of xorvis buts athl fools: one special $10 / 82$ oval socket for thwe crank shaft bearing loolts.
No. 15A Monsberg Soeket Wrenelt set, packed in woul case. cach
Each.. D P. 88.3

## Lane's Unique Ratchet Wrench



No. S Walden Set of Five Ford Service Wrenches, per set $\$ 1.25$ Per set. .D.P. $\$ 2.06$
Williams' "Ford" Sets of Superior Drop-Forged Wrenches

"Ford" set "A"

"Ford" set "B"

| No. | Class | T ${ }^{\text {an }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Milled OpeningsPocbes | Semi-Finish |  |
|  |  |  | Price | Retail |
| 27 | Engineer's. | 19/32-11/16 | D.P. $\$ 0.35$ | 50.25 |
| 702 | Cay Screw | 9/16 | D.P. $\quad 24$ | .17 |
| 963 D | Offret Socket | 29/64 | D.P. $\quad 40$ | . 27 |
| 964 A | Ofreet Socket | $33 / 64$ | D.P. $\quad 44$ | . 30 |
| 9665 | Straight Socket | 37/64 | D.P. $\quad .50$ | . 33 |
| 996 D | Ofret Socket. | $37 / 64$ | D.P. $\quad .50$ | . 33 |
| 9654 | Offset Socket. | 39/64 | D.P. $\quad .30$ | . 33 |
| 966 DS | Offeet Socket | 41/64 | D.P. $\quad 70$ | . 40 |
| 9674 967 D | Offset Socket Offeet Socket | $45 / 64$ $49 / 64$ | $\begin{array}{ll}\text { D. P. } & 60 \\ \text { D. } \mathrm{P} & 60\end{array}$ | 48 |
| 96isa | Offet Socket | $51 / 64$ | D.P. 66 | 45 |
| 969A | Offset Socket | $57 / 64$ | D.P. 78 | . 51 |
| Set A, without roll .......................... |  |  | D.P. 6.22 | 4.25 |
| Set A, with roll... |  |  | D.P. 6.88 | 4.65 |


| SET "B" |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Class | Milled <br> Operinges neber | Length Inches | Price |  | Retail |
| 27 C | Engineer's | 9/11-11/16 | $57 /$ | D.P. | \$0.33 | \$38 |
|  | Cap Serew | $8_{1}-{ }^{-3} 4$ | 63 |  |  | -28 |
| -33C | Engineer's | $15 / 16-1$ | $8{ }^{81}$ | D.P. | . 60 | 42 |
| ${ }^{724}$ | Cap Ecrew | 7 $6-116$ | $9^{31}$ | D. P | 76 70 | .50 .48 |
| 966 DS | Socket...l | $41 / 64$ |  | ${ }_{\text {D }}^{\text {D. P }}$ P | .70 884 | 1.98 |
| Set B, | ith roll... |  |  | D. P. |  | 1.90 2.25 |

# ACCERSORORIES 

## ATWATER-KENT PARTS



## Distributor Cap Complete

Distributor Cap complete with ter-minals-

| 2 -Cylinder | \$3.05 | D.P. \$5.08 |  |
| :---: | :---: | :---: | :---: |
| 4-Cylinder | 3.40 |  | 5.66 |
| Distributor terminals | . 20 | D.P. | . 33 |
| Rubber washers | . 02 | D.P. | . 04 |
| Distributor Block complete- |  |  |  |
| 2 -Cylinder | . 50 | D.P. | 84 |
| 4-Cylinder | . 50 | D.P. | . 84 |
| Contact screw holder | . 35 | D.P. | . 58 |
| Insulated screws and washer | . 05 | D.P | . 09 |
| Latch (not sold separately) |  |  |  |
| Contact screw with shim washer | 1.55 | D.P. | 2.58 |
| Spring contact arm | 1.70 | D.P. | 2.84 |
| Lifter | . 25 | D.P. | . 42 |
| Lifter guide screw | . 07 | D.P. | . 12 |
| Contact spring holder | . 35 | D.P. | . 58 |
| Distributor clamp | . 12 | D.P. | . 20 |
| Distributor clamp screw | . 04 | D.P. | . 07 |
| Binding post | . 08 | D.P. | . 14 |
| Washer | . 08 | D.P. | 14 |
| Base casting | 2.95 | D.P. | 4.88 |
| Notched shaft, 2-cylinder | 1.50 | D.P. | 2.52 |
| Notched shaft, 4-cylinder | 1.50 | D.P. | 2.52 |
| Shaft key and screw | . 10 | D.P. | . 18 |
| Lifter spring | . 20 | D.P. | . 34 |

