

Our Wagon Shop Special

\$245⁰⁰

See Page 5.



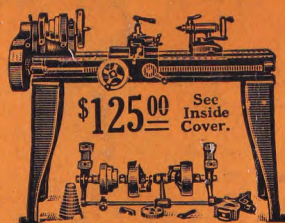
For complete detail description of this machine see page 5 of this catalog

Wood and Metal Working Machinery



\$29⁵⁰

See
Page
3.



\$125⁰⁰

See
Inside
Cover.



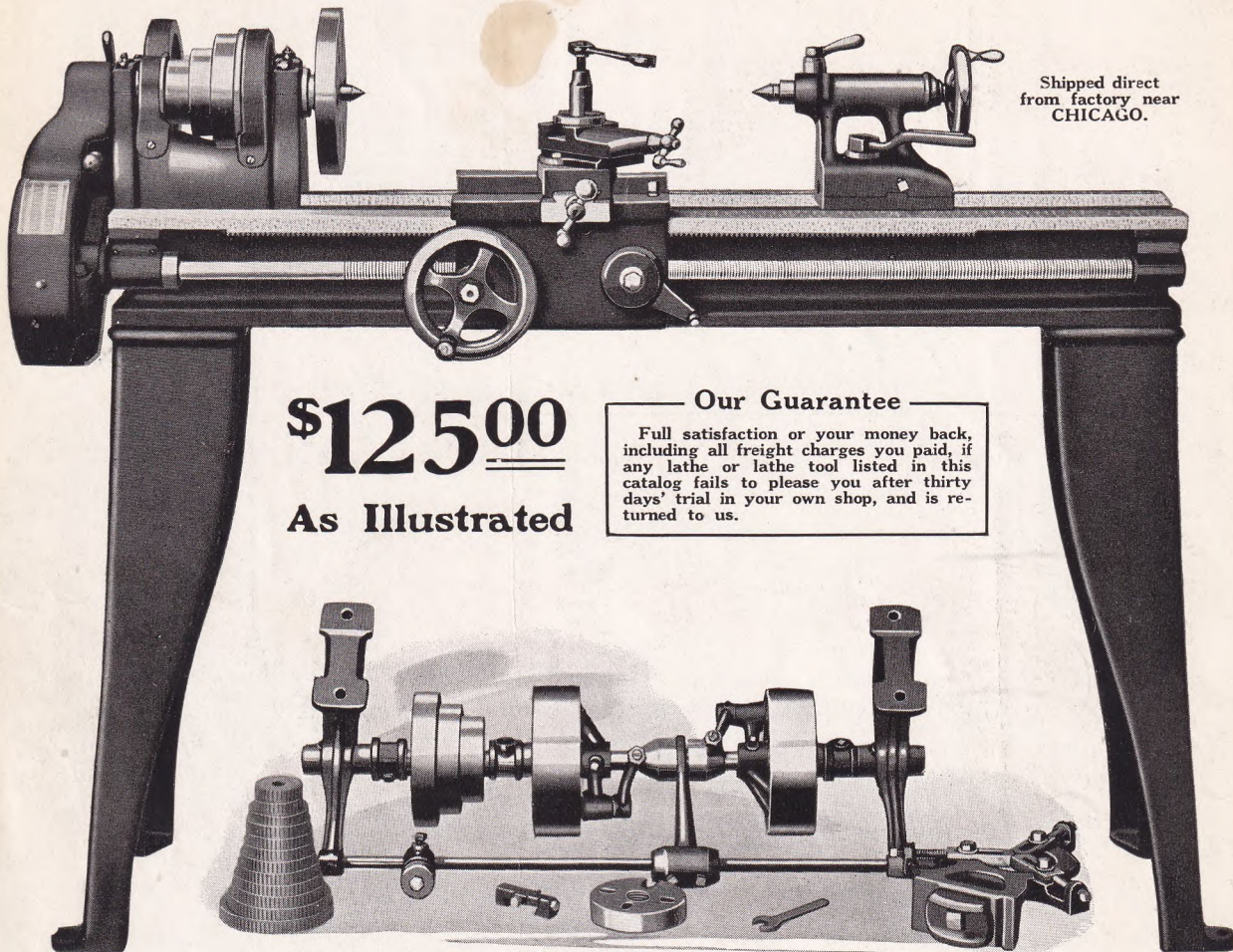
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Page
3.

\$15⁷⁵

Sears, Roebuck and Co.
CHICAGO-PHILADELPHIA

Our "Garage Special" Produces Profits

Only to Be Compared in Value With Lathes Ordinarily
Sold at \$200.00 or More



Shipped direct
from factory near
CHICAGO.

\$125.00

As Illustrated

Our Guarantee

Full satisfaction or your money back, including all freight charges you paid, if any lathe or lathe tool listed in this catalog fails to please you after thirty days' trial in your own shop, and is returned to us.

Screw Cutting Engine Lathe — 10-Inch Swing — 4-Foot Bed

Designed and manufactured exclusively for us to meet the demand for a sturdy, practical, accurate and economical lathe capable of handling the thousand and one metal working jobs that come to garage, machine and repair shops.

A GUARANTEED QUALITY LATHE AT A REMARKABLE PRICE.

A screw cutting engine lathe for the garage, machine and repair shop, for electrical work, or any place where fine, accurate machine work is required. The headstock is equipped with an improved reverse, the spindle cone has three steps for 1-inch belt, spindle has $\frac{3}{4}$ -inch hole and the centers are No. 2 Morse Taper. The bearings are the best phosphor bronze and are adjustable for wear.

The tailstock is offset to allow compound rest to swivel parallel with the bed and is provided with set over for turning taper.

The carriage is fitted with a graduated compound rest which may be set on any angle for turning or boring. The feed of the carriage is operated by clamping the split nuts on the lead screw.

The lathe will cut threads from 4 to 40 right or left, including $11\frac{1}{2}$ -inch pipe thread, and by compounding gears many other threads may be cut.

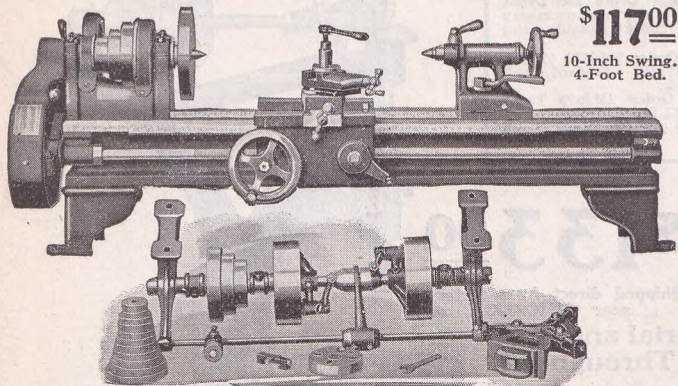
The equipment as shown in the illustration is included in the price of the lathe and consists of large and small face plates, compound rest, two steel centers, center rest, change gears for screw cutting, chuck back fitted to spindle nose, adjustable stop for screw cutting and double friction countershaft.

The lathe swings $10\frac{1}{4}$ inches over the bed. Length of bed is 4 feet, takes between centers $29\frac{1}{2}$ inches and swings over the carriage $7\frac{1}{4}$ inches. Tool post takes $\frac{3}{8} \times \frac{7}{8}$ -inch tool; countershaft speed is 290 revolutions per minute. Approximate weight, crated for shipment, 500 pounds.

99M8275 $\frac{1}{3}$ —"Garage Special," complete as illustrated. Price, shipped direct from factory near CHICAGO... **\$125.00**

Accessories for Our "Garage Special" Engine Lathes

"GARAGE SPECIAL" BENCH LATHE



\$117.00
10-Inch Swing.
4-Foot Bed.

Regular equipment, same as described under illustration of "Garage Special" long leg lathe, is included in price of bench lathe. Approximate weight, crated for shipment, 450 pounds.

99M8276½—Bench Lathe, as illustrated above, with short legs. **\$117.00**

"Garage Special" Machine Shop Equipment

The "Garage Special" Machine Shop Equipment is a very desirable outfit for the garage, the electrical shop and battery service and ignition station, or in any shop where fine, accurate work is desired.

The chucks and tools specified below are the most practical sizes for the lathe for general use.

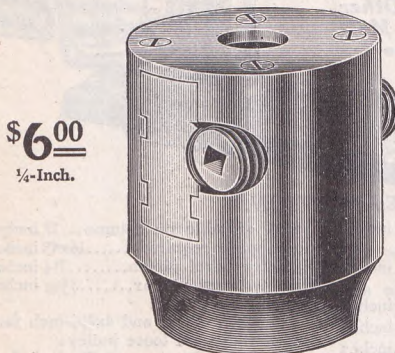
Quotation.

"Garage Special" Machine Shop Equipment.

99M8275½	"Garage Special" Lathe, long legs...	\$125.00
99M8234½	6-Inch Four-Jaw Independent Chuck, Fitting Independent Chuck to lathe, using Machined Chuck Back which is furnished with regular equipment	22.00
99M8270½	½-Inch Standard Drill Chuck, Fitting Drill Chuck to lathe, including arbor	1.00 7.00
99M8266½	Set (6) Lathe Dogs, ¼ to 1½ inches inclusive	2.00 3.95
99M8254½	00-S Patent Turning Tool	1.80
99M8255½	29-R Patent Cutting-Off Tool	1.90
99M8256½	00-B Patent Boring Tool	3.25
Total price of equipment as specified above		\$167.90

For Detailed Description of "Garage Special" Lathe See Opposite Page.

"GARAGE SPECIAL" CHUCKS, TOOLS AND DOGS, ETC.



\$6.00
¼-Inch.

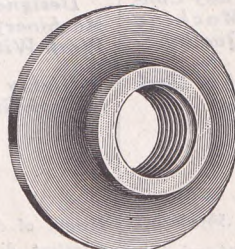
\$7.00
½-Inch.

"STANDARD" DRILL CHUCK

It is very powerful and guaranteed to hold true and not to injure the shanks of the drills. It holds round and square work. The jaws and screws are made from cast steel carefully tempered. The hole in the hub is made to fit taper arbor, which will fit both head and tail spindle of lathe. Price includes wrench.

	Capacity	Diameter	Price, Each
99M8268½	0 to ¼ inch	1½ inches	\$ 6.00
99M8269½	0 to ⅜ inch	1 11/16 inches	6.50
99M8270½	0 to ½ inch	2 3/16 inches	7.00
99M8271½	0 to ¾ inch	2½ inches	8.00
99M8272½	0 to 1 inch	3 1/16 inches	10.00

Price for fitting Drill Chuck to lathe, including arbor, extra **\$2.00**



MACHINED CHUCK BACK

For Fitting Lathe Chuck to Lathe Spindle.

One Machined Chuck Back is included with regular equipment of each lathe. When extra chuck back is wanted, order as follows:

99M8232½
Price, each..... **\$2.00**

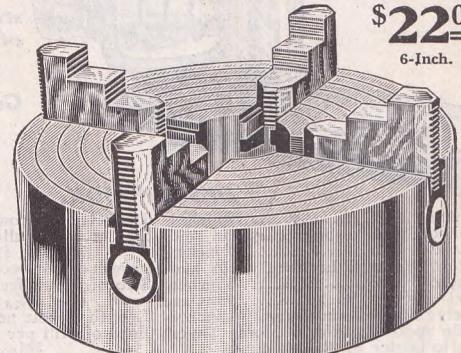


SEMI-MACHINED DRILL CHUCK ARBOR

Fitted to Lathe Spindle.

Drill Chuck Arbor fitted to lathe spindle, but not fitted to drill chuck.

99M8273½—Each. **\$1.50**



\$22.00
6-Inch.

INDEPENDENT LATHE CHUCK

With Four Independent Reversible Jaws.

This Chuck has four solid jaws with half nut, reversible by running out of chuck at the periphery, and turning end for end. Price includes wrench.

Rated Size of Chuck	No.	Will Hold About	Price
99M8233½	5 inches	300	7 inches \$21.00
99M8234½	6 inches	301	7½ inches 22.00
99M8235½	7 inches	302	8¼ inches 25.00
99M8236½	8 inches	302½	9½ inches 26.00

Price for fitting Independent Chuck to lathe before lathe leaves factory, using Machined Chuck Back furnished with regular equipment, extra..... **\$1.00**

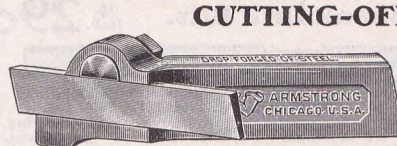
PATENT LATHE TOOLS

Each tool is carefully packed in a cardboard box and price includes one Drop Forged Wrench and one High Speed Steel Cutter, ground to shape.



TURNING TOOL

\$1.80 **99M8254½**
No. 00-S. Size of shank, 5/16x3/4x4½ inches. Size of cutter, 3/16 inch square.
Price, complete..... **\$1.80**



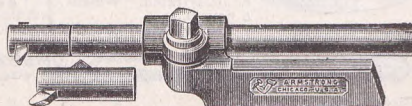
CUTTING-OFF TOOL

\$1.90 **99M8255½**
No. 29-R. Size of shank, 5/16x3/4 inch. Size of blades, 3/4x4x½ inch.
Price, complete..... **\$1.90**

BORING TOOL

\$3.25

Each set consists of Holder and Bar, with straight and 45-degree End Caps, two High Speed Cutters (ground for boring) and a Double End Wrench.



99M8256½—No. 00-B. Size of shank, 5/16x3/4 inch. Size of bar, ½ inch diameter. Size of cutter, 3/16 inch square. Price, complete..... **\$3.25**

LATHE DOGS

These lathe dogs are heavy malleable iron with hardened tool steel set screw.

Size, Inches	Price, Each
99M8260½	¼ 40c
99M8261½	½ 50c
99M8262½	¾ 60c
99M8263½	1 70c
99M8264½	1¼ 80c
99M8265½	1½ 95c



99M8266½—Set of six, one each size, ¼ to 1½ inches. Price, per set. **\$3.95**

ALL GOODS ON THIS PAGE SHIPPED DIRECT FROM FACTORY NEAR CHICAGO.

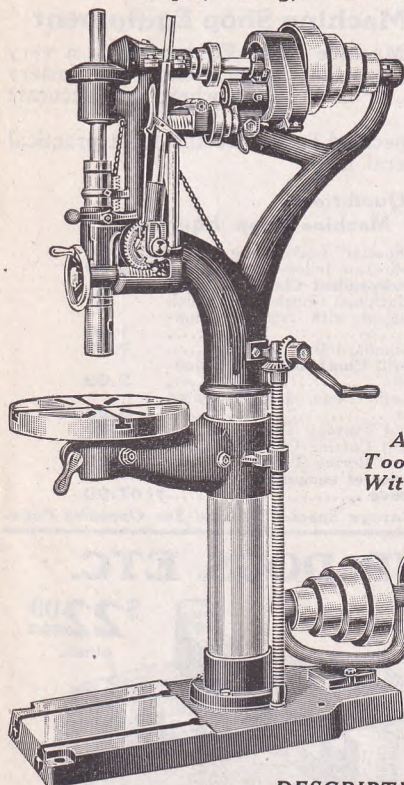
Power Drills and Accessories

20-INCH "EXPERT" POWER DRILL

Back Geared, Power Feed, Automatic Stop.
Simple, Strong, Convenient, Economical.

20-INCH "EXPERT" POWER DRILL

With Hand Lever Feed.
A Splendid All Around Drill at Low Cost.



\$179⁰⁰

Shipped direct from factory
near CHICAGO.

**Best of Material and
Workmanship Throughout**

*A Modern and Serviceable
Tool for Any Shop at a Price
Within Your Reach.*

*Designed So That
Every Move Counts.*

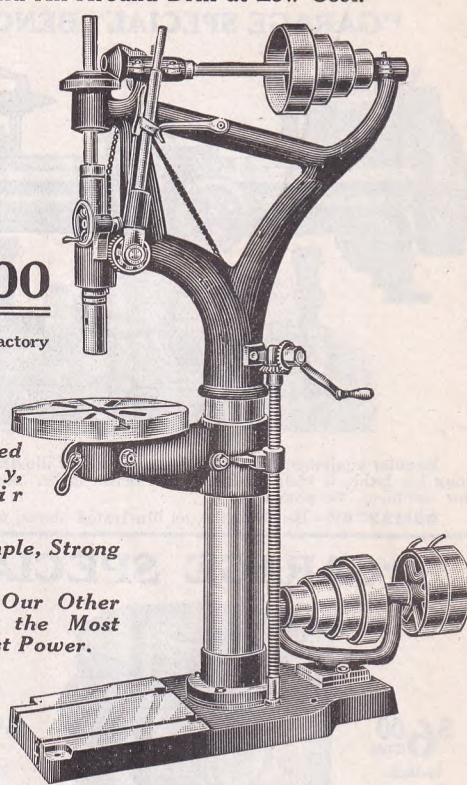
*A Carefully Con-
structed Machine
of High Quality.*

*Finished in Dark
Gray Gloss.*

DESCRIPTION.

Height of drill.....72 inches
Greatest distance between base and spindle.....37 inches
Greatest distance between table and spindle.....25 inches
Travel of spindle.....9 inches
Diameter of spindle in sleeve.....1 1/2 inches
Spindle socket.....No. 4 Morse Taper Drills to center of 21-inch circle.
Diameter of table.....16 inches
Diameter of column.....5 1/2 inches
Travel of table on column.....17 inches
Floor space required.....16x45 inches
Diameter bevel pinion.....3 1/2 inches
Diameter of crown gear.....5 1/2 inches
Size of cone pulleys:
8 7/8, 7 1/4, 5 1/2 and 4x2 1/4-inch face
Length of belt necessary.....12 feet 4 inches
Size of power feed cone pulley:
4 1/2, 3 1/2 and 2 1/2x1-inch face
Length of belt necessary.....31 1/2 inches
Feed of drill per revolution of spindle:
30/1000, 1 1/4/1000, 9/1000 inch
Size of tight and loose pulley:
8x2 1/2-inch face
Speed of countershaft.....380 R. P. M.
Horse-power required.....1 1/2
Shipping weight, 800 pounds.

99M8267 1/2—Power Drill, complete as illustrated and described.
Price, shipped direct from factory near CHICAGO.....**\$179.00**



\$133⁰⁰

Shipped direct from factory
near CHICAGO.

*Especially Adapted
for the Factory,
Garage and Repair
Shop.*

*All Parts Are Simple, Strong
and Convenient.*

*Designed, Like Our Other
Machinery, to Do the Most
Work With the Least Power.*

*Highly Finished
in Dark Gray Gloss.*

DESCRIPTION.

Height of drill.....72 inches
Greatest distance between base and spindle.....37 inches
Greatest distance between table and spindle.....25 inches
Travel of spindle.....9 inches
Diameter of spindle in sleeve.....1 1/2 inches
Spindle socket.....No. 4 Morse Taper Drills to center of 21-inch circle.
Diameter of table.....16 inches
Diameter of column.....5 1/2 inches
Travel of table on column.....17 inches
Floor space required.....16x45 inches
Diameter bevel pinion.....3 1/2 inches
Diameter crown gear.....3 1/2 inches
Size of cone pulley:
8 7/8, 7 1/4, 5 1/2 and 4x2 1/4-inch face
Size of tight and loose pulley:
8x2 1/2-inch face
Length of belt necessary.....12 ft. 4 inches
Speed of countershaft.....380 R. P. M.
Horse-power required.....1 1/2
Shipping weight, 750 pounds.

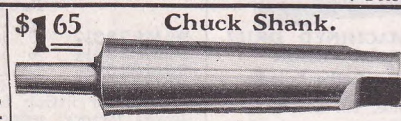
99M8259 1/2—Power Drill, complete as illustrated and described.
Price, shipped direct from factory near CHICAGO.....**\$133.00**



**Standard Drill
Chuck and
Shank.**

\$6⁹⁵

9M5650
Standard Drill
Chucks.
Capacity,
Weight,
Price for Chuck only,
with wrench.....**\$6.95**



Chuck Shank.

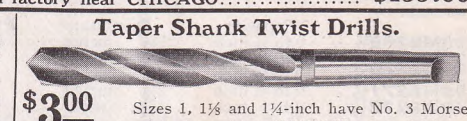
9M5653—Chuck Shank, has No. 4 Morse taper. For fitting standard Drill Chuck to Drill Spindle.
Weight, 1 1/2 pounds.
Price for Chuck Shank
only.....**\$1.65**



**Steel Sleeve
For Taper Shank
Drills.**

\$3⁰⁰

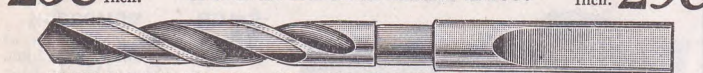
9M5632—Steel
Sleeve, No. 3 to 4
Morse taper, for fit-
ting No. 3 Morse
Taper Drills to No. 4
Spindle Sockets.
Weight, 13 ounces.
Price.....**90c**



Taper Shank Twist Drills.

Sizes 1, 1 1/4 and 1 1/2-inch have No. 3 Morse taper and require a 9M5632 No. 3 to 4 Morse Taper Steel Sleeve to fit spindle socket.
9M5630—State size.
Size.....1 in. 1 1/4 in. 1 1/2 in. 1 3/4 in. 2 in.
Taper of Shank.....No. 3 No. 3 No. 3 No. 4 No. 4
Weight.....1 1/2 lbs. 1 3/4 lbs. 2 1/4 lbs. 3 1/2 lbs. 4 1/2 lbs.
Price, each.....**\$1.80 \$2.40 \$3.00 \$3.60 \$4.20**

23c 3/16-Inch. Round Shank Drill Bits. 1/4-Inch. 29c



WITH 1/2-INCH SHANKS. FIT ANY OF OUR BLACKSMITHS' DRILLS.
9M5633—All drills are ground to micrometer caliper gauge after tempering, and sizes given are exact. Every bit thoroughly inspected and fully guaranteed.
State size.
Size, inch.....1/8 5/32 1/4 5/16 3/8 7/16 1/2
Weight, ounces.....2 2 2 3 3 4 4
Price.....**17c 20c 23c 26c 29c 32c 35c 38c 41c 44c**
Size, inch.....5/16 3/8 1/2 5/8 3/4 7/8 1
Weight, ounces.....4 4 8 12 12 12 12
Price.....**47c 52c 59c 78c 99c**



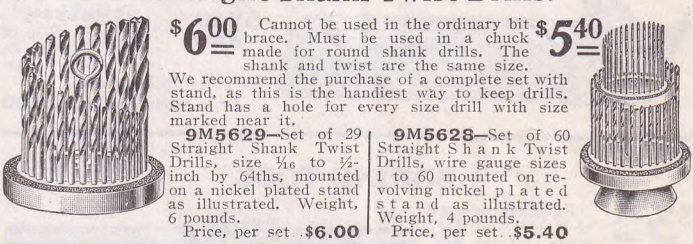
\$2⁸⁵ Set
of 8

**Round Shank
Drills.** Set contains
one each, 1/8, 5/32, 1/4,
5/16, 3/8, 7/16, 1/2 in.
Weight, 2 pounds.
9M5635
Price, per set.....**\$2.85**

\$1⁹⁵ Set
of 6

Round Shank Drills.
Set contains one each
3/16, 1/4, 5/16, 3/8, 1/2, 5/8-
inch. Weight, 1 1/4 lbs.
9M5634
Price, per set.....**\$1.95**

Straight Shank Twist Drills.



