

METAL 
PLANING 
MACHINES



WOODWARD & POWELL
PLANER CO.

WORCESTER, MASS., U. S. A.

METAL PLANING MACHINES

WOODWARD & POWELL
PLANER CO.

WORCESTER, MASSACHUSETTS
U. S. A.

Catalogue B-4
1903

0473



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TELEGRAPH AND CABLE CODE

CABLE ADDRESS, "WOODPOW, WORCESTER"

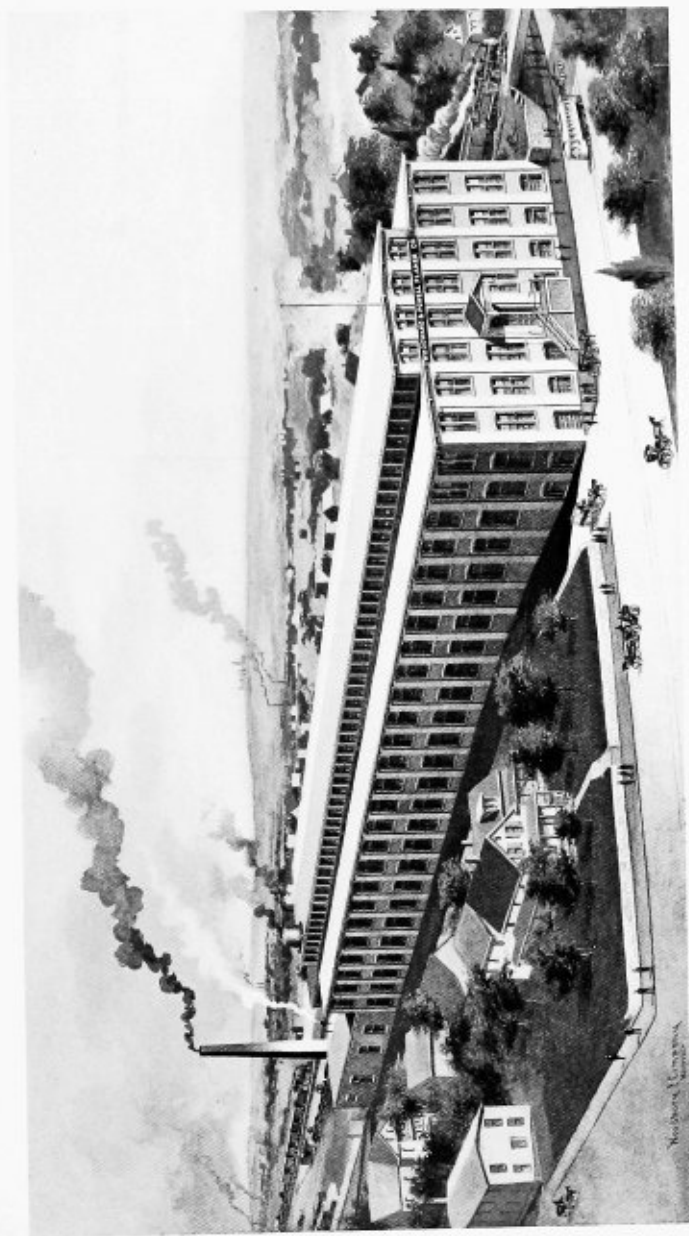
Use "Lieber's Standard" in connection with

OUR CODE

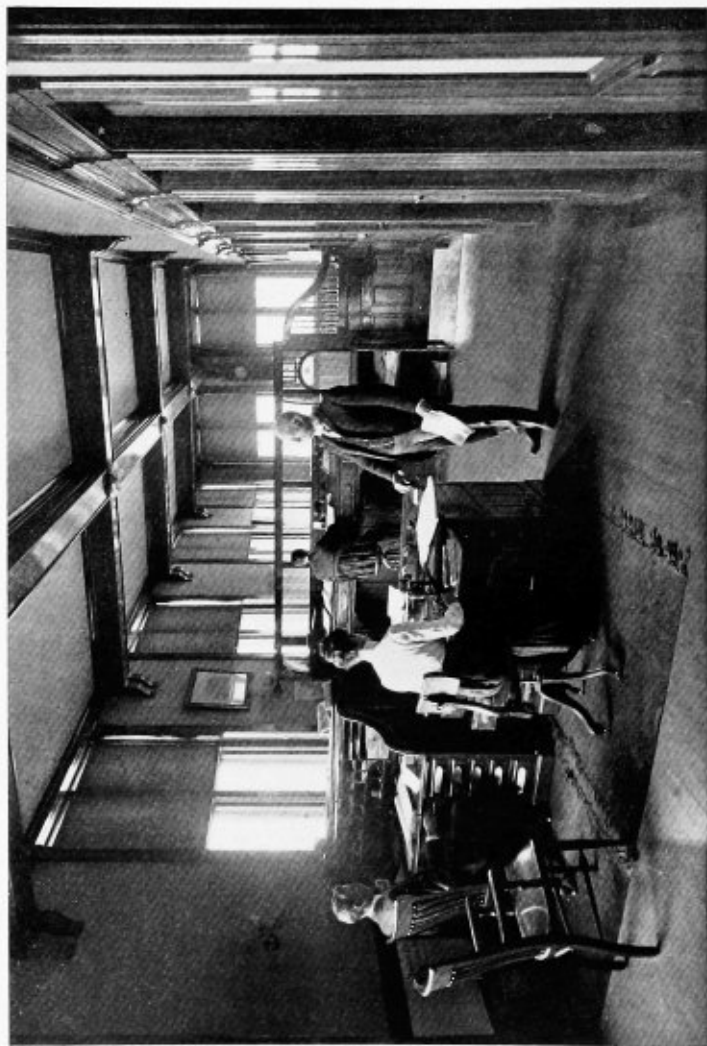
- Palace** What is the rate of freight from Worcester to . . . ?
- Pear** What is the price of . . . boxed for export and delivered in New York City?
- Perry** What is the price of . . . boxed for export and delivered in Boston?
- Pew** How soon can you ship if ordered immediately?
- Pie** When and how did you ship?
- Pigeon** What is the nearest size you have in stock to . . . ?
- Pike** Ship as soon as possible.
- Pile** Ship as soon as possible, and do not insure.
- Piony** Ship as soon as possible, and insure.
- Pig** Wire price and time of delivery of . . .
- Pink** Quote bottom net cash price on . . .
- Pilot** Mail us particulars regarding . . .
- Picket**
- Pine**
- Pace** Shall we ship?
- Pint** Best we can do on delivery.
- Pipe** None on hand or under way in the works.
- Plan** Shipped as per your instructions.
- Place** Can furnish machine inquired for at . . .
- Plumy** Lowest net cash price is . . .
- Plea** Terms: Settlement to be made in 30 days from date of invoice.
- Plutonic** Terms: Spot cash.
- Plow** This is our lowest net cash price t.o.b. Worcester, Mass.
- Poach** We have shipped in our name and have drawn on you at sight with bill of lading attached.
- Poet**
- Parker** You have our very lowest price (prices). We cannot quote lower.

- Post** Have nothing of approximate size in stock.
- Power** Nearest size in stock to what you ask for is
- Prawn** Order is received.
- Present** We can ship at once.
- Pone** We can ship in one week after receipt of order.
- Prtwo** We can ship in two weeks after receipt of order.
- Prthree** We can ship in three weeks after receipt of order.
- Prfour** We can ship in four weeks after receipt of order.
- Prfive** We can ship in five weeks after receipt of order.
- Prsix** We can ship in six weeks after receipt of order.
- Puncto** We can ship in two months after receipt of order.
- Proviso** We can ship in three months after receipt of order.
- Putlog** We can ship in four months after receipt of order.
- Piragua** We can ship in five months after receipt of order.
- Pithy** We can ship in six months after receipt of order.
- Proud** Your telegram is not clear to us.
- Purse** Arranged to receive electric motor between housings, back
of arch-bar, with countershaft mounted on top housings.
- Park** Direct-connected, electric-motor drive.
- Parol** Electric-motor, belted drive.
- Passion**
- Pecan**
- Pearl**
- Pedal**
- Peg**
- Pencil**
- Peril**
- Person**
- Peruse**
- Plaid** Machine to which you refer is sold.

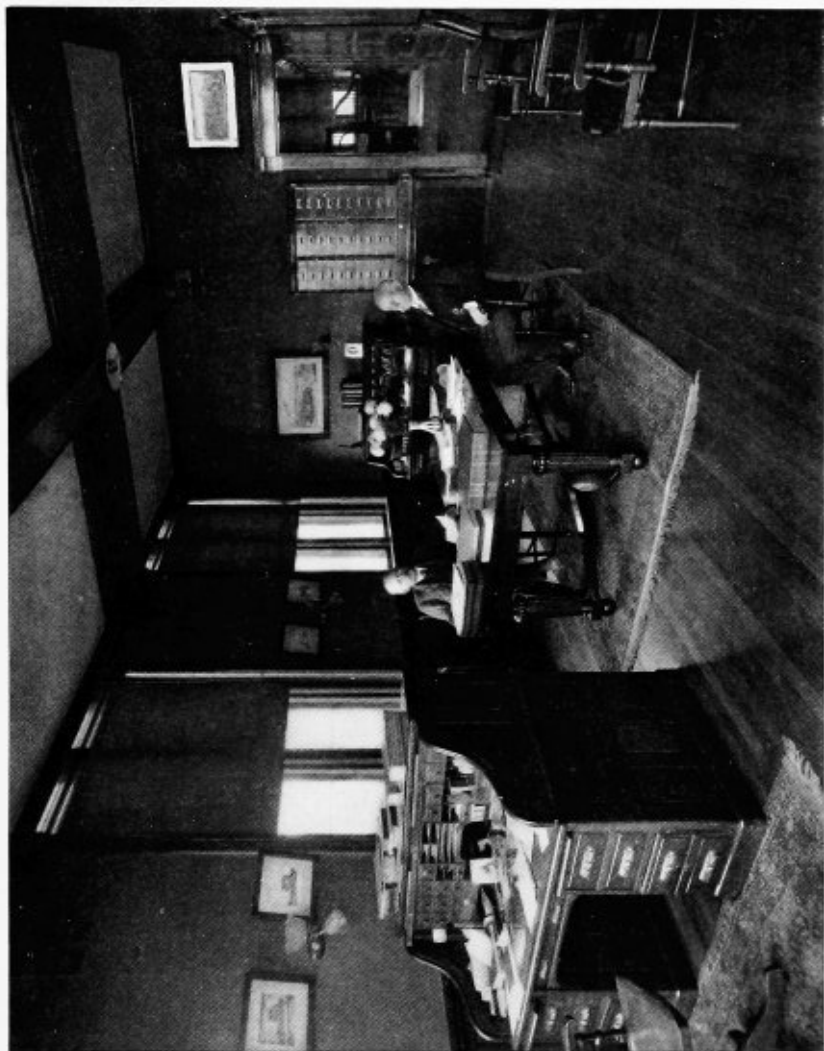




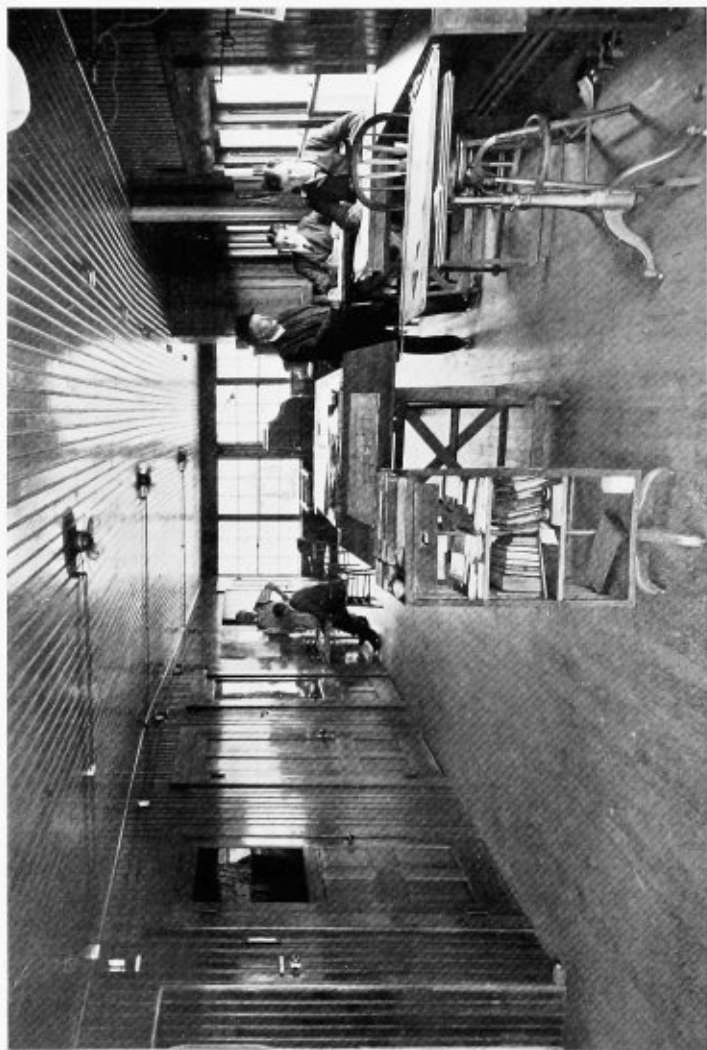
WORKS AT WORCESTER, MASSACHUSETTS.



