

Patent Foot and Hand Power

Wood Working Machinery

Manufactured by

W. F. & John Barnes Co.
ROCKFORD, ILLINOIS,
U.S.A.

The
"Original Barnes"



Catalogue No. 67.

TELEGRAPHIC ADDRESS,
"BARNES" ROCKFORD.

CODES USED,
LIEBER'S AND OUR OWN.

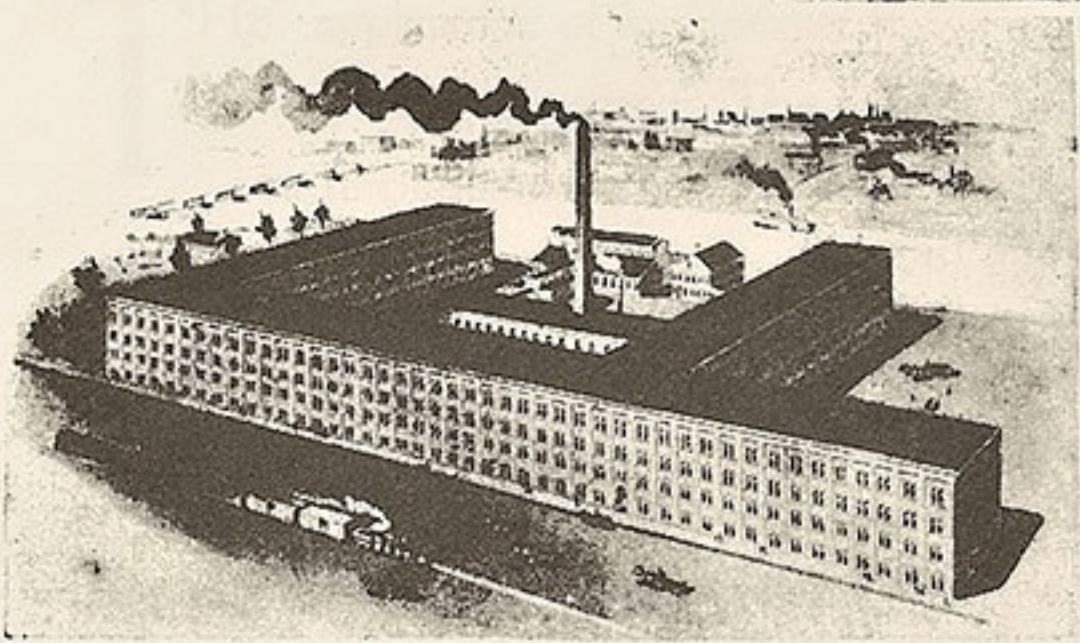
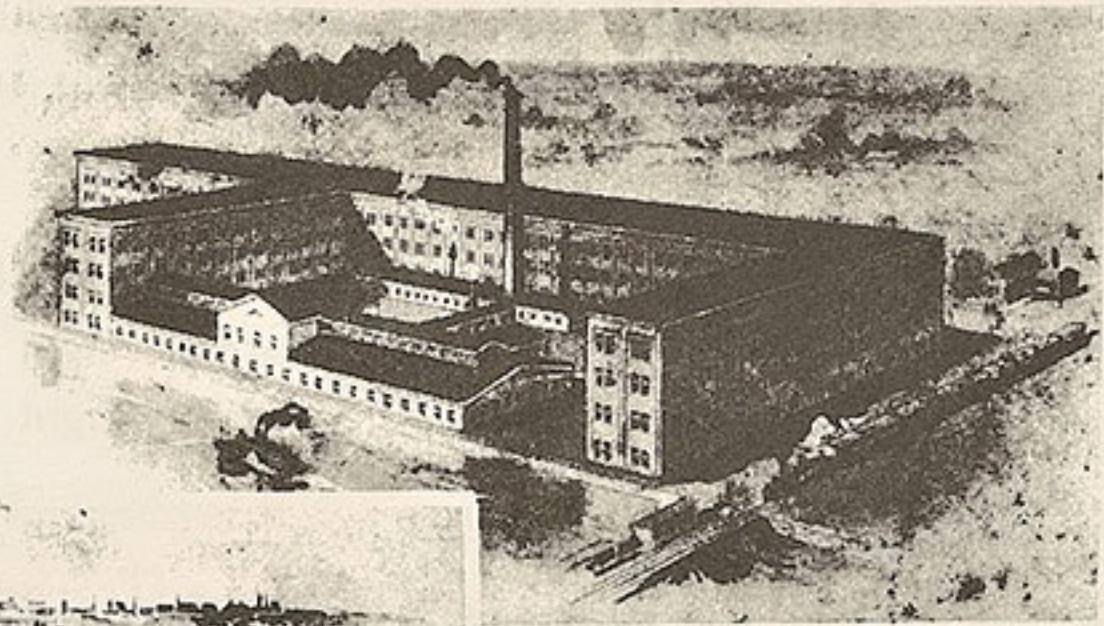
Catalogue No. 67.

May 1st, 1907.

IN addition to the machines described in this catalogue, we make a large line of metal working tools, including Lathes (both foot and steam power), Upright Drills, Emery Tool Grinders, etc., and shall be pleased to mail catalogue describing same upon application.

PRICE LIST AND
Descriptive Catalogue

BARNES'



PATENT FOOT AND
HAND POWER

Wood Working Machinery

W. F. & John Barnes Co.
SOLE MANUFACTURERS
ROCKFORD, ILL., U. S. A.

Established 1872

Every good thing is imitated and counterfeited. It is not strange therefore, that there are different machines in the market claimed to be equal to ours. This cannot be, because they still retain the radical faults of the old foot power. Our inventions and improvements in foot power are fully covered by patents, and cannot be used by any one but ourselves.


There are two classes of foot power machinery, one embracing those designed for amusement and recreation, and the other those for use in the workshop. The machines of our manufacture form substantially the latter class. Purchasers should be careful to discriminate between the two kinds and not to be lead by cheap prices and specious representation into buying machines which are inadequate for workshop use.

In these days of sharp competition the man who is best equipped for his work is the one who wins, and it is no longer a question of **advantage** merely, but one of **absolute necessity** that a carpenter in order to meet the competition, not only of mill work, but of his fellow contractors as well, shall be equipped so that he stands on even terms with all comers.

The best possible equipment for a carpenter, a cabinet maker or a general wood-worker is an outfit of our machines. They are not experiments; that stage we passed long ago. They have stood the test for twenty years and are today the only complete line of such machines made.

In buying them you are taking no risk on new or untried machines. The honesty and durability of their construction is shown by the fact that we are today filling orders for saw blades or other extras for machines which have been in continuous use for the past twenty years or more.

We would ask customers when ordering repairs, to be particular to describe clearly the part required and also give the number of the machine, which is stamped on the table, or in case of the No. 3 Lathe, on the bed, and on the wood cross bar of the Hand Rip Saw. It is also well to state, if possible, the year in which the machine was bought, for changes have been made at different times, and if the information we have indicated is given it will enable us to send just what is wanted and will save our customers the delay of correspondence.

 We do not furnish parts of our machines except as repairs for machines in use.

No. 4 Circular Saw.

Description Page 9

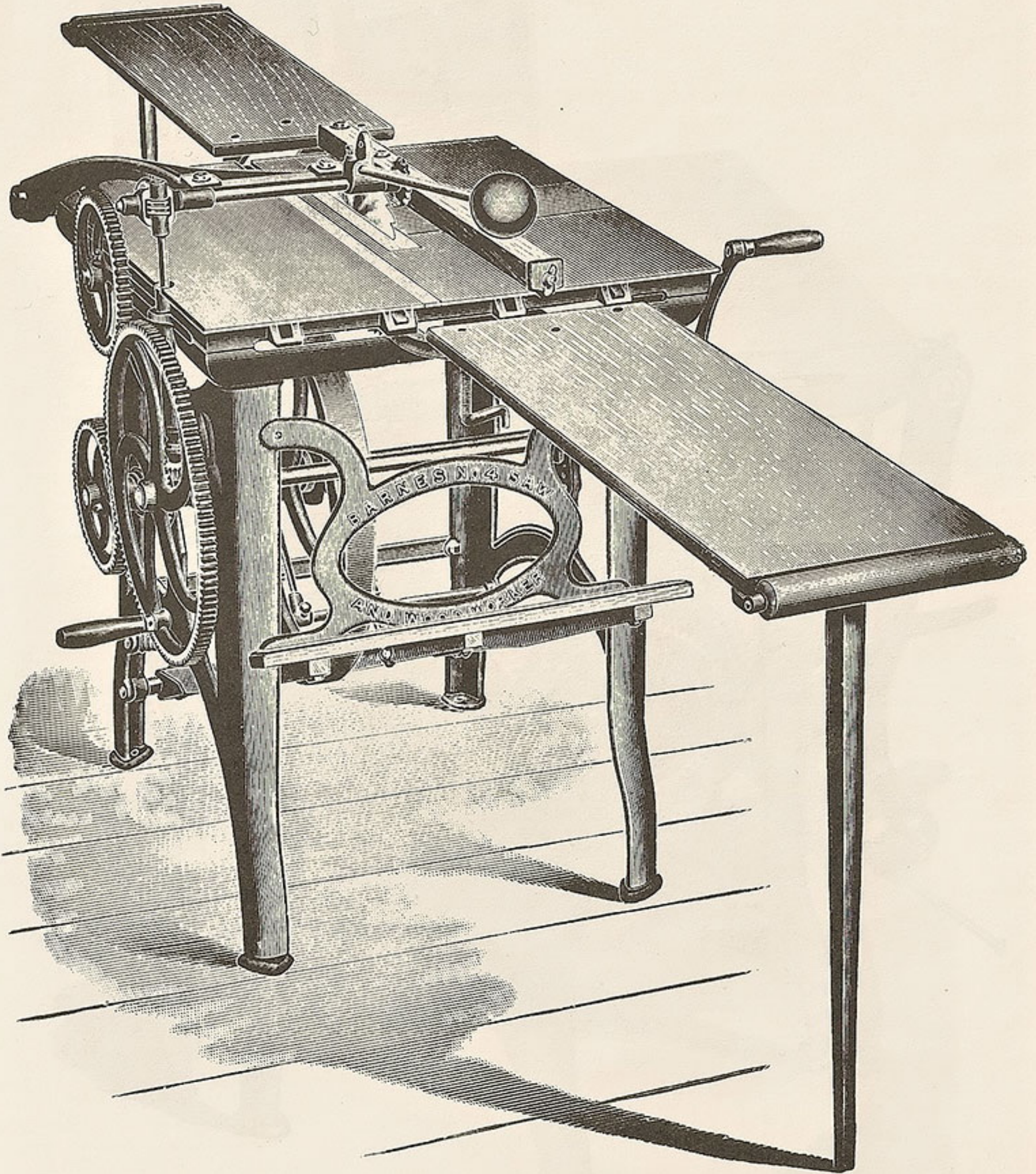


Fig. 1.

No. 4 Circular Saw.

Description Page 9

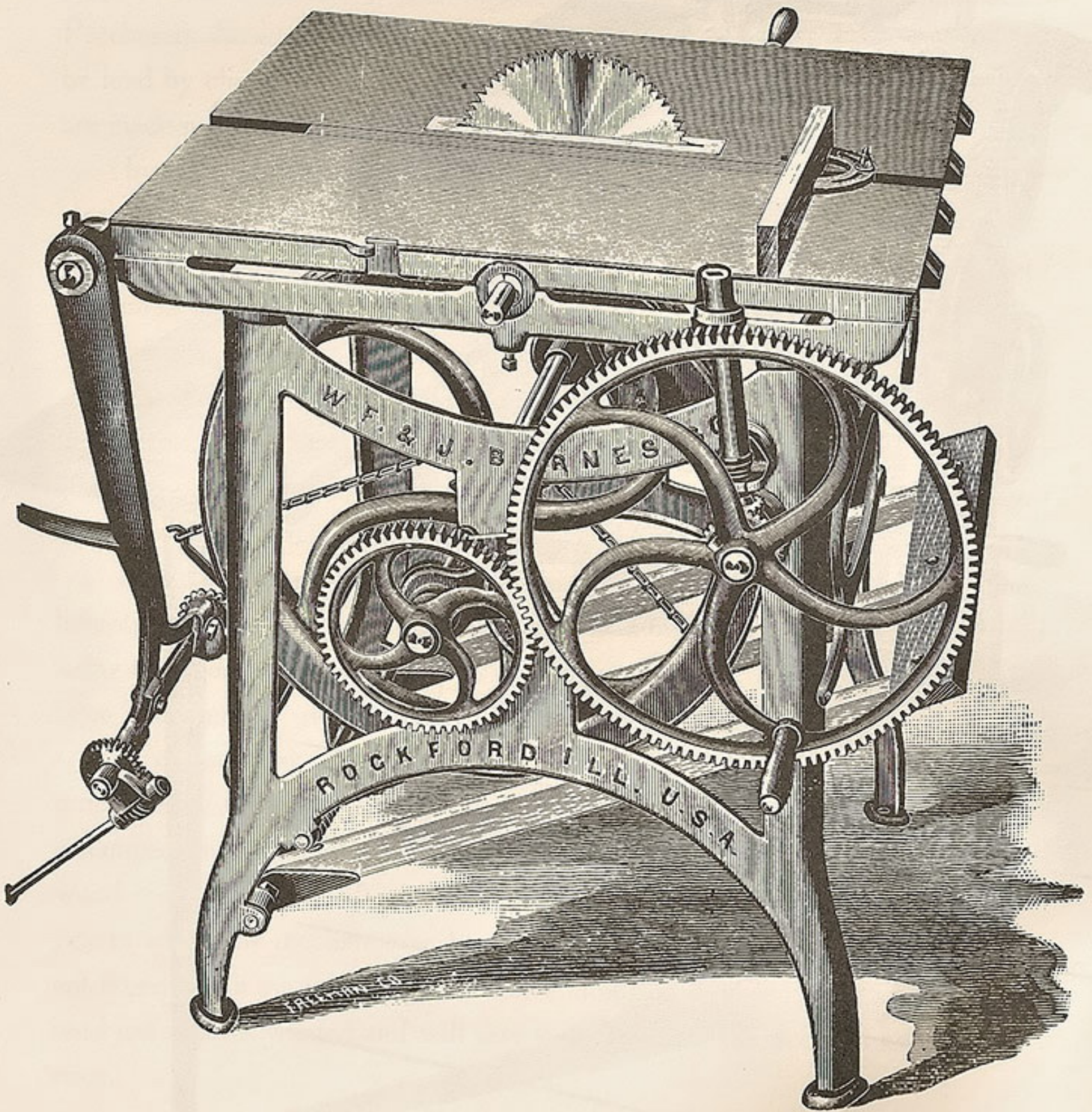
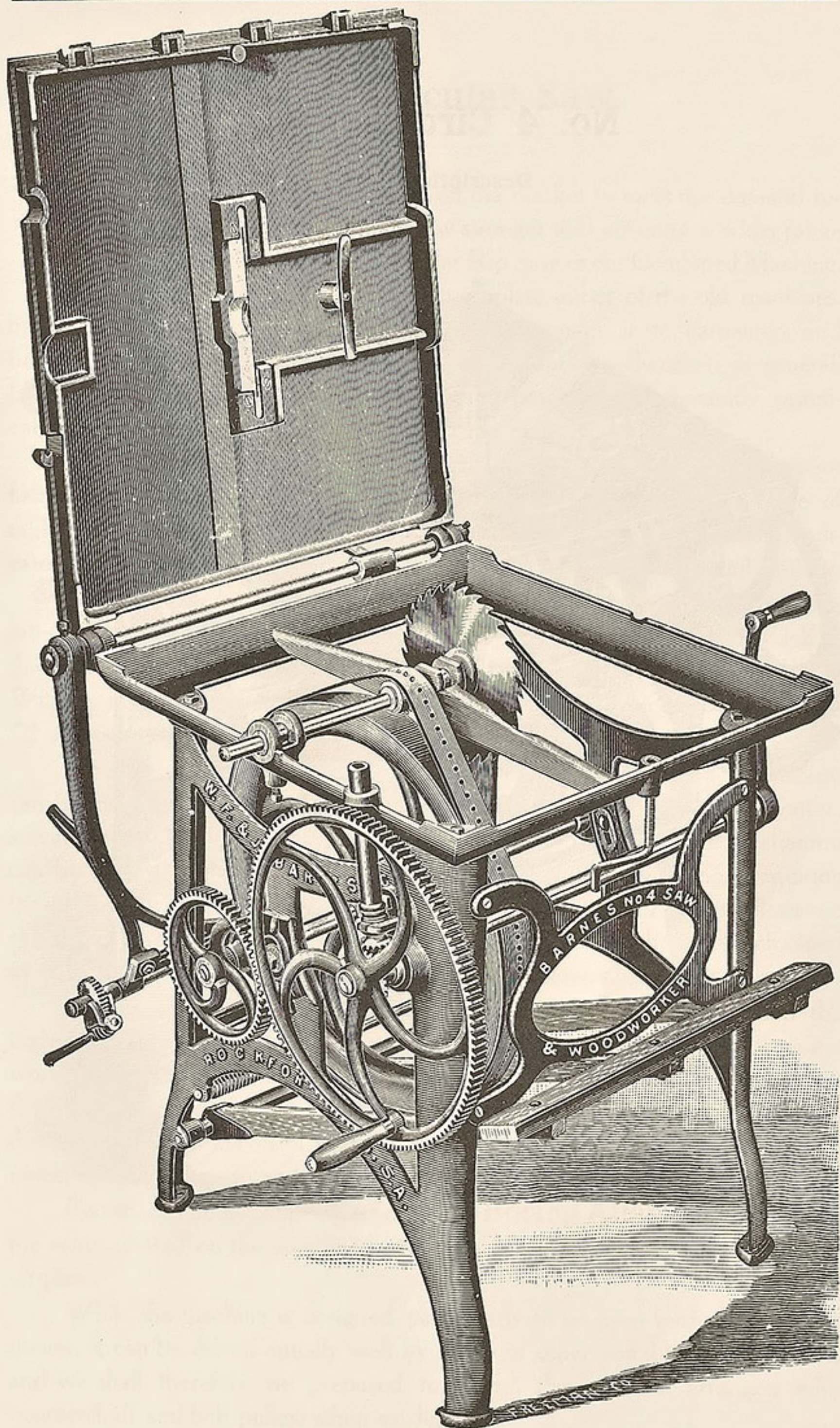