Distributor Cap complete-

| 2-Cylinder |  | D.P. 86.84 |
| :---: | :---: | :---: |
| 4-Cylinder | 4.10 | D.P. 6.84 |
| 6 -Cylinder | 5.00 | D.P. 8.34 |
| 8-Cylinder | 6.00 | D.P. 10.00 |
| Distributor terminal | 20 | D.P. 33 |
| Rubber washer | . 02 | D.P. . 04 |
| Distributor clamp screw | . 04 | D.P. 07 |
| Contact screw holders | . 35 | D.P. . 58 |
| Insulated screws and washers | . 05 | D.P. 09 |
| Contact screw | 1.55 | D.P. 2.58 |
| Spring contact arm | 1.70 | D.P. 2.84 |
| Lifter | 25 | D.P. 42 |
| Base plate screws | . 05 | D.P. . 09 |
| Lifter guide screws | . 07 | D.P. 12 |
| Contact arm holder | 35 |  |
| Main body casting | 1.45 | D.P. 2.40 |
| Governor weights | . 20 | D.P. .33 |
| Governor springs |  | . 24 |
| Distributor Block complete- |  |  |
| 2 -Cylinder | . 50 | D.P. 84 |
| 4 -Cylinder | . 50 | D.P. 84 |
| 6 -Cylinder | . 50 | D.P. 84 |
| 8-Cylinder | . 75 | D.P. 1.24 |
| Distributor clamp | . 12 | D.P. 20 |
| Binding post screw | . 08 | D.P. ${ }^{13}$ |
| Binding post washer | . 08 | D.P. 13 |
| Contact maker base | 2.10 | D.P. 3.52 |
| Lifter spring |  |  |
| Upper Shaft- |  |  |
| 2-Cylinder | 1.00 | D.P. 1.66 |
| 4-Cylinder |  | D.P. 1.66 |
| 6 -Cylinder | 1.20 | D.P. 2.00 |
| 8-Cylinder |  | D.P. 3.66 |
| Contact maker complete (sha cluded) | $7.20$ | D.P. 12.00 |

#  <br> PARTS 

In compliance with the many requests of our dealers we have added to our stock a line of Repair Parts for Ford Cars. We have stocked and catalogued only such parts as the repair men and garage may require in the regular run of service and repairs.
The part numbers refer to similar parts as listed by the Ford Motor Company and the numbers not listed by us, we do not carry and cannot supply.




All orders should refer to the part number and only for such parts as listed.
Each part is made from the very best materials obtainable, machined by expert workmen, tested for strength, and all are guaranteed to be properly and accurately finished to fit. A small stock of Repair Parts for Ford Cars involves only a small amount of money and brings in a volume of profitable business.
We have prepared a list of such parts as required to supply such service at the minimum expenditure, and we will gladly mail a copy to any dealer upon request.

## PARTS FOR FORD CARS



## PARTS FOR FORD CARS-Continued



# ACCESOKORIES 

PARTS FOR FORD CARS-Continued


PARTS FOR FORD CARS-Continued


# ACCESORORIES 

PARTS FOR FORD CARS-Concluded


## All Prices in the Entire Catalog Subject to Change Without Notice

USEFUL INFORMATION

From The Horseless Age, February 1, 1916.

# $3,114,000$ Cars in the World 

The United States Has Three Times as Many Automobiles as the Rest of the World Combined, with $2,400,000$ Vehicles. Great Britain, France and Germany Next in Rank

According to statistics just compiled by The Horseless Age, there are approximately $3,114,000$ automobiles in use throughout the globe. The latest registration figures indicate that there are $2,400,000$ automobiles in the United States alone. Approximately 77 per cent. of the world's automoblles are being operated orer the roads of this country.

An idea of the position the United States occupies in the motoring field may be gained when it is known that the 714,000 cars in vervice in other sections of the world represent less than the total of cars registerel in the states of New Yorls, Ob California and Iowa.

Dany of the countries recorded in the accompanying table do not ofticlally enumerate the motor vebicles within their borders, the figures shown baving been obtained from reports from consular officers and United States Government exports statistics. The United States, of course, ranks flrst, having more than three times as many cars as all the other countries combined. Great Britain comes second with its 276,690 cars, which represents about one vehicle to every nine in this country. Prance and Germany, with thelr betwork of good roads and years of advance orer the United States in the general manufacture of motor vehicles, occupy third and fourth places, resnectivelv. with 98,400 and 71,450 . It is interesting to note in connection with these four countries that their standing in the automobile manufacturing line is relatively the same as that given above for consumption.