MAIN OFFICE



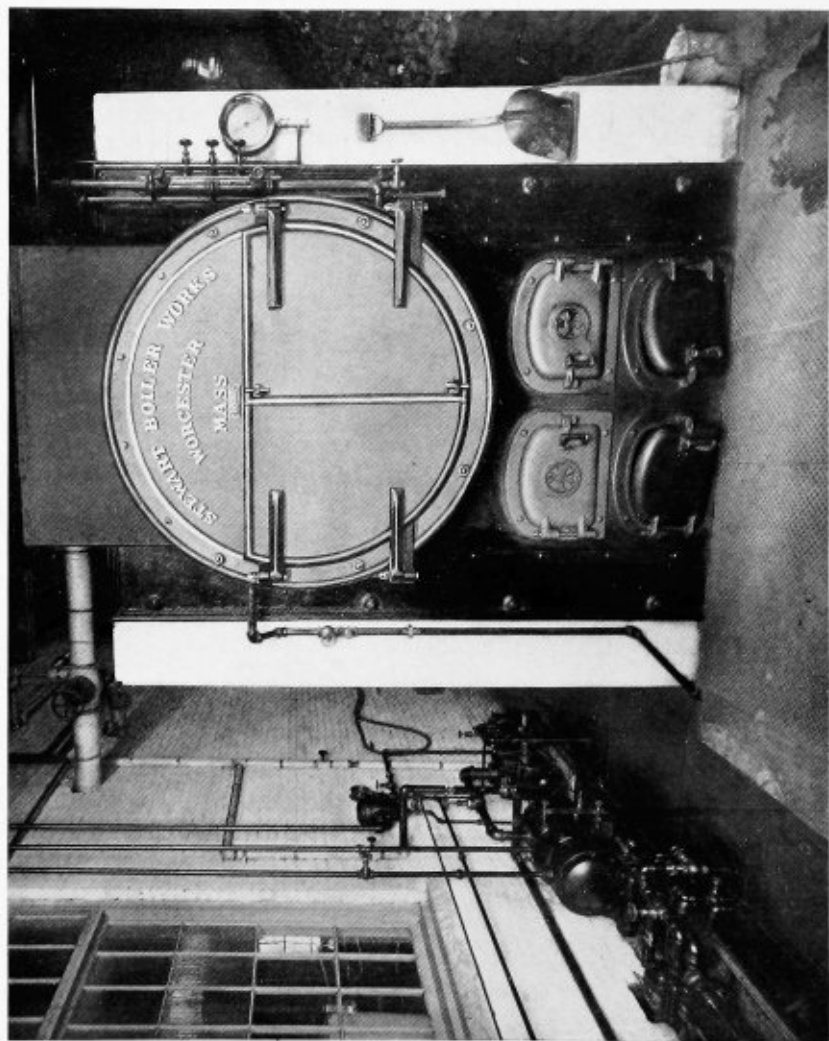
PRIVATE OFFICE



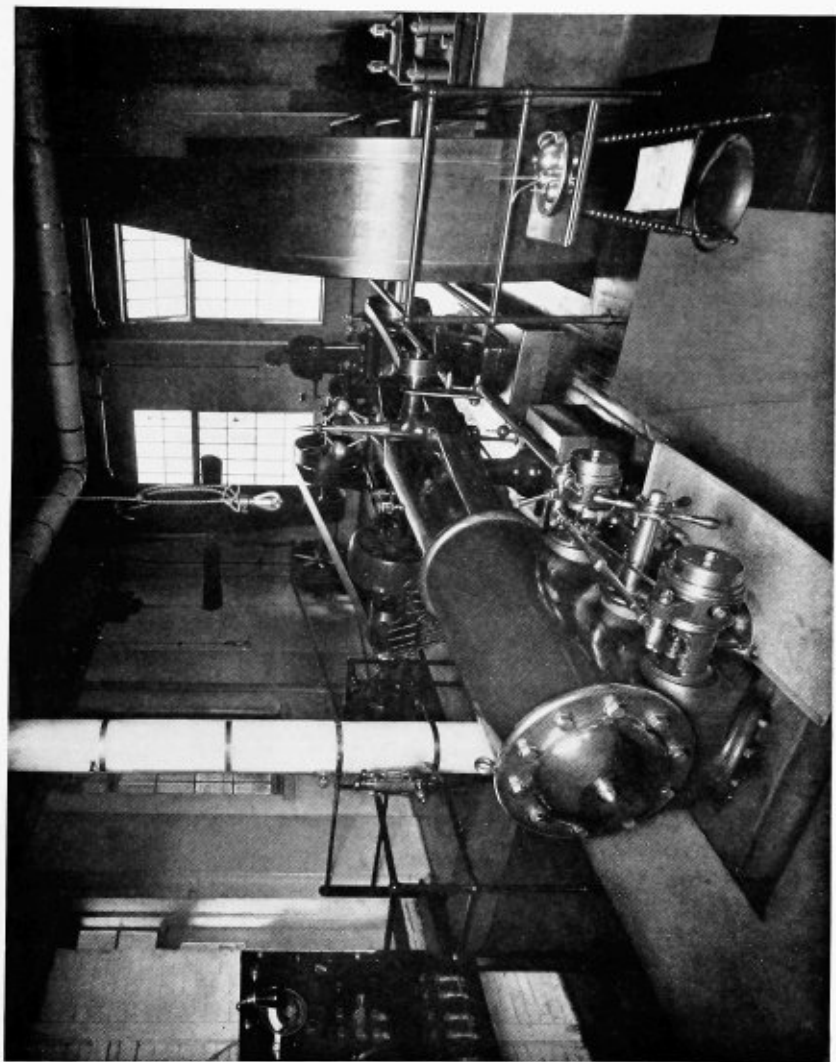
DRAWING ROOM



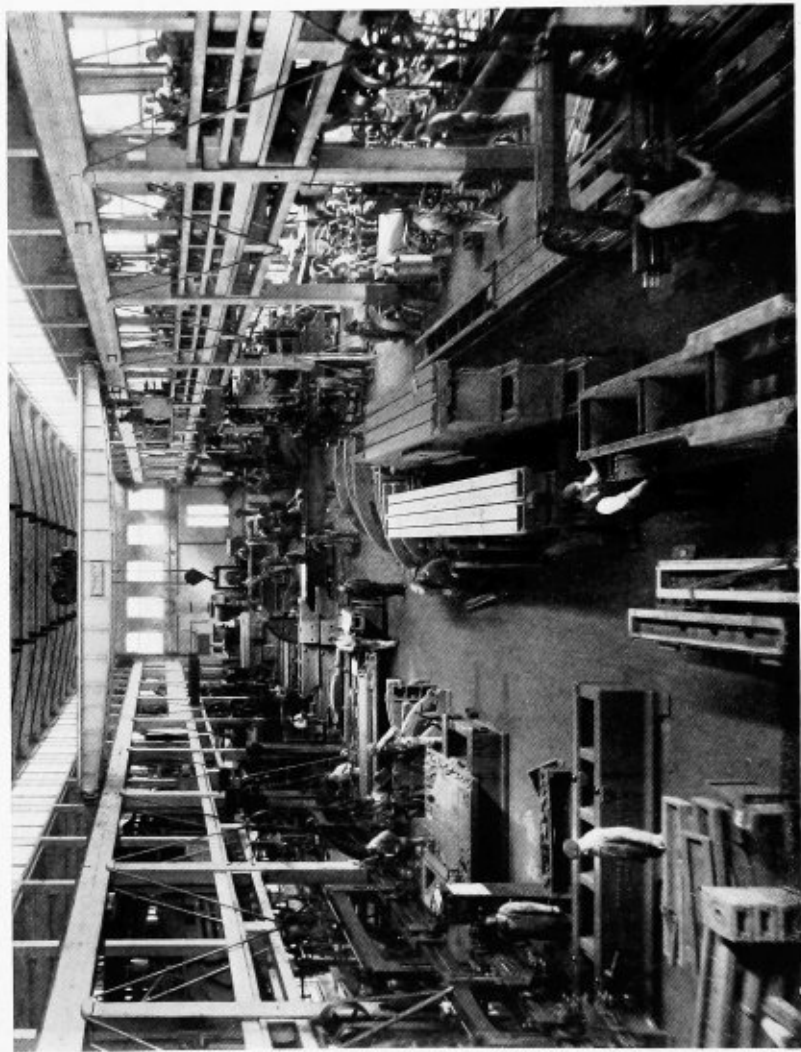
GENERAL FOREMAN'S OFFICE



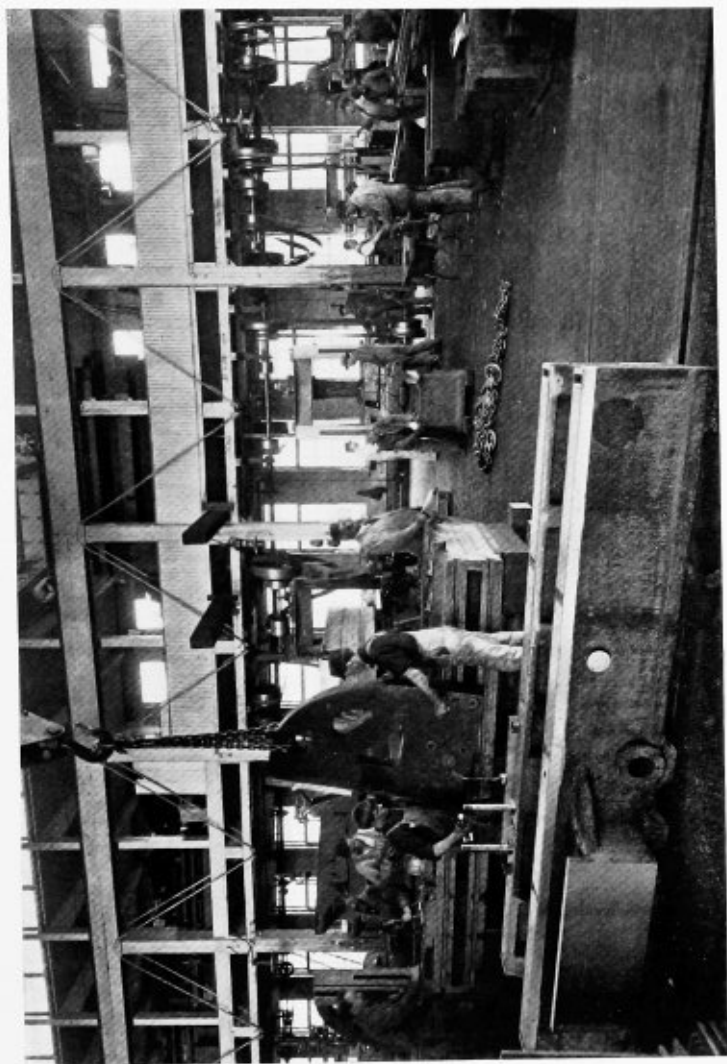
BOILER ROOM



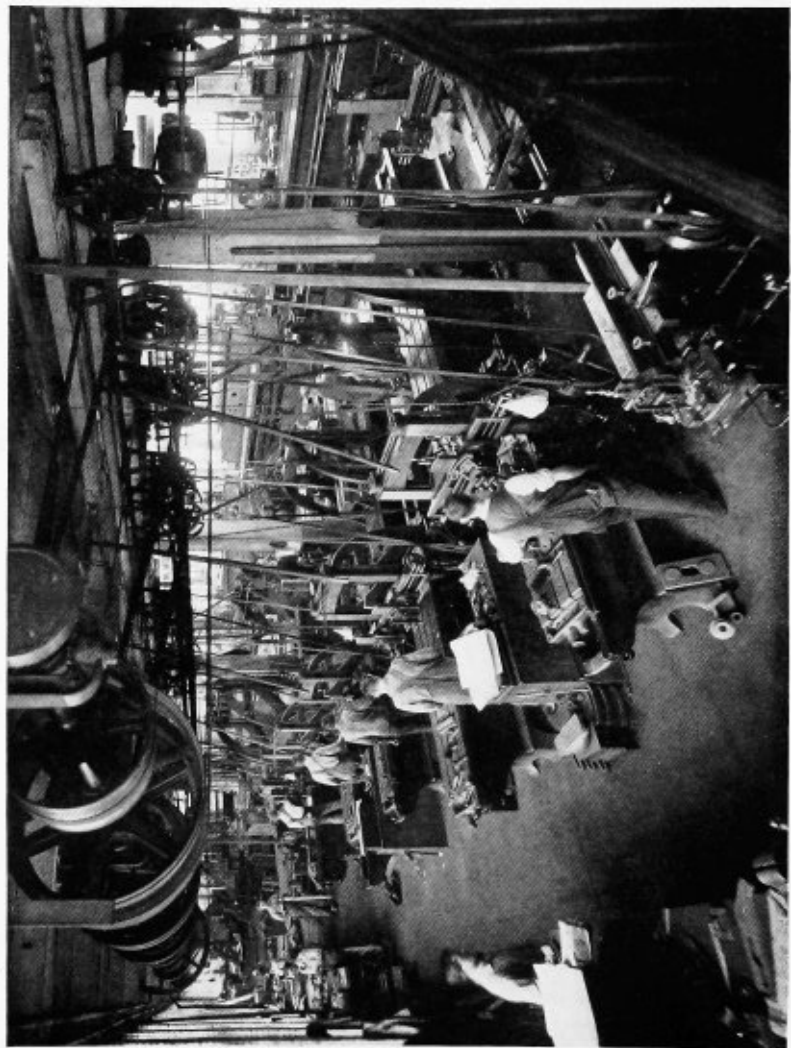
ENGINE ROOM



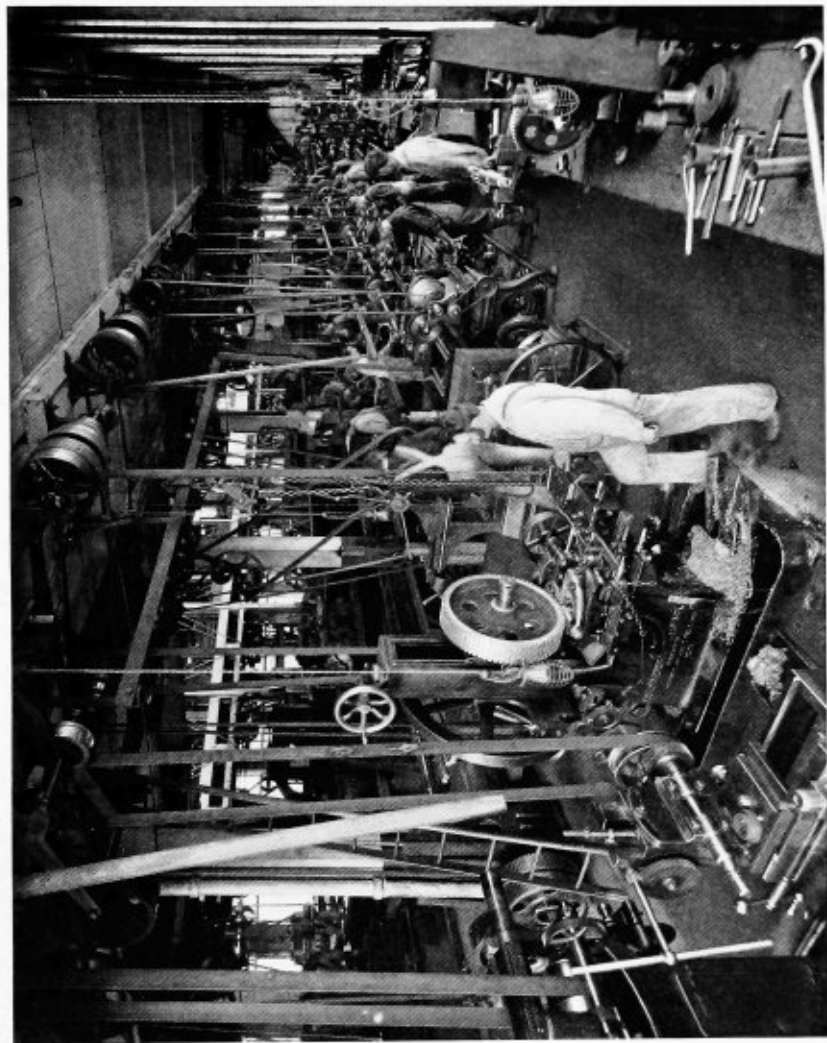
MAIN FLOOR



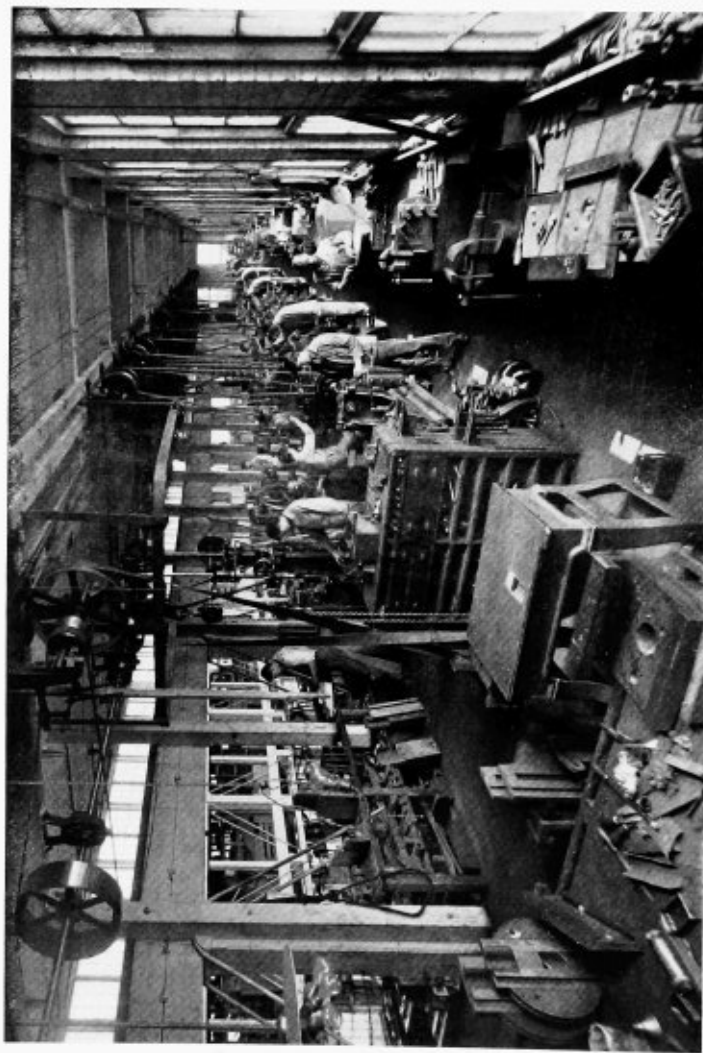
ERECTING DEPARTMENT



PLANING DEPARTMENT



DRIVING-WORKS DEPARTMENT



HEADS DEPARTMENT

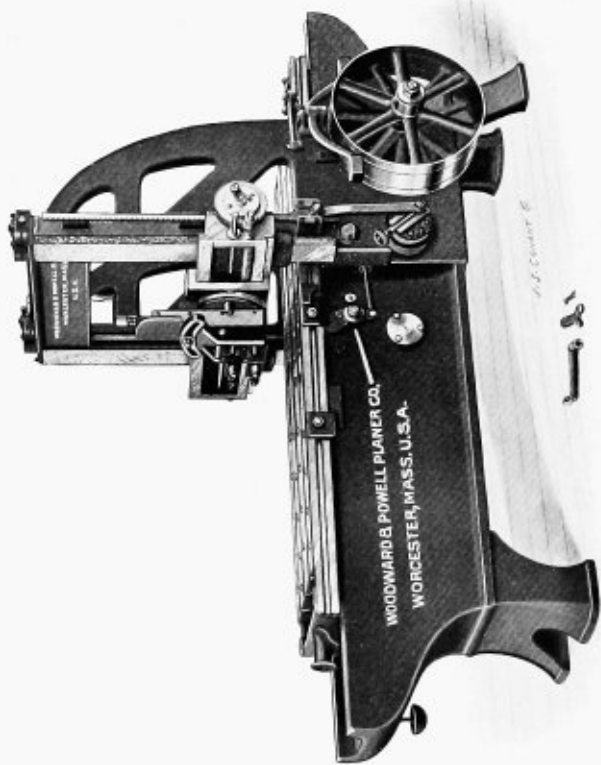


SIXTEEN SIZES

Standard Planers

ANY LENGTH





22" X 22" X 6"

Woodward & Powell Planers are of superior quality
of workmanship and material

The designs are unsurpassed

22" x 22" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Abacot	22 in.	22 in.	4 ft.	4500	\$
Acinus	22 "	22 "	5 "	5000	\$
Adonis	22 "	22 "	6 "	5500	\$
Aerostat	22 "	22 "	7 "	6000	\$
Afric	22 "	22 "	8 "	6500	\$
Agul	22 "	22 "	9 "	7000	\$
Aigret	22 "	22 "	10 "	7500	\$
Ajuga	22 "	22 "	12 "	8500	\$
Aurora	22 "	22 "	Any Length		

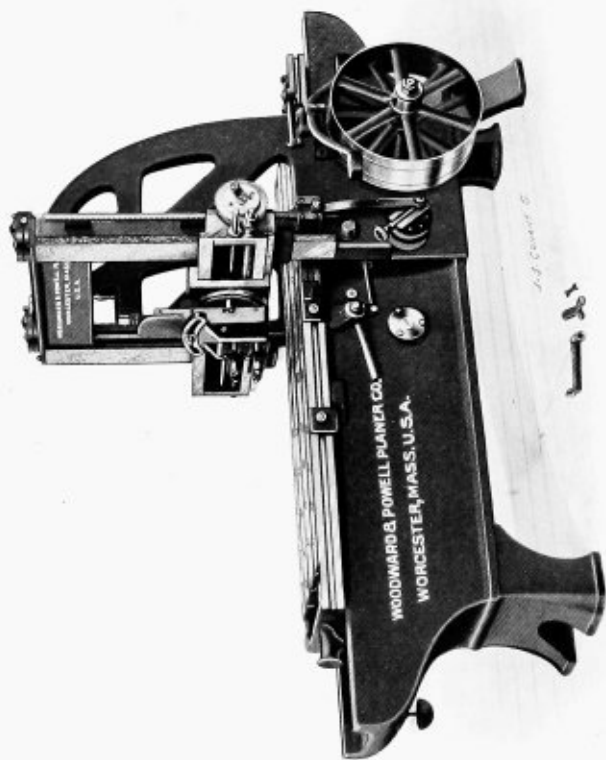
COUNTERSHAFT—Tight and loose pulleys, 10 inches diameter, 4 inches face, each. Should revolve 14 times per minute to move table *one foot* per minute cutting speed.

When requested to place an additional driving-shaft on planer, parallel with the bed, an additional charge will be made. \$

Simple in Construction

Quick Action

Easy to Handle



24" x 24" x 6"

Gearing is powerful and unique, smooth running and free from jar or chatter

24" X 24" PLANER

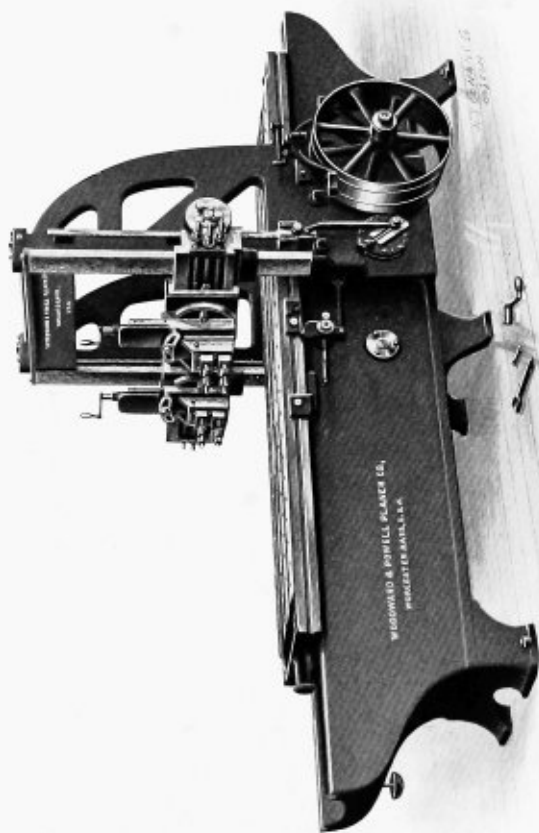
CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Begum	24 in.	24 in.	5 ft.	5500	\$
Bdellium	24 "	24 "	6 "	6000	\$
Bhuchamp	24 "	24 "	7 "	6500	\$
Birch	24 "	24 "	8 "	7000	\$
Blithe	24 "	24 "	9 "	7500	\$
Bonetta	24 "	24 "	10 "	8000	\$
Brocatel	24 "	24 "	11 "	8500	\$
Bugle	24 "	24 "	12 "	9000	\$
Bunch	24 "	24 "	Any Length		

Add to end of code-word the letter X if extra head on cross-rail is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 10 inches diameter, 4 inches face, each. Should revolve 14 times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed. Price, \$

Every planer is run and thoroughly tested before leaving our works