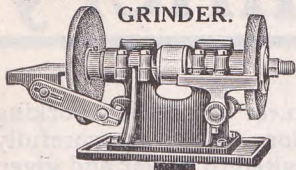
\$6⁰⁰ Cannot be used in the ordinary bit brace. Must be used in a chuck made for round shank drills. The shank and twist are the same size.
We recommend the purchase of a complete set with stand, as this is the handiest way to keep drills. Stand has a hole for every size drill with size marked near it.
9M5629—Set of 29 Straight Shank Twist Drills, size 1/16 to 1/2-inch by 64ths, mounted on a nickel plated stand as illustrated. Weight, 6 pounds.
Price, per set.....**\$6.00**
9M5628—Set of 60 Straight Shank Twist Drills, wire gauge sizes 1 to 60 mounted on revolving nickel plated stand as illustrated. Weight, 4 pounds.
Price, per set.....**\$5.40**

9M5627—Straight Shank Twist Drills.
State size wanted.

Diameter in 64ths of inch.....	4	5	6	7	8	9	10	12
Length, inches.....	2 1/2	2 3/4	2 7/8	3	3 1/4	3 1/2	3 3/4	3 1/2
Price, each.....	3c	4c	5c	6c	7c	8c	9c	10c
Diameter in 64ths of inch.....	14	16	18	20	24	28	32	36
Length, inches.....	3 3/4	4	4 1/4	4 1/2	5	5 1/2	6	6
Price, each.....	11c	12c	14c	16c	20c	26c	34c	34c

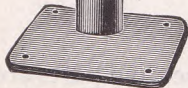
Power Grinders, Hack Saw, Drills, Etc.

"GARAGE SPECIAL" GRINDER.



\$29.50

Shipped Direct
From Factory
Near CHICAGO.



Manufactured especially for use in garages and repair shops. The combination of disc and wheel makes it especially desirable for this class of work. Sandpaper for woodwork or emery paper for metal work can be glued to the disc. Furnished with plate and clamps for clamping sand or emery paper to disc. Rests for disc and wheel are adjustable. Has extra large and long bearings.

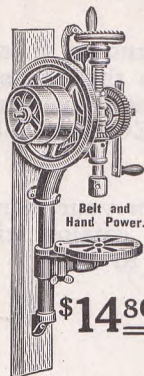
Spindle, 1 1/2 inches in diameter; disc, 12 inches in diameter; pulley measures 4 inches diameter by 2 3/4-inch face.

Actual weight, 245 pounds. Weight, crated for shipment, 270 pounds.

99M8281 1/2 - "Garage Special" Grinder.

Price, shipped direct from factory near CHICAGO \$29.50

ACME SPECIAL DRILL.



Belt and Hand Power.

\$14.80

Has both flywheel and crank. Spindle has up and down run of 3 inches. Table has up and down run of 10 1/2 inches. Drills up to 1 1/4-inch holes and to center of 15-inch circle. Takes 1/2-inch round shank drills. Should be run at about 200 revolutions per minute. Shpg. wt., 126 lbs.

99M5083

★ Price, with lag screws for fastening to post \$14.80

★ Not Mailable.

"GARAGE SPECIAL" DRAW CUT POWER SAW.



\$15.75

Shipped Direct
From Factory
Near CHICAGO.

Cuts bar stock within its capacity very accurately and at low cost. Saw frame is supported on a machined bearing, having adjustment for wear.

Made extra heavy throughout. Simple in design—no complicated mechanism to get out of order, has few moving parts and is very compact and rigid. 12-inch high speed blade furnished with each saw.

Jaws open 3 3/4 inches. Height over all, 29 1/2 inches. Length, 29 inches.

14x2 1/2-inch pulley, which should revolve about sixty revolutions per minute.

Weight, 110 pounds net. Weight, crated for shipment, about 125 lbs.

99M8282 1/2 - "Garage Special" Draw Cut Power Saw.

Price, shipped direct from factory near CHICAGO \$15.75

"GARAGE SPECIAL" POWER DRILL.

This Drill is made extra heavy throughout. The materials which are used for its manufacture are the very best for the different parts.

Bearings are extra long, insuring easy running and long life. Steel ball thrust bearings at the end of the spindle. Spindle is 1 1/4-inch steel, bored for standard 1/2-inch round shank drills. Feed adjustment, 3/4 in.

Table is adjustable up and down, on a cold rolled steel column. Distance from center of drill to column, 7 1/4 in. Vertical adjustment of table, 17 inches. Size of table, 7x8 inches.

Main frame of drill is fastened to a pipe column. Distance from floor to center of pulley shaft, 5 feet. Distance from lower base to end of spindle, 4 feet. Base, or floor plate, 13 1/2 x 17 inches.

Furnished with 10x2-inch tight and loose pulleys; also a hand lever—when used without power.

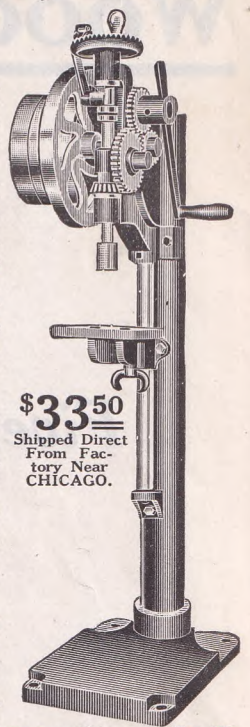
A substantially made machine, suitable for any kind of drilling within its capacity.

Automatic feed attachment is very simple. Drill can also be used with hand feed if desired.

Drill weighs 200 lbs. Weight, crated for shipment, 225 pounds.

99M8280 1/2 - "Garage Special" Power Drill.

Price, shipped direct from factory near Chicago \$33.50



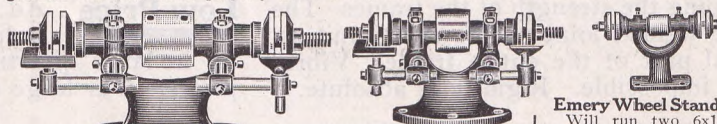
\$33.50

Shipped Direct
From Factory
Near CHICAGO.

EMERY WHEEL STANDS AND COLUMNS.

Stands and Columns Are Sold Separately.

If you desire grinder mounted on column, order a column at the same time you order the stand. Stands are equipped with dustproof brass oil cups and furnished with bolts for attaching to columns. Columns have raised edge around top to prevent tools from falling off, are bored and furnished with lag screws for fastening to the floor. These grinders are well made, properly fitted and guaranteed to give satisfactory service.



Emery Wheel Stand.

With adjustable tool rests. Will run two 14x2-inch grinding wheels with 1 1/4-inch holes. Size of spindle, 1 1/2 inches in diameter by 27 inches long, with 5-inch babbitted bearings. Size of pulley, 5 inches in diameter by 4 1/4-inch face. Shpg. wt., 105 lbs.

99M5556

★ Price for stand only, without emery wheels \$29.00

COLUMN ONLY.

For above emery wheel stand. Height, 28 1/2 inches. Size of base, 15x19 inches. Shipping weight, 125 pounds.

99M5557 - ★ Price for column only \$13.50

★ Not Mailable.

Emery Wheel Stand.

With adjustable tool rests. Will run two 10x1 1/2-inch grinding wheels with 1-inch holes. Size of spindle, 1 1/2 inches in diameter by 19 in. long, with 3 1/4-inch babbitted bearings. Size of pulley, 3 1/2 inches in diameter by 2 1/2-inch face. Shipping wt., 54 lbs.

99M5554 - Price, for stand only, without emery wheels \$16.50

COLUMN ONLY.

For above emery wheel stand. Height, 32 inches. Size of base, 14x16 inches. Shipping weight, 80 pounds.

99M5555 - ★ Price, for column only \$10.00

★ Not Mailable.

Emery Wheel Stand.

Will run two 6x1-inch emery wheels with 1/2-inch holes. Size of spindle, 1 1/4 inches in diameter by 10 1/2 in. long, with plain bearings. Size of pulley, 2 inches in diameter by 1 1/2-inch face. Shipping weight, 11 pounds.

99M5550 - Price, for stand only, without emery wheels \$5.25

COLUMN ONLY.

For above emery wheel stand. Height, 34 1/2 inches. Size of base, 11x12 in. Shipping wt., 56 lbs.

99M5551 - ★ Price, for column only \$6.00

★ Not Mailable.



EMERY WHEEL STAND.

With adjustable tool rests. Will run two 8x1-inch grinding wheels with 3/4-inch holes. Size of spindle, 7/8-inch in diameter by 14 inches long, with 2 1/4-inch babbitted bearings. Size of pulley, 2 1/4 inches in diameter by 2-in. face. COLUMN. Height, 33 1/4 inches. Size of base, 13x14 inches.

99M5549 - Emery Wheel Stand complete with column, as illustrated. Shpg. wt., 79 lbs.

★ Price \$17.70

99M5552 - Emery Wheel Stand only, as above. Shipping wt., 27 pounds.

Price \$9.90

99M5553 - Column only, as above. Shipping weight, 78 pounds.

★ Price \$8.25

★ Not Mailable.

Columns Have Raised Edge Around Top to Prevent Tools From Falling Off.

HOWARD CORUNDUM WHEELS.

Natural corundum, such as is used in these wheels, is considered among the best abrasives and far superior to common emery. Our Howard Corundum Wheels grind fast, wear slowly and keep a sharp jagged edge with little tendency to glaze. Guaranteed satisfactory in general use.

Table Showing Number of Revolutions Per Minute at Which Howard Corundum Wheels Should Be Run.

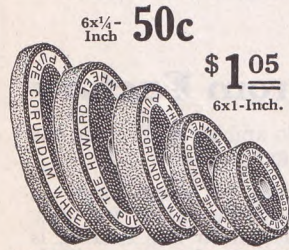
Diameter wheel, inches	2	3	4	5	6	8	10	12	14	16
Revolutions per minute	9,550	6,350	4,775	3,800	3,200	2,400	1,925	1,600	1,375	1,200

HOWARD CORUNDUM TOOL GRINDING WHEELS.

For grinding all kinds of carpenters' and woodworkers' tools, drills, lathe and planer tools, planing mill and paper cutting knives and for general machine shop use. When ordering STATE OUR CATALOG NUMBER, DIAMETER AND THICKNESS OF WHEEL, SIZE OF HOLE IN CENTER, and the kind of work wheel is to be used for.

99M5952 - With flat face.

Diameter, inches	2	3	4	5	6	8	10	12
1/4 inch thick	Price \$0.20	\$0.25	\$0.30	\$0.40	\$0.50	\$0.75	\$1.00	\$1.25
3/8 inch thick	Price .22	.28	.35	.48	.70	.90	1.20	1.50
1/2 inch thick	Price .24	.31	.40	.55	.80	1.10	1.40	1.80
3/4 inch thick	Price .26	.34	.45	.64	.90	1.35	1.75	2.20
1 inch thick	Price .28	.37	.50	.72	1.05	1.70	2.15	2.65
1 1/4 inches thick	Price .31	.42	.58	.85	1.20	2.10	2.60	3.10
1 1/2 inches thick	Price .33	.46	.65	.98	1.35	2.50	3.05	3.70
2 inches thick	Price .36	.52	.78	1.20	1.80	3.00	3.60	4.40



6x1/2-Inch 50c

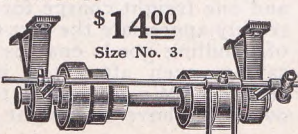
\$1.05

6x1-Inch.

COUNTERSHAFTS TO USE WITH LATHE SETS SHOWN TO THE RIGHT.

Pulleys match pulleys on same size lathe sets. Price includes lag screws and washers for attaching.

Size No.	Shpg. Wt.	Price
99M5635	1 28 lbs.	\$ 7.80
99M5636	2 29 lbs.	9.90
99M5637	3 54 lbs.	14.00
99M5638	4 68 lbs.	16.80



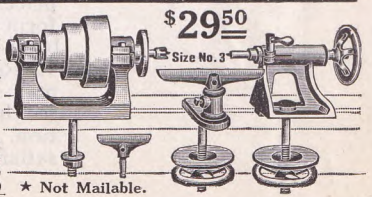
\$14.00
Size No. 3.

Illustration shows size No. 3.

FULL SIZE LATHE SETS FOR MECHANICS' USE.

Nos. 3 and 4 have babbitted bearings; Nos. 1 and 2 have cast iron bearings. Lathe set consists of metal parts only. Wood bed not included.

No.	Size No.	Sw. In.	Cones	Diam. Spindle, In.	Morse Taper, No.	Take Belt, In.	Shpg. Wt., Lbs.	Price.
99M5627	1	6	2	1 1/2	1	1	20	\$14.00
99M5628	2	8	2	1 1/2	1	1 1/4	36	18.50
99M5629	3	11	3	1 1/2	2	1 1/2	86	29.50
99M5630	4	13	4	1 1/2	2	1 1/2	120	46.50



\$29.50

Size No. 3

★ Not Mailable.

Wood Working Machinery

Our saw machines are made by a well known manufacturer of wood working machinery. Only high grade materials go into their construction. They are carefully made by good workmen and, after completion, each machine is belted to power and given an actual running test before being shipped. Every machine that goes out is free from defects and in perfect running order.

OUR GUARANTEE: Full satisfaction or your money back, including all freight charges you paid, if any machine listed in this catalog fails to please you after thirty days' trial in your own shop and is returned to us.

Five Points of Superiority

Strong On account of its great strength, the use of angle steel has made possible many of the modern engineering feats. For example, the 54-story skyscraper, the 500-foot steel bridge and the 1,000-foot trestle. In building and designing wood working machines, we believed they should be made as strong and with as little excess weight as possible. For this reason we believe **angle steel** is the most suitable material.

Rigid Our most recent and most important improvement is the adoption of the **electric welded joint**, still further developing the strength of the frames. The electric welded joint makes every unit an integral part of the entire frame. Vibration is impossible. Rigidity is absolute.

Durable All frames and parts are made so strong and so rigid that we **guarantee our machines** against all defects in material and workmanship.

Portable The angle steel frame combines maximum strength with minimum weight. The long bases allow the engine to be set in the rear where it is easy to get at to keep it in good running order. The engine is away from the sawdust and the long belt drive gives more power.

Low Price All parts have been standardized so they can be made up in large quantities, which means low prices. Our large output is the result.

In Buying a Saw Machine Get a Machine That's Strong, Serviceable and Durable

Strong Enough to Stand All the Strain that a 4-inch belt will pull when operating a 14-inch saw in hardwood. This is the severest strain that any machine can be subjected to. Our machines are guaranteed to stand up under this most severe test and to give you the service you have a right to expect.

Not Affected by Moisture. Unlike wood frame machines, ours, being made of angle steel, are not affected by dampness. Wood frame machines when placed in a damp place will soon swell and become loose and shaky, causing more or less inconvenience. Our frames, being made of angle steel, are not so affected by moisture and are guaranteed not to get loose.

We Ship All Saw Machines Promptly Direct From Factory

Terms and How to Order. Our terms are cash with order. Use the order blank which comes with this catalog, or if you have no order blank use any sheet of plain paper, give the catalog numbers of the articles you select and enclose our price. The best ways to send money are in the form of an express or postoffice money order, bank draft or currency in a registered letter. If you have a checking account at a bank you may send us your personal check. We guarantee the arrival of every shipment in perfect condition. If for any reason you are not perfectly satisfied with the goods you receive, you are at

liberty to send them back, and we will return the price and all freight charges you paid.

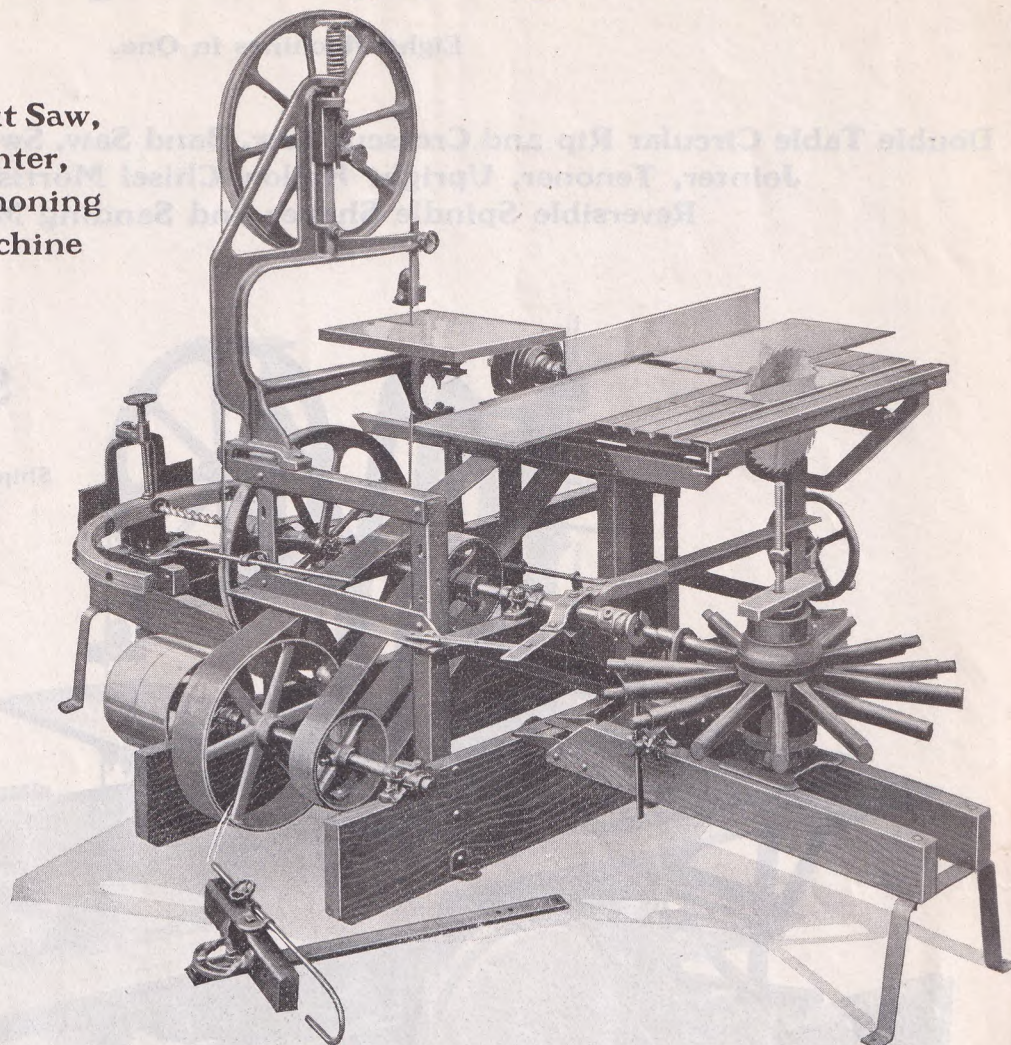
Freight Charges Amount to Very Little as compared with the saving we make for you. Every wood working machine in this catalog is shipped direct to you from the factory at CINCINNATI, OHIO. There is but one handling and one freight charge for you to pay. You can readily appreciate the fact that this direct method of handling goods enables us to make you a big saving, even after you have paid the freight charges. We guarantee to make you a saving over and above all freight charges.

Wagon Shop Special

**Circular, Rip and Crosscut Saw,
Band Saw, 12-Inch Jointer,
Felloe Boring, Spoke Tenoning
and Rim Rounding Machine**

\$245⁰⁰

Shipped Direct From Factory
at Cincinnati, Ohio.



SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electric welded together, 2x10-inch base timbers 5 feet long, set 2 feet apart.

Saw Table. Heavy angle steel frame with channel steel slats welded to frame. Top surface ground level and true. Height, 2 feet 9½ inches; width, 27 inches; overhangs base on left side 10½ inches. Length, 3 feet. Table hinged at back to raise or lower for regulating depth of cut. Has opening for 14-inch saw, which will cut up to 5 inches deep.

Band Saw. 22-inch swing, cuts to center of 44-inch circle. Table measures 14½x17½ inches, stands 40 inches from floor and can be tilted for sawing bevels. Has two saw guides. Upper guide has ball bearing disc and can be raised to saw material up to 7 inches thick. Band saw wheels are covered with endless rubber bands and take saws 12 feet long.

Jointer. 12 inches wide, with round steel safety head and four knives, cutting circle 4¼ inches in diameter. Head fastened to mandrel with both key in shaft and set screw between bearings. Plates made of steel. Front plate, 2 feet long; rear plate, 2½ feet long. Both plates have hand wheel screws for raising or lowering on inclines to adjust depth of cut.

Felloe Borer and Spoke Tenoner. Chucks take ½-inch round shank bits or hollow augers. Hand levers throw bits or hollow

augers to or from work, has adjustable stop for regulating depth of bore. Furnished with ⅝-inch boring bit and 1⅛-inch hollow auger with ⅝-inch and ⅞-inch bushing.

Rounder and Edge Molder. Furnished with cutter heads for rounding rims or poles.

Tilting Guide. For jointer or rip saw, tilts to angle of 45 degrees and is adjustable for ripping up to 17 inches in width. Furnished with spring to hold down material.

Crosscut Guide. Slides in milled groove. Has angle adjustment of 45 degrees and adjustable stop for cutting to length.

Saw Mandrel. 1⅝ inches in diameter, 39¾ inches long, threaded at both ends. Right and left hand threads, left end threaded 4¼ inches long, right end 6 inches long. Takes saws, cutter heads or emery wheels with 1-inch hole. Flanges 3½ inches in diameter.

Countershaft. 1⅝ inches in diameter. Size of pulley for circular saw mandrel, 16x4-inch face; size of pulley for band saw, 8x3-inch face; size of tight and loose drive pulleys, 10x4-inch face.

Bearings. 4 inches wide, full babbitted with high quality babbitt.

Shipping Weight
950 lbs.

Floor Space
7 ft. 9 in. x 6 ft. 5 in.

Tight and Loose Drive Pulley
10x4 in.

Speed
550 R. P. M.

Power
5 H.-P.

99M8710⅓—Wagon Shop Special, complete with one 12-inch rip saw, one 10-inch crosscut saw, one ⅜-inch band saw, one ⅝-inch bit, one 1⅛-inch hollow auger with ⅝-inch and ⅞-inch bushings and one 4-inch and one 3-inch belt. **\$245.00**

SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

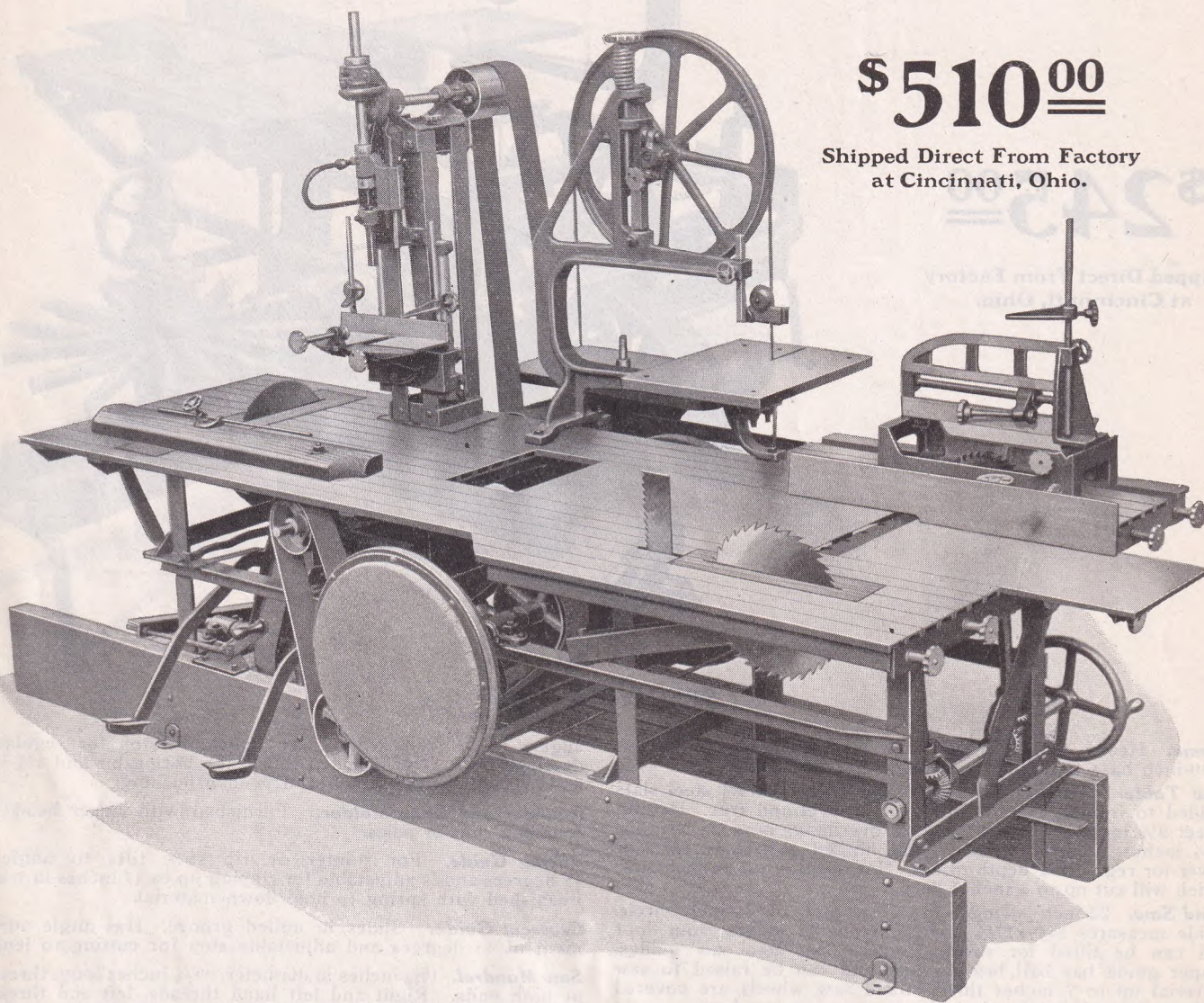
Planing Mill Special

Eight Machines in One.