## Automobile Census of the World

| Afphanistan | 65 | Italy | 13,000 |
| :---: | :---: | :---: | :---: |
| Algeria | 5,900 | Jamaica | 548 |
| Arabia | 50 | Japan. | 1,500 |
| Argentina | 12,550 | Liberia | 400 |
| Australia | 20,350 | Madagasear | 75 |
| Austria | 13,160 | Mexico.. | 4,290 |
| Belgiam | 9,400 | Moroceo | 490 |
| Bolivis | 19 | New Zeland | 10,060 |
| Brazil. | 5,400 | Nicaragua | 18 |
| British N. Borneo. | 5 | Norwny | 975 |
| British S. Africa | 8,340 | Pabsma | 127 |
| Bulgaria | 3,059 | Paraguay | 18 |
| Burma | 800 | Persia | 27 |
| Canada | 65,600 | Pera | 350 |
| Ceylon | 2,150 | Philippines | 2,580 |
| Chili | 768 | Porto Rico | 2,400 |
| Chins | 714 | Portugal. | 2,500 |
| Colombia | 1,131 | Roumania | 1,800 |
| Costa Rica | 145 | Russia. | 15,360 |
| Cuba. | 2,095 | Salvador | 37 |
| Denmark | 8,525 | Samont. | 10 |
| Duteh East Indies | 7,413 | Santo Domingo | 45 |
| Ecundor | 171 | Sorvia. | 120 |
| Erypt. | 873 | Sinm. | 750 |
| France | 98,400 | Spain | 9.000 |
| Germany | 71,455 | Struits Settlement | 2,103 |
| Great Britnin | 276,600 | 8weden | 6,048 |
| $G$ recee. . | 335 | Switserland | 5,100 |
| Guatemala | 210 | Trinidad | 275 |
| Haiti | 45 | Tunis. | 045 |
| Holland. | 38750 | Turkey | 525 |
| Hoaduras | 9 | United States | .2,400,000 |
| Honpkrang | 达 | Uruguay | 1,810 |
| Hungary | 6. 300 | Venexuela | 775 |
| Iecland. <br> India | 7.7315 | Zanzibar | 40 |

Algeria
Arabia.
Australia
Austria.
Belgium.
Brazil.
British N. Borneo
Bulgaria
Burma
Ceylon.
Chili.
Chins.
Costa Rica
Cuba
Dentehark
Duteh East Indies
Eeundor
France
Germany
Greece
Guatemalu
Haiti
Honduras
Honpkang
Iecland.
India.


#### Abstract

Canada, on the other hand, has never been a quantity manufacturer of nutomobiles, but has always been the beaviest purchaser of cars made in this country. Witbin the last few years several American manufacturers have established plants in the Dominion where cars are as established piants in the Dominion where cars are as sembled, Most of these cars, however, have been made sembled, Most of these cars, however, have been made for export purposes, the Canadian assembled machines for export purposes, the canadian assembled machimes gettiag a preferentlal tarif over the United States cars when belig shipped to the British colonies.

While Canada ranks fifth in the motor nations with 55,660 cars. Mexico, on our Soutbern border, is well down in the list with but 4,290 cars. Australla is a country of exclusively imported cars, a large portion coming from America, and contains about 20,30 machines. Of the South American countries, with their totat of over 23,200 cars, Argentina holds the leading position with 12,500 cars, with Brazll and Uraguay fol. lowing with 5,400 and 1,810 cars.

Russia, until tbree years ago, Imported all of its au. tomobiles, Among the concerns that distributed the 15,360 michines in use in Russia are several representatives of Ancerican car manufacturers, Austria's manafacturing activitles are also modest, a majority of the 12,160 cars earrying Anstrian license plates being made outside its borders. Italy, the bome of several cars wbicb bave gained conslderable prestige in this country and the land where the automobile owner pays, or at lenst dil pay before the war, fifty cents a gallon for his gasoline, is ninth in the list of motoring nations with 13,000 cars.


How Registrations by States Have Increased


## USEFUL INFORMATION

## Engineering Data

Water weighs 62.4 pounds per cubic foot and 8.3 pounds per gallon.

There are 7.5 gallons in a cubic foot of water.