27" x 27" x 8"

All parts are interchangeable as far as practicable, and work is executed under our personal supervision

27" x 27" PLANER.

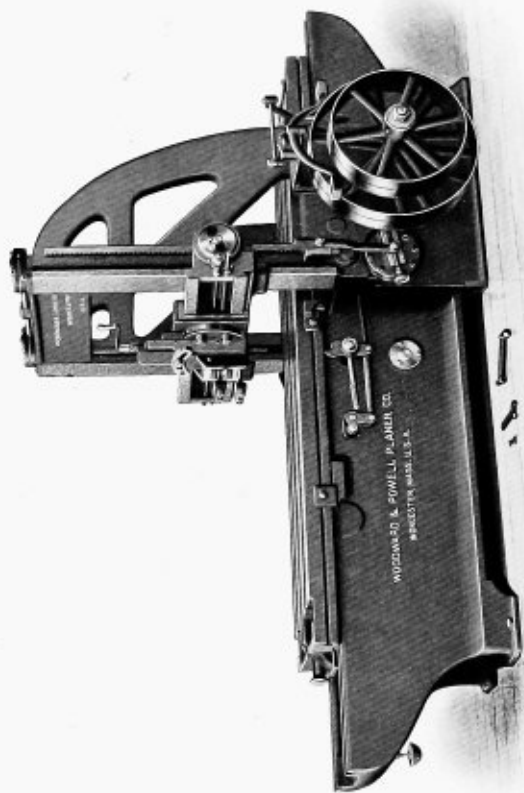
CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Cedar	27 in.	27 in.	6 ft.	7000	\$
Chalk	27 "	27 "	7 "	7500	\$
Cinchona	27 "	27 "	8 "	8000	\$
Client	27 "	27 "	9 "	8500	\$
Comet	27 "	27 "	10 "	9000	\$
Cremona	27 "	27 "	11 "	9500	\$
Culm	27 "	27 "	12 "	10000	\$
Curculio	27 "	27 "	14 "	11000	\$
Custom	27 "	27 "	Any Length		

Add to end of code-word the letter X if extra head on cross-rail is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys 10 inches diameter, 4 inches face, each. Should revolve $15\frac{1}{4}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed. Price, \$

All racks and gears are cut—epicycloidal form of tooth



30" x 30" x 8"

Holes in side of bed, for shaft-boxes, are bored to a jig. Solid boxes, one-third longer than usual practice,

30' x 30' PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Delta	30 in.	30 in.	6 ft.	8600	\$
Dendrit	30 "	30 "	7 "	9500	\$
Diamond	30 "	30 "	8 "	10400	\$
Diota	30 "	30 "	9 "	11300	\$
Dolphin	30 "	30 "	10 "	12200	\$
Domesti	30 "	30 "	12 "	14000	\$
Draco	30 "	30 "	14 "	15800	\$
Draconti	30 "	30 "	16 "	17600	\$
Duke	30 "	30 "	Any Length		

Add to end of code-word the letter :

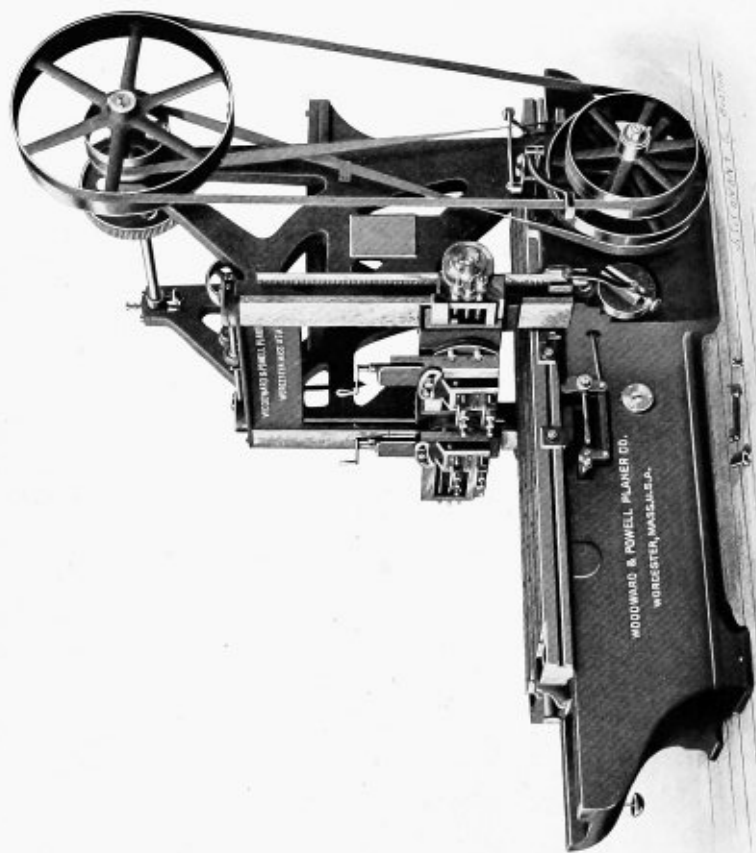
X if extra head on cross-rail is wanted. Price, \$

Y if extra head on front housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 14 inches diameter, 5 inches face, each. Should revolve $15\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

are fitted into these holes, and each box has a support at each end



30" x 30" x 8'—Electrically Driven

The illustration on opposite page represents a

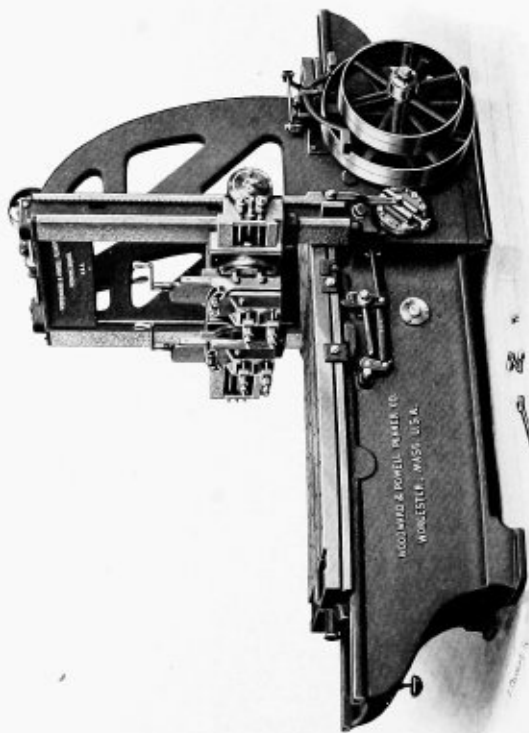
30" X 30" X 8' PLANER

arranged to receive an

Electric Motor

on shelf between the housings, back of arch-bar, and to connect with the countershaft by spur gears; said countershaft being mounted above the motor. We furnish the gear for countershaft and the gear for motor-shaft. Switch and rheostat secured to the side of front housing, or where desired.