Fig. 2



No. 4 Circular Saw Fig. 3
Description Page 9

No. 4 Circular Saw.

Description Page 9

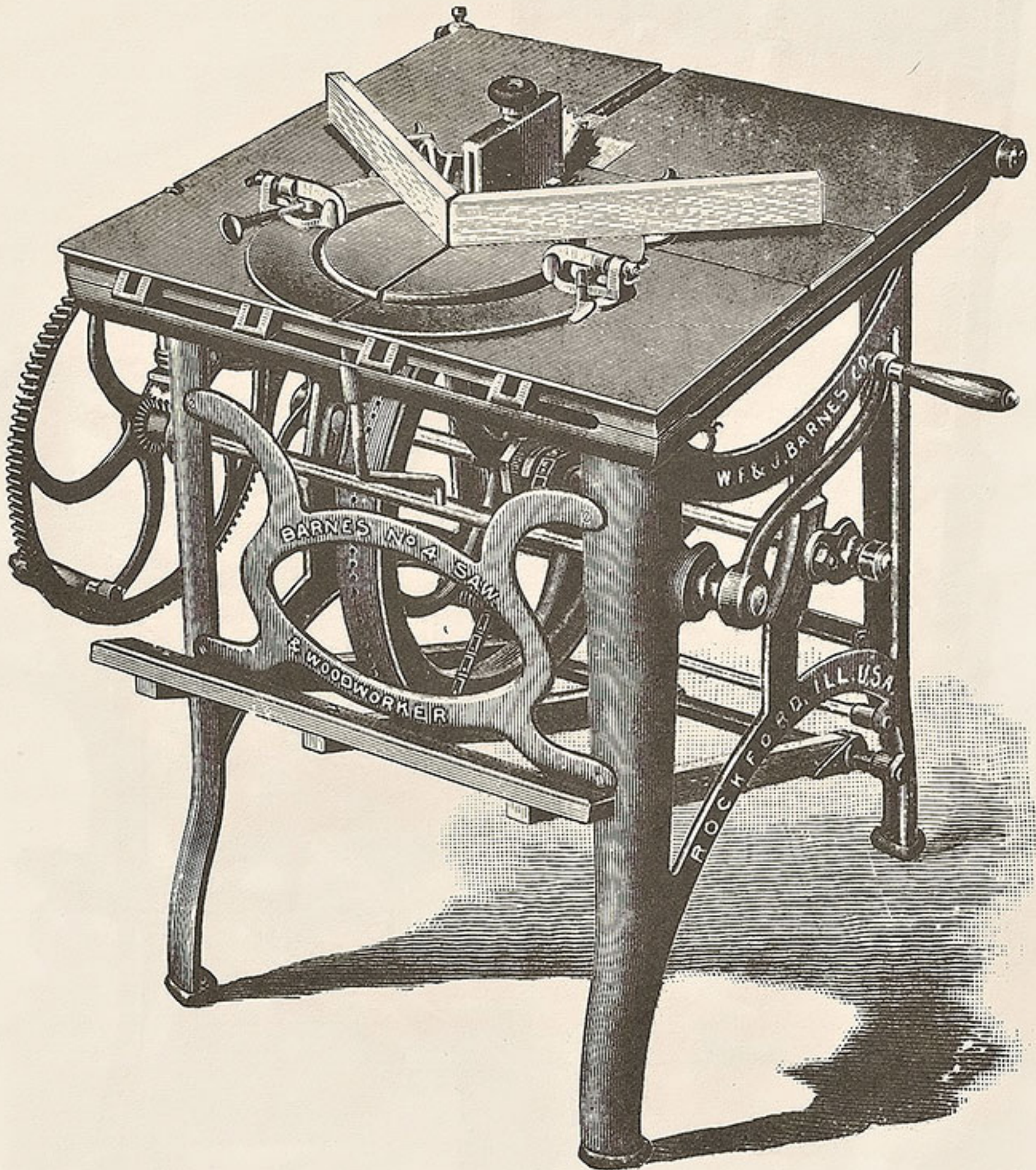


Fig. 4.

No. 4 Circular Saw

THIS new machine we are placing on the market to meet the demand for a foot and hand power circular saw stronger and covering a wider range of work than either our Hand Circular Rip Saw or our Combined Machine.

The new machine is not intended to supplant either of the old machines, but is designed to cover a field of its own, and we offer it to carpenters and builders, cabinet makers, picture frame makers and woodworkers in general, believing we are presenting the strongest, most powerful and eminently practical foot and hand power circular saw that has ever been built.

The machine is very strong and rigid, and the workmanship throughout first-class. **The table is of iron, planed perfectly true.** Size of table 30x30 inches. The large range of work which the machine will do is indicated by the following enumeration of its various arrangements and combinations.

First. It can be used as a hand and foot power circular rip saw with self feed, and this feed can be regulated properly for hard or soft, or thick or thin lumber, and is self-adjusting for lumber of different or uneven thickness. With a 10-inch saw, lumber up to $3\frac{1}{2}$ inches thick can be ripped, or with a 12-inch saw up to $4\frac{1}{2}$ inches.

Second. It can be used as a cross-cut saw. The self-feed mechanism can be instantly thrown back to the rear of the machine, as also the rip gauge, leaving the table perfectly clear for cut-off work. The self-feed mechanism can be put in position for use or thrown back out of the way, without requiring the use of a wrench or the removal of any bolts or nuts. The cut-off gauge can be set at any required angle. The speed of the saw can be readily changed so as to give a high speed for cross-cut work or a slower speed for ripping.

Third. The machine can be used for rabbeting and grooving, and the high speed at which the cutter heads can be run insures smooth and clean-cut work. The self-feed can be used for grooving and rabbeting as well as when the machine is used for ripping. Cutter heads are also used for gaining and dadoing, and with knives of suitable width for joining. The table can be adjusted up and down so as to regulate the depth of grooves and rabbet.

Fourth. The machine is provided with **Boring Attachment**, which is the same as used on the combined machine. See page 11 for cut and description.

While the machine is designed particularly to be used by hand and foot power, it can be driven equally well by steam or other suitable motive power, and we shall therefore be prepared to furnish the machine arranged with countershaft and belt pulley when so desired.

We show several cuts which indicate not only the general appearance and construction of the machine, but the wide range of work which it is calculated to perform.

Figure No. 1 shows the machine arranged for ripping, with the self-feed mechanism in position.

Figure No. 2 shows the machine with the self-feed arrangement and rip gauge thrown back, with the table clear for cut-off work.

Figure No. 3 represents the machine with the table raised, showing the mandrel and construction under the table.

The use of our patent perforated belt running over a spur or pin pulley, is an important factor in giving the machine points of superiority over any other foot or hand power saw made. It enables us to use a short belt from the drive wheel to the saw mandrel, securing great speed without loss of power, as the spur or pin pulley prevents absolutely any slipping of the belt.

The motion is always strong and positive, and the machine runs at high speed with far less noise than any machine in which the power is transmitted by gearing.

The perforated belt allows us to use a smaller pulley on the mandrel than would otherwise be possible, and the pulley being entirely below the table, the full depth of the cut of the saw is obtained.

Figure No. 4 shows the machine with the special universal gauge which adapts the machine particularly for the use of picture frame makers and for any other work where a perfectly accurate joint is required.

For cutting picture frame mouldings this gauge will be found invaluable. The joint can be made by cutting both ends at the same time, and those who are familiar with this class of work will readily understand that a more perfect joint is thus made than can possibly be obtained by any other method. The gauge is provided with clamping screws to hold the work in position, and, if desired, the moulding can be bradded before it is taken from the gauge.

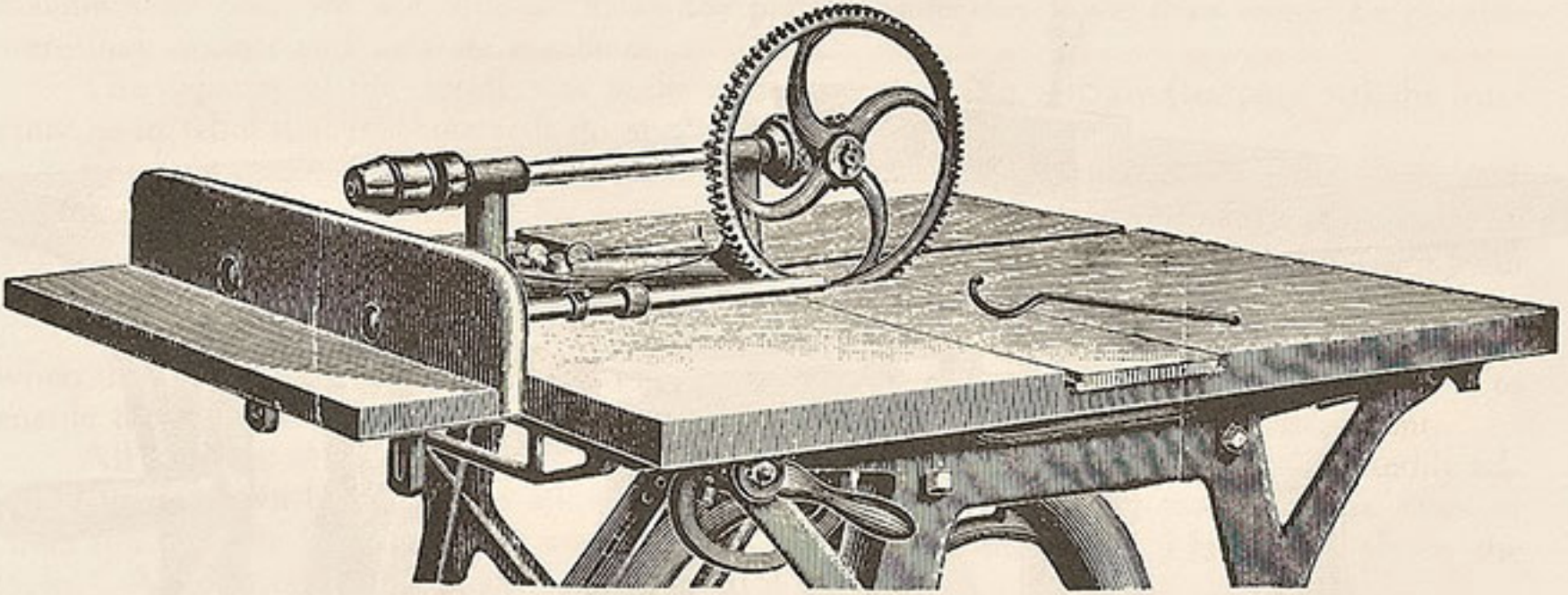
The weight of the machine is 400 pounds. Crated for shipment, approximately 500 pounds.

PRICE LIST

No. 4 Circular Saw, complete with Self-feed, with two 10-inch Circular Saws, (one each rip and cut-off)	\$60 00
Same as above, except arranged with Countershaft,* for steam, instead of Foot Power,	65 00
Boring Attachment,	10 00
Countershaft* and Belt Pulley,	10 00
Universal Mitre Gauge,	10 00

*Speed of countershaft 200 R. P. M. (Pulleys 10-inch diameter, 2 inches wide).

Boring Attachment for Combined Machine and No. 4 Saw



This cut represents a very serviceable Boring Attachment for the Combined Machine and No. 4 Saw. It has a sliding table on which the work is placed; this moves on substantial ways, which carry the material uniformly to the auger or bit. It also has a stop to govern the depth of the hole. The table is adjustable up and down, and as the work can be run from side to side between stops, in the usual way, all the adjustments necessary for general use are provided for.

The spindle is fitted with a chuck which will hold drills or bits with from $\frac{1}{8}$ to $\frac{3}{8}$ inch shank, and by cutting off the square, the ordinary brace bits of any size can be used. The machine will drive as large as $\frac{3}{4}$ inch in soft woods, and will be found a valuable aid in most lines of woodwork.