Gasoline has a specific gravity of .72 , and consequently weighs 5.96 pounds per gallon. This applies to $76^{\circ}$ gasoline.

A foot-pound represents the work required to raise a weight of one pound to a height of one foot. There are 33,000 foot-pounds to a horsepower.

A British Thermal Unit represents the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit at or near $39^{\circ} \mathrm{F}$. Its symbol is B. T. U.

There are 778 foot-pounds in a B. T. U.

On direct drive, with an efficient transmission and differential, about 88 per cent. of the power furnished by the motor should be delivered at the rear wheels.

Under the best condition about 75 per cent. of the indicated horsepower of the engine should be available for useful work.

To find the area of a circle, multiply the diameter by 7854 , and to find the circumference of a circle, multiply the diameter by 3 14-16.

To find the cubic displacement of a motor, multiply the bore or diameter of cylinder by 7854 and multiply the result by the stroke and multiply this result by the number of cylinders, which gives the piston displacement.

## USEFUL INFORMATION

## Hints on the Care of Storage Batteries

If a few simple rules are followed in the care of Storage Batteries, little or no trouble will be encountered in their use.

The battery should be inspected once a week in summer and once every two weeks in winter to ascertain the level of the electrolyte, which is lowered by evaporation. The electrolyte should cover the plates, and if such is not the case, pure distilled or rain water (ordinary hydrant or pump water will not do) must be added to bring the solution up to the proper level.

## Addition of Acid

Acid should only be added to replace spilled solution and in the proportion of one part Chemically Pure (not merely commercially pure) sulphuric acid and three parts of pure distilled water at a hydrometer reading of 1300 at $70^{\circ}$ Fahrenheit. For every three degrees above 70 the gravity should be one point lower; for every three degrees below 70 the gravity should be one point higher.

## ALWAYS ADD THE ACID TO THE WATER -AND NOT THE WATER TO THE ACID

## Testing of Storage Batteries

For this purpose a Battery Hydrometer should be used. Fill the instrument with the liquid and the following reading shows condition of the batteries.

If battery fully charged reads 1250 on hydrometer, then the various readings would indicate battery strength of the percentage shown below: 1250 indicates . . ... . 100 per cent. 1175 indicates . . .... 40 per cent. 1225 indicates .. .... 80 per cent. 1150 indicates .. .... 20 per cent. 1200 indicates . . .... 60 per cent. 1125 exhausted . . . . 00 per cent.

If battery is completely discharged, it should be taken off the car and recharged. The most satisfactory apparatus for this purpose is a Motor Generator Set or Rectifier, which is shown in a section of this catalog.

## Charging of Storage Batteries

In the charging of storage batteries, if the operator should be puzzled in determining the positive and negative of the charging wire, a simple test is as follows:

Draw three-fourths tumblerful of electrolyte from the battery. Attach a strip of lead to each terminal of the charging wire and place both strips in the solution. The current should be withheld, and in about three minutes the strips of lead examined. The one which is brown is attached to the positive side of the charging source and obviously the other side to the negative.

## USEFUL INFORMATION

## Hints on Use and Care of Dry Cells

It was predicted that with the advent of magnetos and starting and lighting systems on automobiles, the use of Dry Cells would be diminished, but instead there is a constant increase in their sale, due to the universal use in which they are employed.

They contain the maximum amount of power for the minimum amount of weight, but care must be given them or best results cannot be secured.

Before Solar Dry Cells are shipped from the factory, they are aged and tested for ten days. If any manufacturing errors have been made, such as torn paper lining or broken connections, they will show up in considerably less time, and such cells are discarded, so we therefore know that Solar Cells are right when shipped from the factory.

## Storage of Dry Cells

Do not purchase more Dry Cells than you can sell in a period of sixty days. Of course, they will keep much longer than this but while we use the best material and workmanship, a chemical action takes place within the cell that causes it to deteriorate if kept in storage for an indefinite period.

The temperature of the storage is very important. They should be kept in a cool, dry place in an upright position. High temperature will cause dry cells to deteriorate faster than low temperature.

In winter, dry cells exposed to low temperature may show very low current readings. This does not affect the quality of the cell, even though it has been exposed to temperature below freezing point, as after being gradually thawed out they will register up to the original state and will give the same results in service as if they had not been frozen.