*We are prepared to furnish other types of
Electric Drive*



33" x 33" x 8"

The intermediate shaft in all sizes of planers, 33 inches and smaller, can be removed from the planer bed,

33" x 33" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Efficien	33 in.	33 in.	6 ft.	9200	\$
Egeran	33 "	33 "	7 "	10200	\$
Eider	33 "	33 "	8 "	11200	\$
Ejector	33 "	33 "	9 "	12200	\$
Eked	33 "	33 "	10 "	13200	\$
Eldorad	33 "	33 "	12 "	14200	\$
Emerald	33 "	33 "	14 "	16200	\$
Enhance	33 "	33 "	16 "	18200	\$
Epitaph	33 "	33 "	Any Length		

Add to end of code-word the letter :

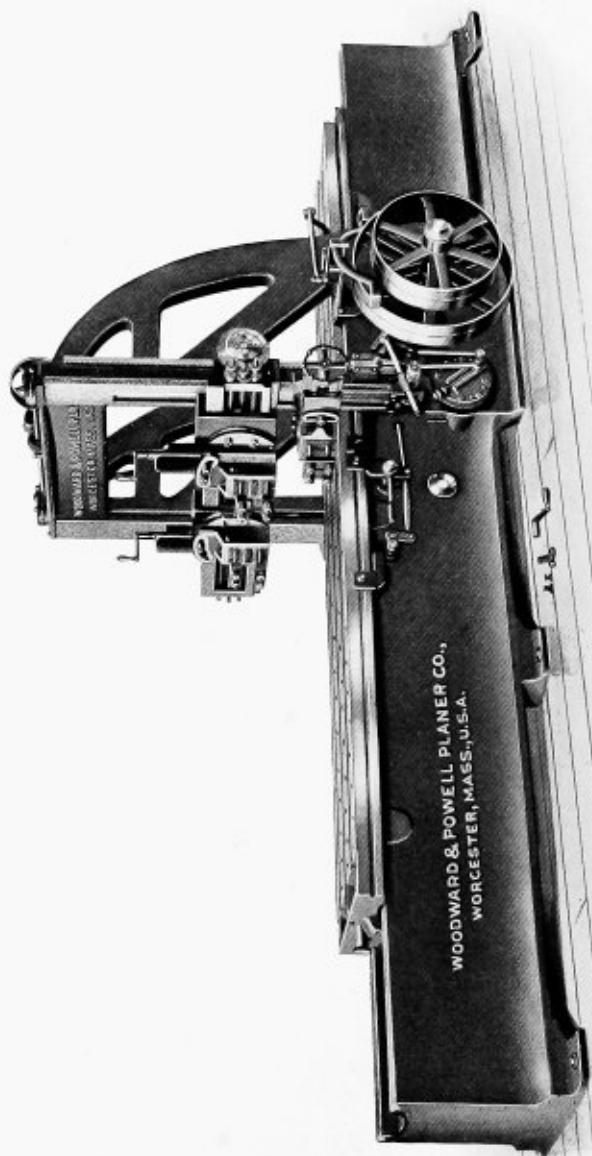
X if extra head on cross-rail is wanted. Price, \$

Y if extra head on front housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 14 inches diameter, 5 inches face, each. Should revolve $15\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

with large intermediate gear, shaft-box on back side, and *rack-gear pinion* all in contact; the hole in bed on back side being large enough to admit the pinion-gear



36" x 36" x 12'

Belts are shifted from either side of planer by a cam that shifts one belt onto loose pulley before the other belt is shifted onto the other tight pulley

36" x 36" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Filbert	36 in.	36 in.	8 ft.	15000	\$
Flotil	36 "	36 "	9 "	16000	\$
Formule	36 "	36 "	10 "	17000	\$
Fragrant	36 "	36 "	11 "	18000	\$
Fresco	36 "	36 "	12 "	19000	\$
Frigate	36 "	36 "	14 "	21000	\$
Frontal	36 "	36 "	16 "	23000	\$
Fungoid	36 "	36 "	18 "	25000	\$
Fuse	36 "	36 "	Any Length		

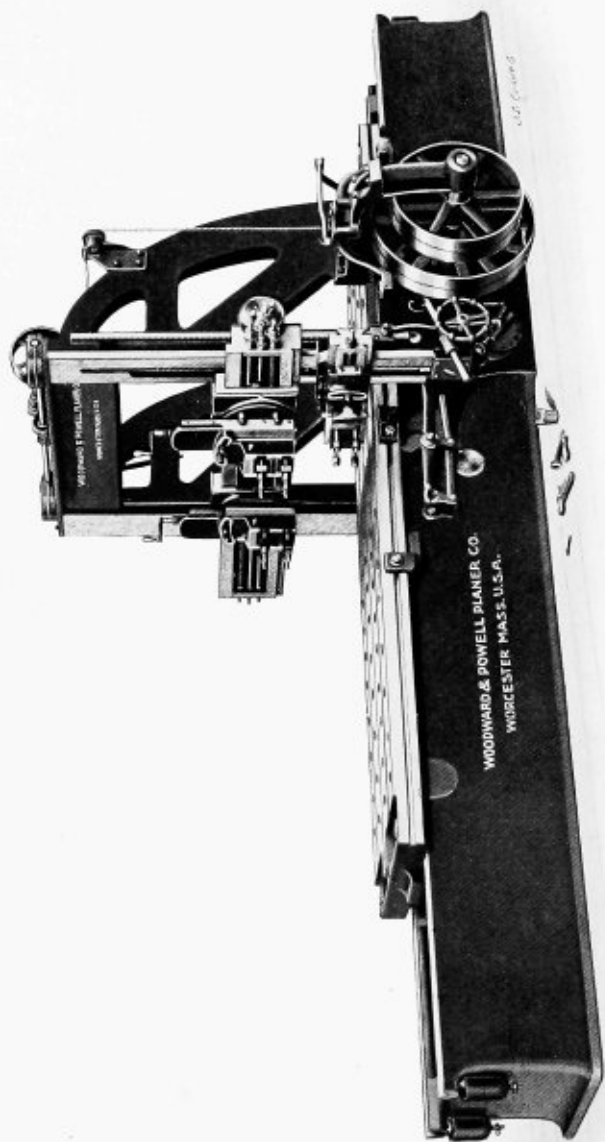
Add to end of code-word the letter :

X if extra head on cross-rail is wanted.	Price, \$
Y if extra head on front housing is wanted.	Price, \$
Z if extra head on back housing is wanted.	Price, \$

COUNTERSHAFT—Tight and loose pulleys, 15 inches diameter, 5 inches face, each. Should revolve 19 times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

The belt-shifter can be locked with both belts on the two loose pulleys, by a device situated conveniently for the operator, thus avoiding danger of accident by reason of belts working onto tight pulleys and starting the table



42" X 42" X 12'

Woodward & Powell Planers have very wide tracks, which are protected from chips and dirt by guards on the tables. Automatic track-oilers located in the bed

42" x 42" PLANER

Code Word	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Gherkin	42 in.	42 in.	10 ft.	22000	\$
Giant	42 "	42 "	12 "	24500	\$
Gladio	42 "	42 "	14 "	27000	\$
Greis	42 "	42 "	16 "	29500	\$
Golden	42 "	42 "	18 "	32000	\$
Grade	42 "	42 "	20 "	34500	\$
Gunbo	42 "	42 "	22 "	37000	\$
Guard	42 "	42 "	24 "	39500	\$
Guilt	42 "	42 "	Any Length		

Add to end of code-word the letter :

X if extra head on cross-rail is wanted. Price, \$

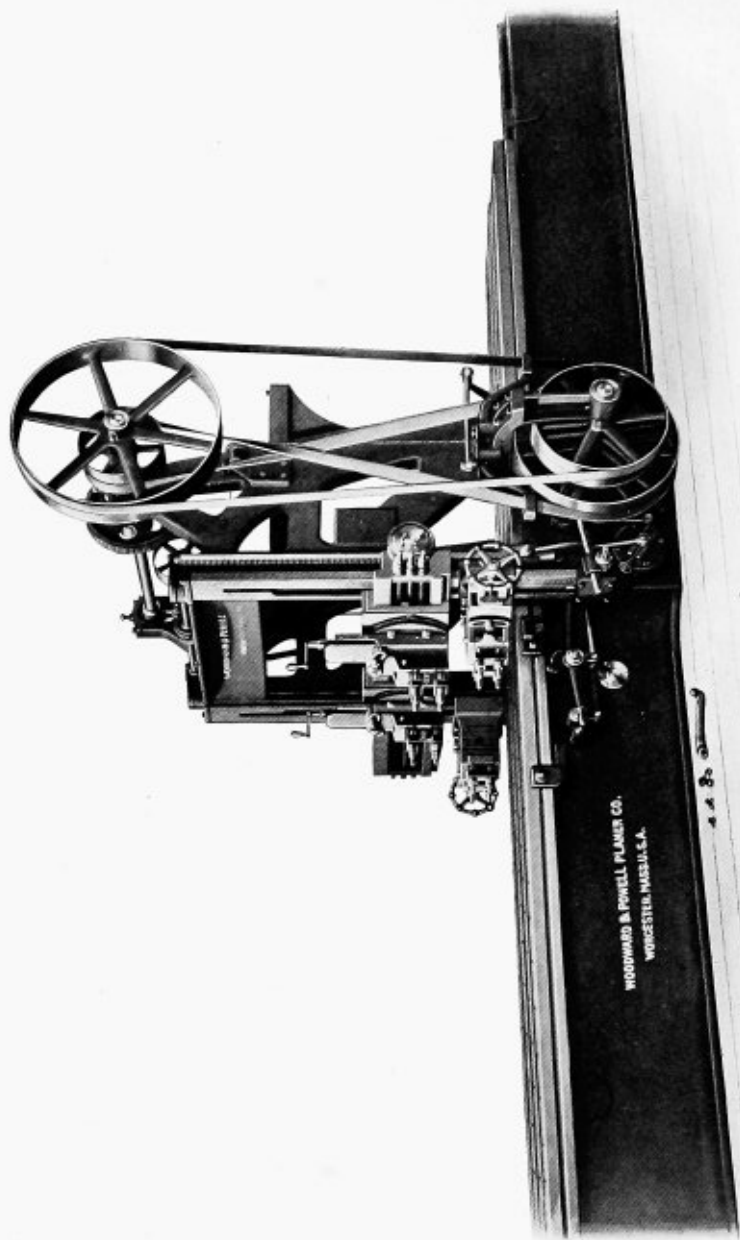
Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 16 inches diameter, 6 inches face, each. Should revolve 18½ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

Table-racks are made of short sections, teeth cut from solid stock. Table can be run back clear from cutting-heads by raising a latch in back dog attached to table



42" x 42" — Arranged for Electric Motor

The illustration on opposite page represents a

42" X 42" PLANER

arranged to receive an

Electric Motor

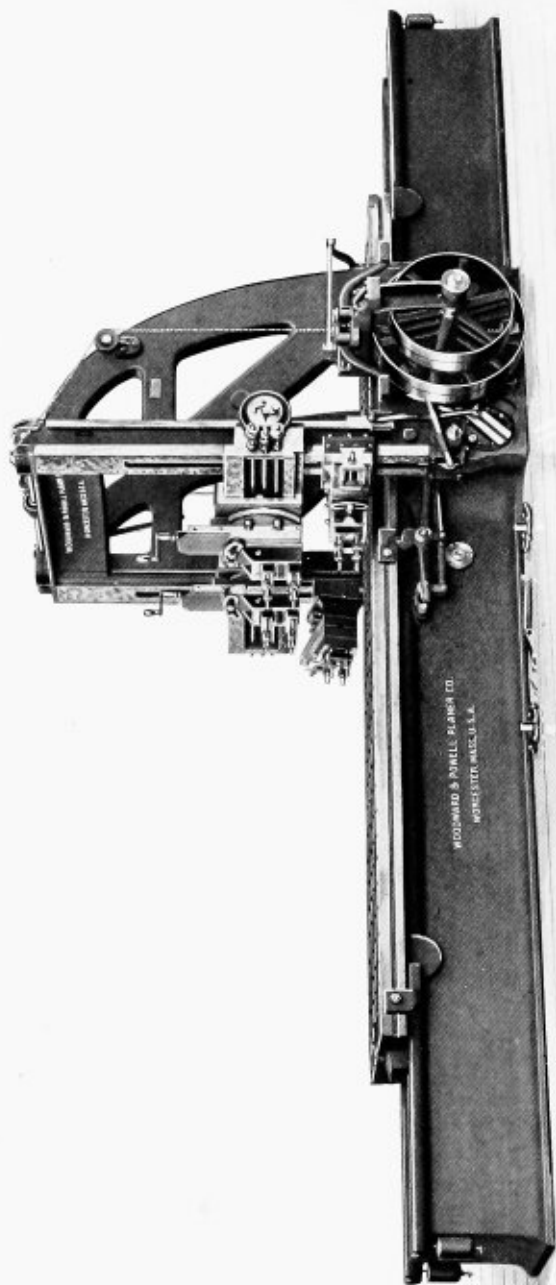
on shelf between the housings, back of arch-bar, and to connect with the countershaft by spur gears; said countershaft being mounted above the motor. We furnish the gear for countershaft and the gear for motor-shaft. Switch and rheostat can be secured to side of front housing, or where desired.

*We are prepared to furnish other types of
Electric Drive*

THE DIRECT-CONNECTED

THE SILENT-CHAIN

THE MOTOR-BELTED



48" X 48" X 14"

Woodward & Powell Planers having two heads on the cross-rail, have their *patent feed device* attached to the front end of cross-rail, which feeds both heads at the same time, one strictly independent of the other, in any direction

48" x 48" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Hakot	48 in.	48 in.	10 ft.	28000	\$
Haloid	48 "	48 "	12 "	30800	\$
Hedge	48 "	48 "	14 "	33600	\$
Helm	48 "	48 "	16 "	36400	\$
Hiatus	48 "	48 "	18 "	39200	\$
Hithe	48 "	48 "	20 "	42000	\$
Honor	48 "	48 "	22 "	44800	\$
Homage	48 "	48 "	24 "	47600	\$
Hump	48 "	48 "	Any Length		

Add to end of code-word the letter :

X if extra head on cross-rail is wanted. Price, \$

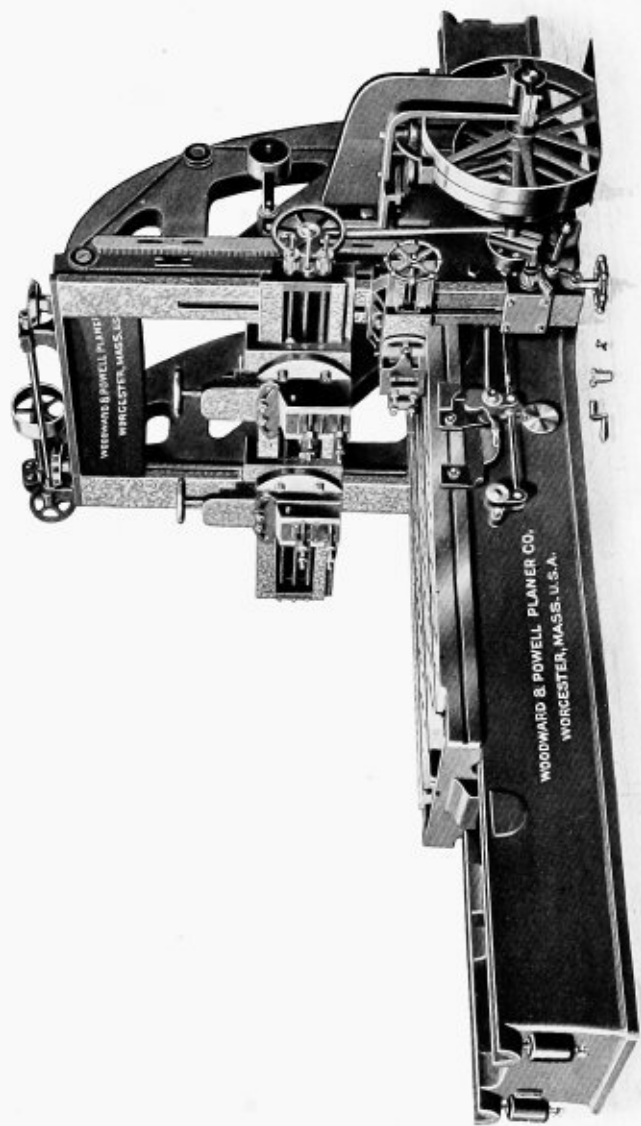
Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 16 inches diameter, 6 inches face, each. Should revolve $18\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

Cross-rails on planers larger than 30 inches are raised and lowered by power. All elevating-screws are cut right-hand, and especial attention paid to accuracy



54" X 54" X 12"

Cross-rails are sufficiently long at each end so that the head can be set at an angle of 45 degrees, and plane this angle on a piece as wide as will pass between the housings

54" x 54" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Icon	54 in.	54 in.	10 ft.	40000	\$
India	54 "	54 "	12 "	43000	\$
Idiago	54 "	54 "	14 "	46000	\$
Inertia	54 "	54 "	16 "	49000	\$
Ingot	54 "	54 "	18 "	52000	\$
Intim	54 "	54 "	20 "	55000	\$
Invent	54 "	54 "	22 "	58000	\$
Ionic	54 "	54 "	24 "	61000	\$
Ire	54 "	54 "	Any Length		

Add to end of code-word the letter :

X if extra head on cross-rail is wanted.	Price, \$
Y if extra head on front housing is wanted.	Price, \$
Z if extra head on back housing is wanted.	Price, \$