Double Table Circular Rip and Crosscut Saw, Band Saw, Swing Cut-Off Saw, 12-Inch Jointer, Tenoner, Upright Hollow Chisel Mortiser and Borer, Reversible Spindle Shaper and Sanding Machine

\$510⁰⁰

Shipped Direct From Factory
at Cincinnati, Ohio.



Shipping
Weight
1,800 lbs.

Floor Space
4 ft. 10 in. x 9 ft. 6 in.

Tight and Loose
Drive Pulley
10x4 in. face

Speed
550 R. P. M.

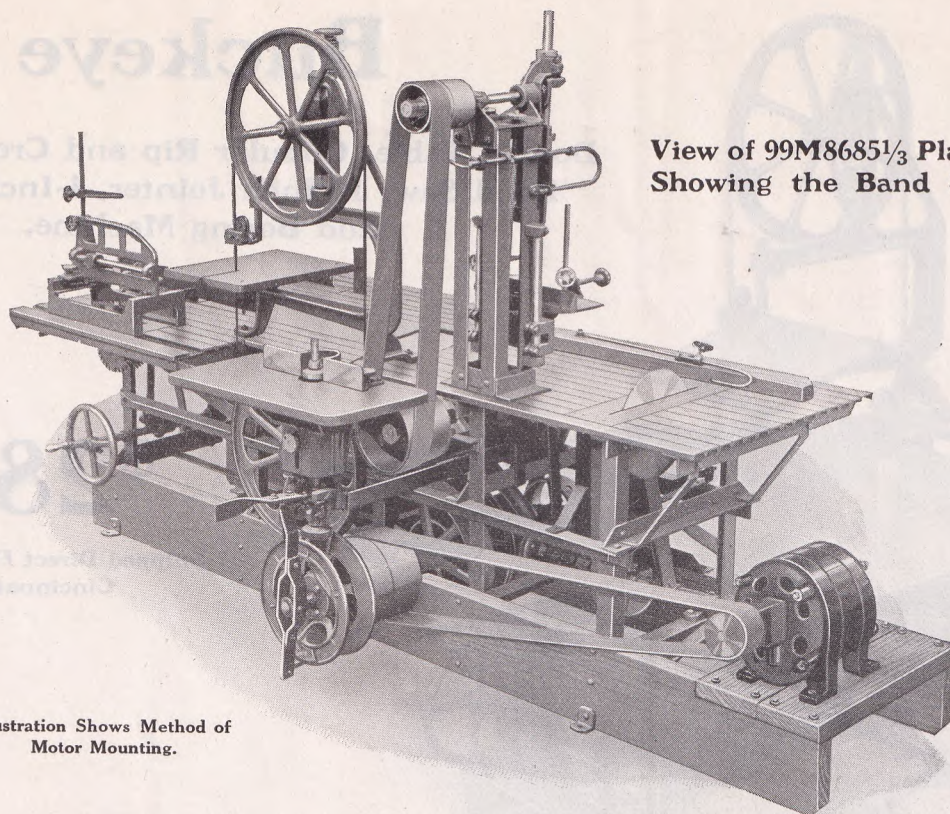
Power
5 to 7½ H.-P.

99M8685½—Planing Mill Special, complete with one 12-inch cut-off saw, one 12-inch rip saw, one 10-inch crosscut saw, one ¾-inch band saw and five belts.

Price **\$510.00**

(See page 7 for specifications.)

SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.



**View of 99M8685 $\frac{1}{3}$ Planing Mill Special
Showing the Band Saw and Shaper.**

**Illustration Shows Method of
Motor Mounting.**

SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electrically welded together. Heavy 2x10-inch base timbers 8 feet long, set 2 feet apart.

Circular Saw Table. Has double working surface. Heavy angle steel frame with channel steel slats welded to frame. Top surface ground level and true. Width 44 inches, overhangs base on right side 10 inches, overhangs base on left side 8 inches.

Raising and Lowering Circular Saw Mandrel. Has positive and accurate adjustment for quickly and easily regulating depth of cut. Diameter of mandrel $1\frac{1}{16}$ inches, threaded left end $4\frac{1}{4}$ inches, right end $5\frac{7}{8}$ inches. Flanges $3\frac{1}{2}$ inches in diameter. Takes saws, etc., with 1-inch hole. Size of pulley 3x4-inch face. Has friction clutch to start and stop.

Jointer. 12 inches wide, with round safety head and four knives, cutting circle $4\frac{1}{8}$ inches in diameter. Head is fastened to mandrel with both key in shaft and set-screw between bearings. Plates made of steel. Front plate 2 feet long, rear plate $2\frac{1}{2}$ feet long. Both plates have handwheel screws for raising or lowering on inclines to adjust depth of cut.

Tilting Guide. For jointer tilts to angle of 45 degrees and is adjustable up to 17 inches in width. Furnished with spring to hold down material.

Band Saw. 22-inch swing, cuts to center of 44-inch circle. Table measures $14\frac{1}{2}$ x $17\frac{1}{2}$ inches, stands 40 inches from floor and can be tilted for sawing bevels. Has two saw guides. Upper guide has ball bearing disc and can be raised to saw materials up to 7 inches thick. Band saw wheels are covered with endless rubber bands and take saws 12 feet long. Has belt shifter to start and stop.

Swing Cut-Off Saw. Has welded channel steel top. 12-inch saw furnished will cut 1-inch stuff 15 inches wide or 3-inch stuff 12 inches wide. Has an adjustable stop so as not to swing back farther than necessary to take in width desired to work. Saw drops below table surface when not in use. Saw mandrel $1\frac{1}{16}$ inches in diameter, $3\frac{1}{2}$ -inch flanges, take saws with 1-inch

hole. By throwing out the lever which engages the bevel frictions, the swing saw stops.

Reversible Spindle Shaper. Table is 12 inches wide by 2 feet 2 inches long and raises and lowers by handwheel to limit of 3 inches to adjust cut. Spindle is 1 inch in diameter, takes cutters with $\frac{7}{8}$ -inch hole. Threaded end is $3\frac{3}{4}$ inches long. Flange is $2\frac{3}{4}$ inches in diameter. Collar for reversible knives is $1\frac{3}{8}$ inches in diameter by $\frac{3}{4}$ -inch face. Shaper is operated by lever which presses the spindle against double friction discs. A pair of slotted collars and two straight edge knives are furnished.

Upright Hollow Chisel Mortiser and Borer. Bed plate tilts to angle of 45 degrees and is adjustable to and from stand and will take up to 3 inches to center of bit. Chuck takes hollow chisel bits from $\frac{1}{4}$ to $\frac{5}{8}$ -inch and boring bits with $\frac{1}{2}$ -inch shank from $\frac{1}{4}$ to 2-inch. Foot treadle forces chisels and bits into the work. Furnished with one $\frac{3}{8}$ -inch boring bit. Has belt shifter to start and stop.

Tenoner. Furnished with two 9-inch grooving saws and sliding carriage. Saws cut up to $2\frac{1}{2}$ inches deep and up to $1\frac{3}{4}$ inches wide. Cuts tenons up to 12 inches wide and by removing edge clamp up to 14 inches wide and up to 3 inches deep. Thickness of tenon is regulated by collars placed between the saws. Carriage has vertical stop for making tenons of exact lengths.

Sand Disc. 18 inches in diameter, has metal band to hold on sandpaper and is covered with sandpaper.

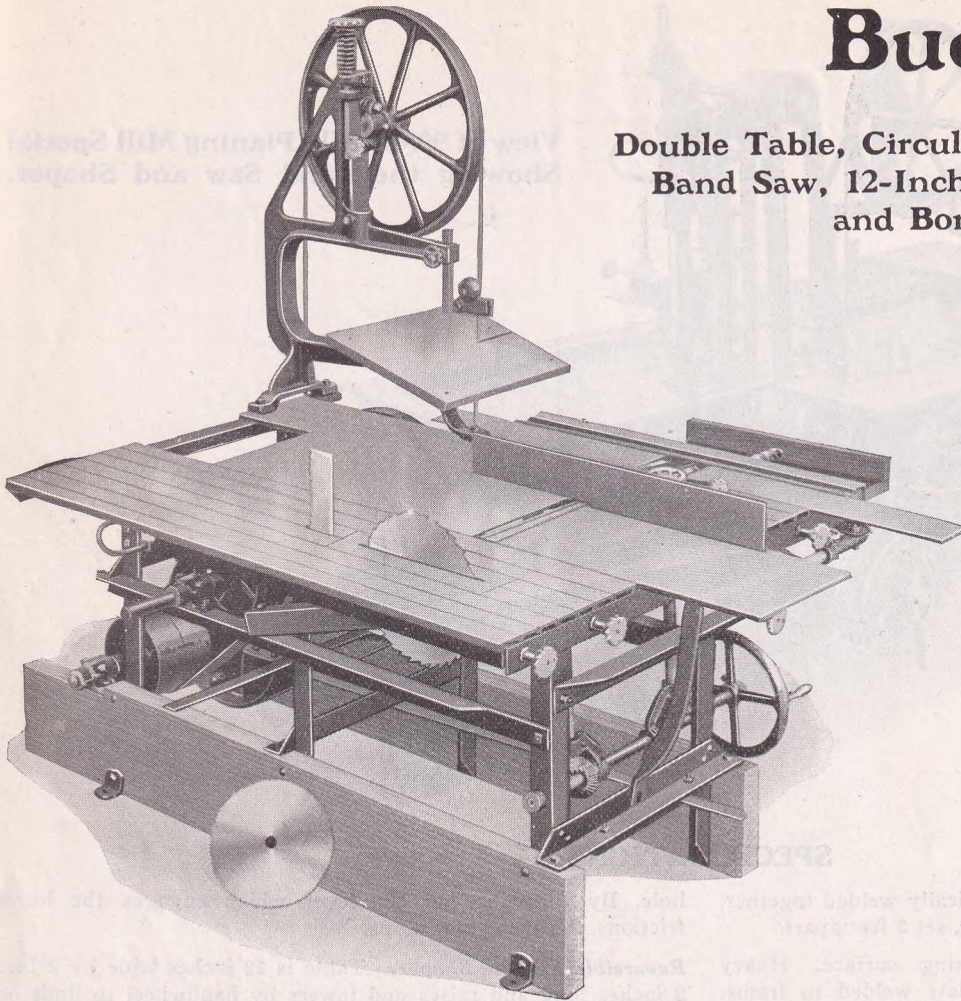
Rip Guide. Is adjustable for any width up to 22 inches wide and has wood spring for holding down material.

Crosscut Guide. Slides in milled groove. Has angle adjustment of 45 degrees and adjustable stop for cutting to length.

Countershaft. $1\frac{1}{16}$ inches in diameter with 10x4-inch tight and loose pulleys.

Buckeye

Double Table, Circular Rip and Crosscut Saws,
Band Saw, 12-Inch Jointer, 4-Inch Jointer
and Boring Machine.



\$284⁰⁰

Shipped Direct From Factory at
Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy 2-inch angle steel electrically welded together, 2x10-inch base timbers, 5 feet long, set 2 feet apart.

Circular Saw Table. Has double working surface. Heavy angle steel frame with channel steel slats welded to frame. Top surface ground level and true. Width 44 inches, overhangs base on right side 10 inches, overhangs base on left side 8 inches. Length, 3 feet; height, 31½ inches. Distance between saws, 28 inches.

Raising and Lowering Circular Saw Mandrel. Has positive and accurate adjustment for quickly and easily regulating depth of cut. Diameter of mandrel 1½ inches, threaded left end ¼ inches, right end 5/8 inches. Flanges 3½ inches in diameter. Takes saws, etc., with 1-inch hole. Size of pulley, 3x4 inch face. Has friction clutch to start and stop.

Jointer. 12 inches wide with round safety head and four knives, cutting circle 4¼ inches in diameter. Head is fastened to mandrel with both key in shaft and set screw between bearings. Plates made of steel. Front plate 2 feet long. Rear plate 2½ feet long. Both plates have handwheel screws for raising or lowering on inclines to adjust depth of cut.

Jointer. 4 inches, with square head, two knives and side cutter. Adjustable plates are 3½ inches wide by 2 feet long.

Band Saw. 22-inch swing, cuts to center of 44-inch circle. Table measures 14½x17½ inches, stands 40 inches from floor and can be tilted for sawing bevels. Has two saw guides. Upper guide has ball bearing disc and can be raised to saw material up to 7 inches thick. Band saw wheels are covered with endless rubber bands and take saws 12 feet long. Has belt shifter to start and stop.

Borer. Takes bits with ½-inch round shank from ¼ to 1½ inches. Adjustable sliding table can be raised or lowered to take up to 2¼ inches below center of bit and has stop for regulating depth of bore.

Crosscut and Tenoning Guide. With clamping bar. Slides in milled groove, has angle adjustment of 45 degrees and adjustable stop for cutting to length. Clamping bar holds material firmly in place.

Tilting Guide. Tilts to angle of 45 degrees and is adjustable up to 17 inches in width. Furnished with spring to hold down material.

Rip Guide. Is adjustable for any width up to 22 inches wide and has wood spring for holding down material.

Countershaft. 1½ inches in diameter, 45 inches long with 10x4-inch tight and loose drive pulleys.

Bearings. 4 inches wide, full babbitted with high quality babbitt.

Shipping

Weight

1,170 lbs.

Floor Space

4 ft. 10 in. x 6 ft. 5 in.

Tight and Loose Drive Pulleys

10x4-In. Face

Speed

550 R. P. M.

Power

5 H.-P.

99M8680 1/3—Buckeye, complete with one 12-inch rip saw, one 10-inch crosscut saw, one 3/8-inch band saw and two belts. Price.....

\$284.00

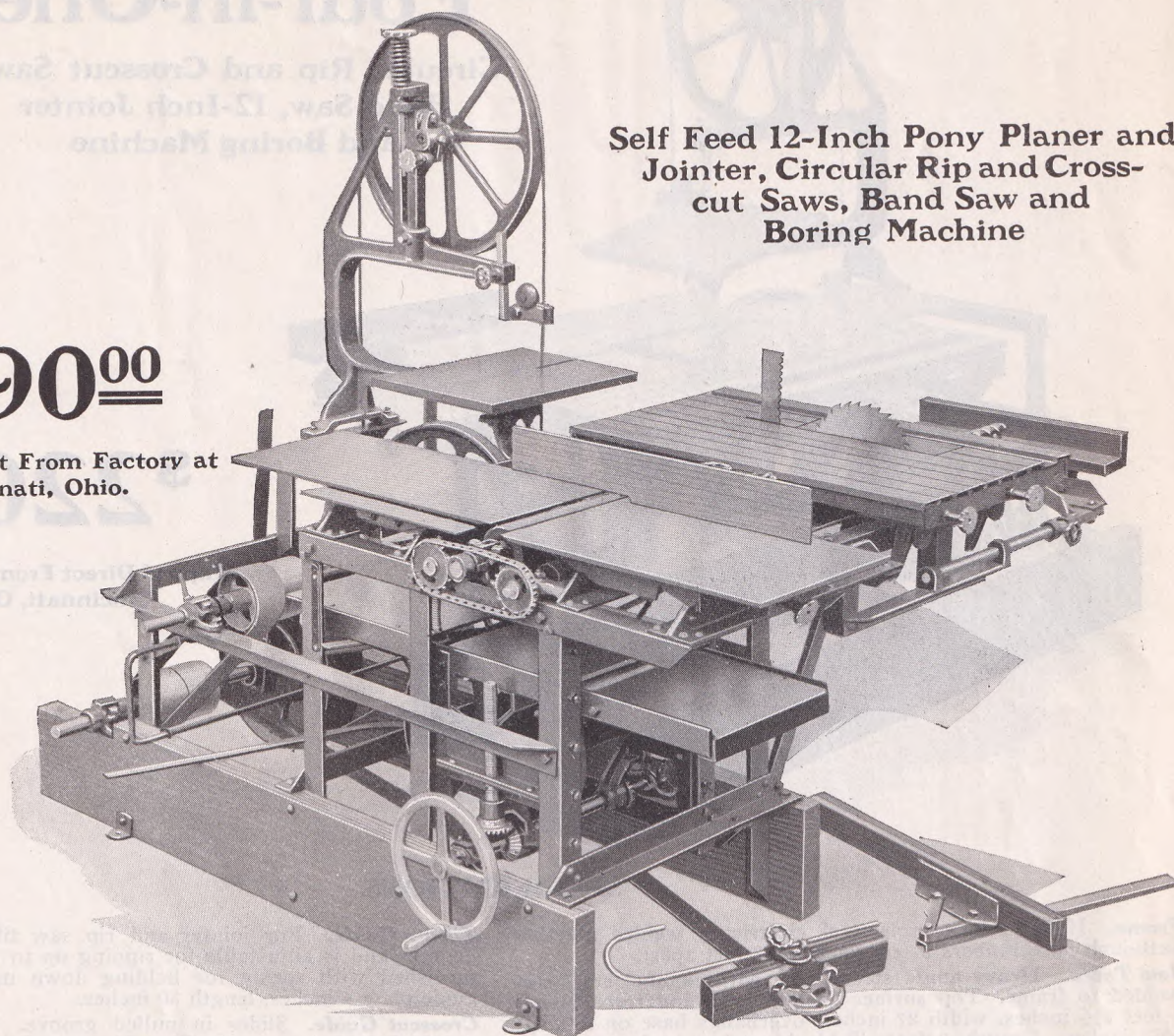
SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Pride of the Shop

Self Feed 12-Inch Pony Planer and
Jointer, Circular Rip and Cross-
cut Saws, Band Saw and
Boring Machine

\$390⁰⁰

Shipped Direct From Factory at
Cincinnati, Ohio.



SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electrically welded together, 2x10-inch base timbers 5 feet long, set 2 feet apart.

Saw Table. Heavy angle steel frame with channel steel slats, welded to frame. Top surface ground level and true. Height 2 feet 9½ inches, width 20¼ inches. Length 3 feet. Table hinged at back to raise or lower for regulating depth of cut. Has opening for 14-inch saw which will cut up to 5 inches deep.

12-Inch Jointer and Self Feed Pony Planer. With round safety head and four knives, cutting circle 4⅞ inches in diameter. Head is fastened to mandrel with both key in shaft and set screw between bearings. Jointer plates made of steel. Front plate 2 feet long, rear plate 2½ feet long. Both plates have handwheel screws for raising or lowering on inclines to adjust depth of cut. Pony planer consists of adjustable table under cutter head. Has feed rollers in front and rear of cutter head. Self feed has two speeds or can be stopped by shifting gears in neutral position. Planes material up to 12 inches wide and up to 6 inches thick. Has friction clutch to start and stop.

Band Saw. 22-inch swing, cuts to center of 44-inch circle. Table measures 14½x17½ inches, stands 40 inches from floor and can be tilted for sawing bevels. Has two saw guides. Upper

guide has ball bearing disc and can be raised to saw material up to 7 inches thick. Band saw wheels are covered with endless rubber bands and take saws 12 feet long. Has belt shifter to start and stop.

Borer. Takes bits with ½-inch round shank from ¼ to 1½ inches. Adjustable sliding table can be raised or lowered to take up to 2¼ inches below center of bit and has stop for regulating depth of bore.

Tilting Guide. For jointer tilts to angle of 45 degrees and is furnished with spring to hold down material.

Crosscut Guide. Slides in milled groove, has angle adjustment of 45 degrees and adjustable stop for cutting to length.

Rip Guide. Adjustable for ripping any width up to 22 inches with wood spring to hold down material.

Saw Mandrel. 15⅞ inches in diameter, 25 inches long. Right hand thread 6¾ inches long. Takes saws with 1-inch hole up to 14 inches in diameter. Flanges 3½ inches in diameter. Has friction clutch to start and stop.

Countershaft. 13⅞ inches in diameter. Drive pulley 10x4-inch face.

Bearings. 4 inches wide, full babbitted with high quality babbitt.

Shipping Weight
1,375 lbs.

Floor Space
5 ft. 4 in. x 7 ft.

Drive Pulley, Tight
10x4 in.

Speed
550 R. P. M.

Power
5 H.-P.

99M8720⅓—Pride of the Shop, complete with one 12-inch rip saw, one 10-inch crosscut saw; one ¾-inch band saw and four belts. Price.....

\$390.00

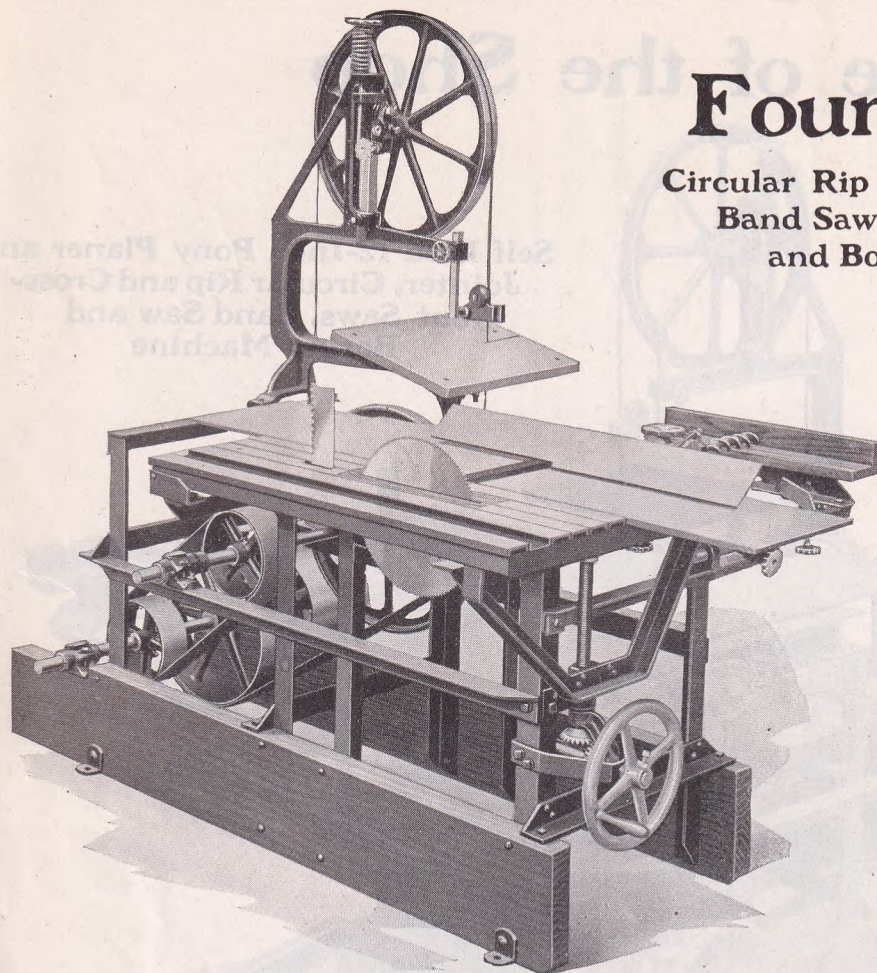
SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Four-in-One

Circular Rip and Crosscut Saws,
Band Saw, 12-Inch Jointer
and Boring Machine

\$220⁰⁰

Shipped Direct From Factory at
Cincinnati, Ohio.



SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electrically welded together, 2x10-inch base timbers 5 feet long, set 2 feet apart.

Saw Table. Heavy angle steel frame with channel steel slats welded to frame. Top surface ground level and true. Height 2 feet 9½ inches, width 27 inches, overhangs base on left side 10½ inches. Length, 3 feet. Table hinged at back to raise or lower for regulating depth of cut. Has opening for 14-inch saw, which will cut up to 5 inches.

Band Saw. 22-inch swing, cuts to center of 44-inch circle. Table measures 14½x17½ inches, stands 40 inches from floor and can be tilted for sawing bevels. Has two saw guides, upper guide has ball-bearing disc and can be raised to saw material up to 7 inches thick. Band saw wheels are covered with endless rubber bands and take saws 12 feet long.

Jointer. 12 inches wide with round safety head and four knives, cutting circle 4¼ inches in diameter. Head is fastened to mandrel with both key in shaft and set screw between bearings. Plates made of steel. Front plate 2 feet long. Rear plate 2½ feet long. Both plates have hand wheel screws for raising or lowering on inclines to adjust depth of cut.

Borer. Takes bits with ½-inch round shank from ¼ to 1½ inches. Adjustable sliding table can be raised or lowered to take up to 2¾ inches below center of bit and has stop for regulating depth of bore.

Tilting Guide. For jointer and rip saw tilts to angle of 45 degrees and is adjustable for ripping up to 17 inches in width, furnished with spring for holding down material. Width of guide plate 4 inches, length 30 inches.

Crosscut Guide. Slides in milled groove. Has angle adjustment of 45 degrees and adjustable stop for cutting to length.

Saw Mandrel. 1½ inches in diameter, 39¾ inches long, threaded at both ends, right and left hand threads. Left end threaded 4¼ inches, right end threaded 6 inches. Flanges measure 3½ inches in diameter, takes saws with 1-inch hole; fitted with 3x4-inch face pulley.

Countershaft. 1¾ inches in diameter, size of pulley for circular saw mandrel 16x4-inch face. Size of pulley for band saw 8x3-inch face. Size of tight and loose drive pulleys 10x4-inch face.

Bearings. 4 inches wide, full babbitted with high quality babbitt.

Illustration Showing Band
Saw and Borer.



Shipping Weight	Floor Space	Tight and Loose Drive Pulley	Speed	Power
920 lbs.	4 ft. 4 in.x6 ft. 5 in.	10 in. diam.x4 in. face	550 R. P. M.	5 H.-P.

99M8670½—Four-in-One, complete with one 12-inch rip saw, one 10-inch crosscut saw, one ¾-inch band saw, one ¾-inch bit and one 4-inch and one 3-inch belt.

Price **\$220.00**

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Standard

Rip and Crosscut Saw, 6-Inch Jointer,
12-Inch Sand Drum and
Boring Machine

\$170⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electrically welded together, 2x10-inch base timbers 4 feet long, set 2 feet apart.

Saw Table. Heavy angle steel frame, with channel steel slats welded to frame. Top surface ground level and true. Height 2 feet 9½ inches, width 27 inches, overhangs base on left side 10½ inches. Length 3 feet. Table hinged at back to raise or lower for regulating depth of cut. Has opening for 14-inch saw, which will cut up to 5 inches deep.

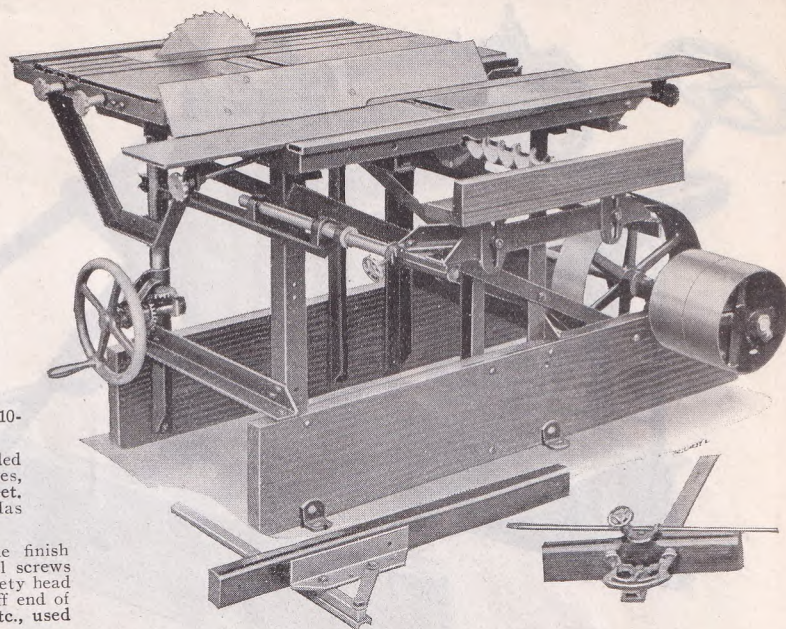
6-Inch Jointer. Plates are steel 6 inches wide, ground to a true finish surface. Both plates are 2 feet long and are furnished with handwheel screws for raising and lowering (to adjust depth of cut). Head is our round safety head with four knives. Cutting circle of head is 4¼ inches. Can be slipped off end of mandrel and sand drum, or other cutter heads with molding knives, etc., used in its place.

Boring Attachment. Adjustable sliding table and ¾-inch boring bit. Takes bits with ½-inch round shank from ¼ to 1½ inches.

Sand Drum. 12 inches wide by 4¼ inches in diameter, covered with sand-paper.

Tilting Guide. For jointer is adjustable and tilts to angle of 45 degrees. Furnished with spring for holding down material.

Crosscut Guide. Slides in milled groove. Has angle adjustment of 45 degrees and adjustable stop for cutting to length.



Rip Guide. Adjustable for ripping any width up to 22 inches.

Saw Mandrel. 15½ inches in diameter, 39¼ inches long, threaded left end 4¼ inches long. Takes saws with 1-inch hole up to 14 inches in diameter. Flanges 3½ inches in diameter.

Countershaft. 1¾ inches in diameter, large pulley 16x4-inch face, tight and loose pulleys 10x4-inch face.

Bearings. Are 4 inches wide and are full babbbitted with high quality babbbitt.

Shipping Weight
360 lbs.

Floor Space
4 ft. 4 in. x 5 ft. 6 in.

Tight and Loose
Drive Pulley
10x4-inch face

Speed
550 R. P. M.

Power
3 to 5 H. P.

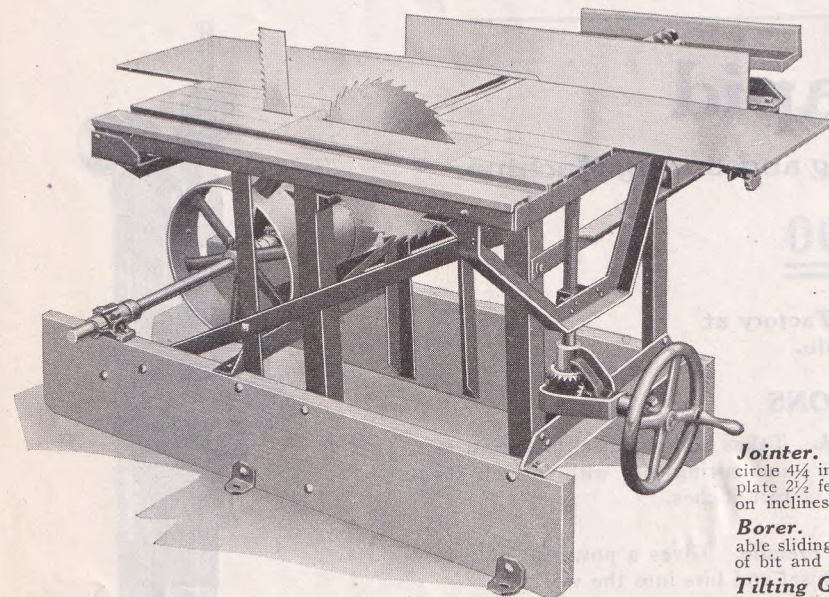
99M8655⅓—Standard, complete with one 12-inch rip saw, one 10-inch crosscut saw, one 4-inch belt and one ¾-inch boring bit. Price..... **\$170.00**

Old Reliable

Circular Rip and Crosscut Saw,
12-Inch Jointer and Boring Machine

\$156⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.



SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electrically welded together, 2x10-inch base timbers 4 feet long, set 2 feet apart.

Saw Table. Heavy angle steel frame, with channel steel slats riveted to frame. Top surface ground level and true. Height 2 feet 9½ inches, width 27 inches, overhangs base on left side 10½ inches. Length 3 feet. Table hinged at back to raise or lower for regulating depth of cut. Has opening for 14-inch saw, which will cut up to 5 inches deep.

Jointer. 12 inches wide with round steel safety head and four knives, cutting circle 4¼ inches in diameter. Plates made of steel. Front plate 2 feet long, rear plate 2½ feet long. Both plates have handwheel screws for raising or lowering on inclines to adjust depth of cut.

Borer. Takes bits with ½-inch round shank from ¼ to 1½ inches. Adjustable sliding table can be raised or lowered to take up to 2¼ inches below center of bit and has stop for regulating depth of bore.

Tilting Guide. For jointer and rip saw tilts to angle of 45 degrees and is adjustable for ripping up to 17 inches in width. Furnished with spring for holding down material.

Crosscut Guide. Slides in milled groove. Has angle adjustment of 45 degrees and adjustable stop for cutting to length.

Saw Mandrel. 15½ inches in diameter, 39¼ inches long, threaded at both ends. Right and left hand threads, left end threaded 4¼ inches long, right end 6 inches long. Takes saws with one-inch hole. Flanges 3½ inches in diameter.

Countershaft. 1¾ inches in diameter, large pulley 16x4-inch face. Tight and loose pulleys 10x4-inch face. Bearings 4 inches wide and full babbbitted.

Shipping Weight
550 lbs.

Floor Space
4 ft. 4 in. x 5 ft. 6 in.

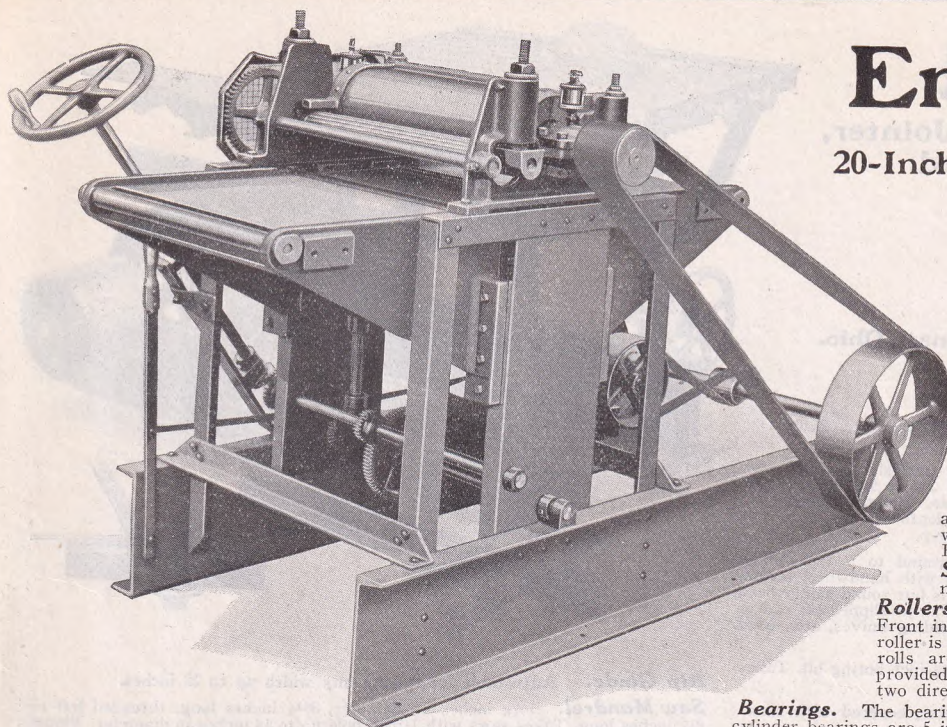
Tight and Loose
Drive Pulley
10x4-inch face

Speed
550 R. P. M.

Power
3 to 5 H. P.

99M8650⅓—Old Reliable, complete with one 12-inch rip saw, one 10-inch crosscut saw, one 4-inch belt and one ¾-inch boring bit. Price..... **\$156.00**

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.



Endurance

20-Inch Single Surface Planer

\$245⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

Frame. The frame is constructed of heavy channel steel. It is electric welded and reinforced at all points of strain. This construction assures a maximum of strength and convenience of operation which is not obtained in the heavy cast iron planers. Easy accessibility to all working parts is a feature.

Self Feed. Has two speeds. All gears are machined and exposed gearing is well guarded.

Rollers. Feed rollers are machined from solid bar steel. Front in-feed roller is fluted to insure positive feed. Rear feed roller is machined and turned true and smooth. Upper pressure rolls are equipped with compression springs. The table is provided with four idler rollers, one on each end of table and two directly under the feed rollers.

Bearings. The bearings for the cutter head are cast in the frame. The cylinder bearings are 5 inches long. All bearings are filled with the very best grade of high speed babbitt and are provided with self closing oil cups.

Head. Cutter head is turned and machined from solid bar steel. The pulley is also part of the solid bar. No keys or set screws to bother with. Furnished with three knives held firmly with planer bolts. Clearance for chips is provided for and the knives are fitted in milled grooves. There is no shearing action or strain on the knives and they cannot work loose.

Countershaft. 1 $\frac{5}{16}$ -inch diameter with 4-inch bearings. Large pulley 16-inch diameter with 4-inch face.

SPECIFICATIONS

Capacity. Will plane material up to 20 inches wide by 8 inches thick.

Table. Length 45 inches between end rollers, width, 20 inches wide between ledges. Table is cast in one piece and machined perfectly level and smooth. Gibs are provided on the sides for taking up the wear. Adjustment for thickness is made by hand wheel at side. Brass index plate fastened on side of table for setting for thickness to be planed.

Shipping Weight
1,450 lbs.

Floor Space
3 ft. 6 in. x 5 ft. 6 in.

Tight and Loose
Drive Pulleys

Speed
1,000 R. P. M.

Power
5 H.-P.

99M8716 $\frac{1}{3}$ —Endurance Planer, complete with one 4-inch and one 2-inch belt. Price..... **\$245.00**

New Rapid

Upright Hollow Chisel Mortising and Boring Machine.

\$88⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Capacity. Mortises of almost any size can be made by repeating the cut either lengthwise or crosswise. Chisel bits mortise up to 3 inches deep, but mortises up to 6 inches deep can be made by reversing the work.

Frame. 2-inch angle steel, securely bolted and riveted together.

Bed Plate. Tilts to angle of 45 degrees and is adjustable to and from stand and will take up 3 inches to center of bit. Can be lowered to take in 12 inches below point of bit.

Chuck. Takes hollow chisel bits from $\frac{1}{4}$ to $\frac{5}{8}$ inch and boring bits with $\frac{1}{2}$ -inch shank from $\frac{1}{4}$ to 2 inches.

Foot Treadle. Gives a powerful pull, forcing chisel and bits into the work.

Shafting. Is 1 inch in diameter with 3-inch babbitted bearings, 5x3-inch tight and loose pulleys with belt shifter.

Shipping Weight
250 lbs.

Floor Space
1 ft. 10 in. x 2 ft.

Tight and Loose
Drive Pulleys
5 in. x 3-in. face

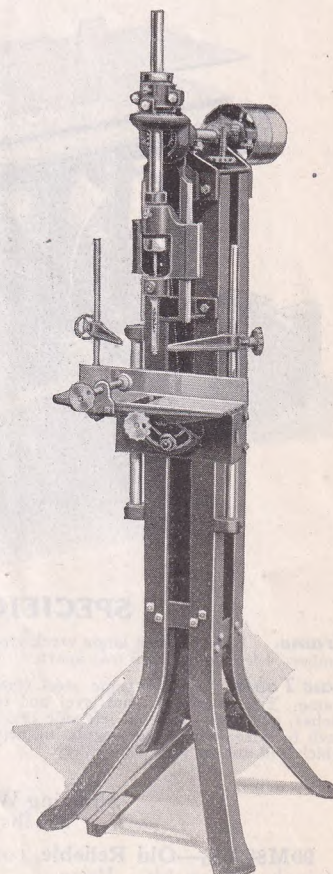
Speed
900 R. P. M.

Power
1 H.-P.

99M8735 $\frac{1}{3}$ —New Rapid Upright Hollow Chisel Mortising and Boring Machine, complete with one $\frac{3}{8}$ -inch hollow chisel and bit and one $\frac{3}{8}$ -inch boring bit.

\$88.00

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

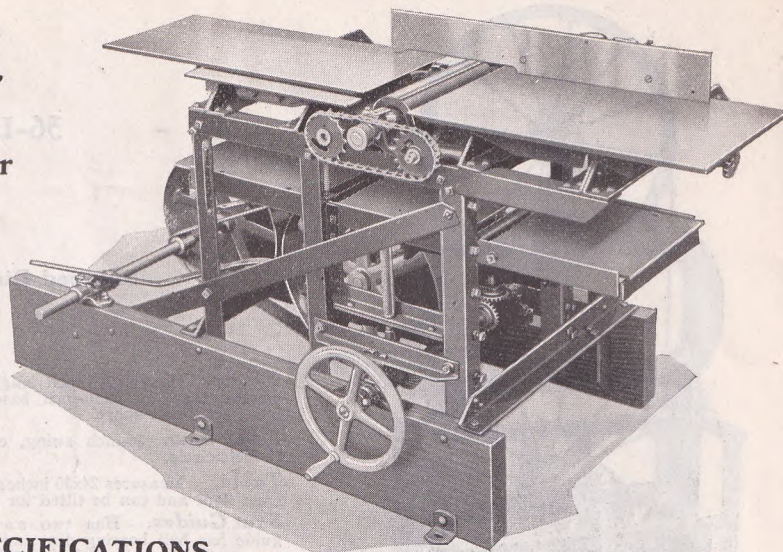


Consolidated

12-Inch Pony Planer and Jointer

\$195⁰⁰

Shipped Direct From Factory at
Cincinnati, Ohio.



SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electric welded together, 2x10 inch base timbers 5 feet long, set 2 feet apart.

12-Inch Jointer. Consists of two steel plates, front plate 14 inches wide by 2 feet long, rear plate 12 inches wide by 2½ feet long. Both plates are ground to a true finish surface and have hand wheel screw adjustment for raising or lowering on inclines for adjusting depth of cut. Front plate extends 2 inches on the left side beyond head, rear plate has an adjustable drop surface on left side in line with end of head for rabbetting on end

of jointer head. Has round safety head fastened to shaft with both key and set screw. Head has four knives.

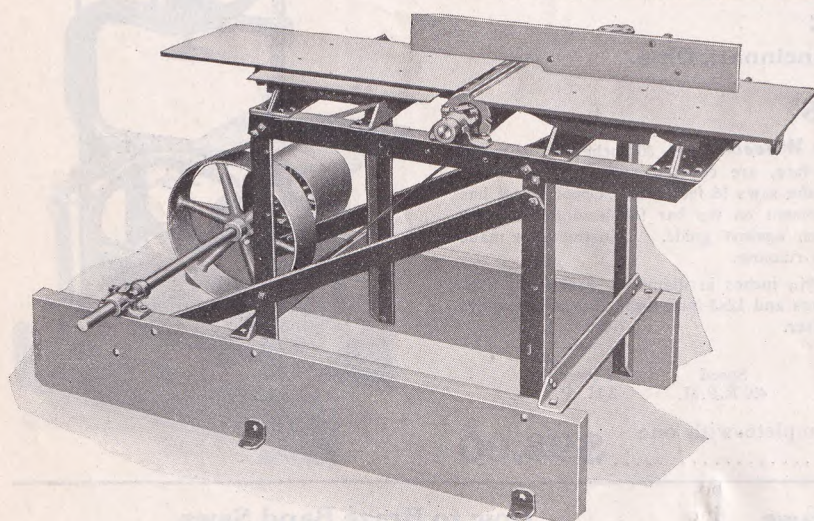
12-Inch Pony Planer. Consists of an adjustable table under cutter head. Has feed rollers in front and rear of cutter head. Self feed has two speeds or can be stopped by shifting gears in neutral position. Planes material up to 12 inches wide and up to 6 inches thick.

Countershaft. 1⅝ inches in diameter with 4-inch babbitted bearings.

Shipping Weight	Floor Space	Tight and Loose Drive Pulley	Speed	Power
785 lbs.	3 ft. 4 in. x 6 ft.	10 in. x 4-in. face	550 R. P. M.	3 to 4 H.-P.

99M8725⅓—Consolidated 12-Inch Pony Planer and Jointer, complete with one 2-inch and one 4-inch belt.

\$195.00



Ideal

12-Inch Jointer

\$122⁰⁰

Shipped Direct From Factory at
Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy 2-inch angle steel electric welded together. Base timbers are 2x10 Yellow Pine 5 feet long and are set 2 feet apart.

Cutter Head. Round safety type made of solid steel and is furnished with four high speed steel knives.

Mandrel. 1⅝-inch diameter.

Jointer Plates. Both plates are ground to a true finish surface

and have handwheel screw adjustment for raising and lowering to adjust depth of cut. Front plate is 14 inches wide by 24 inches long. Rear plate is 12 inches wide by 30 inches long. Rear plate has adjustable plate on the side for rabbetting.

Countershaft. 1⅝ inches in diameter with 4-inch babbitted bearings. Large pulley 16-inch diameter by 4-inch face.

Shipping Weight	Floor Space	Tight and Loose Drive Pulley	Speed	Power
450 lbs.	3 ft. 4 in. x 6 ft.	10 in. x 4-in. face	550 R. P. M.	2 H.-P.

99M8731⅓—Ideal 12-Inch Jointer, complete with 4-inch belt. Price..... **\$122.00**

99M8732⅓—Same machine, without countershaft and belt. Price..... **98.00**

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Jumbo

36-Inch Band Saw Machine

\$122⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy $2\frac{1}{2}$ -inch angle steel, electric welded together, 2x10-inch base timbers 4 feet long, set 2 feet apart.

Band Saw. 36-inch swing, cuts to center of 72-inch circle.

Table. Measures 24x30 inches, stands 40 inches from floor and can be tilted for sawing bevels.

Saw Guides. Has two saw guides, upper guide has ball bearing disc and can be raised to saw material up to 10 inches thick.