## Connection of Dry Cells

The general way of connecting Dry Cells is in series, as shown in illustration, that is, by connecting the positive of one cell to the negative of another. Connecting in series increases the voltage in proportion to the number of cells. The voltage of Solar Dry Cells is $11 / 2$ volts, therefore five cells connected in series would give a voltage reading of $71 / 2$ volts, the ampere reading not being increased.


Where the ampere drain is high and long life is desired, it can be obtained by series multiple connection. However, in using series multiple connections, always use multiples of the original number of batteries connected in series. For instance, if the original equipment required five dry cells connected in series, to connect in multiple series, ten dry cells, fifteen dry cells and so on must be used. We give below an illustration of dry cells connected in multiple series.


In purchasing Dry Cells, see that the ampere reading of each cell does not vary greatly, and never connect new cells with those that have nearly run down, as the amperage of the new cell will be brought down to that of the old cell.

## USEFUL INFORMATION

Interchangeable Tire Sizes
Extra or over sizes Regular
$31 \times 3 \frac{1}{2}$ tires interchangeable with ..... $30 \times 3$
$31 \times 4$ tires interchangeable with ..... $30 \times 31$
$33 \times 4$ tires interchangeable with ..... $32 \times 31$
$35 \times 4$ tires interchangeable with. ..... $34 \times 31$
$37 \times 4$ tires interchangeable with. ..... $36 \times 33$
$95 \times 4 \frac{1}{2}$ tires interchangeable with ..... $.34 \times 4$
$37 \times 43$ tires interchangeable with ..... $.36 \times 4$
$41 \times 4 \frac{1}{2}$ tires interchangeable with ..... $.40 \times 4$
$35 \times 5$ tires interchangeable with ..... $34 \times 41$
$37 \times 5$ tires interchangeable with ..... $36 \times 4 \frac{1}{2}$
$39 \times 5$ tires interchangeable with ..... $38 \times 43$
$37 \times 5 \frac{1}{2}$ tires interchangeable with ..... $.36 \times 5$
$37 \times 6$ tires interchangeable with ..... $.36 \times 5 \frac{1}{2}$
$39 \times 6$ tires interchangeable with ..... $.38 \times 5 \frac{1}{2}$
$41 \times 6$ tires interchangeable with ..... $40 \times 5 \frac{1}{2}$

## Equivalent Sizes of Tires

| Metric <br> Sizes | Approximate <br> Sizes in Inches | Metric <br> Sizes | Approximate <br> Sizes in Inches |
| :---: | :---: | :---: | :---: |
| $700 \times 85$ | $28 \times 3 \frac{3}{2}$ | $1010 \times 90$ | $40 \times 3 \frac{1}{2}$ |
| $750 \times 85$ | $30 \times 3 \frac{3}{2}$ | $815 \times 105$ | $32 \times 4$ |
| $800 \times 85$ | $32 \times 3 \frac{1}{2}$ | $875 \times 105$ | $34 \times 4$ |
| $860 \times 85$ | $34 \times 3 \frac{1}{2}$ | $915 \times 105$ | $36 \times 4$ |
| $760 \times 90$ | $30 \times 3 \frac{1}{2}$ | $820 \times 120$ | $32 \times 4 \frac{1}{2}-5$ |
| $810 \times 90$ | $32 \times 3 \frac{1}{2}$ | $850 \times 120$ | $33 \times 4 \times 5$ |
| $840 \times 90$ | $33 \times 3 \frac{1}{2}-5$ | $880 \times 120$ | $34 \times 4 \frac{1}{2}-5$ |
| $870 \times 90$ | $34 \times 3 \frac{1}{2}$ | $920 \times 120$ | $36 \times 4 \frac{1}{2}-5$ |
| $910 \times 90$ | $36 \times 3 \frac{1}{2}$ | $1020 \times 120$ | $40 \times 4 \frac{1}{2}-5$ |
| $960 \times 90$ | $38 \times 3 \frac{1}{2}$ | $1080 \times 120$ | $42 \times 4 \frac{1}{2}-5$ |

## Air Pressure for Inflating Pneumatic Tires

| Diameter <br> of Tire | Maximum Allowable <br> Welgbt on Wheel | Alr Pressure in Pounda <br> Per Square lnch |
| :---: | :---: | :---: |
| $2 \lambda$ | 225 | 50 |
| 3 | 350 | 60 |
| $3 \frac{1}{2}$ | 600 | 70 |
| 4 | 750 | 80 |
| $4 \frac{1,}{2}$ | 1,000 | 90 |
| 5 | 1,000 | 90 |

The working pressure in a tire will increase 23 per cent. (approximately one-fourth) under the usual touring conditions of roads and speeds, over the pressures above given.