COUNTERSHAFT—Tight and loose pulleys, 24 inches diameter, 6 inches face, each. Should revolve $18\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

When two heads are on the cross-rail, the back end of rail is sufficiently long to allow of the back head being run out of the way, giving the other head full range of the planer



60" X 60" X 12'

Side-heads can be mounted on face of the housings, and run close under the cross-rail and *below the table*. Side-heads have power vertical-feed

60" x 60" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Jacinth	60 in.	60 in.	12 ft.	47000	\$
Jaguar	60 "	60 "	14 "	50500	\$
Japu	60 "	60 "	16 "	54000	\$
Jerboa	60 "	60 "	18 "	57500	\$
Jervin	60 "	60 "	20 "	61000	\$
Jamaici	60 "	60 "	22 "	64500	\$
Jonquil	60 "	60 "	24 "	68000	\$
Junket	60 "	60 "	26 "	71500	\$
Juror	60 "	60 "	Any Length		

Add to end of code-word the letter :

X if extra head on cross-rail is wanted. Price, \$

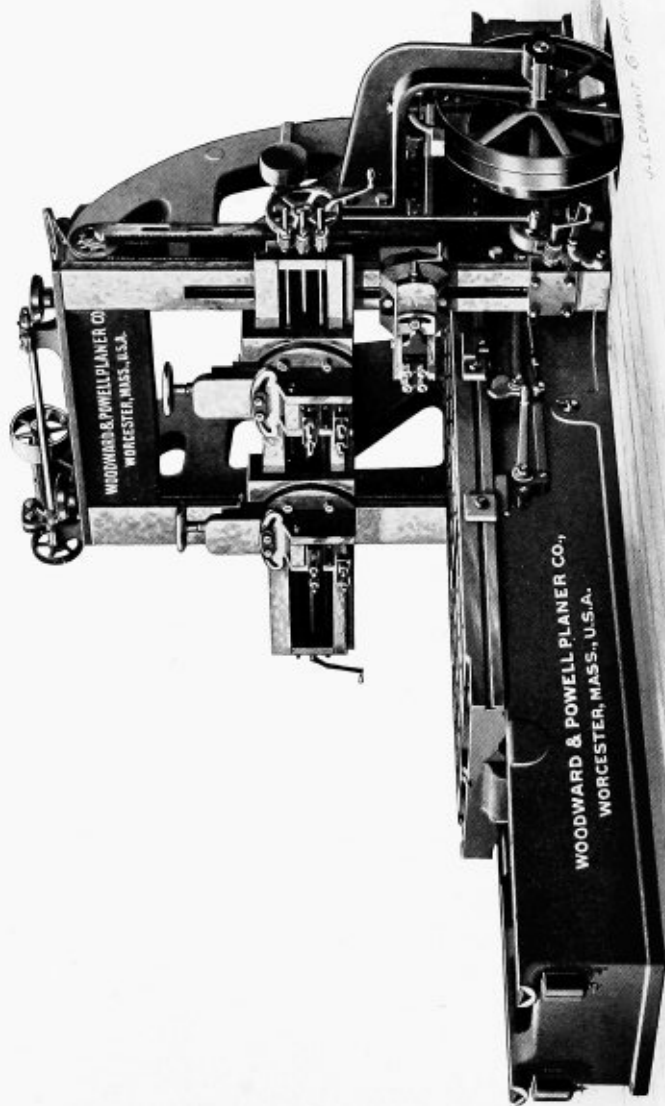
Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 24 inches diameter, 6 inches face, each. Should revolve $18\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

We furnish either the plain or compound side-heads with extension bar



66" x 66" x 12'

Wherever the Woodward & Powell Planers are used, they are pronounced capable of covering a large range of work, from the lightest, where only a light power

66" x 66" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Kaolin	66 in.	66 in.	12 ft.	51000	\$
Kestrel	66 "	66 "	14 "	55000	\$
Kinate	66 "	66 "	16 "	59000	\$
Kirtle	66 "	66 "	18 "	63000	\$
Knight	66 "	66 "	20 "	67000	\$
Knittle	66 "	66 "	22 "	71000	\$
Kruka	66 "	66 "	24 "	75000	\$
Kremlin	66 "	66 "	26 "	79000	\$
Koran	66 "	66 "	Any Length		

Add to end of code-word the letter :

X if extra head on cross-rail is wanted. Price, \$

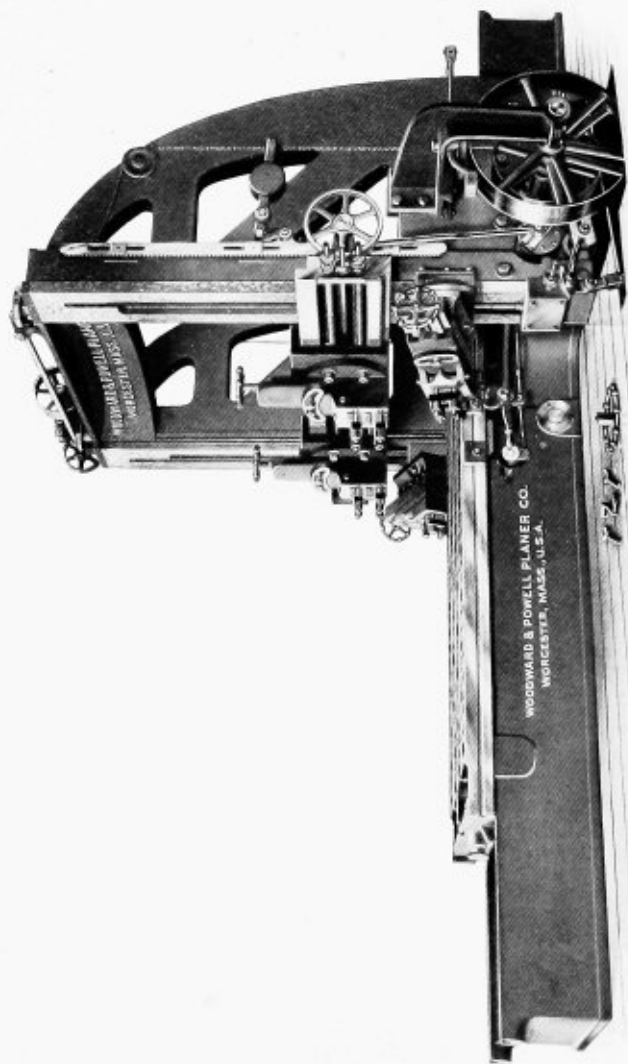
Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 24 inches diameter, 6 inches face, each. Should revolve $18\frac{1}{2}$ times per minute to move table *one foot* per minute.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

is required, to very heavy cuts, where *great* power is required; reliable, efficient, and easily handled by the operator



72" X 72" X 16'

All large gears are made of *semi-steel*, close grain, tough and durable. Pinion gears are made of forged steel 45 to 50 points carbon

72" X 72" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Lactine	72 in.	72 in.	12 ft.	55000	\$
Lacuna	72 "	72 "	14 "	60000	\$
Lampate	72 "	72 "	16 "	65000	\$
League	72 "	72 "	18 "	70000	\$
Lector	72 "	72 "	20 "	75000	\$
Legal	72 "	72 "	22 "	80000	\$
Lithic	72 "	72 "	24 "	85000	\$
Lucern	72 "	72 "	26 "	90000	\$
Luster	72 "	72 "	Any Length		

Add to end of code-word the letter:

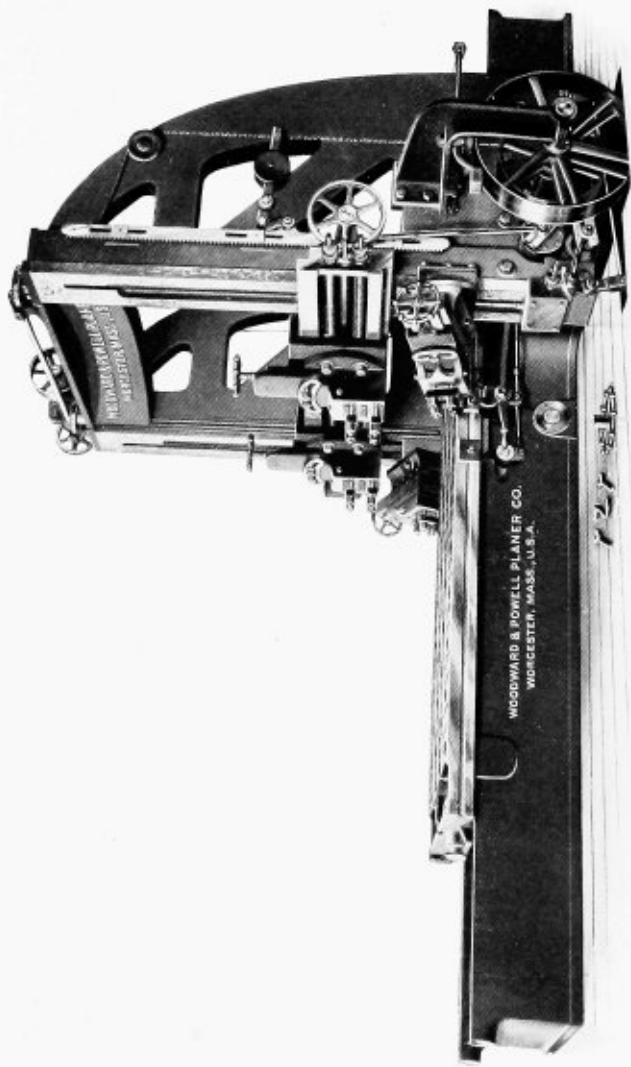
X if extra head on cross-rail is wanted. Price, \$

Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys 24 inches diameter, 6 inches face, each. Should revolve 14 times per minute to move table *one foot* per minute cutting speed.

In 36-inch planers and larger, the pinion gears and shaft are forged in one piece



84" x 84" x 16'

Our planers have a longer vertical feed for the slide on the cross-rail heads than other makes. The feed

84" x 84" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Mace	84 in.	84 in.	12 ft.	60000	\$
Macegno	84 "	84 "	14 "	67000	\$
Magic	84 "	84 "	16 "	74000	\$
Merino	84 "	84 "	18 "	81000	\$
Melt	84 "	84 "	20 "	88000	\$
Mica	84 "	84 "	22 "	95000	\$
Miner	84 "	84 "	24 "	102000	\$
Minute	84 "	84 "	26 "	109000	\$
Moat	84 "	84 "	Any Length		

Add to end of code-word the letter:

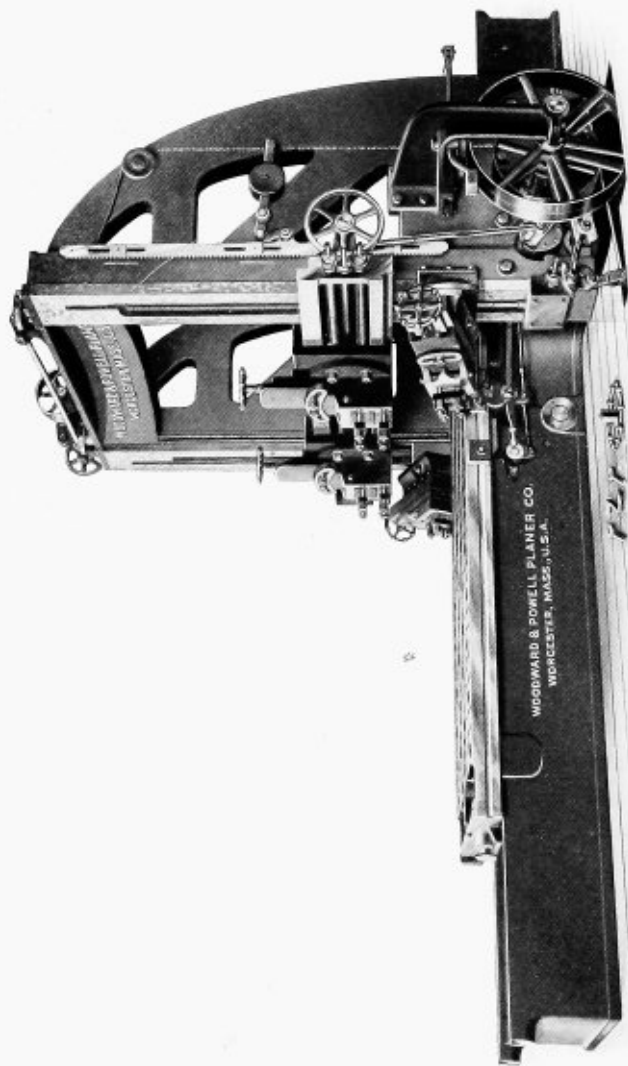
X if extra head on cross-rail is wanted. Price, \$

Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 24 inches diameter, 8 inches face, each. Should revolve $14\frac{1}{4}$ times per minute to move table *one foot* per minute cutting speed.

screw travels with the slide. The slide has the *full bearing* of the swivel at all times



96" x 96" x 16'

Our planers, 36-inch and larger, are quadrupled geared. All of our planers are made square driven, the driving

96" x 96" PLANER

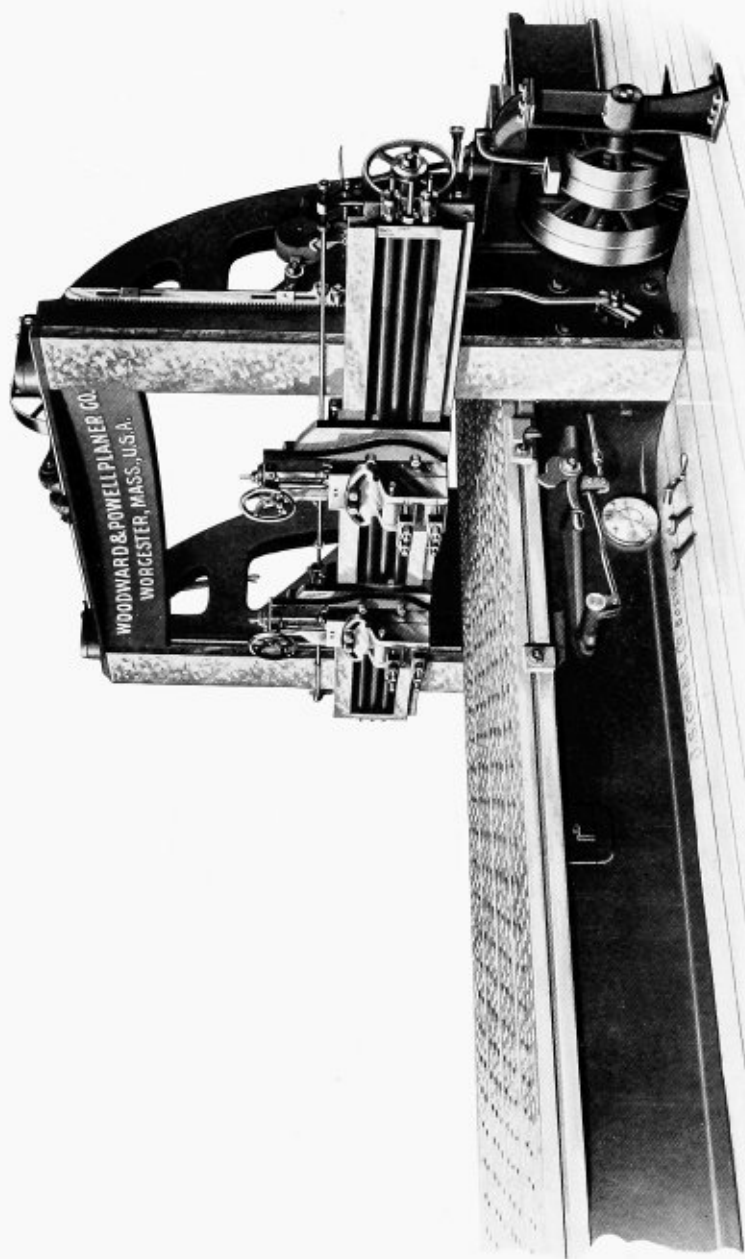
CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Nacrite	96 in.	96 in.	12 ft.	70000	\$
Nebula	96 "	96 "	14 "	78000	\$
Nerve	96 "	96 "	16 "	86000	\$
Nichar	96 "	96 "	18 "	94000	\$
Niello	96 "	96 "	20 "	102000	\$
Noble	96 "	96 "	22 "	110000	\$
Nodule	96 "	96 "	24 "	118000	\$
Noul	96 "	96 "	30 "	142000	\$
Nun	96 "	96 "	Any Length		