Band Saw Wheels. Are 36 inches in diameter by 2-inch face, are covered with endless rubber bands and take saws 17 $\frac{1}{2}$ feet long. Upper wheel has tilting adjustment on top bar for leading saw with proper tension against guide. Adjustment is made while saw is running.

Shaft. Is $1\frac{3}{16}$ inches in diameter, 4-inch full babbitted bearings and 12x3-inch tight and loose pulleys and belt shifter.

Shipping
Weight
650 lbs.

Floor Space
4 ft. 6 in. x 3 ft. 2 in.

Tight and Loose
Drive Pulleys
12-in. diam. x 3-in. face

Speed
350 R.P.M.

Power
2 to 4 H.-P.

99M8665 $\frac{1}{3}$ —Jumbo 36-Inch Band Saw Machine, complete with one $\frac{3}{8}$ -inch band saw. Price..... **\$122.00**

Century

30-Inch Band Saw Machine

\$98⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy $2\frac{1}{2}$ -inch angle steel, electric welded together, 2x10-inch base timbers 4 feet long, set 2 feet apart.

Band Saw. 30-inch swing, cuts to center of 60-inch circle.

Table. Measures 24x30 inches, stands 40 inches from floor and can be tilted for sawing bevels.

Saw Guides. Has two saw guides, upper guide has ball bearing disc and can be raised to saw material up to 8 inches thick.

Band Saw Wheels. Are 30 inches in diameter by $1\frac{3}{4}$ -inch face, are covered with endless rubber bands and take saws 16 feet long. Upper wheel has tilting adjustment on top bar for leading saw with proper tension against guide. Adjustment is made while saw is running.

Shaft. Is $1\frac{3}{16}$ inches in diameter, 4-inch full babbitted bearings and 12x3-inch tight and loose pulleys and belt shifter.

Shipping
Weight
575 lbs.

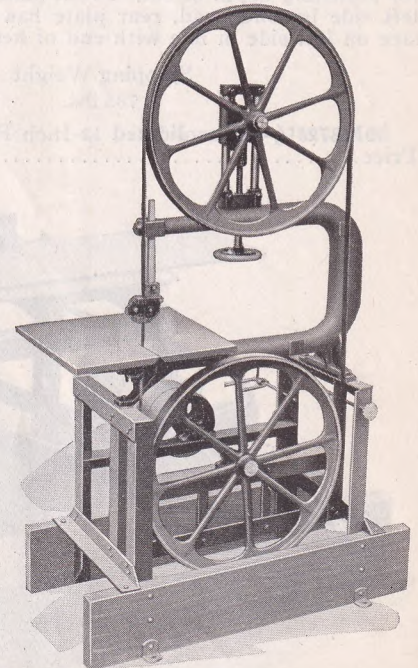
Floor Space
3 ft. 6 in. x 3 ft.

Tight and Loose
Drive Pulleys
12-in. diam. x 3-in. face

Speed
400 R.P.M.

Power
2 H.-P.

99M8664 $\frac{1}{3}$ —Century 30-Inch Band Saw Machine, complete with one $\frac{3}{8}$ -inch band saw. Price..... **\$98.00**



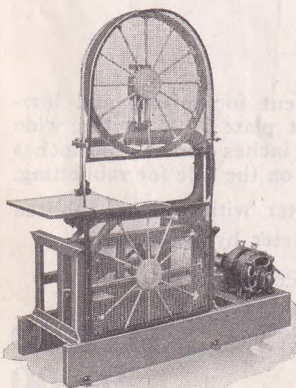
Guards for Band Saws

Guards can be furnished on any band saw machine, either single unit or combination. Guards are hinged on the right hand side and swing away from the machine to allow free access in changing saws.

99M8667 $\frac{1}{3}$ —Guard for 22-Inch Band Saw. Price **\$5.80**

99M8668 $\frac{1}{3}$ —Guard for 30-Inch Band Saw. Price **\$7.80**

99M8669 $\frac{1}{3}$ —Guard for 36-Inch Band Saw. Price **\$9.75**



How to Braze Band Saws

First. File each end of the blade bevel to make a lap joint. This bevel should extend back about two teeth.

Second. Place the blade in the clamp so the ends overlap in the center of the clamp. Put a little powdered borax between the lap and then insert a small piece of silver solder the size of the braze to be made.

Third. Have the brazing tongs to a good red heat and press the joint with them, holding the tongs steady with a strong pressure until the tongs become a dull red. Then slide the tongs along the blade, back and forth a few times to insure a uniform braze.

Fourth. File the joint to the same thickness as the other part of the blade, paying particular attention to the teeth to see that they are in proper condition.

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Jewel

22-Inch Band Saw Machine

\$73⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electric welded, 2x10-inch base timbers 2½ feet long, set 2 feet apart.

Band Saw. 22-inch swing, cuts to center of 44-inch circle.

Table. Measures 14½x17½ inches, stands 40 inches from floor and can be tilted for sawing bevels.

Saw Guides. Has two saw guides, upper guide has ball bearing disc and can be raised to saw material up to 7 inches thick.

Band Saw Wheels. Are 22 inches in diameter by 1½-inch face, are covered with

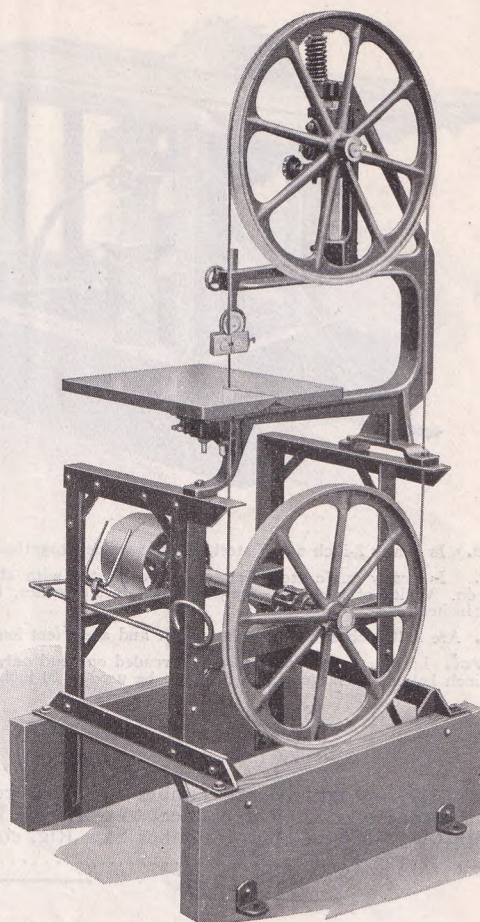
endless rubber bands and take saws 12 feet long.

Adjustment. Is very convenient. The upper wheel has tilting adjustment on top bar for leading saw with proper tension against guide, which is a very desirable feature, as it saves great wear and tear on saws and can be properly done while saw is running. Has handwheel for regulating the tension on saw, which also serves to lower upper wheel to accommodate shorter saws.

Shafting. 1-inch in diameter with 3-inch bearings, full babbitted; and 8x3-inch tight and loose pulleys with belt shifter.

Shipping Weight	Floor Space	Tight and Loose Drive Pulleys	Speed	Power
385 lbs.	2 ft. 6 in. x 2 ft. 6 in.	8 in. diam x 3-in. face	500 R.P.M.	1 H.-P.

99M8660⅓—Jewel 22-Inch Band Saw Machine, complete with one ⅜-inch band saw. Price.....**\$73.00**



Rex

18-Inch Band Saw Machine

\$39⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy 1½-inch angle steel, electric welded together, 2x10-inch base timbers 2½ feet long, set 2 feet apart.

Band Saw. 18-inch swing, cuts to center of 36-inch circle.

Table. Measures 14½x17½ inches, stands 40 inches from floor and can be tilted for sawing bevels.

Saw Guides. Has two saw guides, upper guide has ball bearing disc and can be raised to saw material up to 6 inches thick.

Band Saw Wheels. Are 18 inches in diameter by 1½-inch face, are covered with endless rubber bands and take saws 10 feet 6 inches long.

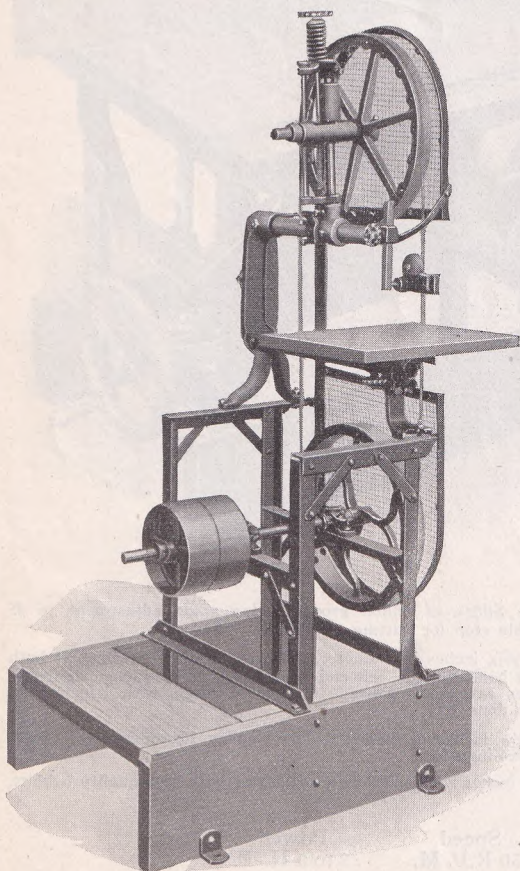
Adjustment. Is very convenient. The upper wheel has tilting adjustment on top bar for leading saw with proper tension against guide, which is a very desirable feature, as it saves great wear and tear on saws and can be properly done while saw is running. Has handwheel for regulating the tension on saw, which also serves to lower upper wheel to accommodate shorter saws.

Shafting. 1 inch in diameter with 3-inch bearings, full babbitted; and 8x3-inch tight and loose pulleys with belt shifter.

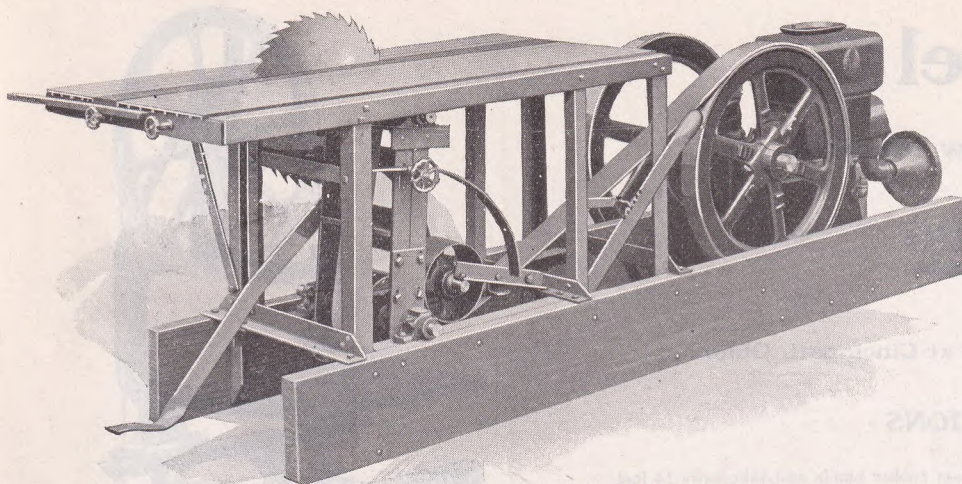
Guard. Is hinged at both top and bottom, and opens full width, making it easy to change saws.

Shipping Weight	Floor Space	Tight and Loose Drive Pulleys	Speed	Power
275 lbs.	2 ft. x 3 ft.	8 in. diam. x 3-in. face	600 R.P.M.	½ to 1 H.-P.

99M8658⅓—Rex 18-Inch Band Saw Machine, complete with one ⅜-inch band saw and guard. Price.....**\$39.00**



ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.



Mogul

Heavy Timber Swing Cut-Off and Rip Saw Rig

\$245⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Is heavy 2-inch angle steel, electric welded together.

Table. Is heavy angle steel, frame double riveted with channel steel slats welded on. Width of table is 3 feet, length 4 feet 6 inches, height of table 2 feet 7½ inches.

Bases. Are 2x10 inches, set 24 inches apart and are 8 feet long.

Mandrel. Is 1¾ inches in diameter, threaded one end only and takes saws with 1-inch hole. The largest saw that can be used is 20 inches.

Countershaft. Is 1¾ inches in diameter. Driving pulleys 10x4-inch face, tight and loose are furnished if machine is ordered without engine.

Guides. Crosscut and rip guides are furnished. Rip guide is used on right hand side of saw and extends the full length of the table and is held rigidly in position by clamps in front and rear.

Saws. One 16-inch rip, and one 16-inch crosscut saw.

Shipping
Weight
650 lbs.

Floor Space
4 ft. x 8 ft.

Tight and Loose
Drive Pulleys
10 in. x 4 in.

Speed
500 R.P. M.

Power
5 to 10 H.-P.

99M8700⅓—Mogul Heavy Timber Saw Rig, complete with one 16-inch rip saw, one 16-inch cut-off saw, (omitting engine and belt to connect to engine.) Price..... **\$117.00**

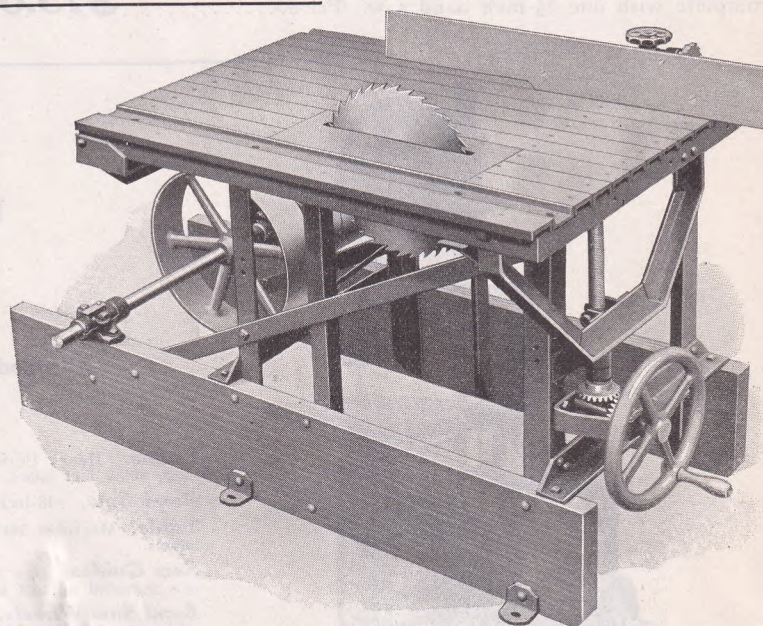
99M8701⅓—Mogul Heavy Timber Saw Rig, complete with 5 H.-P. gasoline engine, mounted as shown above Price..... **245.00**

Champion

Rip and Cut-Off
Saw Machine

\$98⁰⁰

Shipped Direct From Factory at Cincinnati, Ohio.



SPECIFICATIONS

Frame. Heavy 2-inch angle steel electric welded together, 2x10-inch base timbers 5 feet long, set 2 feet apart.

Saw Table. Heavy angle steel frame, with channel steel slats riveted to frame. Top surface ground level and true. Height 2 feet 9½ inches, width 27 inches. Overhangs base on left side 10½ inches. Length 3 feet. Table hinged at back to raise or lower for regulating depth of cut. Has opening for 14-inch saw, which will cut up to 5 inches deep.

Tilting Guide. For rip saw tilts to angle of 45 degrees and is adjustable for ripping up to 17 inches in width. Furnished with spring for holding down material. Width of guide plate 4 inches, length 30 inches.

Crosscut Guide. Slides in milled groove. Has angle adjustment of 45 degrees and adjustable stop for cutting to length.

Saw Mandrel. 1¾ inches in diameter, 39¾ inches long, threaded at both ends. Right and left hand threads, left end threaded 4¼ inches long, right end 6 inches long. Takes saws, cutter heads or emery wheels with 1-inch hole. Flanges ¾ inches in diameter.

Countershaft. 1¾ inches in diameter, large pulley 16x4-inch face. Tight and loose pulleys, 10x4-inch face.

Bearings. Are 4 inches wide and are full babbitted with high quality babbit.

Shipping
Weight
550 lbs.

Floor Space
4 ft. 4 in. x 5 ft. 6 in.

Tight and Loose Drive
Pulley to Belt to
10x4-In. Face

Speed
550 R.P. M.

Power
3 to 5 H.-P.

99M8638⅓—Champion Rip and Cut-Off Saw Machine, complete with 12-inch rip saw, 10-inch cut-off saw and one 4-inch belt. Price..... **\$98.00**

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Contractors' Special

Portable Saw Rig

\$73⁰⁰

Without Engine.

Shipped Direct From Factory at
Cincinnati, Ohio.

SPECIFICATIONS

Table Top. Has angle steel frame with channel steel slats welded on. Table has adjustable side brackets on each side for attaching extensions on each side when working long material.

Frame. Is 2-inch angle steel electric welded together.

Rip Guide. Is adjustable for ripping any width up to 22 inches.

Crosscut Guide. Is 3 feet long and is held in position by two dowel pins. Can be quickly lifted off and rip guide put on. Has adjustable stop for cutting to length.

Saws. One 12-inch rip saw, one 12-inch crosscut saw.

Belt. Roller chain belt is furnished from countershaft to saw mandrel, 3-inch belt from engine to countershaft is not furnished unless engine is ordered.

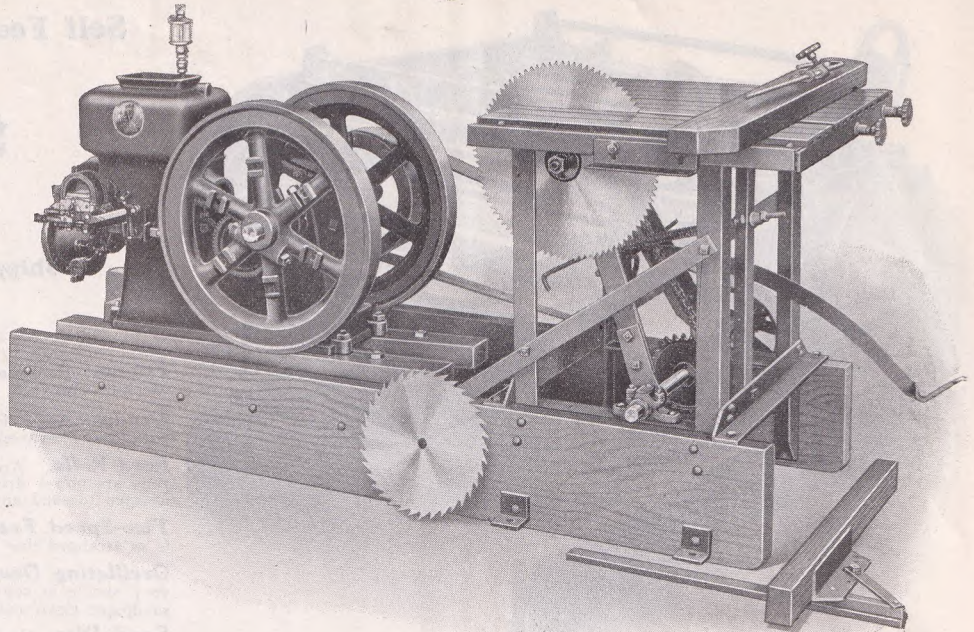
Shipping Weight, With Engine 850 pounds

Shipping Weight, Without Engine 300 pounds

Floor Space 2 ft. 10 in. x 6 ft.

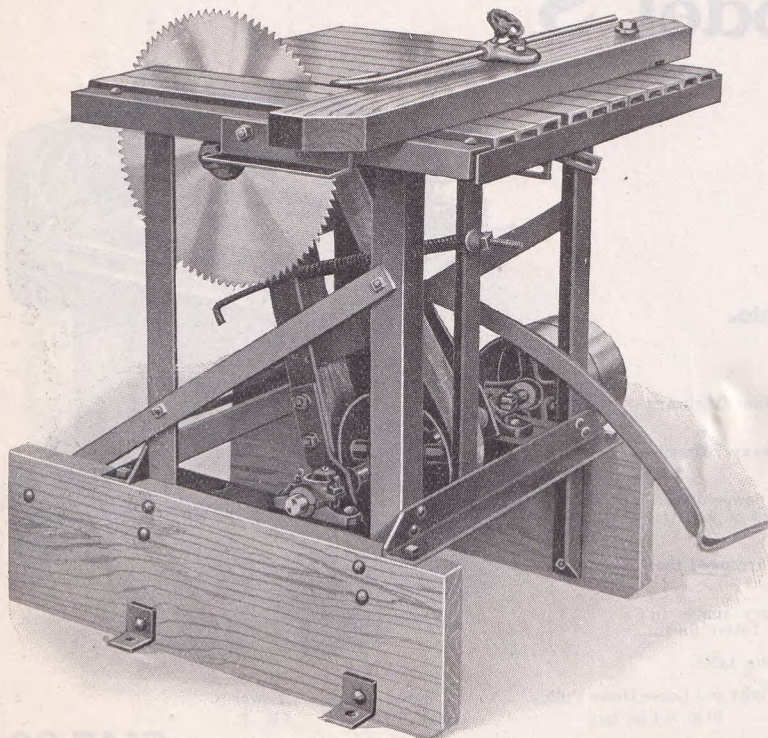
99M8690¹/₃—Contractors' Special Portable Saw Rig, with 12-inch rip saw and 12-inch cut-off saw (omitting engine and engine belt). Price.....

\$73.00



Saw Mandrel. Is 1³/₁₆-inch cold rolled steel, threaded one end only and takes saws with 1-inch hole.

Countershaft. Is 1³/₁₆-inch cold rolled steel and has tight and loose pulleys so it can be started and stopped while engine is running.



Shipping Weight 275 pounds

99M8695¹/₃—Alert Swing Cut-Off Saw, with one 12-inch cut-off saw and one 3-inch belt. Price.....

\$58.00

Alert Swing Cut-Off Saw

\$58⁰⁰

Shipped Direct From Factory
at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Is heavy angle steel, electric welded together.

Table Top. Has heavy steel frame, electric welded, with channel steel slats.

Mandrel. 1³/₁₆-inch diameter, threaded one end and takes saws with 1-inch hole. A 12-inch saw will cut 1-inch stuff 15 inches wide, or 3-inch material 12 inches wide.

Pulleys. The pulley on mandrel is 3x3-inch face; on lower shaft is 8x3-inch face and the pulleys to belt are 8x3-inch face, tight and loose. Speed, 900 R. P. M.

Lower Shaft. Is 1³/₁₆-inch cold rolled steel.

Saw. One 12-inch crosscut saw.

Belt. One 3-inch belt.

Floor Space 2 ft. 2 in. x 2 ft.

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Model S

Self Feed Double Drum Sander

(Made in Two Sizes)

\$268⁰⁰

24-Inch

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy angle steel electric welded, no bolts to come loose. Machine always in perfect alignment.

Drums. Are 20 inches in diameter, built of laminated wood covered with heavy Brussels carpet and sandpaper.

Feed Rolls. Are of steel, ground true. Both upper and lower rolls are power driven. Entire upper mechanism can be elevated or lowered to sand any thickness of material up to 4½ inches.

Two-Speed Feed. Provides for coarse and fine sanding and also is so arranged that feed rolls can be stopped immediately.

Oscillating Device. Is furnished on all these style drums. It is very simple in construction. Consisting of only three parts. Keeps sandpaper clean and gives a better finish.

Sand Disc. Is 18 inches in diameter, provided with an adjustable tilting table.

Shipping Weight
1,175 lbs.