Cast Steel Auger Bits

For Boring Attachment of Combined Machine or of No. 4 Circular Saw

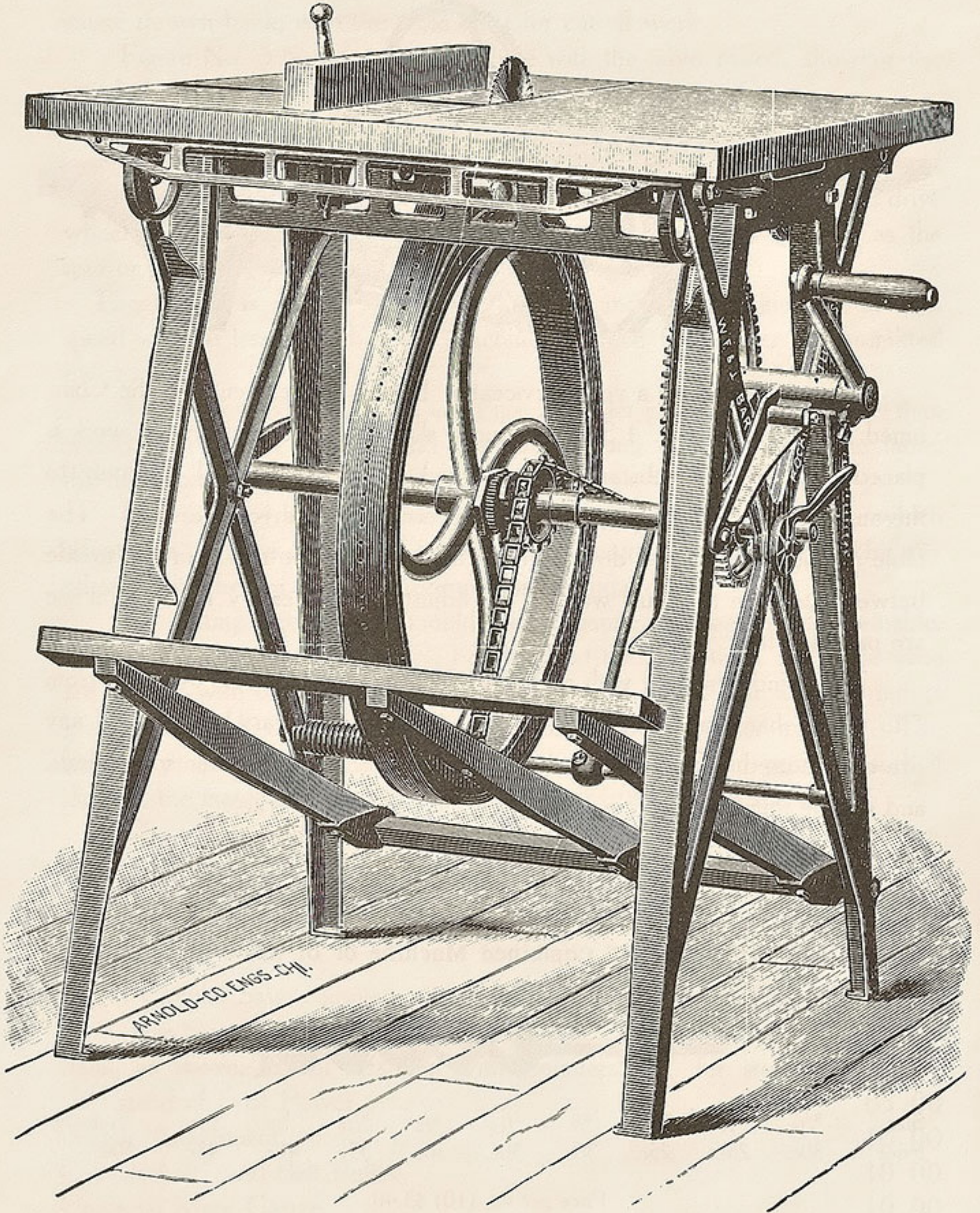


Size	. $\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$ inches
Price	. 30c.	25c.	25c.	30c.	30c.	30c.	35c.	40c.	45c.	50c.

Price per set, (10) \$3.40.

The above are common auger bits with the square shanks cut off.

Combined Machine, Improved.



Combined Machine, Improved

THIS machine combines a Circular and Scroll Saw, the Circular Saw being the machine proper, with the Scroll Saw as an attachment. We are therefore prepared to furnish the machine with or without the Scroll Saw, as may be preferred. This combination is absolutely perfect, as neither the Circular nor the Scroll Saw interferes in the slightest degree with the successful operation of the other, and thus practically combining two machines in one, we are able to make the price considerably lower than would be possible were they distinct and separate machines.

The capacity of the Scroll Saw is the same as that of No. 7 Saw (see page 30), the warranty as to what that machine will do applying equally to this.

For light ripping, cutting to length, cut-off work, etc., the Circular Saw of the Combined Machine is invaluable. In short for general use, no more profitable investment can be made by any carpenter or cabinet-maker, or almost any wood-worker, than this Combined machine with its different combinations and attachments.

The Circular Saw, while remaining on its mandrel, can be taken at once out of the way when the Scroll Saw is to be used. The machine is set in its bearings in such a manner as to enable the operator to take the whole (mandrel and saw) from the machine in an instant.

All varieties of joint-work can be done truly and rapidly. The table can be handily adjusted up or down by a cam, to allow any desired depth of cut being made by the saws or cutter tools. The Circular Saws are six inches in diameter, and reach $1\frac{5}{8}$ inches above the table. A seven or eight inch saw can be used if desired.

Emery wheels in size up to one inch face by six inches in diameter, can be used to good advantage on this machine.

The table of this machine is twenty-eight by thirty inches.

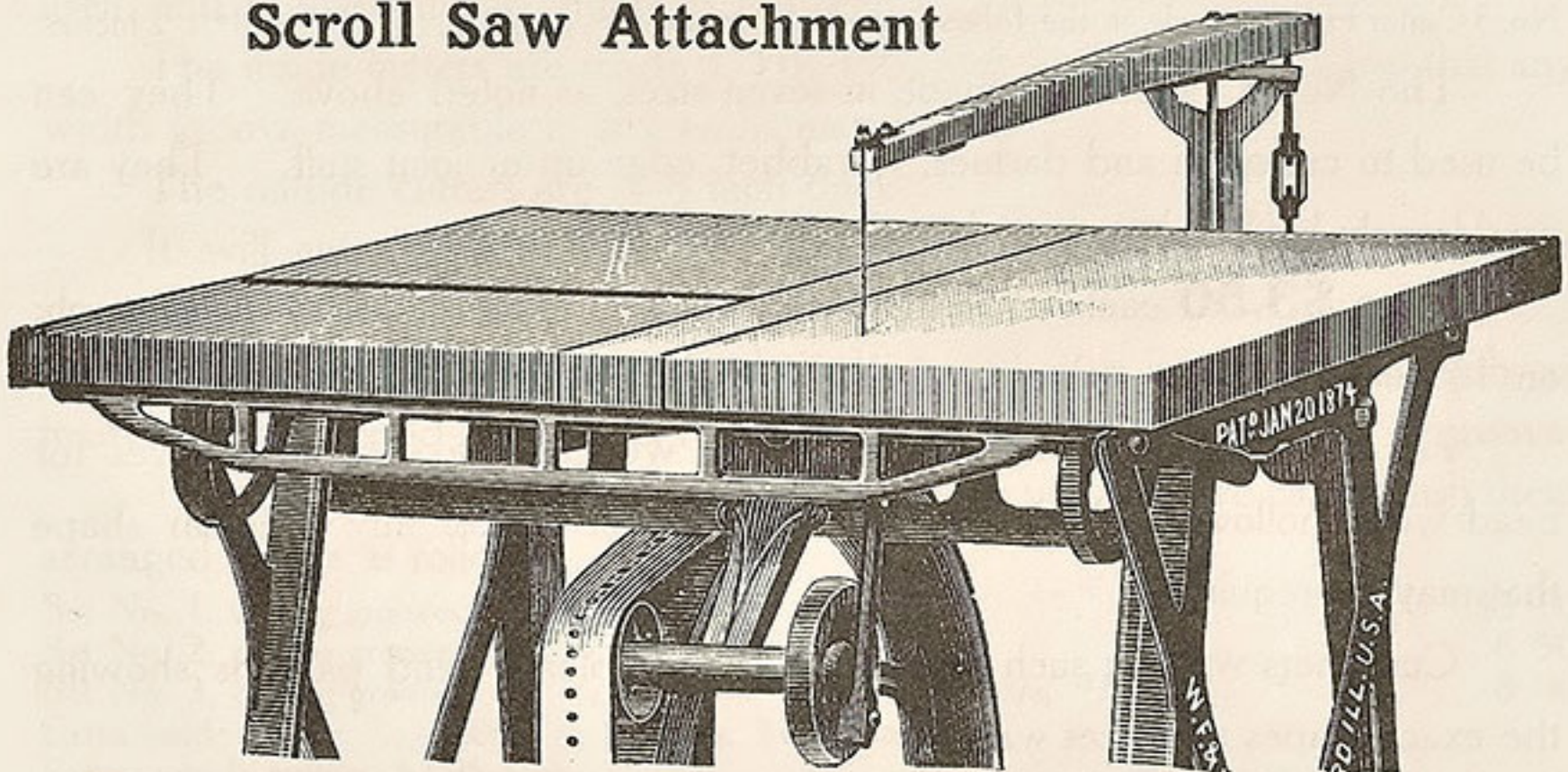
Boxed for shipment weighs 350 pounds.

PRICE LIST OF COMBINED MACHINES

Combined Circular and Scroll Saw and Boring Attachment, including two circular saws, twelve assorted scroll saws, the Boring Attachment, with an "Old Reliable" self-centering drill chuck, all combined in one machine,	\$50 00
Combined Circular and Scroll Saw, including two circular saws and twelve assorted scroll saws,	40 00
Circular Saw alone, including two circular saws, one rip and one cross cut,	35 00
Where the machine has been ordered arranged as a circular saw only, the other attachments can be taken at any time.	
Scroll Saw Attachment, including twelve assorted scroll saws,	5 00
Boring Attachment, including "Old Reliable" self-centering drill-chuck,	10 00
Countershaft for steam power (2x10 pulleys, speed 200 R. P. M.)	10 00

When Countershaft is taken in place of Foot Power add \$5.00 to above list prices.

Scroll Saw Attachment



The cut of Combined Machine on page 12 shows the Circular Saw only. The above cut represents the machine arranged for scroll sawing.

Cutter Heads

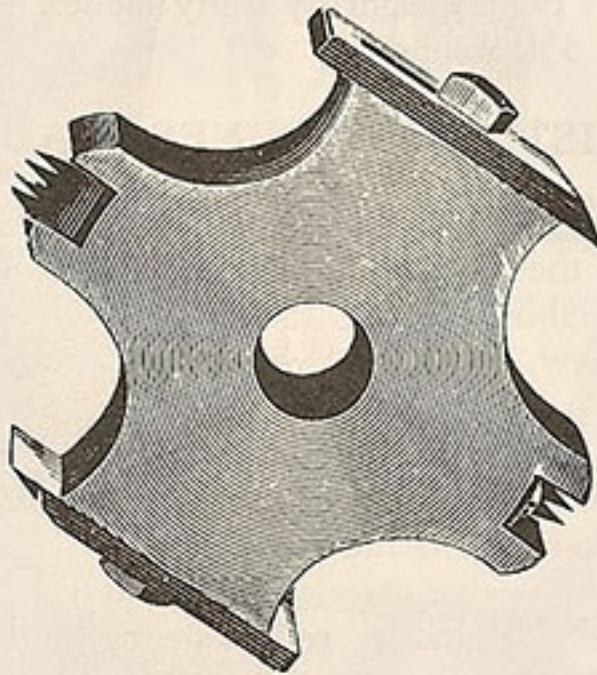


No. 1. Price \$1.00 each.

No. 1 Cutter Head made in the following widths and sizes: $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$ inches.

From the accompanying cuts it will be seen that we make two styles of cutter heads, which we designate as No. 1 and No. 3.

These are for use on the saw mandrel of the Combined Machine and of the No. 4 Circular Saw for cutting grooves, gains, dadoes, rabbets, joints for boxes, drawers, etc. Their cost is not great and they add largely to the usefulness of the machines. They will cut either with or across the grain or across the end of stuff. The price of No. 1 Cutter Heads is \$1.00 each. No extra charge for postage if sent by mail.



No. 3. Price \$3.50 each.

No. 3 Cutter Head is made in the following widths or sizes: $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inches.

The No. 3 Heads are made in seven sizes, as noted above. They can be used to cut gains and dadoes, to rabbet, edge-up or joint stuff. They are used largely by builders to make window and door frames.

Price **\$3.50** each. Postage on $\frac{3}{4}$, $\frac{7}{8}$ and 1-inch heads, 30 cents each; on $1\frac{1}{4}$ and $1\frac{1}{2}$ -inches, 40 cents each; $1\frac{3}{4}$ and 2-inches, 55 cents each.

For use with the No. 3 Cutter Heads we can make special knives for bead work, hollows and rounds, sash moulding or almost any irregular shape that may be required.

Customers wishing such knives made will please send patterns showing the exact shapes and sizes wanted.

NOTE—Extra plain knives for No. 3 Cutter Head, $\frac{3}{4}$ to 1 inch, at 50 cents a pair; $1\frac{1}{4}$ to 2 inches, at 75 cents a pair.

The Huther Groover and Dado Head



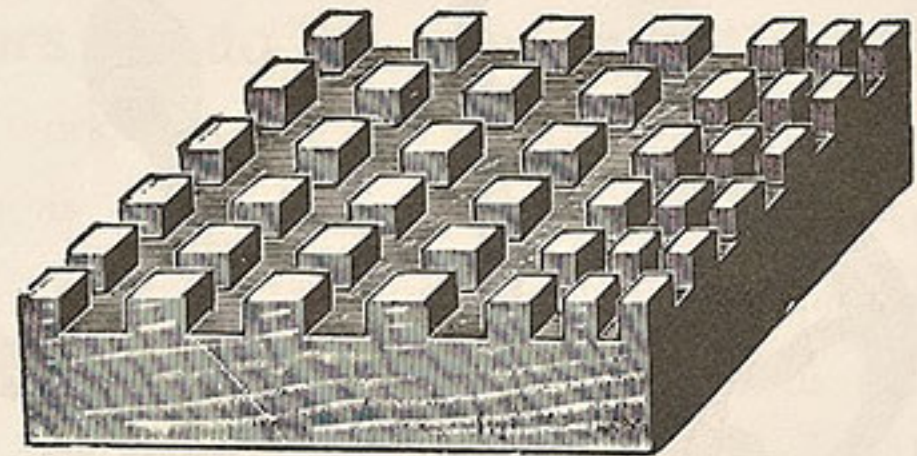
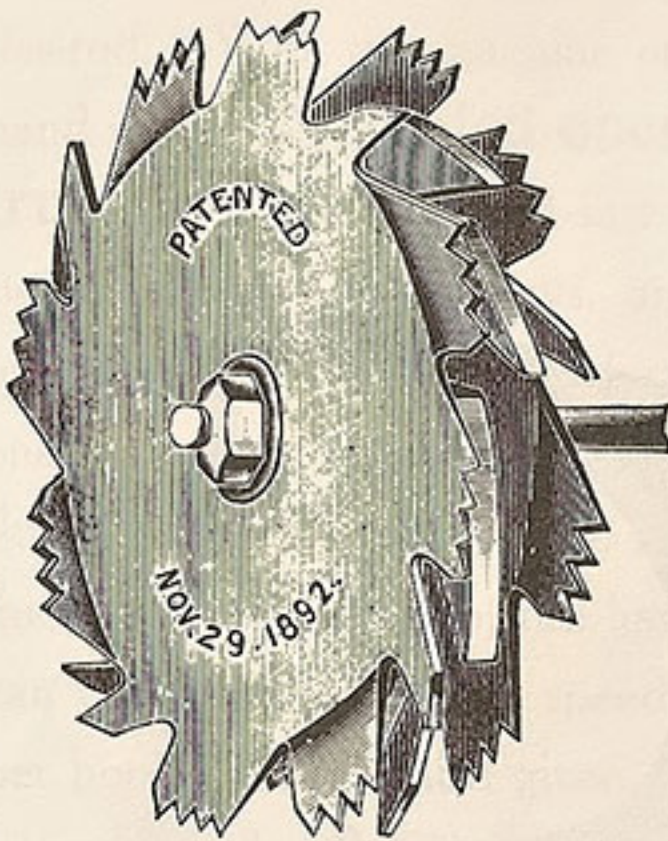
Outside Cutter



Inside Cutter



Outside Cutter



Will cut a perfect groove with
or across the grain.