Add to end of code-word the letter:

X if extra head on cross-rail is wanted.	Price, \$
Y if extra head on front housing is wanted.	Price, \$
Z if extra head on back housing is wanted.	Price, \$

COUNTERSHAFT—Tight and loose pulleys, 26 inches diameter, 8 inches face, each. Should revolve $14\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

shaft placed at right angle to the planer bed unless otherwise ordered



108" X 108"

Our planers can be arranged with driving-shaft placed *parallel* with the bed of planer, if desired by the purchaser

108" x 108" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Oak	108 in.	108 in.	16 ft.	96000	\$
Oasis	108 "	108 "	18 "	106000	\$
Oblate	108 "	108 "	20 "	116000	\$
Oblisk	108 "	108 "	22 "	126000	\$
Octant	108 "	108 "	24 "	136000	\$
Odorin	108 "	108 "	26 "	146000	\$
Olive	108 "	108 "	28 "	156000	\$
Opera	108 "	108 "	30 "	166000	\$
Oracle	108 "	108 "	Any Length		

Add to end of code-word the letter :

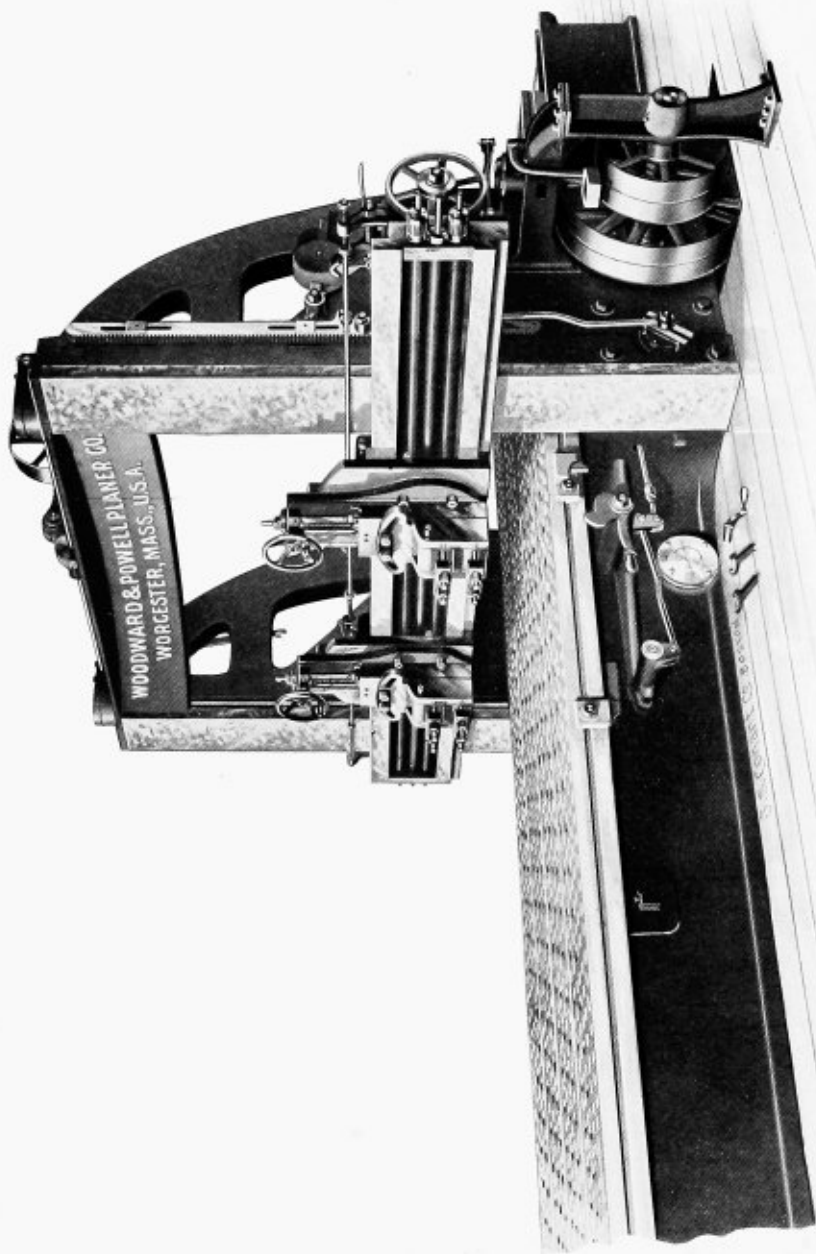
X if extra head on cross-rail is wanted. Price, \$

Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 28 inches diameter, 8 inches face, each. Should revolve $19\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

The illustration on opposite page shows cross-rail extended on front end.



120" X 120'

Automatic cross-feed stop is shown on illustration of 108-inch and 120-inch planers

120" x 120" PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Pacane	120 in.	120 in.	16 ft.	114000	\$
Pearl	120 "	120 "	18 "	126000	\$
Pheon	120 "	120 "	20 "	138000	\$
Plover	120 "	120 "	22 "	150000	\$
Potent	120 "	120 "	24 "	162000	\$
Prime	120 "	120 "	26 "	174000	\$
Public	120 "	120 "	28 "	186000	\$
Pulque	120 "	120 "	30 "	198000	\$
Purse	120 "	120 "	Any Length		

Add to end of code-word the letter :

X if extra head on cross-rail is wanted.	Price, \$
Y if extra head on front housing is wanted.	Price, \$
Z if extra head on back housing is wanted.	Price, \$

COUNTERSHAFT—Tight and loose pulleys, 30 inches diameter, 8 inches face, each. Should revolve $19\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

This automatic feed-stop can be applied to side-head vertical-feed, as shown on illustration on page 72

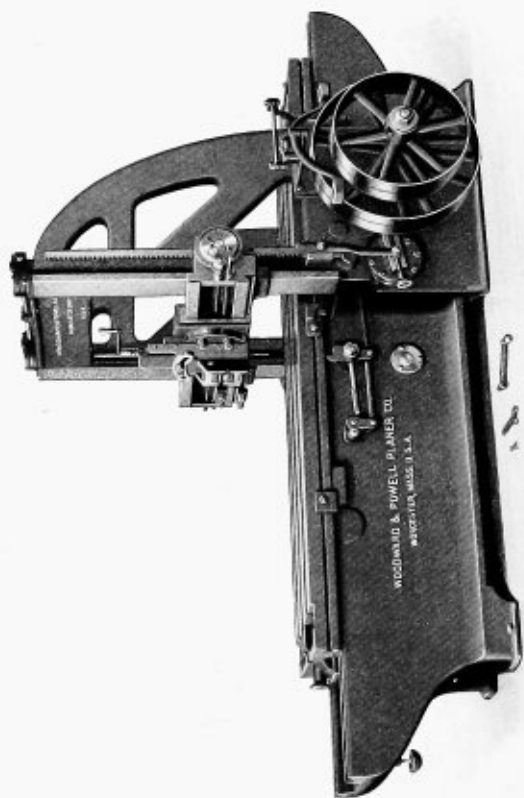


SEVEN SIZES

Widened Planers

ANY LENGTH





36" x 30" x 8"

Widened planers are useful where width is wanted and only ordinary power required

WIDENED PLANERS

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Quadra	36 in.	30 in.	8 ft.	10500	\$
Quaber	36 "	30 "	10 "	12500	\$
Quadrin	36 "	30 "	12 "	14500	\$
Qugga	36 "	30 "	14 "	16500	\$
Quilt	36 "	30 "	Any Length		
Quail	42 in.	30 in.	8 ft.	11500	\$
Quag	42 "	30 "	10 "	13700	\$
Quince	42 "	30 "	12 "	15900	\$
Quorum	42 "	30 "	14 "	18100	\$
Quota	42 "	30 "	Any Length		

Add to end of code-word the letter :

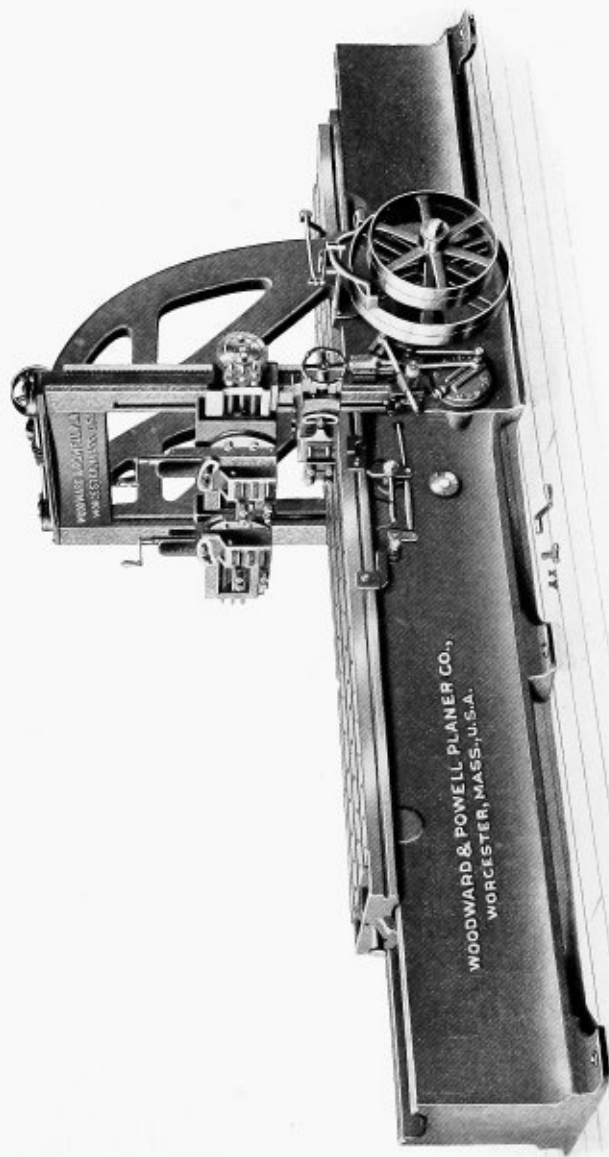
X if extra head on cross-rail is wanted. Price, \$

Y if extra head on front housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 14 inches diameter, 5 inches face, each. Should revolve 15½ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

Bed casting solid, no widening-out pieces used. These planers can be furnished with square end and without legs



42 x 36 x 12

Perfectly reliable for all kinds of planing

WIDENED PLANERS

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Raft	42 in.	36 in.	8 ft.	15500	\$
Reglet	42 "	36 "	10 "	17600	\$
Roman	42 "	36 "	12 "	19700	\$
Rumor	42 "	36 "	14 "	21800	\$
Rotundo	42 "	36 "	16 "	23900	\$
Round	42 "	36 "	Any Length		
Reap	48 in.	36 in.	8 ft.	17000	\$
Rest	48 "	36 "	10 "	19500	\$
Ring	48 "	36 "	12 "	20000	\$
Rotate	48 "	36 "	14 "	24500	\$
Rural	48 "	36 "	16 "	27000	\$
Rustic	48 "	36 "	Any Length		

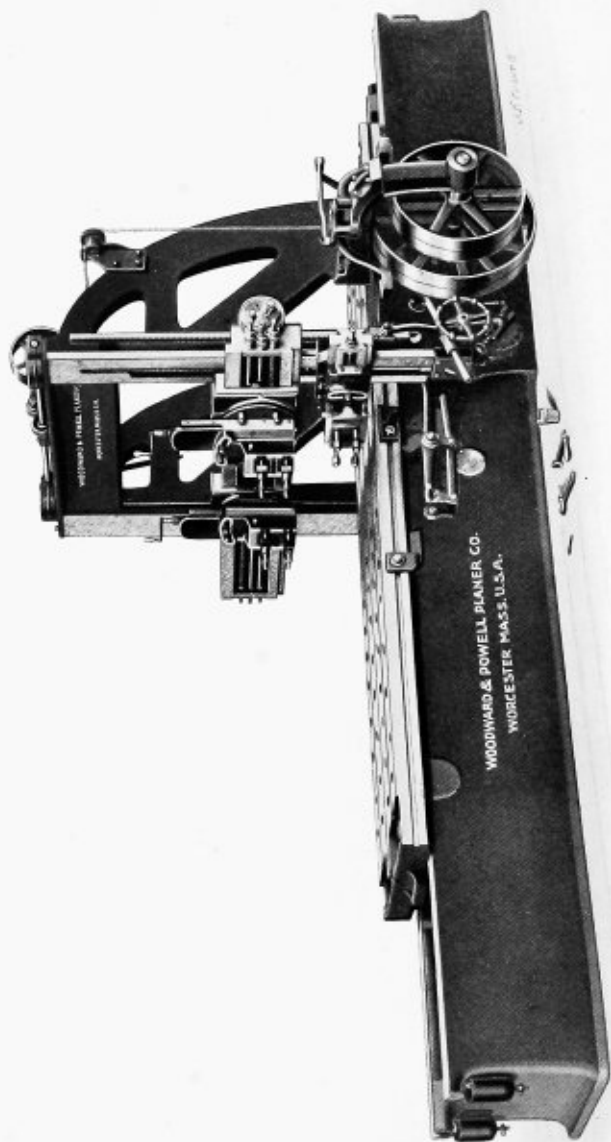
Add to end of code-word the letter :

X if extra head on cross-rail is wanted.	Price, \$
Y if extra head on front housing is wanted.	Price, \$
Z if extra head on back housing is wanted.	Price, \$

COUNTERSHAFT—Tight and loose pulleys, 15 inches diameter, 5 inches face, each. Should revolve 19 times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

Quadruple geared; as strong and powerful as most of the 42-inch planers on the market



54" X 42" X 12"

This makes a fine-looking 54-inch planer

WIDENED PLANERS

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Sable	54 in.	42 in.	10 ft.	24500	\$
Saddle	54 "	42 "	11 "	27200	\$
Safe	54 "	42 "	12 "	29900	\$
Sage	54 "	42 "	14 "	32600	\$
Signal	54 "	42 "	16 "	35300	\$
Silico	54 "	42 "	18 "	38000	\$
Spin	54 "	42 "	20 "	40700	\$
Station	54 "	42 "	22 "	43400	\$
Sugar	54 "	42 "	Any Length		

Add to end of code-word the letter :