## USEFUL INFORMATION

Comparison of Hexagon Head Cap Screws and Nuts
S. A. E. (FORMERLY A. L. A. M.) AND U, \&, \&,

| $\begin{aligned} & \text { Sixe } \\ & \text { Inches } \end{aligned}$ | S. A. E. Number Threads Per 1 In. | U.8.8. <br> Number <br> Thresds <br> Per 1 Im . | Cap Screw Head |  |  |  | Nut Measurements |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | B. A. E. Thick. Inchea | S. A. E. <br> Acrosed Flata Inches | U.S.S. Thick. Inches | C. S. S Acroses Flata Inches | 8.A.E Thick. Inches | 8. A. E. Acrass Flata Incbes | U.S.S. Thick. Incbes | U. S. s Flats Inche: |
| $1 / 4$ | 28 | 20 | $\frac{3}{16}$ | $\frac{7}{16}$ | $1 / 4$ | $\frac{1}{16}$ | $\frac{7}{12}$ | $\frac{1}{16}$ | $1 / 4$ | $1 / 2$ |
| $\frac{5}{16}$ | 24 | 18 | 15/64 | 1/2 | 19/64 | 1/2 | 17/64 | $1 / 2$ | $\frac{5}{16}$ | $\frac{13}{31}$ |
| 38 | 24 | 16 | $\frac{9}{12}$ | $\frac{8}{16}$ | $\frac{11}{2}$ | $\frac{9}{16}$ | 21/64 | 16 | $3 / 8$ | 14 |
| $\frac{3}{16}$ | 20 | 14 | 21/64 | $5 / 8$ | 25/64 | $5 / 8$ | $3 / 8$ | $5 / 8$ | $\frac{3}{16}$ | ${ }_{3}{ }^{5}$ |
| 1/2 | 20 | 13 | 38 | $3 / 4$ | $\frac{7}{10}$ | $3 / 4$ | $\frac{7}{16}$ | $8 / 4$ | 1/2 | $\%_{8}$ |
| $\frac{7}{16}$ | 18 | 12 | 27/64 | $7 / 8$ | 31/64 | 18 | 31/64 | $7 / 8$ | 16 | $\frac{31}{12}$ |
| 5/8 | 18 | 11 | $\frac{14}{3}$ | 15 | $\frac{13}{12}$ | 7/8 | 35/64 | 16 | 5/8 | $1 \frac{1}{16}$ |
| $3 / 4$ | 16 | 10 | $\frac{3}{16}$ | $1 \frac{1}{16}$ | 5/8 | 1 | $\frac{31}{12}$ | $1 \frac{1}{16}$ | $3 / 4$ | $11 / 4$ |
| 7/8 | 14 | 9 | $\frac{31}{2}$ | 11/4 | $\frac{21}{2}$ | 11/8 | 49/64 | $11 / 4$ | 7/8 | $1 \frac{3}{16}$ |
| 1 | 14 | 8 | 34 | 1 $\frac{7}{16}$ | $\frac{14}{16}$ | 11/4 | ?/8 | 1 $\frac{2}{16}$ | 1 | 15\% |
| 11/8 | 12 | 7 | $\frac{31}{31}$ | 15/8 | 鲓 | 13.8 | 63/64 | $15 / 8$ | 11/8 | $1 \frac{14}{16}$ |
| 11/4 | 12 | 7 | $\frac{11}{16}$ | $1 \frac{13}{6}$ | 1 | 11/2 | $1 \frac{3}{32}$ | $1 \frac{18}{16}$ | 11/4 | 2 |
| $13 / 8$ | 12 | 6 | $1 \frac{1}{17}$ | 2 | $1 \frac{3}{17}$ | 15/8 | $113 / 64$ | 2 | $13 / 8$ | $2 \frac{1}{16}$ |
| 11/2 | 12 | 6 | 11/8 | $2 \frac{1}{16}$ | $1 \frac{3}{16}$ | $13 / 4$ | $1 \frac{8}{16}$ | $2 \frac{3}{16}$ | 11/2 | 238 |