This is a very excellent Groover and Dado Head, and can be used to good advantage on either the No. 4 Circular Saw, or the Combined Machine.

This groover consists of two outside saws, each of which is a groover in itself, and as many inside cutters as required.

The inside cutters are made 1-16, 1-8, and 1-4 inches thick, so that any width groove measurable in sixteenths may be cut.

The outside cutters are 1-8 inch thick.

It will cut a perfect groove either with or across the grain, and if in proper condition will not leave a rough edge.

The outside cutters can be used singly, together or in connection with as many or as few inside cutters as required to cut the necessary width of groove.

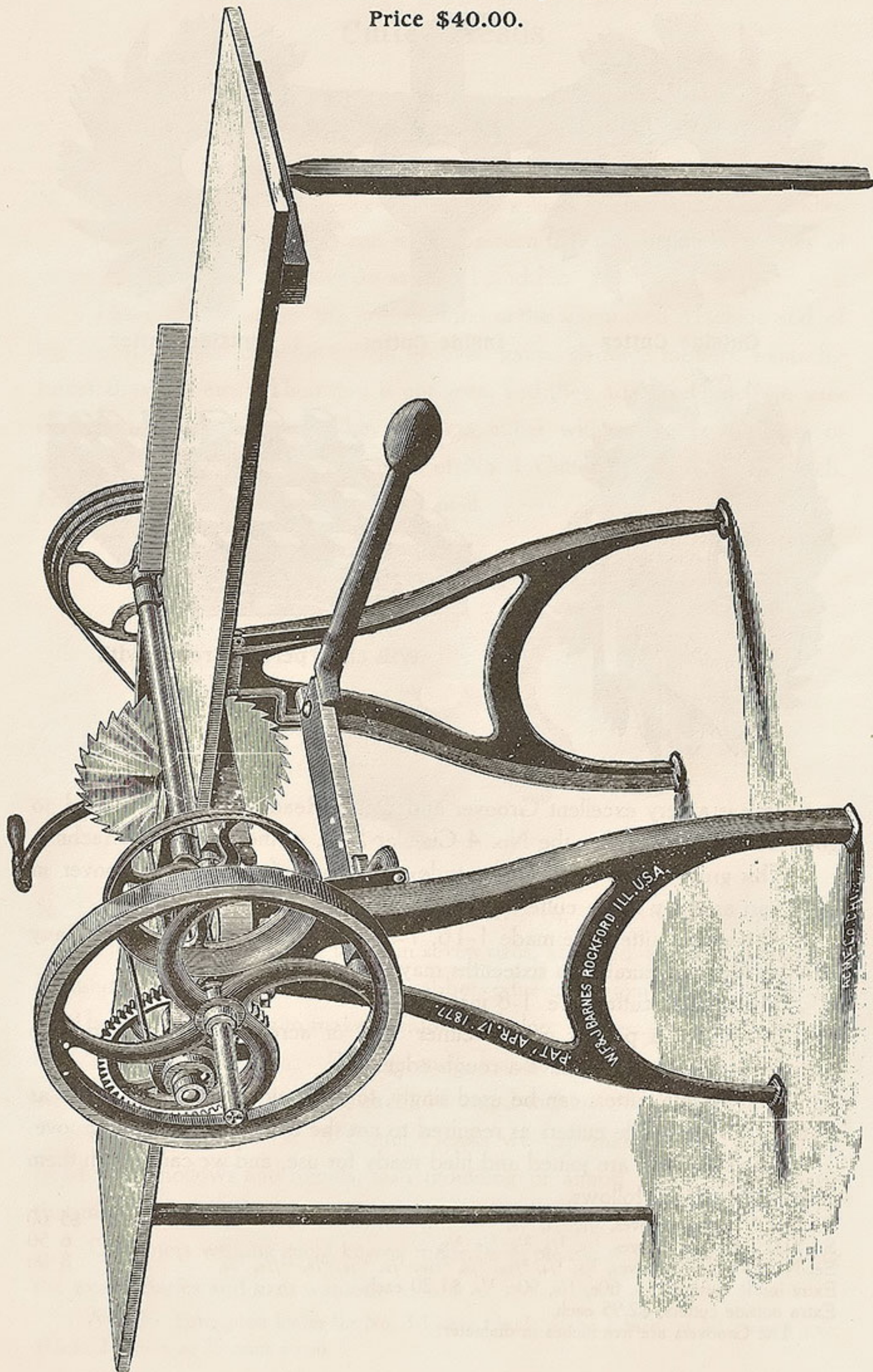
The Groovers are joined and filed ready for use, and we can furnish them arranged in sets as follows,

Set No. 1, cutting grooves, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$,	\$5 00
Set No. 2, cutting grooves, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$,	6 50
Set No. 3, cutting grooves, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, $\frac{5}{8}$, $\frac{11}{16}$, $\frac{3}{4}$,	8 00
Extra inside cutters, $\frac{1}{16}$, 60c; $\frac{1}{8}$, 90c; $\frac{1}{4}$, \$1.20 each.	
Extra outside cutters, \$2.95 each.	

The Groovers are five inches in diameter.

Hand Circular Rip Saw.

Price \$40.00.



Hand Circular Rip Saw.

Price \$40.00.

THIS machine will rip boards or planks of either soft or hard wood of any thickness up to $3\frac{3}{4}$ inches, and of any width up to 19 inches. It is especially adapted to shops without steam or water power.

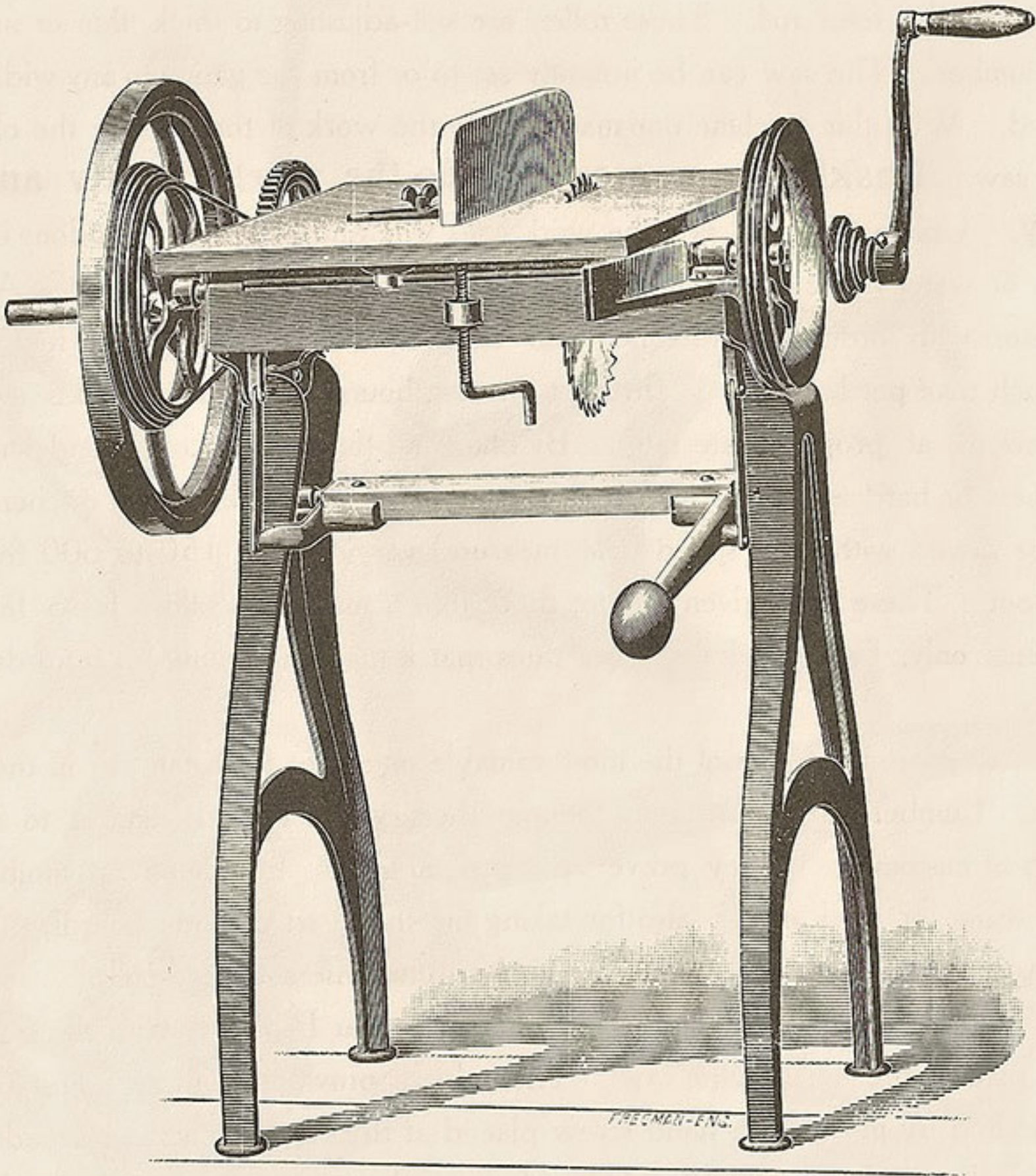
The lumber is placed between two feed rollers, which feed it to the saw. The feed can be made slow or fast, as the operator may desire, by the cone pulleys on the feed roll. These rollers are self-adjusting to thick, thin or uneven lumber. The saw can be instantly set to or from the gauge to any width desired. With this machine one man can do the work of three using the old hand saw. **Unskilled operators can do the work rapidly and truly.** Unlike the hand saw the work is as true and square as that done by steam or water power saws, and is as easily dressed with the plane. An operator with ordinary endurance can easily rip (line measure) 600 feet of one-inch pine per hour, or 6,000 feet in ten hours, and other woods and thicknesses at proportionate rates. By changing the feed to correspond with thickness or hardness of the lumber, hickory, maple, ash, oak, walnut or cherry can be sawed with ease, speed (line measure) varying from 150 to 600 feet per hour. These rates given are not those that a man can follow for a few moments only, but actual day work rates that a man can follow up from day to day.

Builders find it one of the most valuable machines they can put in their shops. Lumber dealers are using them in their yards to size lumber to fill orders of customers. They prove very profitable also in edging up lumber with wane or bark edges, also for taking out the heart of wide boards, thus raising the grade and market value of lumber otherwise sold for "culls."

The cut on page 18 shows the Hand Circular Rip Saw with the front table placed directly over the saw. The table is provided with an adjustable gauge, and by means of a hand screw placed at the rear end it can be readily raised or lowered to govern the depth of cut of the saw. Arranged in this way, rabbets, bevels, tenons, etc., can be cut to advantage, and by using two saws side by side, grooving for windows and door stops, etc., can be done. We furnish an extra saw for this purpose with each machine. The saws are ten inches in diameter. The machine complete weighs 190 pounds. Boxed for shipment, 290 pounds.

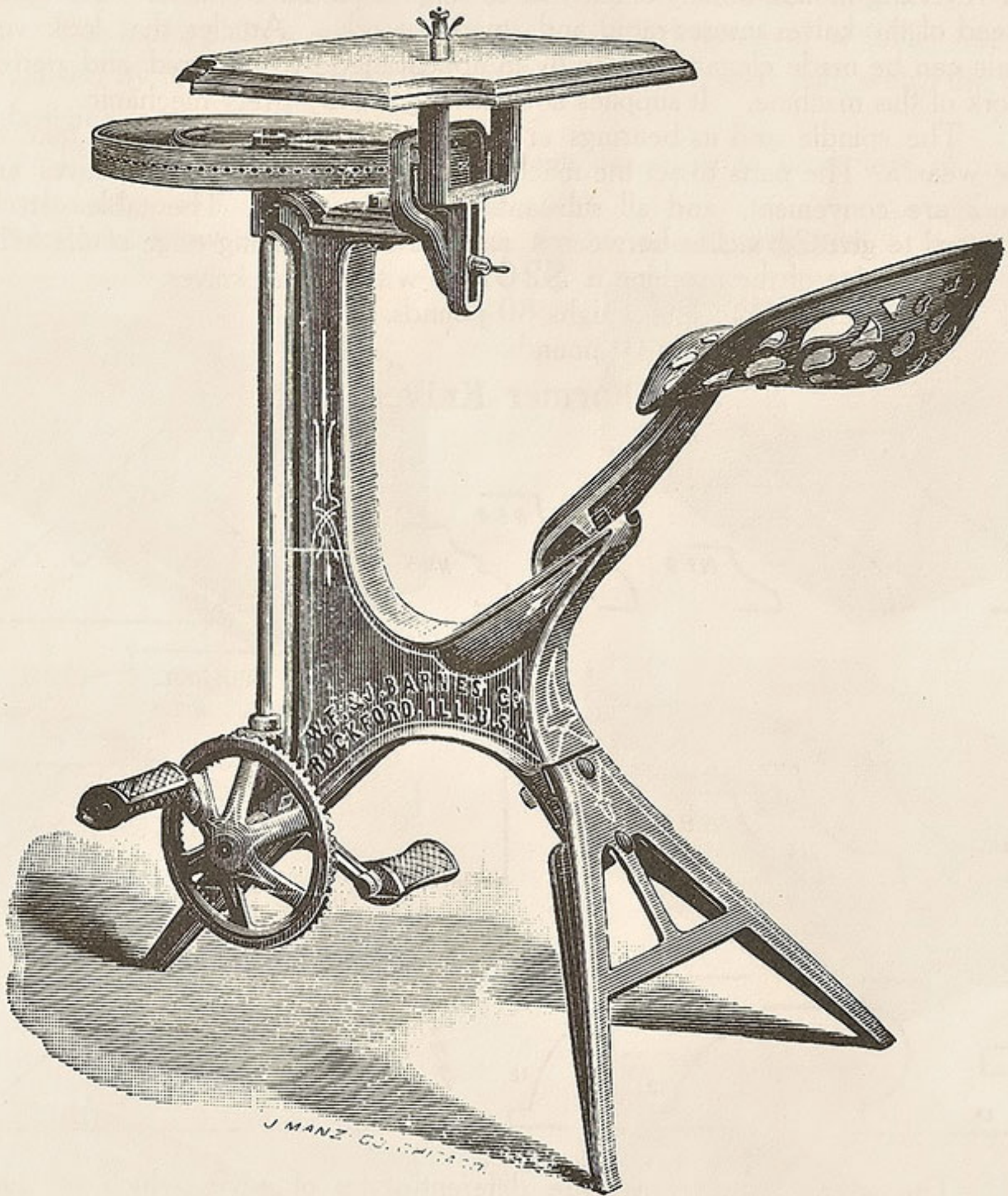
Hand Circular Rip Saw

Continued



Foot Power Former, Improved

Price \$20.00. Knives Extra



Foot Power Former, Improved

The cut on the previous page represents a machine for moulding edges on brackets, scroll work, panel work, regular and irregular mouldings of all styles up to $\frac{7}{8}$ inch. The speed of the knives is from twenty to twenty-five hundred per minute. By the aid of our

PATENT VELOCIPEDE FOOT POWER

the knives are, at the will of the operator, caused to rotate in either direction that the grain of the wood may require, thus avoiding all complicated devices for reversing motion usually employed on single Spindle Formers. The great speed of the knives insures rapid and smooth work. Articles that look very plain can be made elegant and costly in appearance by the rapid and perfect work of this machine. It supplies a want long felt by every mechanic.