X if extra head on cross-rail is wanted. Price, \$

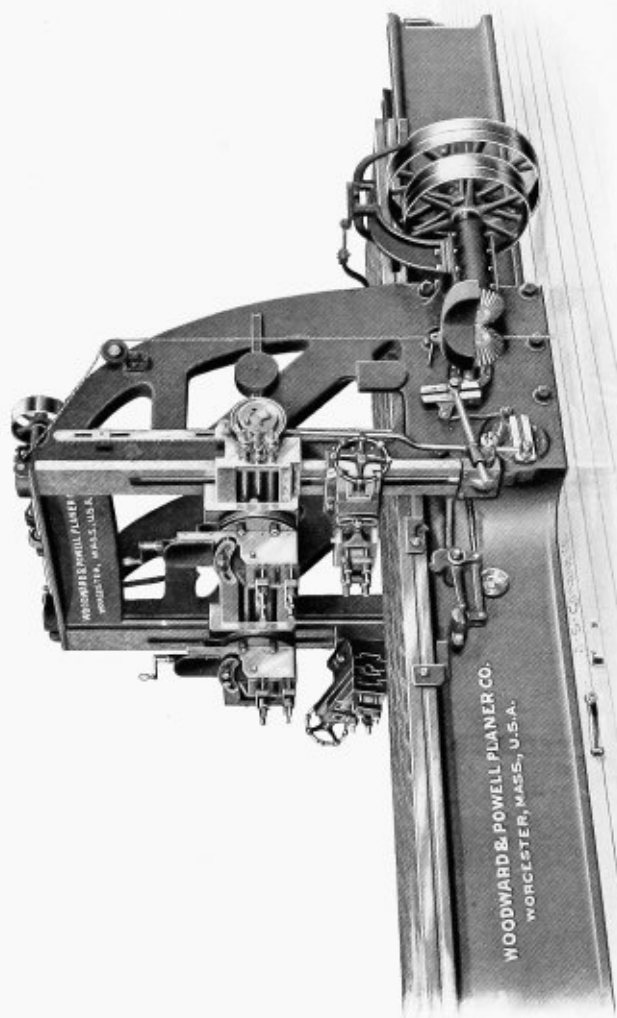
Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 16 inches diameter, 6 inches face, each. Should revolve $18\frac{1}{3}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

All right for planing any piece that can be placed on the planer



60" x 48" x ANY LENGTH

We have made many of this type of planers. They are answering the demands made on them and giving entire

WIDENED PLANERS

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Tetrigo	60 in.	48 in.	10 ft.	30000	\$
Thistle	60 "	48 "	12 "	33000	\$
Theorem	60 "	48 "	14 "	36000	\$
Tidal	60 "	48 "	16 "	39000	\$
Tibial	60 "	48 "	18 "	42000	\$
Tropic	60 "	48 "	Any Length		
Trout	76 in.	48 in.	10 ft.	32000	\$
Tuscan	76 "	48 "	12 "	35200	\$
Twinkle	76 "	48 "	14 "	38400	\$
Trader	76 "	48 "	16 "	41600	\$
Tower	76 "	48 "	18 "	44800	\$
Turtle	76 "	48 "	Any Length		

Add to end of code-word the letter:

X if extra head on cross-rail is wanted. Price, \$

Y if extra head on front housing is wanted. Price, \$

Z if extra head on back housing is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 16 inches diameter, 6 inches face, each. Should revolve $18\frac{1}{3}$ times per minute to move table *one foot* per minute cutting speed.

Additional driving-shaft on planer, parallel with the bed.
Price, \$

satisfaction; we will furnish planers with driving-shaft placed right angle to the bed or parallel with the bed, as desired



T W E L V E

Special Planers

A N Y L E N G T H





FLUTER

Fluting Planers

28 $\frac{3}{4}$ inches between housings, 5 inches between table and cross-rail; table 67 inches long

Will receive ten rolls in width and two rolls in length

Used for fluting feed-rolls 1 $\frac{1}{4}$ inches diameter, for textile machinery

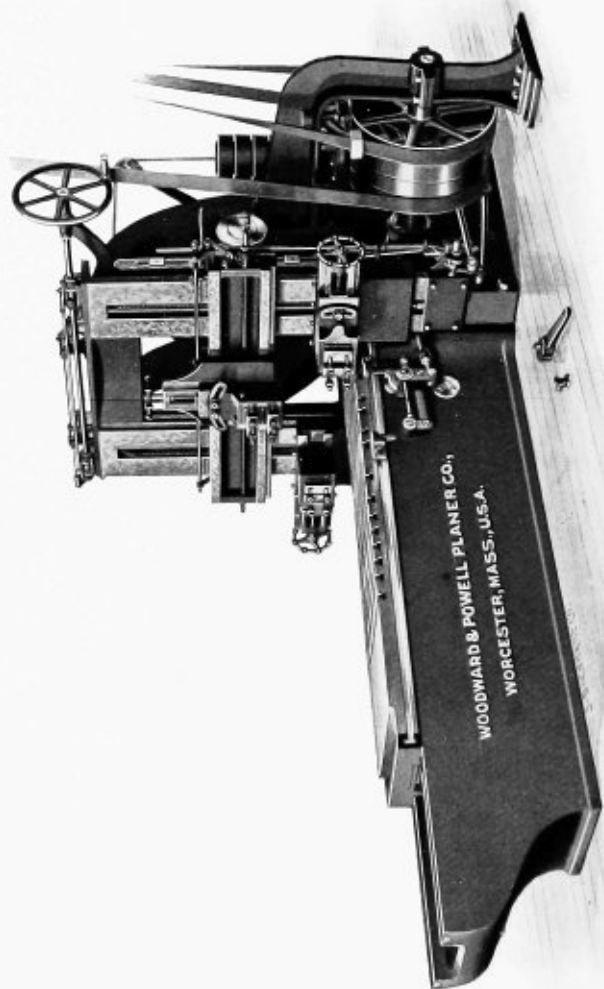
Each roll revolves automatically for each cut

Cross-head has ten tool holders, independent vertical adjustment for each tool

Weight, 6000 pounds. Price, \$

COUNTERSHAFT— Tight and loose pulleys, 9 inches diameter, 3 $\frac{1}{2}$ inches face, each. Should revolve 13 $\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed

We are the only concern in the United States that builds a textile feed-roll planer



22" X 32" X 11'

We are the only manufacturers of this time-saving and economical planer

VALVE PLANERS

Plane in Width	Plane in Height	Plane in Length	Weight About	Price with Three Heads
17 in.	26 in.	8 ft.	11000	\$
17 "	26 "	10 "	12000	\$
17 "	26 "	12 "	13000	\$
22 "	32 "	8 "	15000	\$
22 "	32 "	10 "	16500	\$
22 "	32 "	12 "	18000	\$

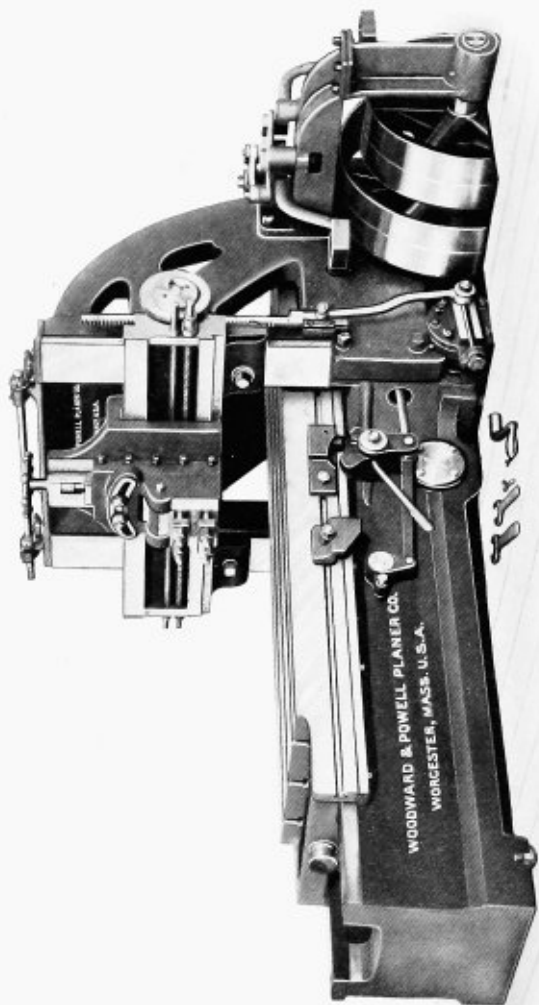
One head on cross-rail. One head on face of each housing. *Automatic Feed Stop for each head.* Planes three flanges at same time.

COUNTERSHAFT, 17-inch Planer—Tight and loose pulleys, 12 inches diameter, 4 inches face, each. Should revolve $19\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

COUNTERSHAFT, 22-inch Planer—Tight and loose pulleys, 16 inches diameter, 7 inches face, each. Should revolve 18 times per minute to move table *one foot* per minute cutting speed.

Each side-head can be raised or lowered independently or together by the use of the hand-wheel and shaft on top of planer

Travel of heads can be stopped automatically at any point



36" x 17" x 8' FROG PLANER

The most powerful Planer of this type built
Great Efficiency

RAILROAD FROG AND CROSSING PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Ultra	36 in.	17 in.	8 ft.	24000	\$
Umbel	36 "	17 "	9 "	25400	\$
Unicorn	36 "	17 "	10 "	26800	\$
Union	36 "	17 "	11 "	28200	\$
Unit	36 "	17 "	12 "	29600	\$
Utter	36 "	17 "	Any Length		

Add to end of code-word the letter:

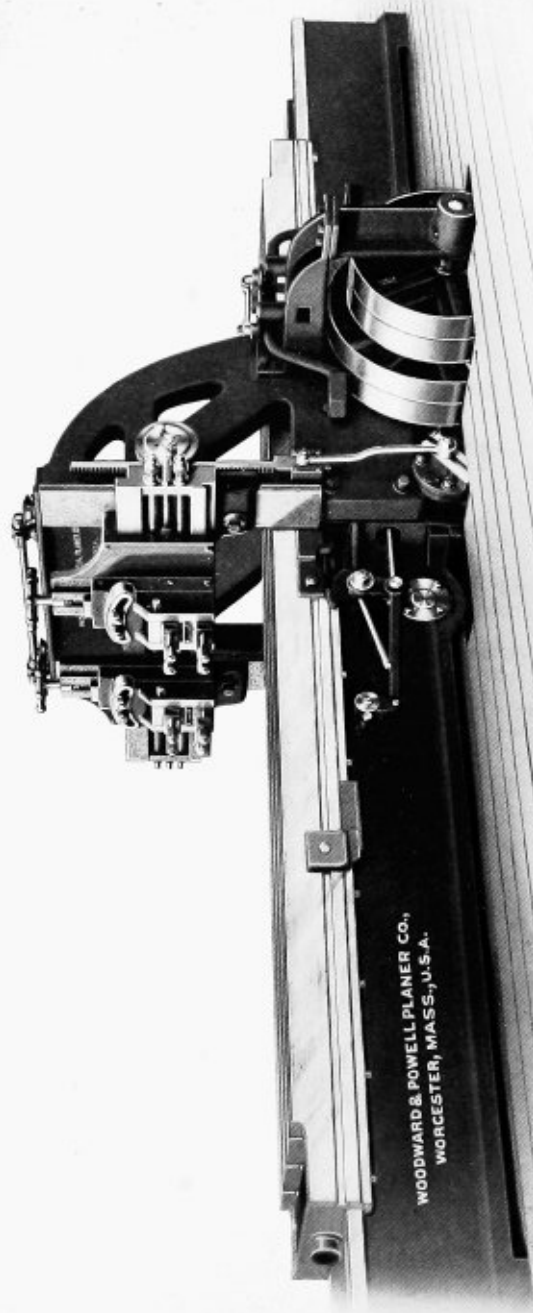
X if extra head on cross-rail is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 24 inches diameter, 8 inches face, each. Should revolve 23 times per minute to move table *one foot* per minute cutting speed.

Quadruple Geared
Steel Gears

Steel Table Rack
All Boxes Lined

Superior in every respect to any other Frog and
Crossing Planer made



36" x 17" x 15' SWITCH-POINT PLANNER

WOODWARD & POWELL PLANNER CO.,
WORCESTER, MASS., U.S.A.

The most powerful planer of this type made, and will produce the greatest quantity of work

RAILROAD SWITCH-POINT PLANER

CODE WORD	Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
Ureter	36 in.	17 in.	14 ft.	32400	\$
Uranus	36 "	17 "	15 "	33800	\$
Urban	36 "	17 "	16 "	35200	\$
Useful	36 "	17 "	18 "	38000	\$
Usher	36 "	17 "	20 "	40800	\$
Uveous	36 "	17 "	Any Length		

Add to end of code-word the letter:

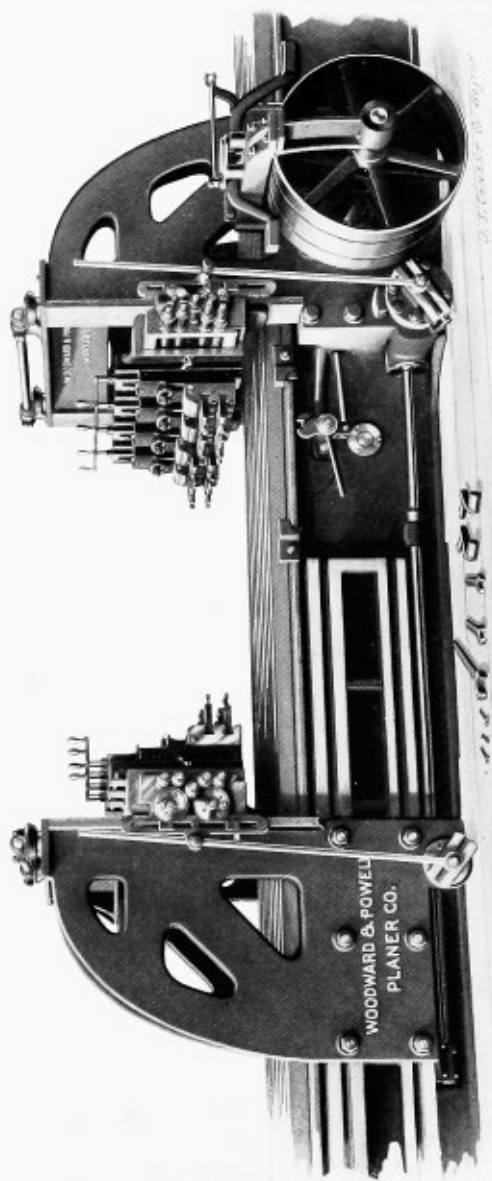
X if extra head on cross-rail is wanted. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 18 inches diameter, 10 inches face, each. Should revolve 25 times per minute to move table *one foot* per minute cutting speed.

Quintuple Geared
Steel Gears

Steel Table Rack
All Boxes Lined

Superior in every respect to any other Switch-point Planer made



46" x 15" DUPLIX PLANER

Designed for textile machinery works. No time lost; cutting all the time. Table runs same speed both ways

DUPLEX PLANER

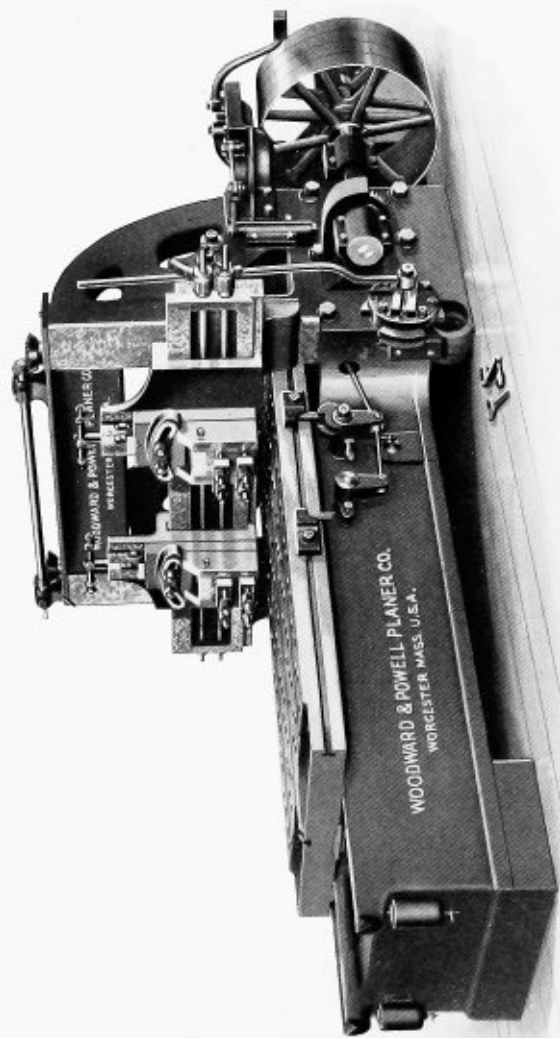
Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
46 in.	15 in.	16 ft.	30000	\$
46 "	15 "	18 "	33500	\$
46 "	15 "	20 "	37000	\$
46 "	15 "	22 "	40500	\$
46 "	15 "	24 "	44000	\$
46 "	15 "	26 "	47500	\$
46 "	15 "	28 "	51000	\$
46 "	15 "	30 "	54500	\$

Two pairs housings; both pairs stationary, or one pair adjustable along the bed. One to four heads on each cross-rail.