Gradients in Per Cent. and Degrees

| Grade <br> Per Cent. | Equal to Angle <br> of | Feet <br> Rise and Fall in <br> One Mile | Grade <br> Per Cent. | Equal to Angle <br> of | Feet <br> River and Fall in <br> One Mile |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2.5 | $1^{\circ}-26^{\prime}$ | 132 | 7.69 | $4^{\circ}-24^{\prime}$ | 406 |
| 2.8 | $1^{\circ}-38^{\prime}$ | 151 | 8.3 | $4^{\circ}-46^{\prime}$ | 440 |
| 3.3 | $1^{\circ}-55^{\prime}$ | 155 | 9 | $5^{\circ}-11^{\prime}$ | 480 |
| 4 | $2^{\circ}-18^{\prime}$ | 218 | 10 | $5^{\circ}-43^{\prime}$ | 528 |
| 5 | $2^{\circ}-52^{\prime}$ | 204 | 11.1 | $6^{\circ}-17^{\prime}$ | 586 |
| 5.5 | $3^{\circ}-11^{\prime}$ | 293 | 12.5 | $7^{\circ}-08^{\prime}$ | 635 |
| 5.8 | $3^{\circ}-22^{\prime}$ | 310 | 14.3 | $8^{\circ}-09^{\prime}$ | 754 |
| 6.25 | $3^{\circ}-35^{\prime}$ | 330 | 16.6 | $9^{\circ}-26^{\prime}$ | 880 |
| 6.66 | $3^{\circ}-49^{\prime}$ | 352 | 20 | $11^{\circ}-19^{\prime}$ | 1056 |
| 7.1 | $4^{\circ}-05^{\prime}$ | 337 |  |  |  |

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Trade Mark Reg. March 16, 1915.


THERE IS AN HONOR IN BUSINESS THAT IS THE FINEGOLDOFIT:THAI RECKONS WIIH EVERY MAN JUSTIY: THAT REGARDS KINDNESS AND FAIRNESS ABOVEALLESE.ITBECOMES AMAN MORE THAN HISFURNISHINGS OR HIS HOUSE. IT SPEAKS FOR HIM IN THE HEARTOF EVERYONE. HIS FRIENDSHIPS ARE SERENE AND SECURE. HIS STRENGTH ISLIKEA YOUNG TREE BY THE RIVER.
"THE BUSINESS YEAR BOOK" WALKER, LONCFLLOW हीCO

# Trie <br> GIBEON COMPAYY 1515 INDLALAPOUIS 1515 


[^0]:    2-ounce Cans Tire-Doh only, each................ . . . 50 Dozen. . D.P. $\$ 8.88$

    4-ounce Cans Tire-Doh Cement only, each........ . . 25
    Dozen. .D.P. \$4.44

[^1]:    Repair Kit Rolls, Der dozenDosen. D.P. $\$ 3.32$One-fourth Pound Rolls, ench$\$ 2.00$50Dozen. D.P. $\$ 9.32$Dozen DP $\$ 18 . \mathrm{G}^{2}$

[^2]:    No. 835 Schrader Dust Cap, each

[^3]:    Gibson \{qualits I'uruelaine for Maxtertat I'lugn. each Gibsun \{ \{uality Poreqlainn for Fural Plage, cacht. Gibson flunlity Iorentainn for Overland lisisw, each
     Gibhan Gquality I'orcelains for Frimiog I'lags. emeh
    
    

[^4]:    *For make and break Ignition systems, low voltage, horns, ete. $\dagger$ For jump spark ignition, horns, 6-volt tungsten lamps lightlisg, etc.
    fFor single spark systems, bigh voltage horns,

[^5]:    *Monchis whirb it battery is goaramferal to ktams on shelf

[^6]:    No, C Lamp Gunrd, $16 e_{,} p_{*}$ ench
    Dozen..D.P. $\$ 2.66$
    No. C Lsmp Guard, 32 c. p., esch. . . . . . . . . . . . . . . . . . . . . . . . . 30
    Dozed., D.P. $\$ 3.11$
    .50
    No. 346 Lamp Guard, 16 c. D., ench. . . . . . . . . . . . . . . . . . . . . . . . . . . 50
    Dozen...D.P. \$6.66
    No. 346 Lamp Guard, 32 c. Dn each. . . . . . . . . . . . . . . . . . . . . . . . Dozen. . D.P. $\$ 8.00$

[^7]:    No. B414V-1 Inch; asand blasted brass case; polished brasa shackle; three lever-tumblers; twe dat steel keys, forty-elght changea, each
    Dozen D. P. $\$ 17.3 \%$