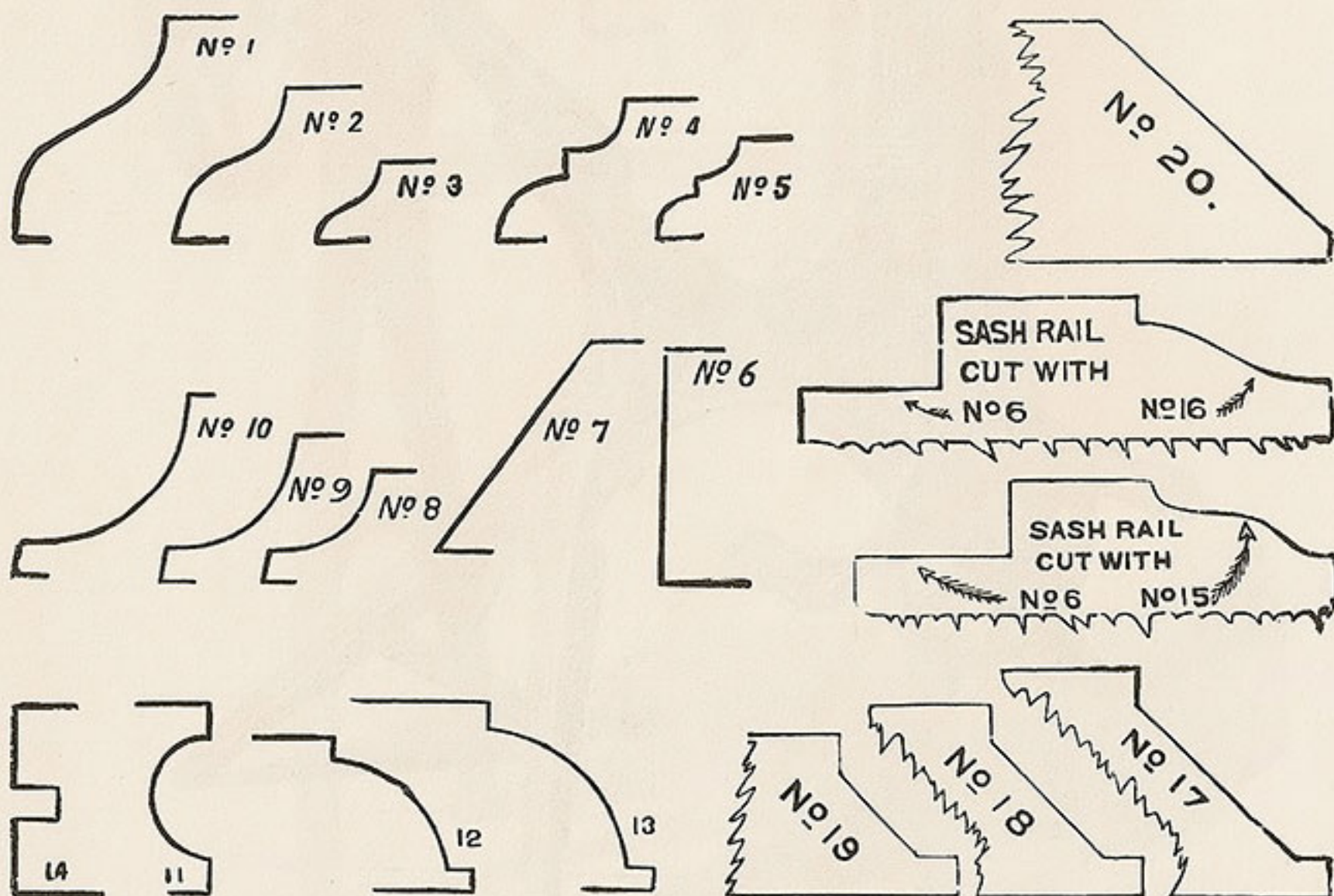
The spindle and its bearings are of steel, with adjustments to take up the wear. The parts to set the machine for the use of different knives and work are convenient, and all substantial and durable. The table can be lowered to give $2\frac{1}{4}$ inches between it and the lower cutting edge of the knife.

The price of the machine is **\$20.00** without any knives.

The machine complete weighs 80 pounds.

Boxed for shipment, 110 pounds.

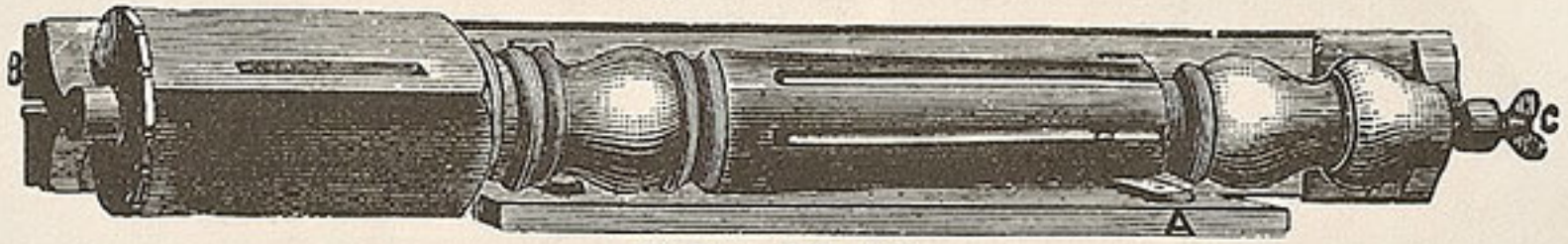
Former Knives



The above cuts show the different styles of edges which we have knives to make; by stating the number we will know which knife to send. The price of these knives is **\$1.00** each. Persons ordering the Former can select such as will serve their purpose. They can be sent at any future time by mail, if not taken with the machine at first.

NOTE—We can furnish the reverse knife of Nos. 8, 9 and 10 at **\$1.00** each and they are known as Nos. 80, 90 and 100 knives.

Fluting Attachment.



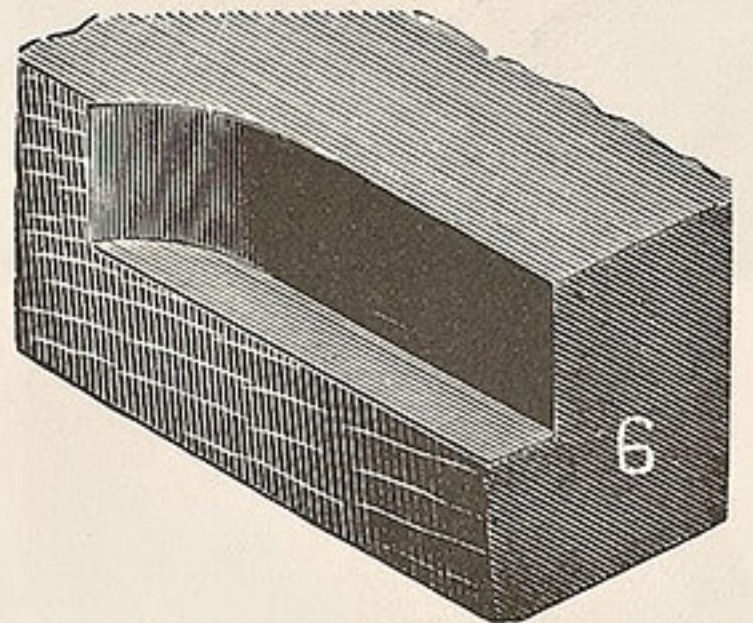
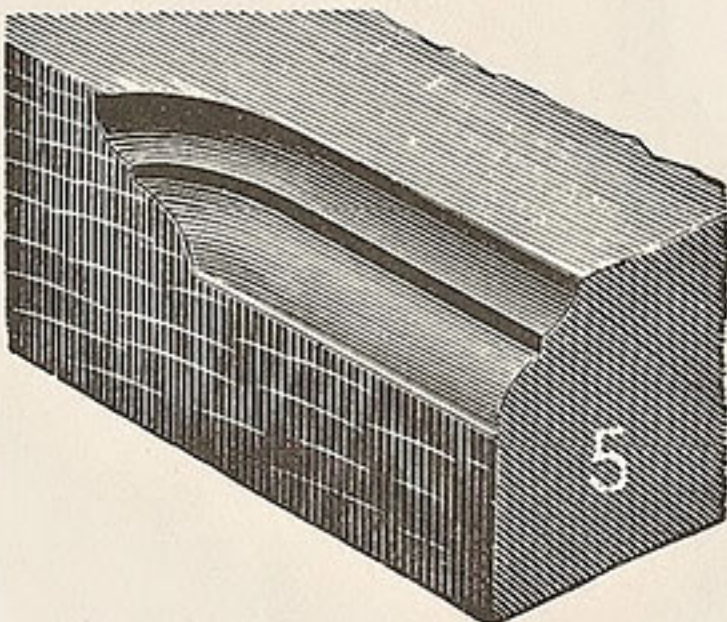
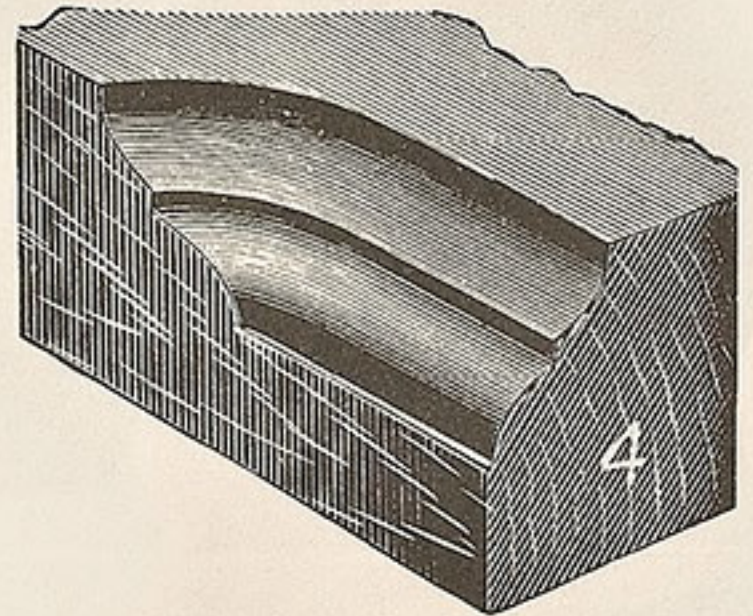
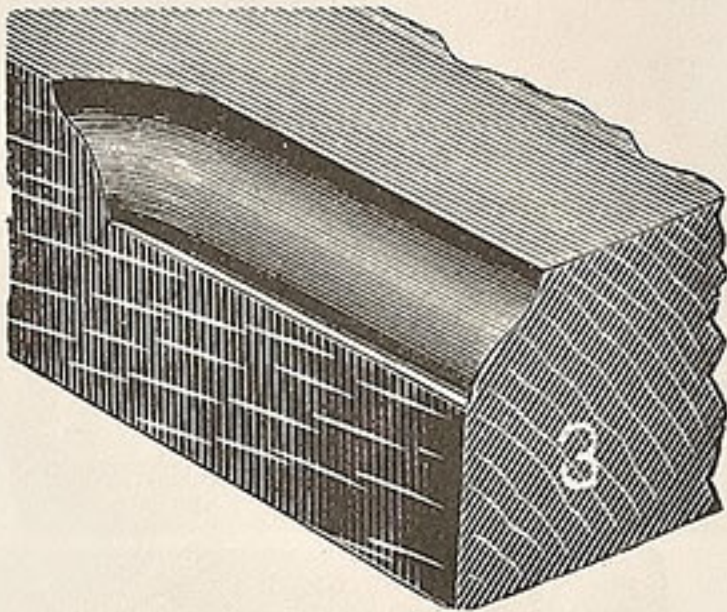
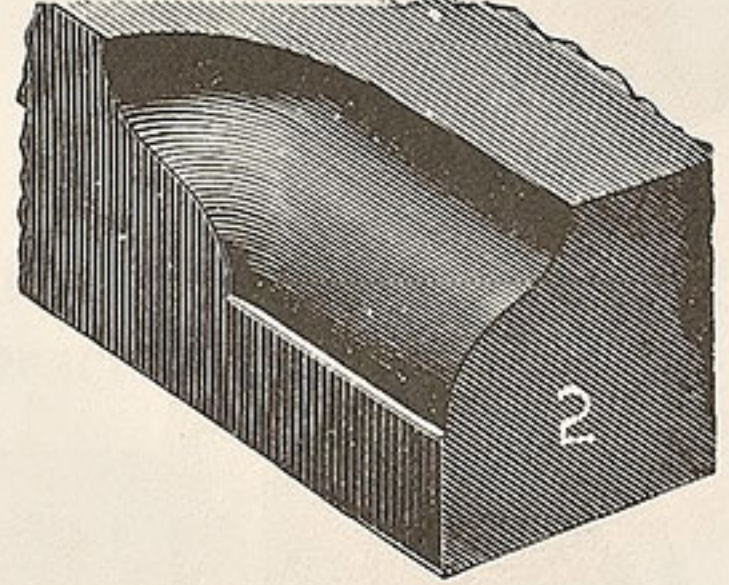
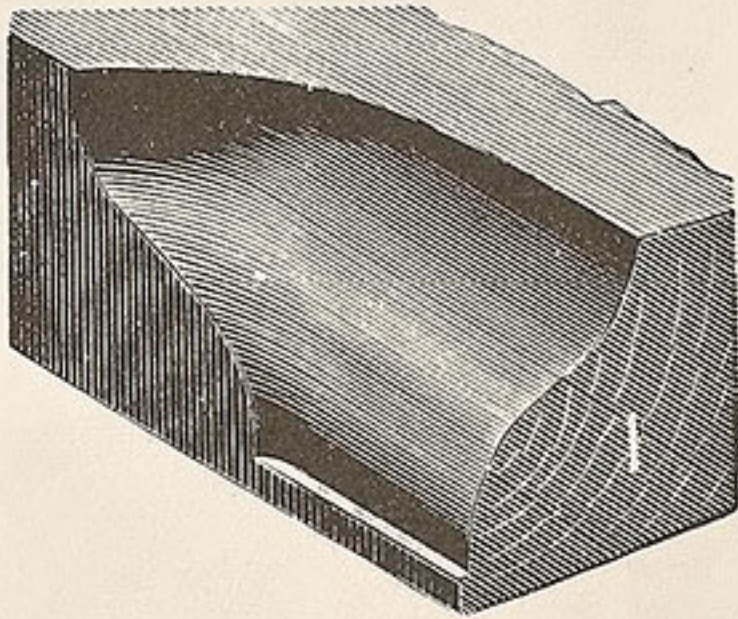
Price \$3.00.