Floor Space
3 ft. 8 in. x 6 ft.

Tight and Loose Drive Pulley
10 in. x 4-in. face

Speed
300 R.P.M.

Power
5 H.-P.

99M8757½—Model S 24-Inch Double Drum Sander with one 3-inch belt. Price.....**\$268.00**
99M8762½—Model S 36-Inch Double Drum Sander, same as above, only 36 inches wide. Floor space, 4 ft. 8 in. x 6 ft. Shipping weight, 1,320 pounds. Price.....**343.00**

Model S

Self Feed Single Drum Sander

(Made in Two Sizes)

\$147⁰⁰

24-Inch

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. Heavy angle steel, electric welded, no bolts to come loose. Machine is always in perfect alignment.

Drum. Is 20 inches in diameter, built of laminated wood covered with heavy Brussels carpet and sandpaper.

Feed Rolls. Are of steel, ground true. Both upper and lower rolls are power driven. Entire upper mechanism can be elevated or lowered to sand any thickness of material up to 4½ inches.

Two-Speed Feed. Provides for coarse and fine sanding and also is so arranged that feed rolls can be stopped immediately.

Oscillating Device. Is furnished on all these style drums. It is very simple in construction, consisting of three parts. Keeps sandpaper clean and gives a better finish.

Sand Disc. Is 18 inches in diameter, provided with an adjustable tilting table.

Shipping Weight
660 lbs.

Floor Space
3 ft. 8 in. x 2 ft. 10 in.

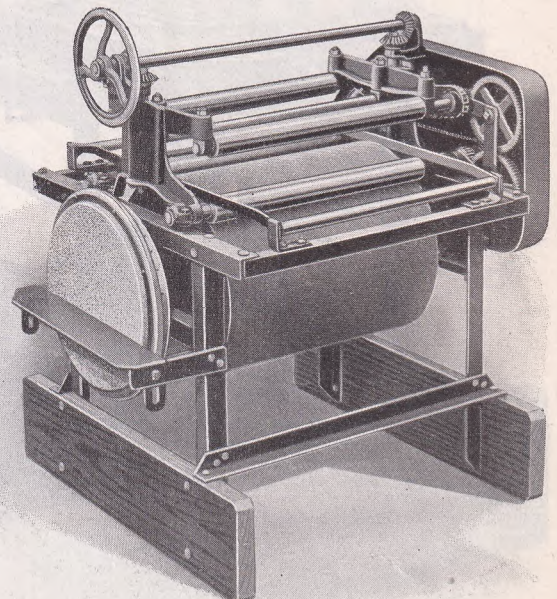
Tight and Loose Drive Pulley
10 in. x 4-in. face

Speed
300 R.P.M.

Power
3 H.-P.

99M8742½—Model S 24-Inch Single Drum Sander. Price.....**\$147.00**
99M8747½—Model S 36-Inch Single Drum Sander, same as above, only 36 inches wide. Floor space, 4 feet 8 inches x 2 feet 10 inches. Shipping weight, 720 pounds. Price.....**195.00**

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.



Peerless

Flexible Endless Belt Sander

SPECIFICATIONS

Belt Standards. The main belt standards are independent and built of heavy 2-inch angle steel, electric welded together. They are self-supporting and can be placed any distance apart to accommodate any length of stock.

Table. The table frame is built of heavy 2-inch angle steel, double riveted and electric welded together forming a rigid and substantial foundation for the table. The work table has a vertical adjustment by hand wheel of 10 inches. The table stands 32 inches from the floor and is adjustable up to 42 inches. Table is 30 inches wide by 72 inches long and is built of wood. The table is mounted on ball bearing rollers making it easy to move back and forth.

Overhead Idlers. Run on bronze bushed bearings. Both idlers are adjustable for aligning sand belt and one idler has an adjustable spring to regulate tension of the belt.

Pulleys. The main sand belt pulleys are 16-inch diameter by 6-inch face. Both sand belt pulleys are faced with rubber. Tight and loose pulleys to belt to are 10-inch diameter by 4-inch face. No countershaft is required as the tight and loose pulleys are placed on the main drive shaft of machine.

Bearings. Are 4 inches wide and full babbitted with best quality babbit. The bearings are carefully fitted to the shafts and provided with convenient oiling devices.

Power. 3 H.-P. required.

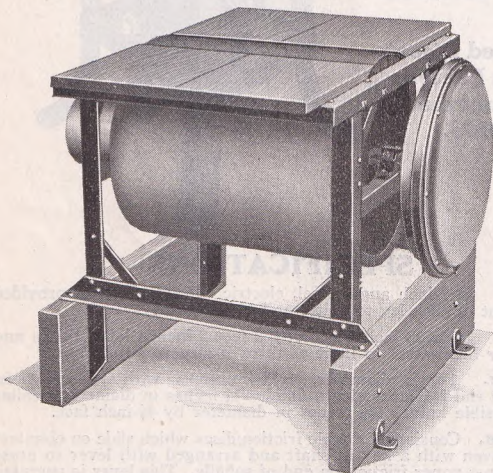
99M8738 $\frac{1}{3}$ —Peerless Flexible Belt Sander with one 6-inch Sand Belt.

Price \$195.00
Shipping weight, 990 pounds.



\$195⁰⁰

Shipped Direct From Factory
at Cincinnati, Ohio.



Economy

Sanding Machine

(Made in Two Sizes)

\$58⁰⁰

24-Inch

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Frame. 2-inch angle steel, electric welded together. **Drum** is covered with brussels carpet and sandpaper.

Table Top. 36 inches long and is made of well seasoned hardwood.

Drum. 20-inch diameter made of laminated wood strips turned perfectly true. **Sand Disc.** 18-inch diameter.

Shpg. Wt.

300 lbs.

Floor Space

3 ft. x 3 ft.

Tight and Loose

Drive Pulley

10x4 in.

Speed

350 R. P. M.

Power

2 H.-P.

99M8764 $\frac{1}{3}$ —Economy Sanding Machine, 24-Inch, complete.

Price \$58.00

99M8766 $\frac{1}{3}$ —Economy Sanding Machine, 36-Inch, complete.

Price 73.00

Shipping weight, 400 pounds.

Garnet Cloth Sand Belt

In 50-Yard Rolls.

99M8752 $\frac{1}{3}$

State Size Number and Width.

Size	Shipping Weight, Per 50-Yard Roll	6-Inch	8-Inch
No. $\frac{1}{2}$	10 lbs.	\$11.75	\$14.50
No. 1	12 lbs.	13.00	16.50

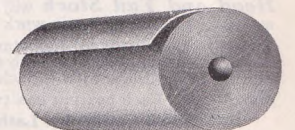
Sandpaper

In 50-Yard Rolls.

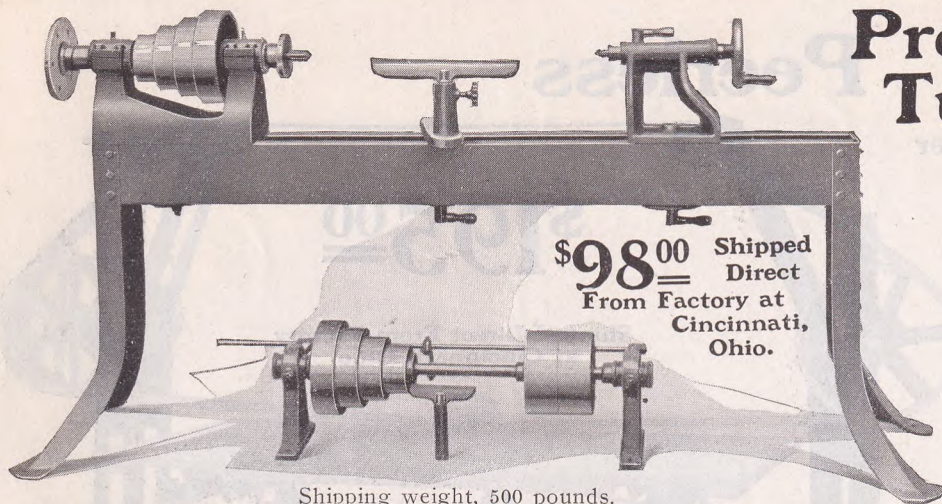
99M8750 $\frac{1}{3}$

State Size Number and Width.

Size	Shipping Weight, Per Roll of 50 Yards	24 Inches Wide	36 Inches Wide
No. $\frac{1}{2}$	56 lbs.	Per Yard	Per Roll
No. 2	85 lbs.	24c	\$11.25
		27c	12.50
			38c
			\$17.50
			40c
			18.25



ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.



Progress 16-Inch Turning Lathe

SPECIFICATIONS

Head and Tail Stock will swing up to 16-inch in diameter and takes 40 inches between centers when mounted on a 6-foot bed.

Lathe Bed is made of channel steel with angle steel legs which are electric welded together making a very substantial bed.

Spindle is 1½-inch diameter, threaded both ends so face plate can be used on either end. Spur center has No. 2 Morse taper.

Face Plates, two sizes are furnished, large size 9¼-inch diameter; small size 4¼-inch diameter.

Cone Pulley is 4-Step Cone type which takes 2-inch belt.

Countershaft has cone pulley to match cone pulley on lathe head. Tight and loose pulleys are 8-inch diameter by 3-inch face.

Bearings are well babitted and are equipped with oiling devices.

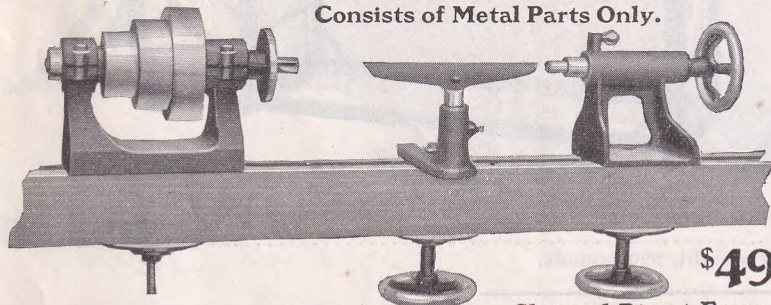
\$98.00 Shipped Direct From Factory at Cincinnati, Ohio.

Shipping weight, 500 pounds.

99M8630½—Progress 16-Inch Turning Lathe, complete with 6-foot bed, spur center, two face plates, two chisel rests and countershaft. Price..... **\$98.00**

Enterprise 13-Inch Wood Turning Lathe

Consists of Metal Parts Only.



\$49.00

Shipped Direct From Factory at Cincinnati, Ohio.

SPECIFICATIONS

Head and Tail Stock will swing material up to 13 inches in diameter. Bed can be made as long as desired to suit work to be done.

Spindle is 1¾-inch diameter, threaded both ends for face plates. Spur center has No. 2 Morse taper.

Cone Pulley is 3-Step Cone type which takes 1½-inch belt.

Face Plates, two sizes are furnished, 9¼-inch and 4¼-inch diameter.

Countershaft has 3-Step Cone to correspond with cone pulley on lathe head. Tight and loose pulleys are 8-inch diameter by 3-inch face.

Bearings are well babitted and equipped with proper oiling devices.

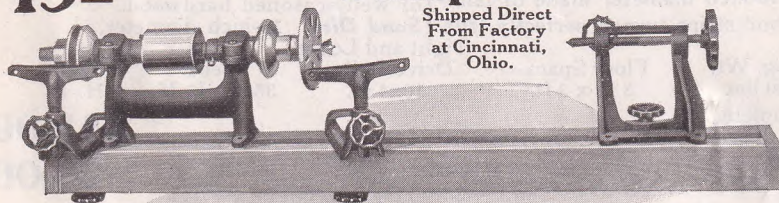
99M8628½—Enterprise 13-Inch Wood Turning Lathe, complete with spur center, two face plates, two chisel rests and countershaft. Shipping weight, 150 pounds. Price..... **\$49.00**

\$13.50

Simplex

Consists of Metal Parts Only.

Shipped Direct From Factory at Cincinnati, Ohio.



SPECIFICATIONS

Head and Tail Stock will swing material up to 11 inches in diameter. Bed can be made as long as desired to suit work to be done.

Spindle is 1 inch in diameter, is threaded for face-plate and has taper socket for spur center. Nut and collar at both ends for circular saw or emery wheel up to 10 inches in diameter by 1 inch thick with ⅞-inch hole. Size of pulley, 3x3 inches.

Bearings. Each bearing has two complete circles of balls, which run in hardened steel races. 99M8625½—Simplex Lathe Set, complete with spur center, 4¾-inch face plate and two adjustable chisel rests. Shipping weight, about 60 pounds. Price..... **\$13.50**

Turning Chisels With Handles.



99M8632½—Turning Chisels.

Size, in.... ¼ ½ ¾ 1 1½
Price85c 90c 95c \$1.20 \$1.45

Turning Gouges With Handles.



99M8633½—Turning Gouges.

Size, in.... ¼ ½ ¾ 1 1½
Price95c \$1.05 \$1.20 \$1.45 \$1.70

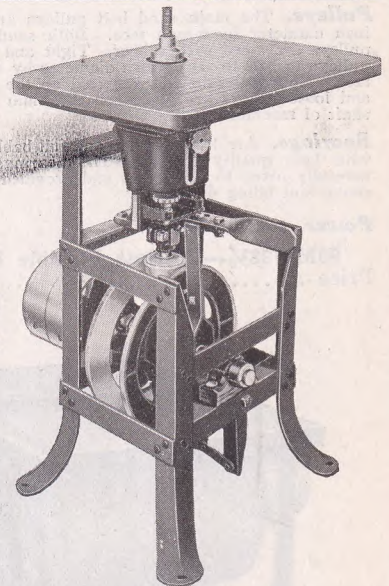
99M8634½—Parting Tool for use with Turning Lathe. Price..... **70c**

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Quick Reverse Spindle Shaper

\$78.00

Shipped Direct From Factory at Cincinnati, Ohio.



SPECIFICATIONS

Frame. Is 2-inch angle steel, electric welded. Hole is provided in the foot of each leg to bolt stand to the floor.

Table. 14 to 18 inches wide by 2 feet 2 inches long, raises and lowers by handwheel to limit of three inches to adjust cut.

Spindle. 1-inch diameter, takes cutters with ⅞-inch hole. Threaded end 3¾ inches long, flange 2¾ inches in diameter. Collar for reversible knives 1½ inches in diameter by ¾-inch face.

Reverse. Consists of double friction discs which slide on countershaft, driven with a key in shaft and arranged with lever to press disc against paper friction on end of spindle. This lever is operated by the knee of the operator. There are three positions, to the left, to the right, and in the center, which is the neutral position.

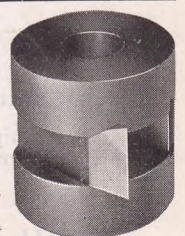
Countershaft. 1¾ inches in diameter with 4-inch full babitted bearings.

Shipping Weight	Tight and Loose Drive Pulley	Speed	Power
250 lbs.	8x3 in.	550 R. P. M.	½ H.P.

99M8768½—Quick Reverse Shaper, complete with slotted collars and two straight edge knives. Price..... **\$78.00**

Shaper Collars

For Use on Shaper Spindle.



The diameter of these collars is 2 inches. Slots in collars take bevel shape steel with 60-degree bevel.

99M8771½—Pair of Slotted Collars for shaper spindle with two straight edge knives. Price..... **\$2.90**

99M8772½—Bevel Shape Steel for making shaper bits.

Size ¾-in. 1-in. 1½-in. 2-in.
Price, per foot.....95c \$1.20 \$1.45 \$1.70

Pioneer

Ball Bearing Circular Rip and Crosscut Saw Machine
For Hand and Foot Power.

\$73⁰⁰

Shipped Direct From Factory in Cincinnati, Ohio.

SPECIFICATIONS

Frame. Is 1½-inch angle steel, strongly braced and electric welded together. Mounted on 2x10-inch wood bases 32 inches long, set 2 feet apart.

Saw Table. Is angle and channel steel. Top surface ground level and true. Hinged at back for raising or lowering, adjusting depth of cut up to 3 inches. Height 2 feet 10 inches, width 18½ inches. Overhanging right side 5 inches. Length 3 feet.

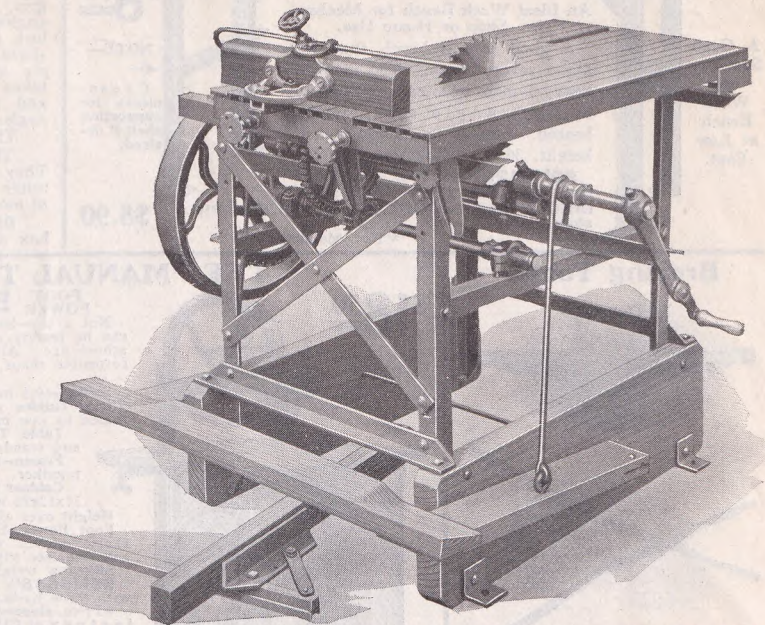
Rip Guide. Adjustable to cut any width up to 22 inches wide. Furnished with adjustable wood spring for holding down material.

Crosscut Guide. Slides in iron groove, has angle adjustment of 45 degrees and adjustable stop for cutting material to length.

Saw Mandrel. 1 inch in diameter, 3¾-inch flanges, takes saws up to 10 inches in diameter with ⅞-inch hole. Threaded end 3¾ inches long.

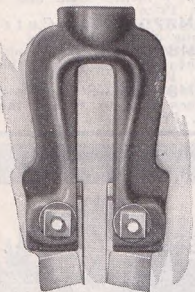
Bearings. Five ball bearing journals, 2 inches wide. Each journal has two complete circle of balls. These wide double ball bearing journals insure easy running and save physical exertion on the part of the operator.

Crank and Treadle. Are arranged so that either or both may be used at the same time. Crank comes up as treadle goes down, giving operator the advantage of naturally applying the maximum amount of power on the treadle when the lift is up on the crank. Crank is adjustable for different lengths. Machine can be set to operate at either fast or slow speed to suit the different kinds of work.



99M8610⅓—Pioneer, complete with 10-inch rip saw and one 8-inch crosscut saw. Floor space required, 3 ft. 10 in. by 3 ft. 4 in. Shipping weight, 350 pounds. Price..... **\$73.00**

Tenoning Tool.



\$4⁹⁰

99M8645⅓—Cuts any size from ¼ inch to ¾ inch. Weight, 3 lbs.
Price..... **\$4.90**

Mortising Chisels.



85c

to

\$1²⁵

Size	¼ in.	5/16 in.	¾ in.
Weight	1.5 oz.	5 oz.	5 oz.
Price, each.....	85c	90c	95c
Size	7/16 in.	½ in.	5/8 in.
Weight,	5 oz.	6 oz.	6 oz.
Price, each.....	\$1.00	\$1.05	\$1.10
Size	¾ in.	7/8 in.	1 in.
Weight	¾ in.	8 oz.	9 oz.
Price, each.....	\$1.15	\$1.20	\$1.25

Gem

Mortising and Tenoning Machine

For Foot Power.

\$29⁰⁰

Shipped Direct From Factory in Cincinnati, Ohio.

SPECIFICATIONS

Frame. Made of 1½-inch angle steel, strongly braced and securely bolted together, height 6 feet 3 inches. Base 24x24 inches.

Guide Bed. Stands 32 inches from floor and can be tilted any angle up to 45 degrees.

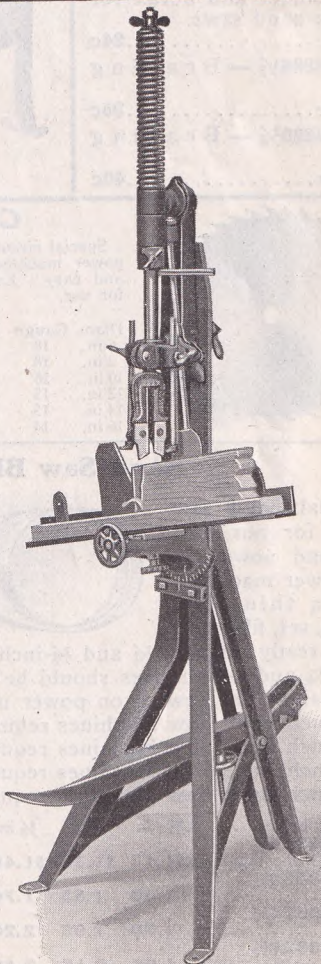
As a Mortising Machine. Makes mortises any length desired up to 10 inches wide by 1 inch thick. The two middle collars are connected around the chisel shaft for setting chisel square. Tool is reversed by turning reverse handle and tightening thumbscrew.

As a Tenoning Machine. Makes tenons any length desired up to 5 inches wide from one edge or 10 inches wide by reversing work and cutting from both edges and from ¼ to ¾ inch thick with 1-inch shoulder on each side. When using tenoning tool, a piece of wood is placed on guide plate for bits to cut into.

Treadle Rod. Leverage on treadle rod is adjustable for long or short stroke to suit hard or soft woods. Handwheel at lower end of rod regulates depth of cut.

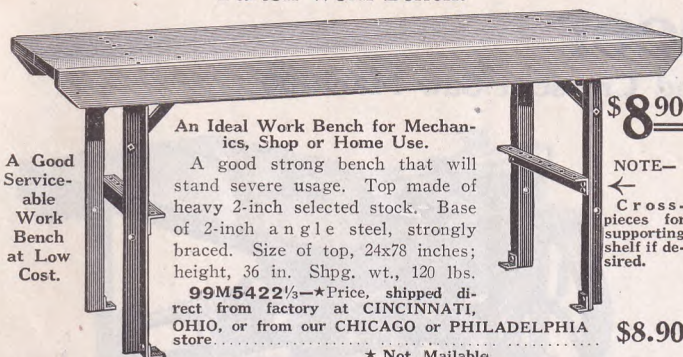
Floor Space required, 2 feet 4 inches by 2 feet 6 inches.

99M8635⅓—Gem Mortising and Tenoning Machine, with tenon tool and one ¾-inch mortise chisel. Shipping weight, 100 pounds.
Price..... **\$29.00**



ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Fulton Work Bench.



A Good Serviceable Work Bench at Low Cost.

An Ideal Work Bench for Mechanics, Shop or Home Use.

A good strong bench that will stand severe usage. Top made of heavy 2-inch selected stock. Base of 2-inch angle steel, strongly braced. Size of top, 24x78 inches; height, 36 in. Shpg. wt., 120 lbs.

99M5422½—Price, shipped direct from factory at CINCINNATI, OHIO, or from our CHICAGO or PHILADELPHIA store.

* Not Mailable.

\$8.90

NOTE—

Cross-pieces for supporting shelf if desired.

\$8.90

Advance Miter Box.

Ball bearings in arm make the Advance Miter Box work easily, the saw run true and free and prevent wear.

Saw guide is lined with bronze strips, adjustable by gib screws.