[^8]:    Marathen Brand Snow White Wiping Ragn, per pound

[^9]:    Special Discownt Applies to Weed Chains

[^10]:    Elk Dinle Neverlreak Cot Laces are made of the best selected drab colored "Eik" tanned leatber, which is stronger than other kiuls of leathers used for this purpose. They are all eut straight, ace sott and pliable, will wear longer and give better gatisfaction than other kinds of laces, and will not get hard or crack from continued use.
    No. 383 Neverbreak Cut Laces, IA inch wide, 36 incher
    long (z slozen in has). per dowen .......................... $\$ 1.00$ Per Dozen. D.P. $\$ 1.72$
    No. 484 Neverbreak Gut Laces, $\frac{2}{2}$ imeh wide. is inchen
    long (1 doxen in box), per doren
    1'ur Toben . It ए. 80:2

[^11]:    Peerless Acid-Proof Battery Box Black

    A black, gloss, enamel-like finish for wood and metal that is acidresisting, and when used on battery boxes, cases, racks, etc., protects and preserves the wood and metal from being eaten up and decaying. One coat covers solid. Air drying in five to six hours.
    1 -pint can
    $\$ 0.54$
    Doz, D.P. 89.60
    $\frac{1}{1}$-pint can
    . 30
    Doz..D.P. 85.33

[^12]:    \%-18 S. A. E., each............ D.P. $\$ 1.66$
    18 M.M., metric, each........ . D.P. 1.33
    衣-14 pipe .................... . D.P. 1.00
    Per set of three.............. D.P. 8.33 Per set 2.50

[^13]:    Delleate operations can be performed with absolute safety. The above suggests the manner of necuring a snag support for delicate parts under pressure.

[^14]:    Ont fit Bbls, Gap.
    Ontit Bbis. Gals. Sige Price
    
    20314 I $170 \quad 37!\times 4 \geqslant \quad$ D.I. 817,00
    $\begin{array}{llllll}90414 & 4 & 980 & 371 \times 48 & \text { D.P. } & 369.00 \\ 30614 & 6 & 545 & 371 \times 25 & \text { D.P } & 41400\end{array}$
    $\begin{array}{lll}20614 & 6 & 545 \\ 20814 & 8 & 455\end{array}$
    $\begin{array}{lccccc}51014 & 10 & 570 & 373 \times 98 & \text { D.P, } & 458.00 \\ 51014 \times 172 & \text { D.P. } & 50 \pm .00\end{array}$
    No, 50 Pump only ...........P. stos.i5
    Dealnct for 100,000 gallon meter if
    bot wanted. . D.P. \$5.3.00
    Pyuipment incluies:
    No. 50 Kinsey Prmp.
    Discharge Reqister.
    14x,(0ha Gallon Meter,
    Two-Way Disclarge with Model A Hose Nozzle.
    Three filtirs.
    Tank as selecterl.
    Fill pibe with lock and cover.
    Mouble Horizontal Cbeck Valve.
    Kaction line for tank.
    15all Joint Tnion.
    Fumn W rench.
    1)rip Pan.

    Jag serew.
    Litharge and Glycerin for making pipe connections.

[^15]:    Head with Plain Pulley
    D.P. $\$ 7.77$

    Column D. P. 8.88

    Countershaft D.P. 977

    Complete D.P. 21.40

    Extra fe 7 .................................................................. D P. 8
    Extra for Wheel Guards Per Palr..................................... $0^{\prime \prime}$ and $s^{\prime \prime}$
    Wheels Recommended, inches
    $6 \times 14$ or $8 \times 1$
    Diameter Between Collars, Inches
    6x12 or $8 \times 1$
    12
    Weight of Head, ibs....
    12
    Weight of Column, lbs.
    Weight of
    Weight of Countersbaft, Complete Machine, ibs.

[^16]:    No. 91 Champion Self-Feed Ball Bearing Blacksmith Post Drill, weight 100 lbs .
    D.P. $\$ 17.77$

[^17]:    This bew shater Volennizer is made to fit the Ford sixe casings and tubes. Tubos are quickly abd permanently vulcanized and the same voleanizer repairs all cuts and tears in the casings withont removing from the wheel or letting oint the air. Just clean out the cut, fill with new rubher, fill ruleanizer with gasoline or alcohol, clamo in place and light the fuel. No exposed blaze, no danger from spilling, absoluce certainty of correct curing as fuel gauge provides correct amount for proper cure. Tse at home or on the rond for either tubes or casings. No exposed blaze to blow out or scoreh febslers.
    

    Trice in subatantial bex

[^18]:    0