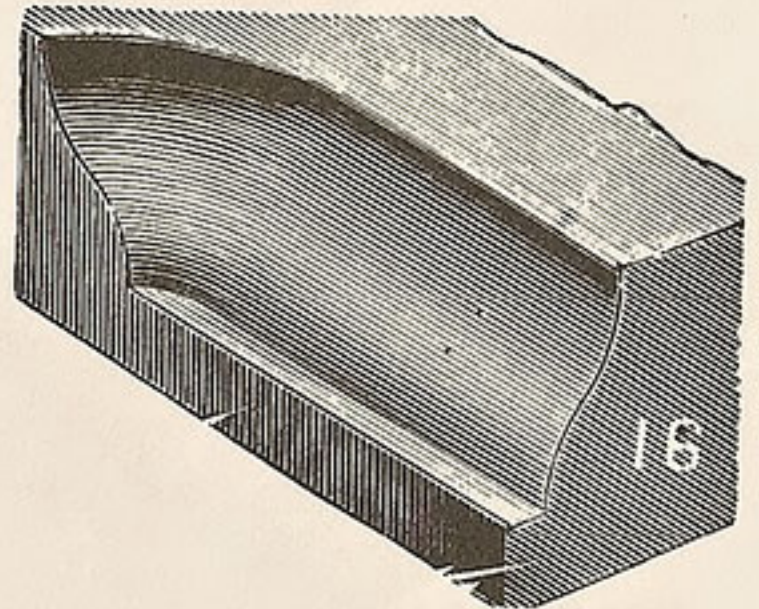
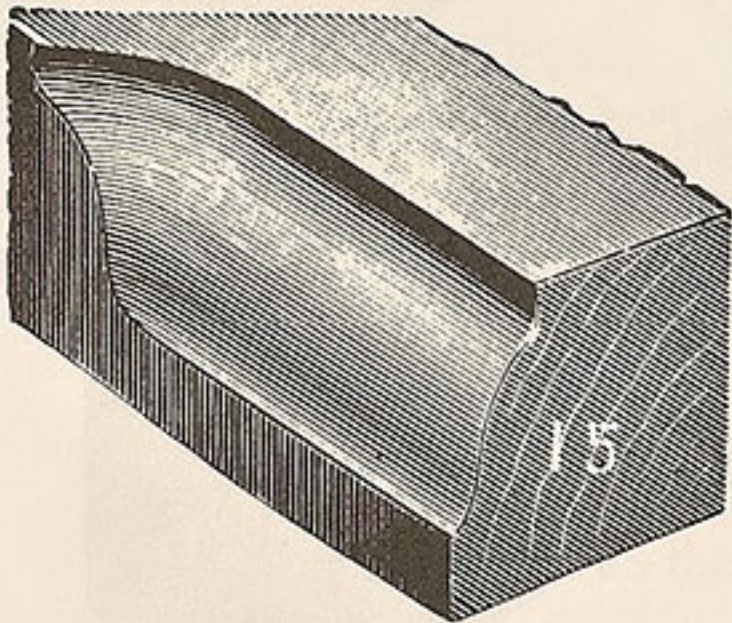
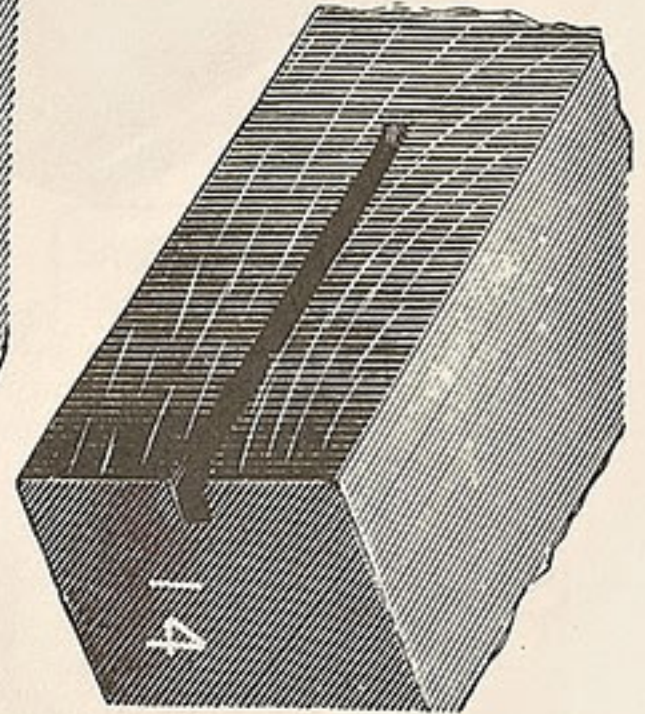
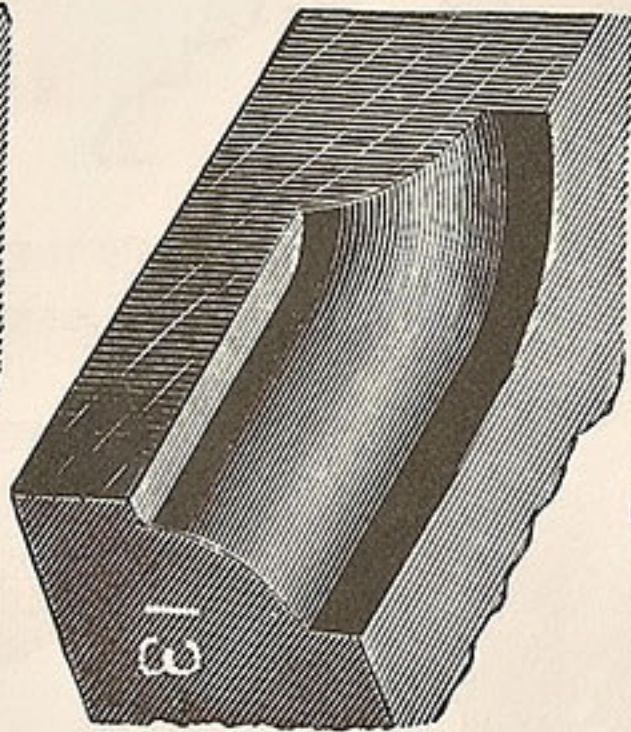
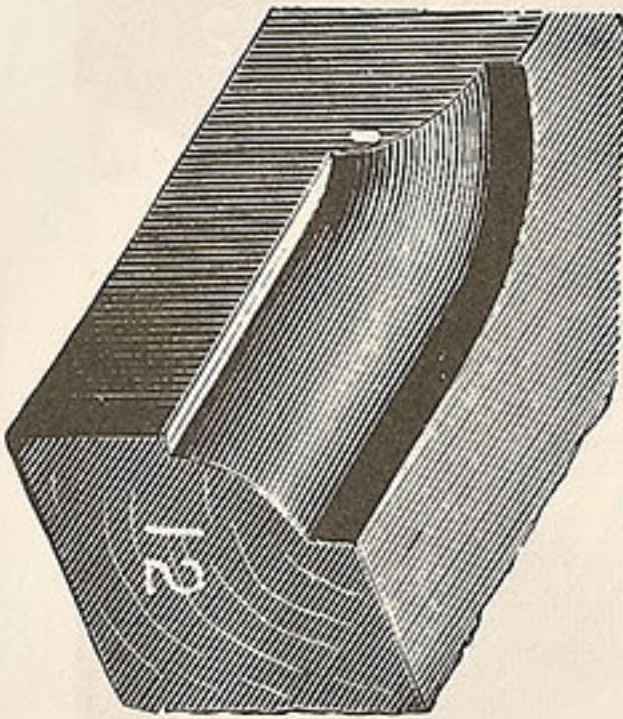
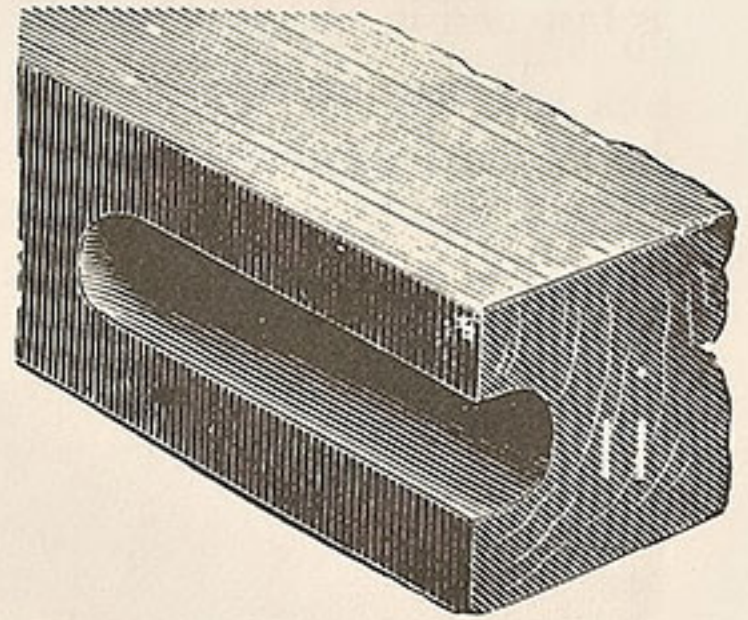
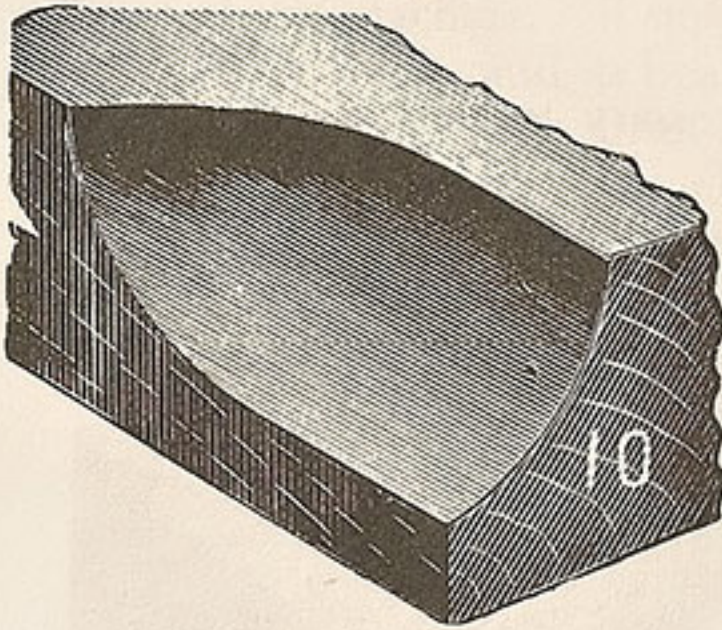
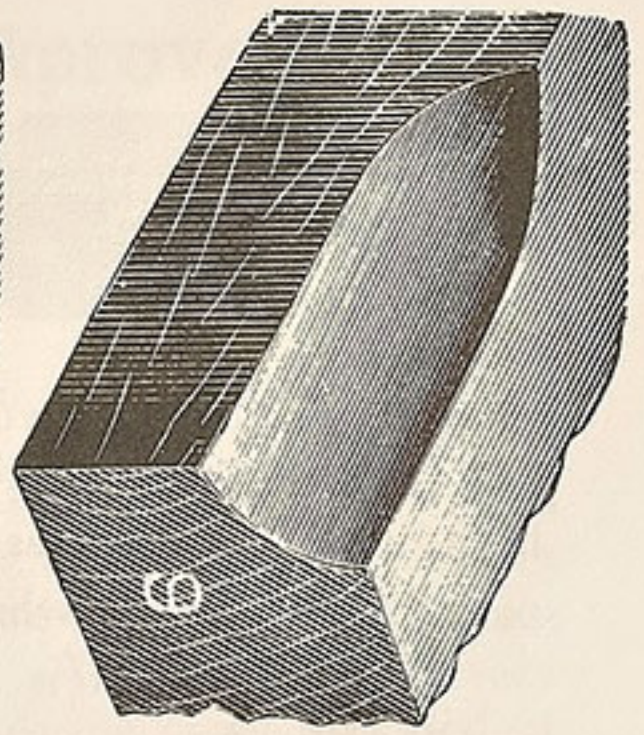
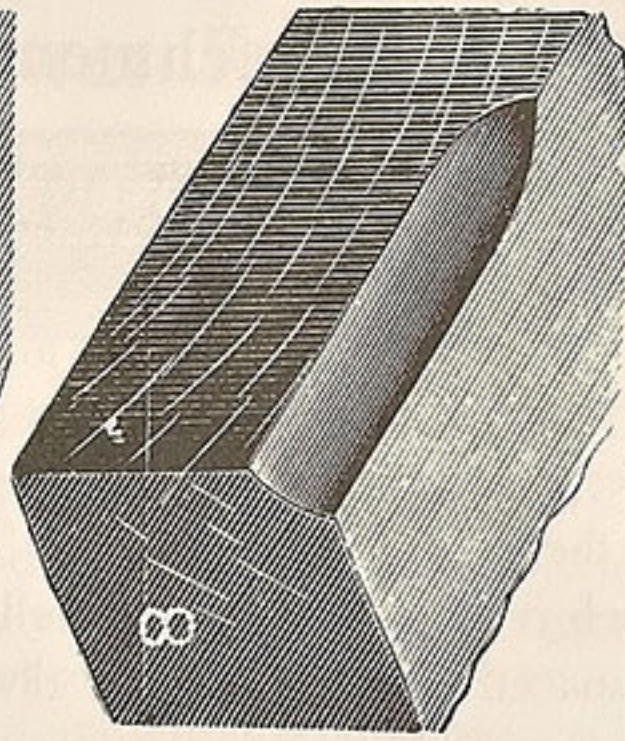
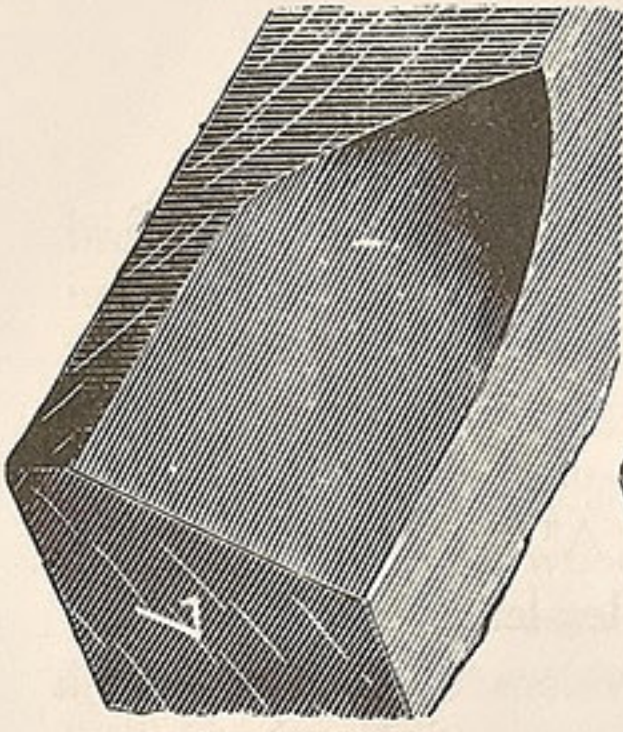
The above cut represents an attachment to be used on the Former for fluting table legs, etc., as the leg in the cut shows. "A" shows the edge of the pattern, the shape of which regulates the cut on the leg lengthwise.