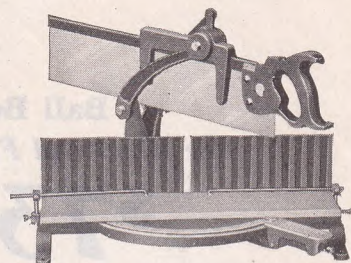
All angles set and held by friction grip. Extra pin lock for important angles. Both friction grip and pin lock easily and quickly operated by slight pressure of one hand. A simple adjustment beneath the frame takes up wear on the swinging arm and insures absolute accuracy of angles at all times.

The length stops can be set for duplicate pieces and crown moldings.

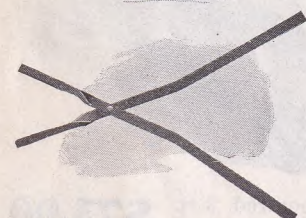
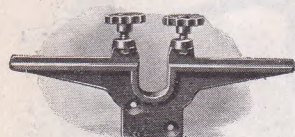
These are all exclusive features found only on the Advance Miter Box. They are all simple—there is nothing complicated. The Advance is the only miter box so constructed that there is an adjustment for wear at every point of movement—insuring long life.

99M8842½—Advance Miter Box, complete with 28x5 miter box saw. Price.

\$19.50



Brazing Tools.



99M8827½—One piece of silver solder and borax for brazing band saws.

Price.....24c

99M8828½—Brazing clamp.

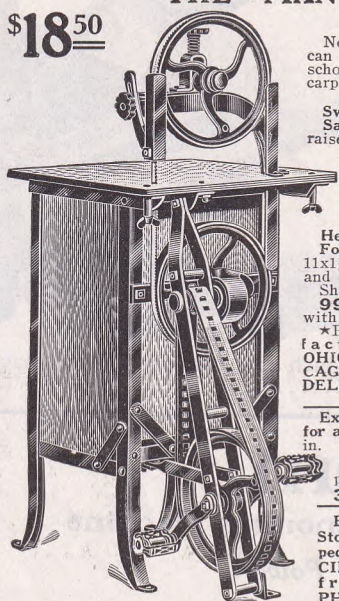
Price.....95c

99M8829½—Brazing tongs.

Price.....49c

THE "MANUAL TRAINER"

\$18.50



FOOT POWER Band Saw Machine

Not a toy—but a real honest-to-goodness saw that can be readily operated by any ordinary boy of high school age. Also makes a handy machine for small carpenter shops, etc.

DESCRIPTION:

Swing—10½ inches.
Saw Guides are adjustable. Upper guide can be raised to saw material up to 2 inches thick.
Table Top of hardwood measures 18x19 in. and stands 31 inches from floor.
Frame—¼-in. angle steel, riveted and bolted together.
Cabinet for holding tools, drawings, etc., 11x12x20 inches high inside.

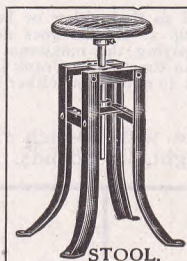
Height over all, 44 inches.
Foot Power—Drive wheel, 11x1½ inches with pedals and complete with belt.
Shipping weight, 125 lbs.
99M5645½—Complete with three ¾-in. band saws.
*Price, shipped direct from factory at CINCINNATI, OHIO, or from our CHICAGO or PHILADELPHIA store. \$18.50

* Not Mailable.

Extra Band Saw Blades for above. Size, ¾ in. by 66 in. Weight of three, 4 oz.

99M5647½—Price, per package of 3 blades.....\$1.35

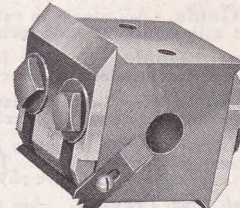
Band Saw Blades, and Stool shown above, shipped direct from factory at CINCINNATI, OHIO, or from our CHICAGO or PHILADELPHIA store.



STOOL.
For "Manual Trainer" Band Saw Machine. Adjustable from 20 to 25 inches in height. Shpg. wt., 36 pounds.
99M5646½—Price.....\$2.40

4-Side Molding Heads.

For Jointing, Gaining, Tenoning, Sticking Sash, Flooring, Molding, Etc.



Used on end of saw mandrel outside of bearings. Bits can be adjusted to cut up to ¼-inch deep. Cutting edge circle 5½ inches.

Made in two sizes.

2-inch Head takes knives with one slot.
4-inch Head takes knives with two slots.

99M8788½—2-Inch Four-Side Molding Head with two straight edge knives 2 inches wide and one side cutter. Price.....\$7.25

99M8792½—4-Inch Four-Side Molding Head with two straight edge knives 4 inches wide and one side cutter. Price.....\$8.75

99M8793½—Side Cutters for tenoning or gaining. Price.....\$9.00

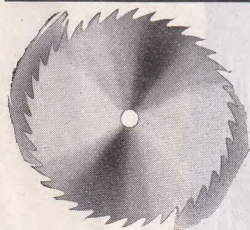
99M8794½—Straight edge knives 2 inches wide by ¾-inch thick, tempered. Price.....\$2.40

99M8796½—Straight edge knives 4 inches wide by ¾-inch thick, tempered. Price.....\$3.40

Circular Saws.

Special circular saws for our foot and hand or power machines. Tooth is shaped to cut fast and easy. Every saw is filed and set ready for use.

Diam.	Gauge	Hole in Saw	99M8830½ Crosscut	99M8831½ Rip
6 in.	18	¾ or 1 in.	\$1.70	\$1.70
8 in.	18	¾ or 1 in.	2.20	2.20
10 in.	16	¾ or 1 in.	2.90	2.90
12 in.	15	1 in.	3.90	3.90
14 in.	15	1 in.	4.90	4.90
16 in.	14	1 in.	5.85	5.85



Band Saw Blades.

Special band saw blades for our foot and hand power or belt power machines—extra thin, easy cutting, set, filed and brazed ready for use; ¼ and ⅜-inch sizes are best for general work, ¾ and 1-inch sizes should be used only for long curves and straight line sawing on power machines.

18-Inch Band Saw Machines require saw 10 ft. 6 in. long.

22-Inch Band Saw Machines require saw 12 ft. long.

30-Inch Band Saw Machines require saw 16 ft. long.

36-Inch Band Saw Machines require saw 17 ft. 6 in. long.

Width of blade.....	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	1 in.
99M8822½							
10 feet 6 inches.....	\$1.15	\$1.35	\$1.45	\$1.70	\$1.95	\$2.20	\$2.45
99M8823½							
12 feet.....	1.35	1.55	1.70	1.95	2.20	2.55	2.80
99M8824½							
16 feet.....	1.70	1.95	2.20	2.45	2.75	3.15	3.50
99M8825½							
17 feet 6 inches.....	1.95	2.15	2.45	2.65	3.05	3.50	3.90
99M8826½							
Price, per foot.....	.07	.09	.11	.13	.15	.18	.19

ALL GOODS SHOWN ON THIS PAGE SHIPPED

Adjustable Dado and Grooving Head.

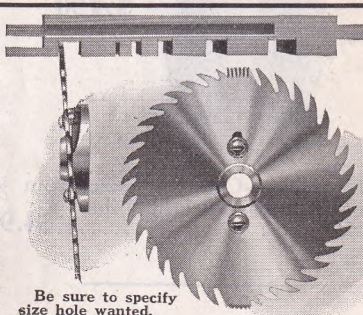
Consists of heavy grooving saw provided with side cutters mounted on an adjustable hub. Hub is rounded at point where saw rests, permitting saw to be tilted for cutting different width of grooves.

99M8780½—Adjustable Grooving Head with 7-inch saw with either ¾ or 1-inch hole to cut from ⅛ to 1¼ inches wide and up to 1½ inches deep. Shipping weight, 6 pounds.

Price, each.....\$6.25

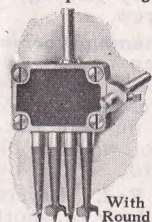
99M8785½—Adjustable Grooving Head with 9-inch saw, either ¾ or 1-inch hole, to cut from ⅛ to 1¼ inches wide and up to 2½ inches deep. Shipping weight, 7 pounds.

Price, each.....\$8.75



Be sure to specify size hole wanted.

Multiple Boring Bits.



With ½-Inch Round Shank.

Make a perfect mortise, no cutting, trimming or fitting necessary. Shipping weight, 4½ pounds.

99M8815½—Quadruple Bit, bores four ¼-in. holes, centers ¾ in. apart, makes a mortise of correct size for regular sash pulleys. Price.....\$17.50

99M8820½—Triple Bit, bores 3 1-in. holes, centers ¾ in. apart. \$17.50

Machine Wood Boring Bits.

With ½-Inch Round Shank.

Size	¼ in.	½ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.
Price, each	\$0.80	\$0.85	\$0.90	\$0.95	\$1.00	\$1.10	\$1.20	\$1.30
Size	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.
Price, each	\$1.30	\$1.40	\$1.50	\$1.65	\$1.80	\$1.95	\$2.10	\$2.25
Size	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.	¾ in.
Price, each	\$2.10	\$2.25	\$2.45	\$2.65	\$3.15	\$3.90		

Hollow Chisels and Bits.



99M8805½—Hollow chisel is held solid in the machine. Bit fits in the socket and revolves. Cuts a clean square mortise with little effort.

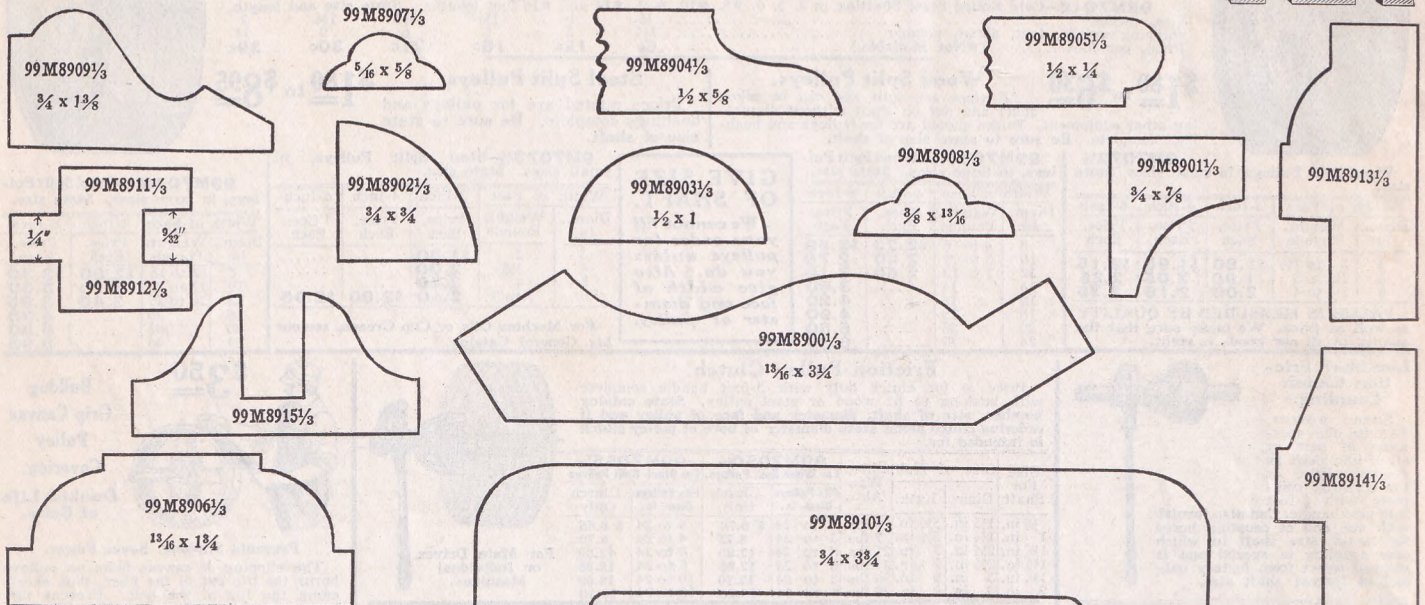
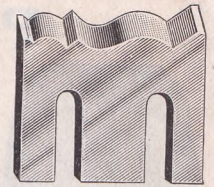
Size

Price, each

Molding Knives

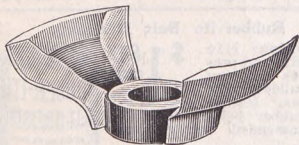
For Square Heads

These knives are made from high grade tool steel and are sharpened and tempered ready to use.



99M8900 1/2 - Price	\$5.85	99M8904 1/2 - Price	\$3.40	99M8908 1/2 - Price	\$3.40	99M8912 1/2 - Groove. Price..	\$3.40
99M8901 1/2 - Price	3.40	99M8905 1/2 - Price	3.40	99M8909 1/2 - Price	3.90	99M8913 1/2 - Price	4.40
99M8902 1/2 - Price	3.40	99M8906 1/2 - Price	4.40	99M8910 1/2 - Price	7.80	99M8914 1/2 - Price	4.40
99M8903 1/2 - Price	3.40	99M8907 1/2 - Price	3.40	99M8911 1/2 - Tongue. Price..	3.40	99M8915 1/2 - Price	4.40

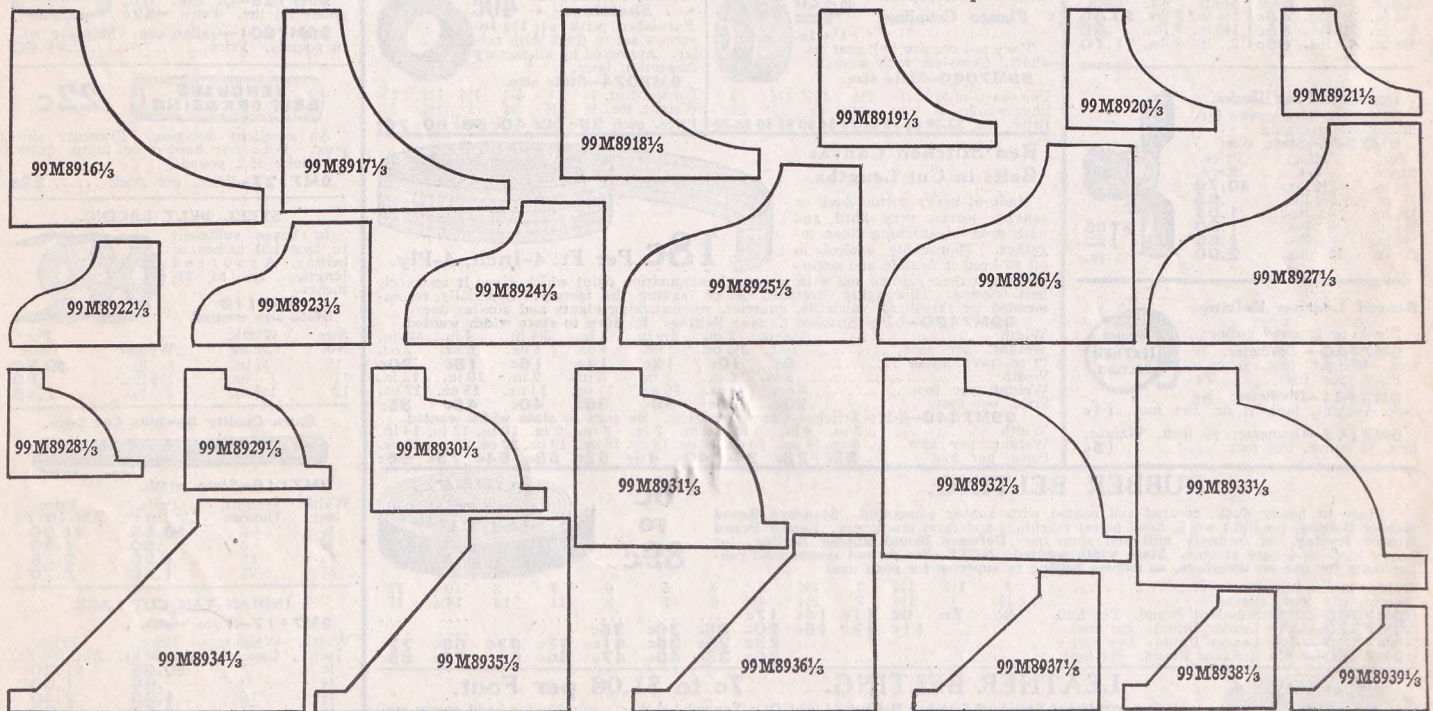
Solid Steel Reversible Knives



These knives are used on upright reversible spindle shaper with spindle running in either direction. They are made from a solid piece of tool steel, and hollow ground, as shown by illus-

tration. These knives are sharpened from the inside so a sharp cutting edge can be given them without disturbing the cutting shape, which is always the same.

(Illustrations show full size shape of the wood material.)



Cove		O. G.		Quarter Round		Bevel	
99M8916 1/2 - Price	\$5.85	99M8922 1/2 - Price	\$3.40	99M8928 1/2 - Price	\$3.40	99M8934 1/2 - Price	\$5.85
99M8917 1/2 - Price	5.35	99M8923 1/2 - Price	3.90	99M8929 1/2 - Price	3.90	99M8935 1/2 - Price	5.35
99M8918 1/2 - Price	4.90	99M8924 1/2 - Price	4.40	99M8930 1/2 - Price	4.40	99M8936 1/2 - Price	4.90
99M8919 1/2 - Price	4.40	99M8925 1/2 - Price	4.90	99M8931 1/2 - Price	4.90	99M8937 1/2 - Price	4.40
99M8920 1/2 - Price	3.90	99M8926 1/2 - Price	5.35	99M8932 1/2 - Price	5.35	99M8938 1/2 - Price	3.90
99M8921 1/2 - Price	3.40	99M8927 1/2 - Price	5.85	99M8933 1/2 - Price	5.85	99M8939 1/2 - Price	3.40

ALL GOODS SHOWN ON THIS PAGE SHIPPED DIRECT FROM FACTORY AT CINCINNATI, OHIO.

Pulleys, Shafting, Belting and Accessories

All merchandise on this page shipped only from our Chicago or Philadelphia store.

COLD DRAWN STEEL SHAFTING.

6c
Foot.
3/4-In.

21c
Foot.
1 1/2-In.

Smooth, straight steel, uniform in size the entire length. We do not furnish other than sizes and lengths listed.

99M7016—Cold Rolled steel Shafting in 4, 5, 6, 8, 10, 12, 14 and 16-foot lengths.													State size and length.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Size, inches	3/4	1	1 1/4	1 1/2	2	3	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Shipping weight, foot, about, pounds	1 1/2	2	3 1/2	5	8	12	18	27	38	50	64	80	98	118	140	164	190	218	248	280	314	350	388	428	470	514	560	608	658	710	764	820	878	938	998	1060	1124	1190	1258	1328	1398	1470	1544	1618	1694	1770	1848	1928	2008	2090	2172	2256	2340	2424	2510	2596	2684	2772	2862	2952	3044	3136	3230	3324	3420	3516	3614	3712	3812	3912	4014	4116	4218	4322	4424	4528	4632	4738	4844	4950	5058	5166	5274	5384	5494	5604	5716	5828	5940	6054	6168	6284	6398	6514	6630	6748	6866	6984	7104	7224	7344	7464	7586	7708	7830	7954	8078	8202	8328	8454	8580	8708	8836	8964	9094	9224	9354	9484	9616	9748	9880	10014	10148	10284	10420	10556	10694	10832	10972	11112	11254	11396	11540	11684	11830	11976	12124	12272	12422	12572	12724	12876	13030	13184	13340	13496	13654	13812	13972	14132	14294	14456	14620	14784	14950	15116	15284	15452	15622	15792	15964	16136	16310	16484	16660	16836	17014	17194	17374	17556	17738	17922	18108	18294	18482	18672	18864	19056	19250	19444	19640	19836	20034	20234	20434	20636	20840	21044	21250	21456	21664	21874	22084	22294	22504	22716	22930	23144	23360	23576	23794	24014	24234	24456	24680	24904	25130	25356	25584	25814	26044	26276	26510	26744	26980	27216	27454	27694	27936	28180	28424	28670	28916	29164	29414	29664	29916	30170	30424	30680	30936	31194	31452	31712	31972	32234	32496	32760	33024	33290	33556	33824	34094	34364	34636	34910	35184	35460	35736	36014	36294	36576	36860	37144	37430	37716	38004	38294	38584	38876	39170	39464	39760	40056	40354	40654	40956	41260	41564	41870	42176	42484	42794	43104	43416	43730	44044	44360	44676	44994	45314	45636	45960	46284	46610	46936	47264	47594	47924	48256	48590	48924	49260	49600	49944	50290	50636	50984	51334	51684	52036	52390	52744	53100	53456	53814	54174	54536	54900	55264	55630	56000	56372	56744	57116	57490	57864	58240	58616	59000	59384	59770	60156	60544	60934	61324	61716	62110	62504	62900	63296	63694	64094	64496	64900	65304	65710	66116	66524	66934	67344	67756	68170	68584	69000	69416	69834	70254	70676	71096	71516	71940	72364	72790	73216	73644	74074	74504	74936	75370	75804	76240	76676	77114	77554	77996	78440	78884	79330	79776	80224	80674	81124	81576	82030	82484	82940	83396	83854	84314	84776	85240	85704	86170	86636	87104	87574	88044	88516	89000	89464	89940	90416	90894	91374	91856	92340	92824	93310	93796	94284	94774	95264	95756	96250	96744	97240	97736	98234	98734	99236	99740	100244	100750	101256	101764	102274	102784	103296	103810	104324	104840	105356	105874	106394	106916	107440	107964	108490	109016	109544	110074	110604	111136	111670	112204	112740	113276	113814	114354	114896	115440	115984	116530	117076	117624	118174	118724	119276	119830	120384	120940	121496	122054	122614	123176	123740	124304	124870	125436	126004	126574	127146	127720	128296	128874	129454	130036	130620	131204	131790	132376	132964	133554	134146	134740	135336	135934	136534	137136	137740	138346	138954	139564	140176	140790	141404	142020	142636	143254	143874	144496	145120	145744	146370	146996	147624	148254	148884	149516	150150	150784	151420	152056	152694	153334	153976	154620	155264	155910	156556	157204	157854	158504	159156	159810	160464	161120	161776	162434	163094	163756	164420	165084	165750	166416	167084	167754	168426	169100	169776	170454	171134	171816	172500	173184	173870	174556	175244	175934	176626	177320	178016	178714	179414	180116	180820	181526	182234	182944	183656	184370	185084	185796	186510	187224	187940	188656	189374	190092	190812	191534	192256	192980	193706	194432	195160	195890	196622	197356	198092	198830	199570	200312	201056	201802	202550	203296	204044	204794	205546	206300	207056	207814	208574	209336	210100	210866	211634	212404	213176	213950	214726	215504	216284	217066	217850	218636	219424	220214	221006	221800	222596	223394	224194	224996	225796	226598	227402	228208	229016	229826	230638	231452	232268	233086	233906	234728	235552	236378	237206	238036	238868	239702	240538	241376	242216	243058	243902	244748	245596	246446	247298	248152	249008	249866	250726	251588	252452	253318	254186	255056	255928	256802	257678	258556	259436	260318	261202	262088	262976	263866	264758	265652	266548	267446	268346	269248	270152	271058	271966	272876	273788	274702	275618	276536	277456	278378	279302	280228	281156	282086	283018	283952	284888	285826	286766	287708	288652	289598	290546	291496	292448	293402	294358	295316	296276	297238	298202	299168	300136	301106	302078	303052	304028	305006	305986	306968	307952	308938	309926	310916	311908	312902	313898	314896	315896	316898	317902	318908	319916	320926	321938	322952	323968	324986	325996	327008	328022	329038	330056	331076	332098	333122	334148	335176	336206	337238	338272	339308	340346	341386	342428	343472	344518	345566	346616	347668	348722	349778	350836	351896	352958	354022	355088	356156	357226	358298	359372	360448	361526	362606	363688	364772	365858	366946	368036	369128	370222	371318	372416	373516	374618	375722	376828	377936	379046	380158	381272	382388	383506	384626	385748	386872	387998	389126	390256	391388	392522	393658	394796	395936	397078	398222	399368	400516	401666	402818	403972	405128	406286	407446	408608	409772	410938	412106	413276	414448	415622	416798	417976	419156	420338	421522	422708	423896	425086	426278	427472	428668	429866	431066	432268	433472	434678	435886	437096	438308	439522	440738	441956	443176	444398	445622	446848	448076	449306	450538	451772	453008	454246	455486	456728	457972	459218	460466	461716	462968	464222	465478	466736	467996	469258	470522	471788	473056	474326	475598	476872	478148	479426	480706	481988	483272	484558	485846	487136	488428	489722	491018	492316	493616	494918	496222	497528	498836	500146	501458	502772	504088	505406	506726	508048	509372	510698	512026	513356	514688	516022	517358	518696	520036	521378	522722	524068	525416	526766	528118	529472	530828	532186	533546	534908	536272	537638	539006	540376	541748	543122	544498	545876	547256	548638	549922	551308	552696	554086	555478	556872	558268	559666	561066	562468	563872	565278	566686	568096	569508	570922	572338	573756	575176	576598	578022	579448	580876	582306	583738	585172	586608	588046	589486	590928	592372	593818	595266	596716	598168	599622	601078	602536	603996	605458	606922	608388	609856	611326	612798	614272	615748	617226	618706	620188	621672	623158	624646	626136	627628	629122	630618	632116	633616	635118	636622	638128	639636	641146	642658	644172	645688	647206	648726	650248	651772	653298	654826	656356	657888	659422	660958	662496	664036	665578	667122	668668	670216	671766	673318	674872	676428	677986	679546	681108	682672	684238	685806	687376	688948	690522	692098	693676	695256	696838	698422	700008	701596	703186	704778	706372	707968	709566	711166	712768	714372	715978	717586	719196	720808	722422	724038	725656	727276	728898	730522	732148	733776	735406	737038	738672	740308	741946	743586	745228	746872	748518	750166	751816	753468	755122	756778	758436	760096	761758	763422	765088	766756	768426	770098	771772	773448	775126	776806	778488	780172	781858	783546	785236	786928	788622	790318	792016	793716	795418	797122	798828	800536	802246	803958	805672	807388	809106	810826	812548	814272	815998	817726	819456	821188	822922	824658	826396	828136	829878	831622	833368	835116	836866	838618	840372	842128	843886	845646	847408	849172	850938	852706	854476	856248	858022	859798	861576	863356	865138	866922	868708	870496	872286	874078	875872	877668	879466	881266	883068	884872	886678	888486	890296	892108	893922	895738	897556	899376	901198	903022	904848	906676	908506	910338	912172	914008	915846	917

Fulton Circular Saws

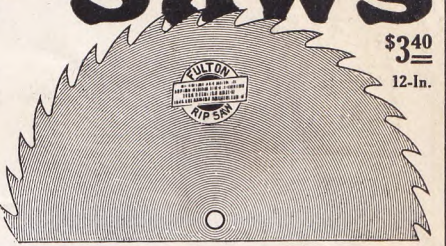
\$3.50
12-In.