Extra head for each cross-rail. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 14 inches diameter, 6 inches face, each. Should revolve 11½ times per minute to move table *one foot* per minute cutting speed.

and can plane the *full* length of table between pockets. Independent hand and power cross feed for each head.



48" x 18" x 8' SINGLE-ROD PLANNER

Will receive two locomotive rods and plane the head at one end of each at the same time.

Can furnish this planer with head on face of each

LOCOMOTIVE CONNECTION-ROD PLANER. SINGLE

Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
48 in.	18 in.	8 ft.	30000	\$
48 "	18 "	9 "	31200	\$
48 "	18 "	10 "	32400	\$
48 "	18 "	11 "	33600	\$
48 "	18 "	12 "	34800	\$
48 "	18 "	14 "	36000	\$

One pair stationary housings. *Can plane pieces full length of table between pockets; table has quick return.*

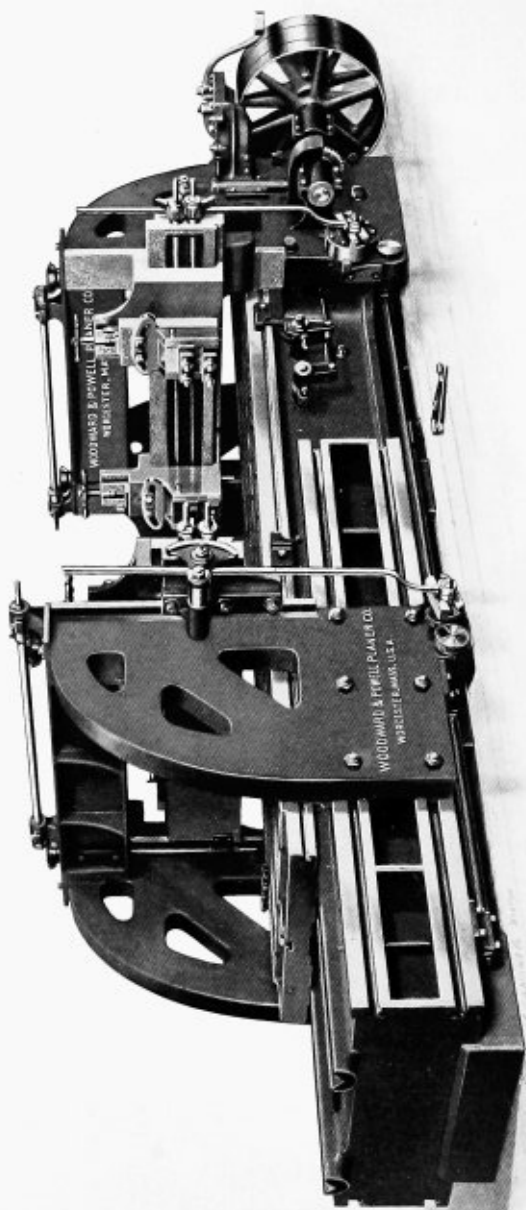
Extra head for cross-rail. Price, \$

Additional price for each side-head, \$

COUNTERSHAFT—Tight and loose pulleys, 14 inches diameter, 5 inches face, each. Should revolve $13\frac{1}{4}$ times per minute to move table *one foot* per minute cutting speed.

housing, with independent power vertical feed for each head, and hand feed for each head.

Power and hand horizontal feed, and hand vertical feed for heads on cross-rail.



48" x 18" x 16' DOUBLE-ROD PLANER

We build the largest planer of this type made. Will receive two locomotive rods, and plane the head on each end of both rods at the same time. Can furnish this

DUPLEX PLANER

LOCOMOTIVE CONNECTION-ROD PLANER

Planes 48 inches in width, 18 inches in height; length of table, 16 feet. Will plane connecting-rods $3\frac{1}{2}$ to 11 feet in length.

Two pairs of housings—one pair stationary and one pair adjustable along the bed. One cross-rail on each pair of housings. Two heads on each cross-rail.

Weight about 48,000 lbs. Price, \$

Additional price for each side-head, \$

COUNTERSHAFT—Tight and loose pulleys, 14 inches diameter, 5 inches face, each. Should revolve $13\frac{1}{4}$ times per minute to move table *one foot* per minute cutting speed.

planer with *head on face of each housing* with independent power vertical feed for each head, and hand feed for each head.

Power and hand horizontal feed, and hand vertical feed for heads on cross-rail.



48" to 72" x 60" EXTENSION PLANER

A very handy planer for works that have large and small pieces to plane, but do not require a number of

EXTENSION PLANER

When housings are set at nearest point to each other, the distance between is 48 inches.

When the back housing is extended or moved to the farthest point from the front housing, the distance between is 72 inches.

Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
48 to 72 in.	60 in.	12 ft.	35500	\$
48 " 72 "	60 "	14 "	38000	\$
48 " 72 "	60 "	16 "	40500	\$
48 " 72 "	60 "	18 "	43000	\$
48 " 72 "	60 "	20 "	45500	\$
48 " 72 "	60 "	22 "	48000	\$
48 " 72 "	60 "	24 "	50500	\$
48 " 72 "	60 "	26 "	53500	\$

Extra head for cross-rail. Price, \$

Extra head for housing, each. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 24 inches diameter, 6 inches face, each. Should revolve $13\frac{1}{2}$ times per minute to move table *one foot* per minute cutting speed.

planers. This design of planer is first-class for a jobbing shop.



8 1/2" x 18" x 1 1/2"

This planer can be made with housings that are higher, so as to admit more than 18 inches under the cross-rail.

81" x 18" PLANER

DESIGNED FOR PRINTING-PRESS MANUFACTURING

Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
81 in.	18 in.	12 ft.	33000	\$
81 "	18 "	14 "	37000	\$
81 "	18 "	16 "	41000	\$
81 "	18 "	18 "	45000	\$
81 "	18 "	20 "	49000	\$
81 "	18 "	24 "	57000	\$

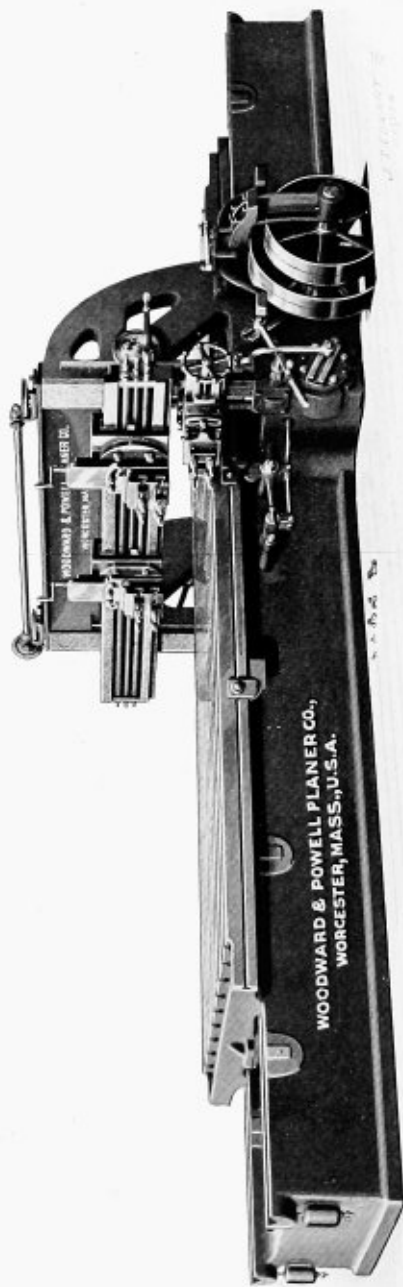
Extra head on cross-rail. Price, \$

Extra head on front housing. Price, \$

Extra head on back housing. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 18 inches diameter, 6 inches face, each. Should revolve 19 times per minute to move table *one foot* per minute cutting speed.

Hand and independent power feed for each head on cross-rail. Hand and power vertical feed for head on each housing.



87" x 18" x 15'

This planer can be made with housings that are higher so as to admit more than 18 inches under the cross-rail.

87" x 18" PLANER

DESIGNED FOR PRINTING-PRESS MANUFACTURING

Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
87 in.	18 in.	12 ft.	40000	\$
87 "	18 "	14 "	45000	\$
87 "	18 "	16 "	50000	\$
87 "	18 "	18 "	55000	\$
87 "	18 "	20 "	60000	\$
87 "	18 "	24 "	70000	\$

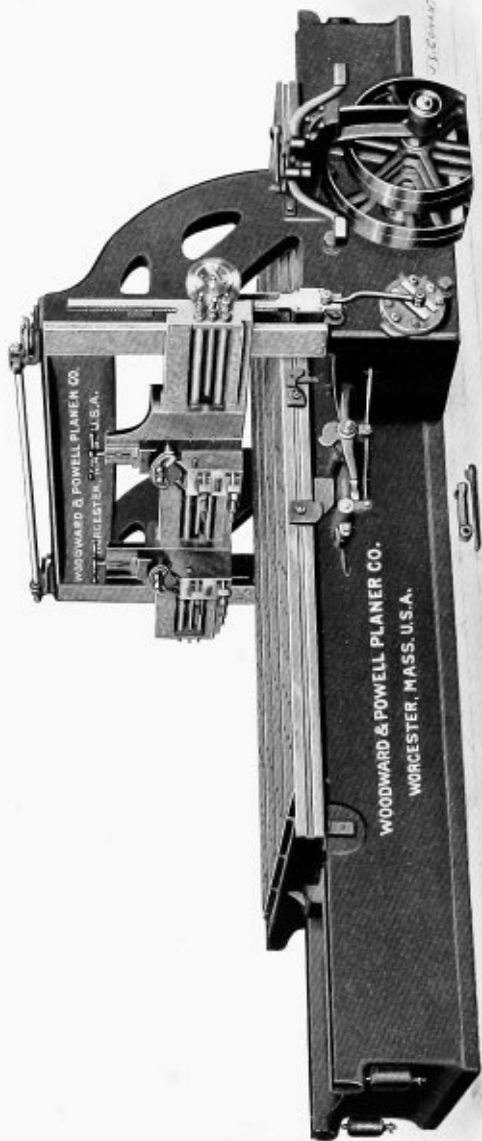
Extra head on cross-rail. Price, \$

Extra head on front housing. Price, \$

Extra head on back housing. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 18 inches diameter, 8 inches face, each. Should revolve 19 times per minute to move table *one foot* per minute cutting speed.

Hand and independent power feed for each head on cross-rail. Hand and power vertical feed for head on each housing.



96" x 24" x 11"

This planer can be made with housings that are higher so as to admit of 46 inches under the cross-rail.

Hand and independent power feed for each head on

96" x 24" PLANER

DESIGNED FOR SPECIAL WORK

Plane in Width	Plane in Height	Plane in Length	Weight About	Price with One Head on Cross-Rail
96 in.	24 in.	12 ft.	45000	\$
96 "	24 "	14 "	51000	\$
96 "	24 "	16 "	57000	\$
96 "	24 "	18 "	63000	\$
96 "	24 "	20 "	69000	\$
96 "	24 "	24 "	81000	\$

Extra head on cross-rail. Price, \$

Extra head on front housing. Price, \$

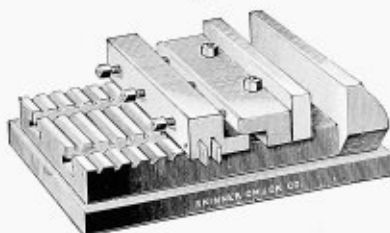
Extra head on back housing. Price, \$

COUNTERSHAFT—Tight and loose pulleys, 18 inches diameter, 8 inches face, each. Should revolve 19 times per minute to move table *one foot* per minute cutting speed.

cross-rail. Hand and power vertical feed for head on face of each housing.

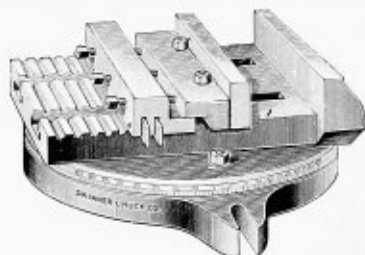
PRICE LIST AND DIMENSIONS

OF



SQUARE BASE CHUCK

Size Chuck No.	Price	Length of Jaw	Depth of Jaw	Jaws will Open	Space Required
6	\$20.00	7 in.	1 1/2 in.	3 1/2 in.	7 1/4 x 11 in.
8	25.00	9 "	1 7/8 "	5 "	9 x 12 1/2 "
10	30.00	11 "	2 3/8 "	6 "	11 x 15 "
12	35.00	13 "	2 3/8 "	8 "	13 x 17 "
15	45.00	15 1/2 "	2 1/2 "	9 1/2 "	15 1/2 x 21 "
18	55.00	18 1/2 "	2 3/4 "	11 1/4 "	18 1/2 x 24 "
24	75.00	24 1/4 "	2 3/4 "	16 "	24 1/4 x 28 "
30	100.00	30 1/4 "	2 3/4 "	21 1/2 "	30 1/4 x 34 "



ROUND SWIVEL BASE CHUCK

Size Chuck No.	Price	Length of Jaw	Depth of Jaw	Jaws will Open	Space Required
6	\$25.00	7 in.	1 1/2 in.	3 1/2 in.	10 in.
8	30.00	9 "	1 7/8 "	5 "	12 1/2 "
10	36.00	11 "	2 3/8 "	6 "	14 1/2 "
12	40.00	13 "	2 3/8 "	8 "	16 3/4 "
15	50.00	15 1/2 "	2 1/2 "	9 1/2 "	20 "
18	60.00	18 1/2 "	2 3/4 "	11 1/4 "	23 "
24	90.00	24 1/4 "	2 3/4 "	16 "	27 "
30	120.00	30 1/4 "	2 3/4 "	21 1/2 "	34 "

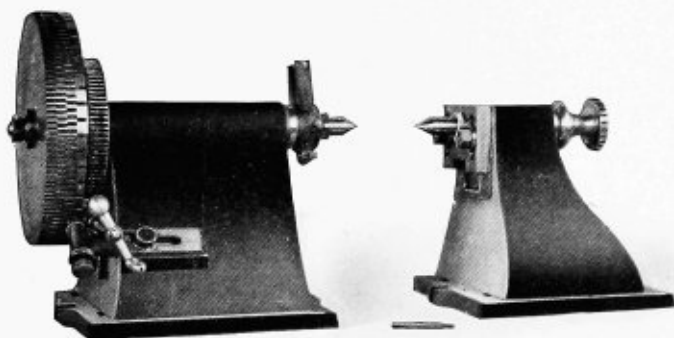
PLANER CENTERS



13" SWING

Index consisting of five circular plates or disks, each $\frac{1}{8}$ inch thick and $7\frac{1}{4}$ inches diameter, which are accurately cut with 44, 52, 56, 90, and 96 notches, respectively.

Weight, 85 lbs. Price, \$38.



20" SWING

Index consisting of four circular plates or disks, each $\frac{1}{8}$ inch thick and 12 inches diameter, which are accurately cut with 48, 110, 126, and 140 notches, respectively.

Weight, 210 lbs. Price, \$60.

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