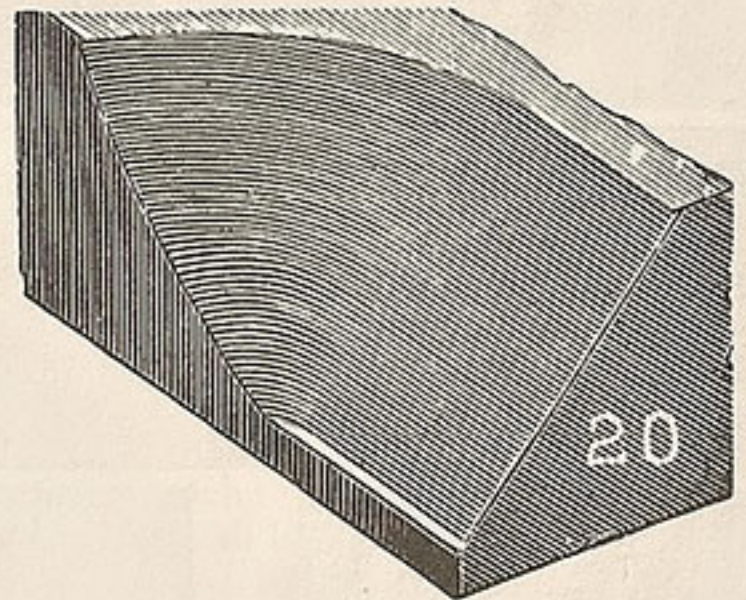
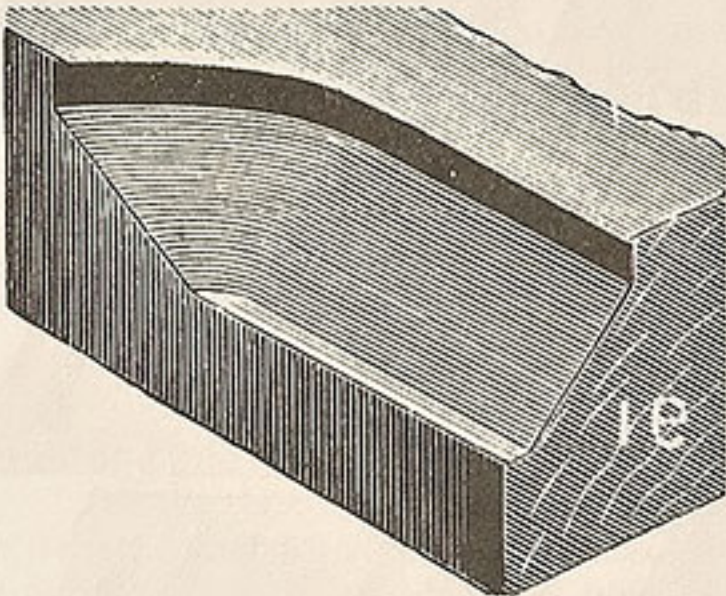
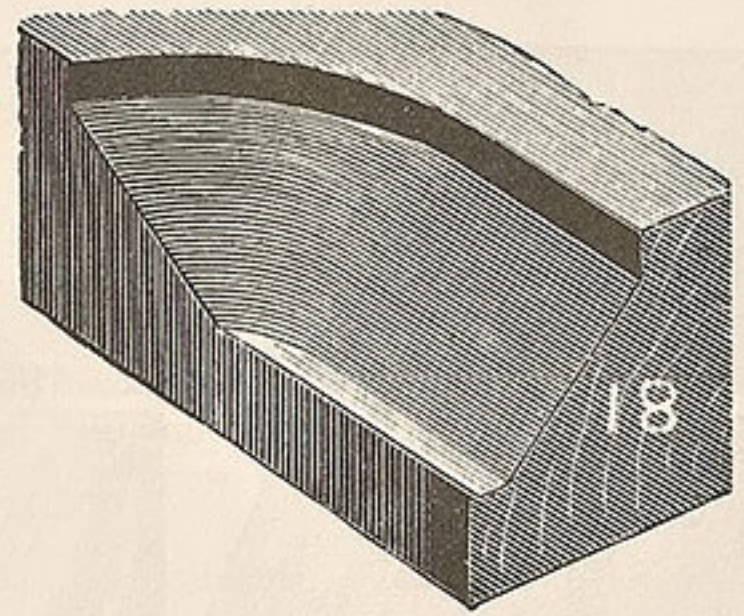
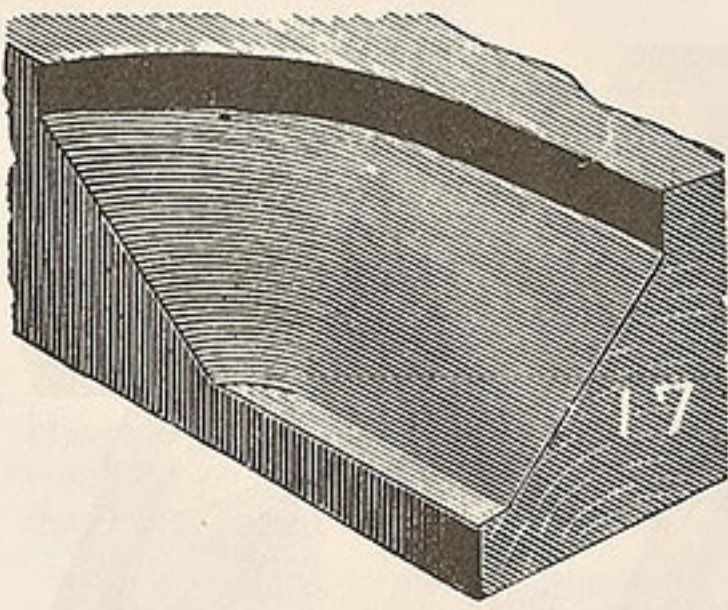
The index plate is spaced to make several divisions of a circle, and is regulated by the snap-latch at "B." "C" is a screw center, with which the leg is fastened in place.

This attachment has all the adjustments necessary to work legs of usual length and up to three inches in diameter.

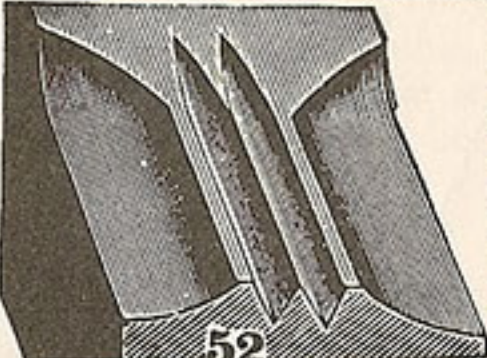
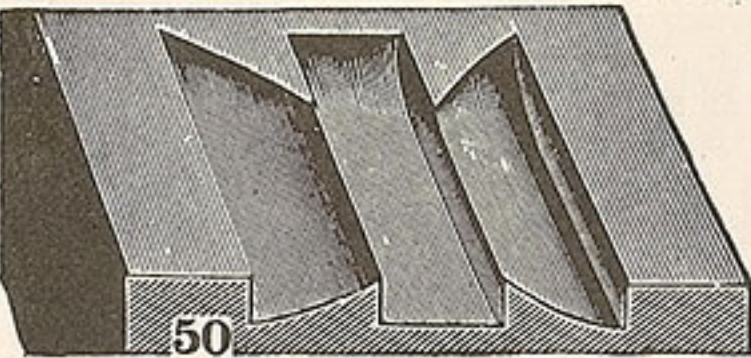
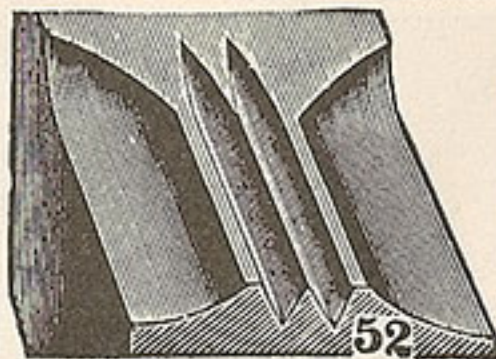
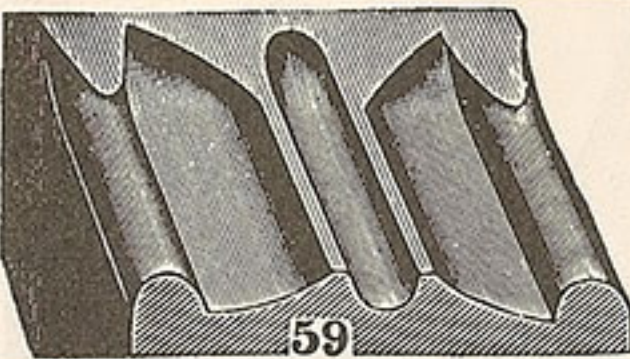
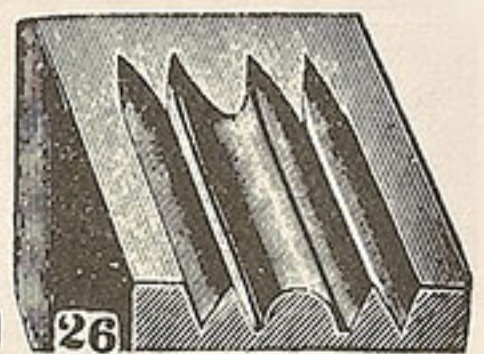
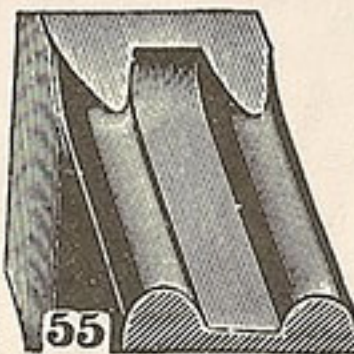
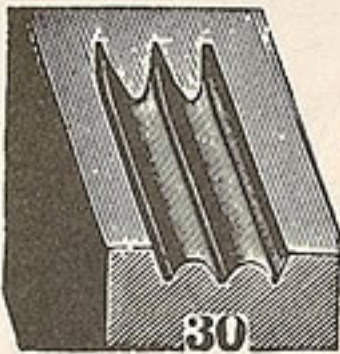
Sectional View Showing Cuts made by Former Knives Nos. 1 to 20.

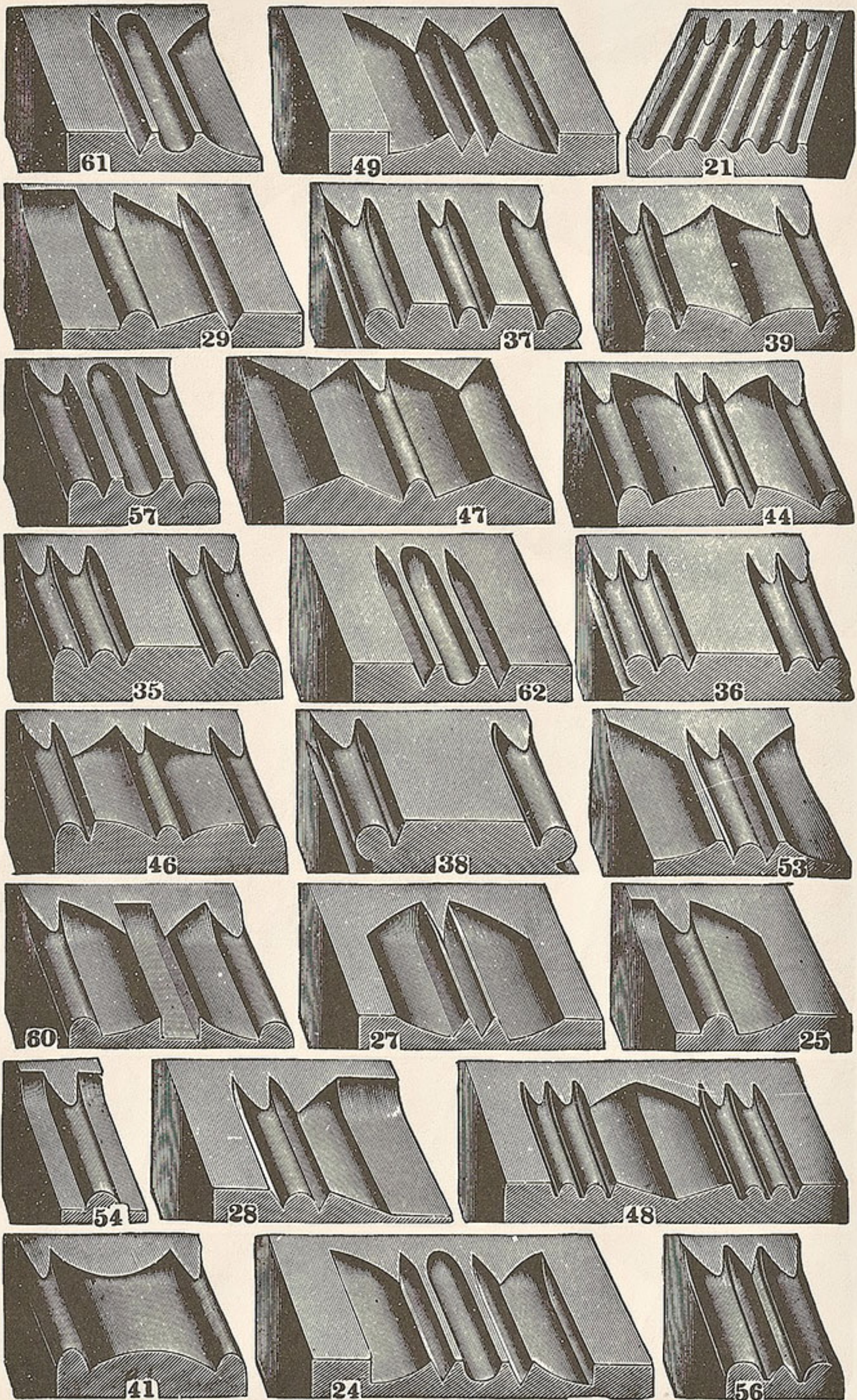






Sectional Views Showing a Few of the Cuts that can be Made with the New Former Knives, Described on Page 25





New Former Knives

We show on pages 23 and 24 cuts of mouldings made by our new pattern knives, which we are now prepared to furnish.