Are Made of Special Saw Steel of the Correct Gauge or Thickness for the Size and Kind of Saw and With the Proper Number of Teeth as Listed Below.

Saws are evenly tempered, ground on special machinery, and are carefully balanced and tested at full speed. Every Fulton Circular Saw is hand smithed and hand blocked, hand filed and hand set, and sent out ready for use.

\$3.40
12-In.



Fulton Circular Cut-Off Saws.

High speed saws, for use in factories, mills and general woodworking plants. State diameter.

9M5000—Fulton Circular Cut-Off Saws in small sizes.

Diam., In.	Arbor Gauge Hole, In.	Rev. per Minute	Teeth in Saw	Wt., Lbs.	Price, Each
4	19 3/4	5,000	110 3/4	\$1.20	
6	18 3/4	4,800	110 3/4	1.60	
8	18 7/8	4,600	110 3/4	2.00	
10	16 1	4,000	100 1/2	2.75	
12	15 1	3,300	90 2/3	3.50	
14	15 1 1/2	2,800	90 3/4	4.50	

NOTE—State whether 1 1/2 or 1 1/2-inch arbor hole is wanted on 28 and 30-inch saws.

9M5955—Fulton Circular Cut-Off Saws in large sizes.

Diam., In.	Arbor Gauge Hole, In.	Rev. per Minute	Teeth in Saw	Shpg. Wt., Lbs.	Price, Each
16	14 1 1/2	2,500	90 5/8	\$5.75	
18	13 1 1/2	2,250	80 7/8	7.00	
20	13 1 1/2	1,950	80 9/8	8.50	
22	12 1 1/2	1,750	72 15	10.00	
24	11 1 1/2	1,600	72 18	12.00	
26	11 1 1/2	1,500	72 20	14.00	
28	10 1 1/2 or 1 1/2	1,400	72 23	16.50	
30	10 1 1/2 or 1 1/2	1,300	80 27	19.00	
32	10 1 1/2	1,225	80 33	22.00	
34	9 1 1/2	1,125	80 40	25.00	
36	9 1 1/2	1,075	90 45	28.00	

*Not Mailable.

Fulton Circular Rip Saws.

High speed saws, for use in factories, mills and woodworking plants generally. State diameter.

9M5001—Fulton Circular Rip Saws in small sizes.

Diam., In.	Arbor Gauge Hole, In.	Rev. per Minute	Teeth in Saw	Wt., Lbs.	Price, Each
4	19 3/4	5,000	38 1/4	\$1.10	
6	18 3/4	4,800	38 1/2	1.50	
8	18 7/8	4,600	38 3/4	1.90	
10	16 1	4,000	36 1 1/2	2.65	
12	15 1	3,300	36 3	3.40	
14	15 1 1/2	2,800	36 4	4.40	

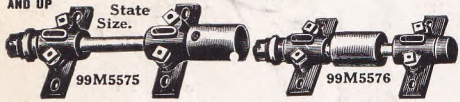
NOTE—State whether 1 1/2 or 1 1/2-inch arbor hole is wanted on 28 and 30-inch saws.

9M5953—Fulton Circular Rip Saws in large sizes.

Diam., In.	Arbor Gauge Hole, In.	Rev. per Minute	Teeth in Saw	Shpg. Wt., Lbs.	Price, Each
16	14 1 1/2	2,500	36 5/8	\$5.65	
18	13 1 1/2	2,250	34 7/8	6.40	
20	13 1 1/2	1,950	34 12	8.40	
22	12 1 1/2	1,750	34 15	9.90	
24	11 1 1/2	1,600	34 17	11.90	
26	11 1 1/2	1,500	32 20	13.90	
28	10 1 1/2 or 1 1/2	1,400	32 27	16.40	
30	10 1 1/2 or 1 1/2	1,300	32 29	18.90	
32	10 1 1/2	1,225	34 34	21.90	
34	9 1 1/2	1,125	34 41	24.90	
36	9 1 1/2	1,075	34 43	27.90	

*Not Mailable.

\$5.85 Circular Saw Mandrels.



Pulley on right hand side.

Pulley in center.

Boxes and pillows soft gray iron, babbitted bearings. Shaft is cold rolled steel and arbors have left hand threads. Furnished complete with bolts for attaching.

Size of Pulley, In.	Size of Flange, In.	Size of Shaft, In.	Size of Hole in Saw, In.	For Saws, Diam. In.	Shpg. Pulley, Lbs.	Pulley, Right Center, Lbs.
0	2 x 3	2	1 1/2	7/8	34	6 14 \$5.85 \$5.90
1	2 1/2 x 3 1/2	2 1/2	1 1/2	1 1/8	10	22 6.35 6.40
2	3 x 4	3	1 1/2	1 1/4	14	27 7.80 7.85
3	3 1/2 x 4 1/2	3 1/2	1 1/2	1 1/4	18	38 8.95 9.00
4	4 x 5	4	24	1 1/2	20	45 10.20 10.25
5	4 1/2 x 5 1/2	4 1/2	26	1 1/2	22	53 11.40 11.45
6	5 x 6	5	28	1 1/2	24	50 12.55 12.60
7	5 1/2 x 6 1/2	5 1/2	30 1/2	1 1/2	26	60 13.65 13.70
8	6 x 7	6	32 1/2	1 1/2	30	74 16.75 16.80
9	7 x 8	6	37 1 1/2	1 1/2	32	90 22.00 22.10
10	8 x 8	6	41 1 1/2	1 1/2	36	110 25.00 25.15
11	9 x 10	6	48 2 1/2	2	48	150 34.00 34.20

*Not Mailable.

All merchandise on this page, except Fulton Circular Mill Saws, which are shipped direct from factory near CHICAGO, is shipped only from our CHICAGO or PHILADELPHIA stores.

85c Improved Circular Saw Side Filer.

For dressing sides and points of teeth on circular saws.

9M5116—Weight, 1 1/2 pounds. Price, with file.....85c

9M5117—Extra Files only. Weight, 8 ounces. Price.....30c

Crosscut and Circular Saw Sets.

A standard tool that will give good service.

9M5102—Size No. 3. For single tooth saws from 20 to 14 gauge. Weight, 2 pounds. Price.....90c

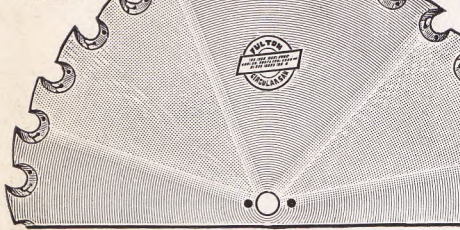
9M5103—Size No. 4. For Champion Saws from 20 to 14 gauge. Weight, 1 1/2 pounds. Price.....95c

\$1.85 Stearns Saw Set.

For timber and board saws from 6 to 14 gauge. Length, 15 inches. Weight, 3 pounds.

9M5108 Price, each, \$1.85

\$110.00 50-Inch



Fulton Circular Mill Saws

Made to order only and shipped from factory near CHICAGO, usually within ten days. In ordering be sure to give us all specifications of saw desired as mentioned below, so we can make the saw to suit your requirements and avoid the delay which would be necessary if we have to write you for additional information. All saws 40 inches and larger should have 2-inch mandrel holes, with two 5/8-inch pin holes, spaced 3 inches center to center.

IN ORDERING BE SURE TO GIVE ALL SPECIFICATIONS AS FOLLOWS: Number of teeth wanted in saw, gauge at rim, gauge in center, whether spring or swage set, temper, speed, feed, whether to cut hard or soft wood, right or left hand, size of mandrel holes, size and distance center to center of pin holes.

Fulton Inserted Tooth Mill Saws.

We will make any size saw with more teeth, if desired, at an additional price of 40 cents for each extra tooth. Revolutions per minute, 500. Feed, 4 inches. Shipped direct from factory near CHICAGO. 99M8304 1/3—State diameter.

Diameter, Inches	Gauge	No. Teeth in Saw	Shipping Wt., Lbs.	Price, Each
*40	8	28	90 lbs.	\$70.00
*42	7	30	110 lbs.	76.00
*44	7	30	130 lbs.	83.00
*46	7	30	140 lbs.	91.00
*48	7	30	150 lbs.	100.00
*50	6	32	170 lbs.	110.00
*52	6	34	185 lbs.	121.00
*54	6	36	200 lbs.	132.00
*56	6	36	215 lbs.	145.00
*58	6	38	230 lbs.	159.00
*60	6	40	240 lbs.	174.00

*Not Mailable.

Extra Points and Holders for Fulton Inserted Tooth Saws. Shipped direct from factory only.

99M8306 1/3—Fulton Drop Forged Extra Points only. State gauge, Shpg. wt., per 100, 2 1/2 lbs. Each.....\$3.80

99M8307 1/3—Fulton Drop Forged Extra Holders for points. State gauge wanted. Shipping wt., per 100, 9 lbs. Each.....\$3.30

99M8308 1/3—Fulton Inserted Tooth Wrenches. Shipping wt., 2 pounds. Price, each.....60c

Mixer's Champion Saw Gummer.

Many experienced sawmill men will have no other kind. Self acting, throwing itself out of gear when teeth are cut to required depth, making them of uniform length. The line of the teeth can be cut at any angle desired. Cuts rapidly and with no risk of bending, breaking or casehardening saw. Price includes three cutters, sizes, 3/4, 1/2 and 1 inch with 1/2-inch holes, wrench and holder for sharpening cutters. Shipping weight, 24 pounds.

99M5545—Price.....\$27.00

50c AND UP

9M5114 Mixer's "XX" Gummer Cutters; 1/2-in. hole only. State size of cutter or send impression of one end. Weight, 1 ounce. Diameter, in. 3/4 7/8 1 1/4 1 1/2 Price, each 50c 60c 70c 80c 90c

Fulton Power Grindstone.

"Cuts Hard Work." Makes All Grinding Jobs Easy. Sturdy—Safe—Efficient.

Introductory Price, **\$14.50**

Shipped direct from factory near Chicago.

Geared to give correct speed on engine drive. Can be connected with engine direct or from countershaft. A good investment for farm or shop.

Specifications:

Drive Pulley—12x2 1/2-inch face. Geared 5 to 1. Speed, 520 R. P. M.

Stone—High quality; free cutting. Size, 22x4 inches. Weight, 123 pounds.

Bearings—Fitted with pressed steel oil cups.

Water Pan—Fitted to under side of stone.

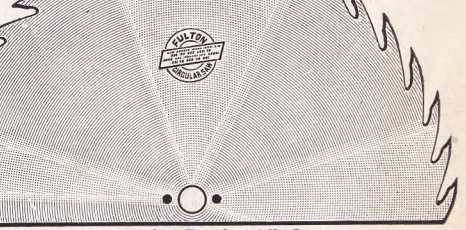
Frame—Heavy 2 1/4-inch angle steel, strong and rigid. Shipping weight, 250 pounds.

99M293 1/3—Price.....\$14.50

Shipped direct from factory near CHICAGO.

*Not Mailable.

\$83.00 50-Inch



Fulton Solid Tooth Mill Saws.

Guaranteed to give satisfactory service. Revolutions per minute, 500 to 900. Feed, 4 to 6 1/2 inches. Shipped direct from factory near CHICAGO.

Diameter, Inches	Gauge	No. Teeth in Saw	Shipping Wt., Lbs.	Price, Each
*40	9	36 to 64	90 lbs.	\$43.00
*42	9	36 to 64	100 lbs.	49.00
*44	9	36 to 64	115 lbs.	56.00
*46	9	30 to 56	125 lbs.	64.00
*48	8	32 to 60	135 lbs.	83.00
*50	8	32 to 60	150 lbs.	83.00
*52	8	34 to 64	160 lbs.	94.00
*54	8	34 to 68	175 lbs.	106.00
*56	8	36 to 70	190 lbs.	119.00
*58	8	38 to 72	200 lbs.	133.00
*60	7	40 to 76	225 lbs.	148.00

*Not Mailable.

Saw Swages or Upsets. \$3.15 No. 2

Spreads and shapes point of tooth, squares up cutting edge and gives body to swaged points, making saw cut easily, clear well and run steadily in the cut. Full directions sent with each swage.

9M5113—State size wanted.

Size	For Saws	Weight	Price
No. 1	5 to 10 gauge	1 1/4 lbs.	\$3.70
No. 2	9 to 12 gauge	1 1/2 lbs.	3.15
No. 3	12 to 14 gauge	1 3/4 lbs.	2.65

A Big Machine for the Big Shop

SPECIFICATIONS

Frame. Heavy 2-inch angle steel, electrically welded together. Heavy 2x10-inch base timbers 8 feet long, set 2 feet apart.

Circular Saw Table. Has double working surface. Heavy angle steel frame with channel steel slats welded to frame. Top surface ground level and true. Width 44 inches, overhangs base on right side 10 inches, overhangs base on left side 8 inches.

Raising and Lowering Circular Saw Mandrel. Has positive and accurate adjustment for quickly and easily regulating depth of cut. Diameter of mandrel, 1 1/4 inches, threaded left end 4 1/4 inches, right end 5 1/4 inches. Flanges 3 1/2 inches in diameter. Takes saws, etc., with 1-inch hole. Size of pulley, 3x4-inch face. Has friction clutch to start and stop.

Jointer. 12 inches wide with round safety head and four knives, cutting circle 4 1/2 inches in diameter. Head is fastened to mandrel with both key in shaft and set screw between bearings. Plates made of steel. Front plate 2 feet long, rear plate 2 1/2 feet long. Both plates have handwheel screws for raising or lowering or inclines to adjust depth of cut.

Tilting Guide. For jointer tilts to angle of 45 degrees and is adjustable up to 17 inches in width. Furnished with spring to hold down material.

Band Saw. 22-inch swing, cuts to center of 44-inch circle. Table measures 14 1/2 x 17 1/2 inches, stands 40 inches from floor and can be tilted for sawing bevels. Has two saw guides. Upper guide has ball bearing disc and can be raised to saw materials up to 7 inches thick. Band saw wheels are covered with endless rubber bands and take saws 12 feet long. Has belt shifter to start and stop.

Swing Cut-Off Saw. Has welded channel steel top. 12-inch saw furnished will cut 1-inch stuff 15 inches wide or 3-inch stuff 12 inches wide. Has an adjustable stop so as not to swing back further than necessary to take in width desired to

work. Saw drops below table surface when not in use. Saw mandrel 1 1/4-inch in diameter, 3 1/2-inch flanges, take saws with 1-inch hole. By throwing out the lever which engages the bevel frictions, the swing saw stops.

Reversible Spindle Shaper. Table is 12 inches wide by 2 feet 2 inches long and raises and lowers by handwheel to limit of 3 inches to adjust cut. Spindle is 1 inch in diameter, takes cutters with 7/8-inch hole. Threaded end is 3 3/4 inches long. Flange is 2 1/4 inches in diameter. Collar for reversible knives is 1 3/4 inches in diameter by 3/4-inch face. Shaper is operated by lever which presses the spindle against double friction discs. A pair of slotted collars and two straight edge knives are furnished.

Upright Hollow Chisel Mortiser and Borer. Bed plate tilts to angle of 45 degrees and is adjustable to and from stand and will take up to 3 inches to center of bit. Chuck takes hollow chisel bits from 1/4 to 3/4-inch and boring bits with 1/2-inch shank from 1/4 to 2-inch. Foot treadle forces chisels and bits into the work. Furnished with one 3/4-inch boring bit. Has belt shifter to start and stop.

Tenoner. Furnished with two 9-inch grooving saws and sliding carriage. Saws cut up to 2 1/2 inches deep and up to 1 3/4 inches wide. Cuts tenons up to 12 inches wide and by removing edge clamp up to 14 inches wide and up to 3 inches deep. Thickness of tenon is regulated by collars placed between the saws. Carriage has Sand Disc for making tenons of exact lengths.

Sand Disc. 18 inches in diameter, has metal band to hold on sandpaper and is covered with sandpaper.

Rip Guide. Is adjustable for any width up to 22 inches wide and has wood spring for holding down material.

Crosscut Guide. Slides in milled groove. Has angle adjustment of 45 degrees and adjustable stop for cutting to length.

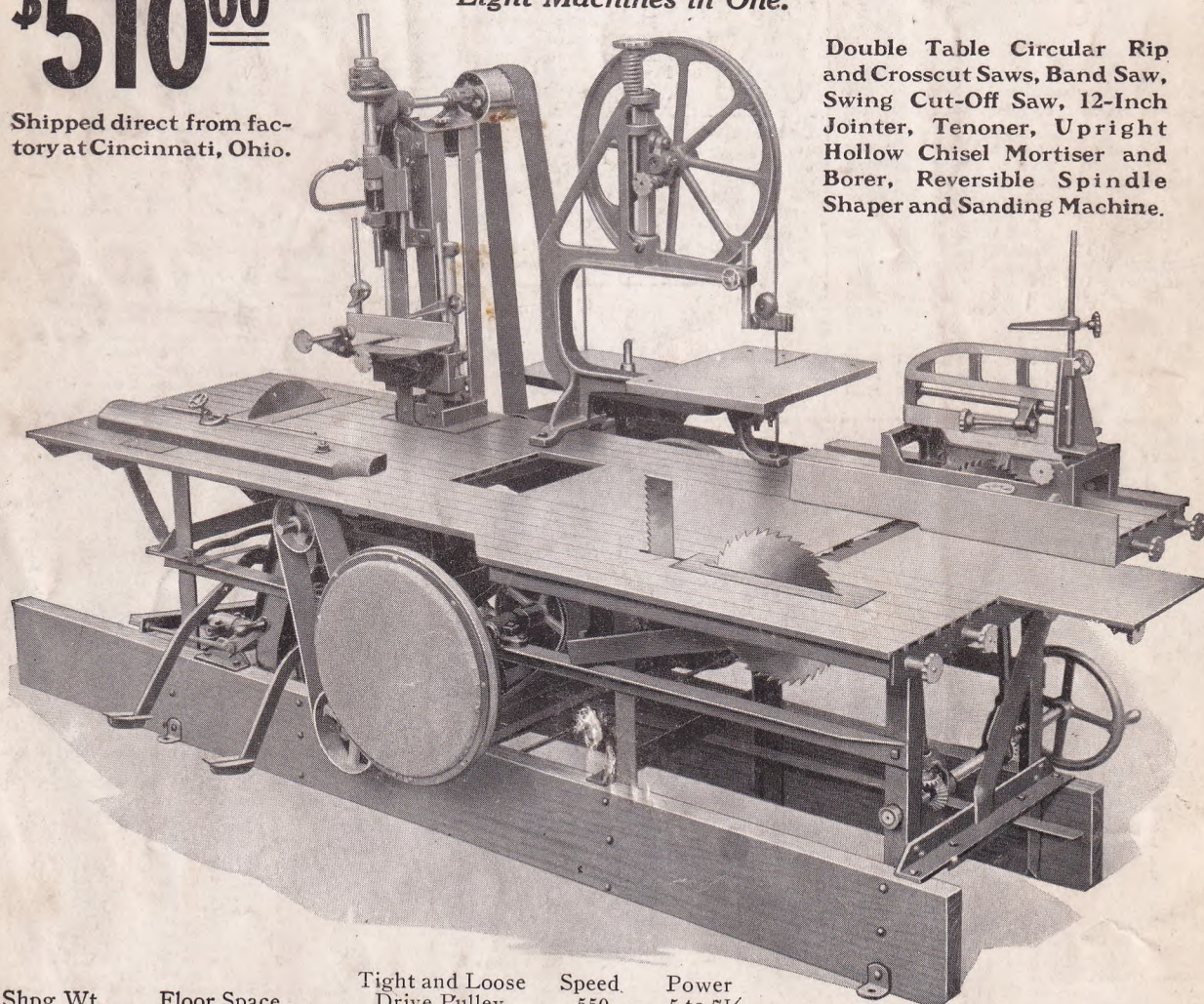
Countershaft. 1 1/8 inches in diameter with 10x4-inch tight and loose pulleys.

Planing Mill Special

Eight Machines in One.

\$510⁰⁰

Shipped direct from factory at Cincinnati, Ohio.



Double Table Circular Rip and Crosscut Saws, Band Saw, Swing Cut-Off Saw, 12-Inch Jointer, Tenoner, Upright Hollow Chisel Mortiser and Borer, Reversible Spindle Shaper and Sanding Machine.

Shpg. Wt.,	Floor Space	Tight and Loose	Speed	Power
1,800 lbs.	4 ft. 10 in. x 9 ft. 6 in.	Drive Pulley	550	5 to 7 1/2
		10x4-Inch Face	R. P. M.	H.-P.

99M8685 2/3—Planing Mill Special, complete with one 12-inch cut-off saw, one 12-inch rip saw, one 10-inch crosscut saw, one 3/4-inch band saw and five belts.

Price **\$510.00**