These embrace forms not covered by our old set of knives, Nos. 1 to 20. The new knives are made on a different principle from the old ones, and can be used separately or in combination. The illustrations given do not by any means show the full extent of the work that can be done with these knives.

The possibilities of combination are almost endless, and valuable as the Former has been heretofore, its usefulness is immensely increased by this new set of knives which make the Former the most valuable single machine that a cabinet maker or wood worker can employ.



The above cut represents the elementary form of the knives, which as before stated can be used singly or in combination as may be required.

All the different shapes are made in three sizes, viz: $\frac{1}{8}$ -inch, $\frac{3}{16}$ -inch, $\frac{1}{4}$ -inch, and it is designed that where knives are used in combination they shall all be of the same size. This, however, is not imperative, and users of the knives can combine different sizes according to their fancy.

In ordering these knives it will be well for customers to give the shape of knives required, designating same by letters as shown on cut, and also state size whether $\frac{1}{8}$, $\frac{3}{16}$ or $\frac{1}{4}$, as the case may be.

Where knives are wanted for making any of the forms shown on page 23 or 24, it can be so stated in the order, and to facilitate the ordering of such knives, we give below knives required to make the different forms.

FORM		FORM	
No. 24, page 24, takes	Knives K-G- D-G-K	No. 46, page 24, takes	Knives B-H-A-H-B
No. 25, " 24, "	E-A-K	No. 47, " 24, "	L-L-A-L-L
No. 26, " 23, "	P-A-P	No. 48, " 24, "	B-L-L-B
No. 27, " 24, "	K-G-K	No. 49, " 24, "	K-G-G-K
No. 28, " 24, "	B-L-E	No. 50, " 23, "	K-E-K
No. 29, " 24, "	E-A-L-G	No. 51, " 23, "	K-G-E-G-K
No. 30, " 23, "	B-B	No. 52, " 23, "	K-G-G-K
No. 35, " 24, "	B-A-A-B	No. 53, " 24, "	K-C-K
No. 36, " 24, "	B-B	No. 54, " 24, "	E-A-E
No. 37, " 24, "	B-C-B	No. 55, " 23, "	B-E-B
No. 38, " 24, "	B-B	No. 56, " 23, "	A-P-A
No. 39, " 24, "	B-H-H-B	No. 57, " 24, "	B-D-B
No. 40, " 23, "	B-K-K-B	No. 58, " 23, "	P-K-P-P
No. 41, " 24, "	B-H-H-B	No. 59, " 23, "	B-K-D-K-B
No. 42, " 23, "	B-K-K-B	No. 60, " 24, "	B-K-E-K-B
No. 44, " 24, "	B-H-C-H-B	No. 61, " 24, "	G-D-K
No. 45, " 23, "	B-K-C-K-B	No. 62, " 24, "	G-D-G

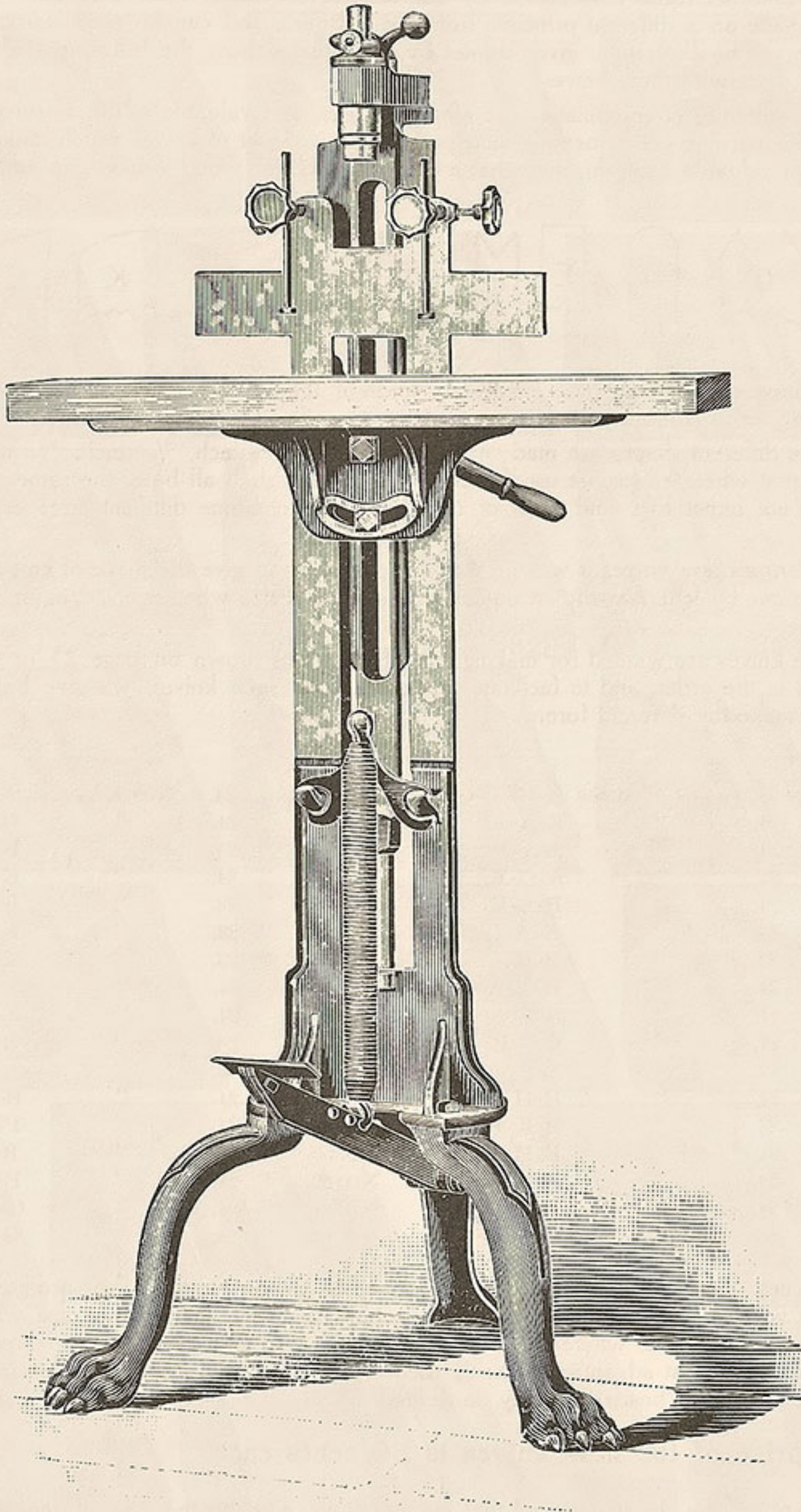
These new knives supersede the old style Beading knives, to which they are greatly superior in many ways. They require no head for holding them, as was the case with the old knives; they are reversible, whereas the old beading knives could be run in one direction only, and they have the great advantage of being used singly for center bead work or in combination for any number of beads that may be desired.

The price of the new knives is 50 cents each.

It will, of course, be understood that we continue to make the original series of knives, Nos. 1 to 20, the price of these being, as heretofore, \$1.00 each.

Foot Power Mortising Machine

Price \$20.00 Chisels Extra



Foot Power Mortising Machine

This machine is strong, thoroughly practical and occupies but little shop room. With the exception of the supplementary table, it is made entirely from iron and steel, and the simplicity of construction makes it almost impossible to get out of order.

The table can be set at any desired angle, and all other necessary adjustments are provided for and can be made easily and quickly. The spring is of coiled steel wire and is made especially for the machine, and can be readily adjusted to give any required tension.

The weight of the machine is 135 pounds; boxed for shipment 170 pounds. Price (without chisel) **\$20.00**. We make ten sizes of chisels, as given below, and customers can select such sizes as their work may require. The price of the chisels is **\$1.00** each.

Self-Cleaning Mortising Machine Chisels



Sizes $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch.

Tenoning Tool

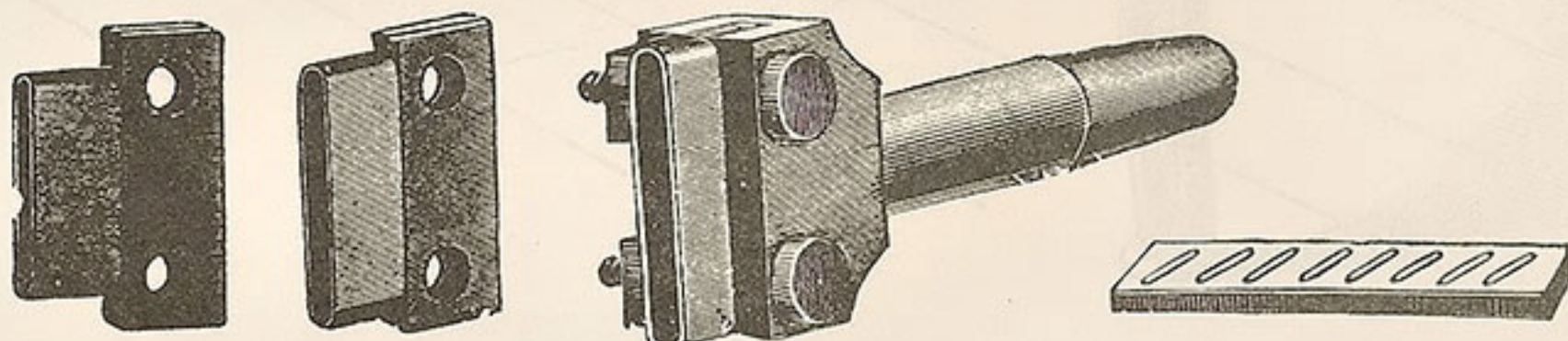


Price \$5.00

We can furnish a Tenoning Tool for the Mortiser, but we recommend it for light work only; far better results can be obtained from our regular Tenoning Machine described on next page.

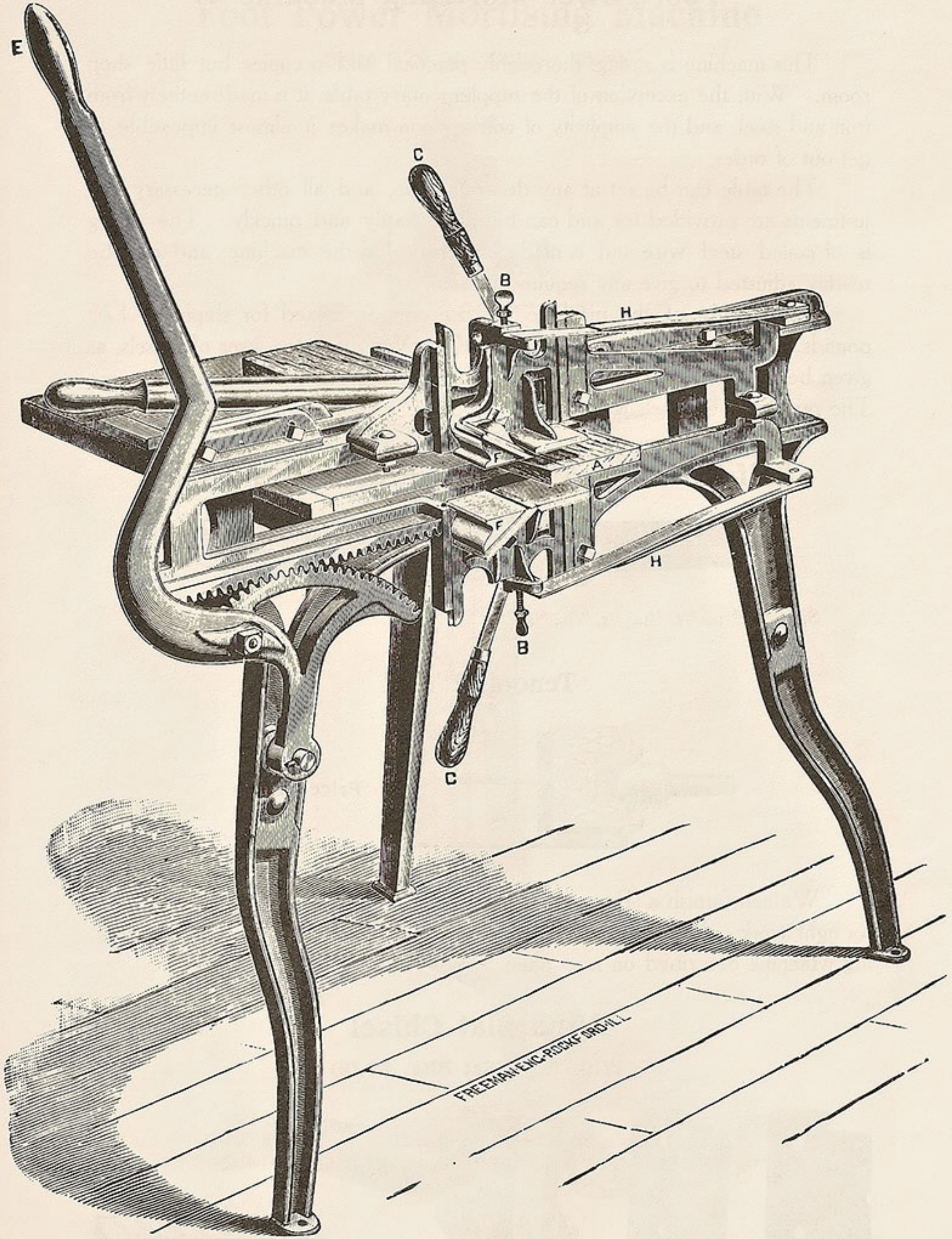
Blind Slat Chisel

With Three Set Bits, \$5.00



Hand Tenoning Machine.

Price \$25.00.



FREEMAN ENG. ROOMS BOSTON

Hand Tenoning Machine.

Price \$25.00.

THE machine will cut tenons of any length up to three inches. By repeating the cut any desired length can be made. It will work on stuff of any size up to 2 x 12 inches, and can be adjusted to gauge the length, thickness and shoulder of a tenon. It will not cope a shoulder, but will cut one shoulder farther back than the other to accommodate stuff having rabbeted edge; and will cut one shoulder deeper than the other, or both alike as desired. Both sides of the tenon are cut at once, or one side only can be cut. Each thrust of the lever "E" cuts a shaving similar to that of a rabbet plane; the rapidity of the thrusts and set of knives (as with a plane), govern the speed of the work. The machine cuts true, smooth, square shoulders, and can be set to cut tenons of uniform thickness or distance between the shoulders. Every mechanic knows the importance of a perfect tenon, and will appreciate a hand machine with which as perfect tenons can be made as with steam power machinery. The price of the machine is \$25.00. It weighs 100 pounds; boxed for shipment, 140 pounds.

A—Tenon being cut.

BB—Screws to set depth of shoulder.

CC—Handle to raise cutters from work.

D—Lever to hold work in place.

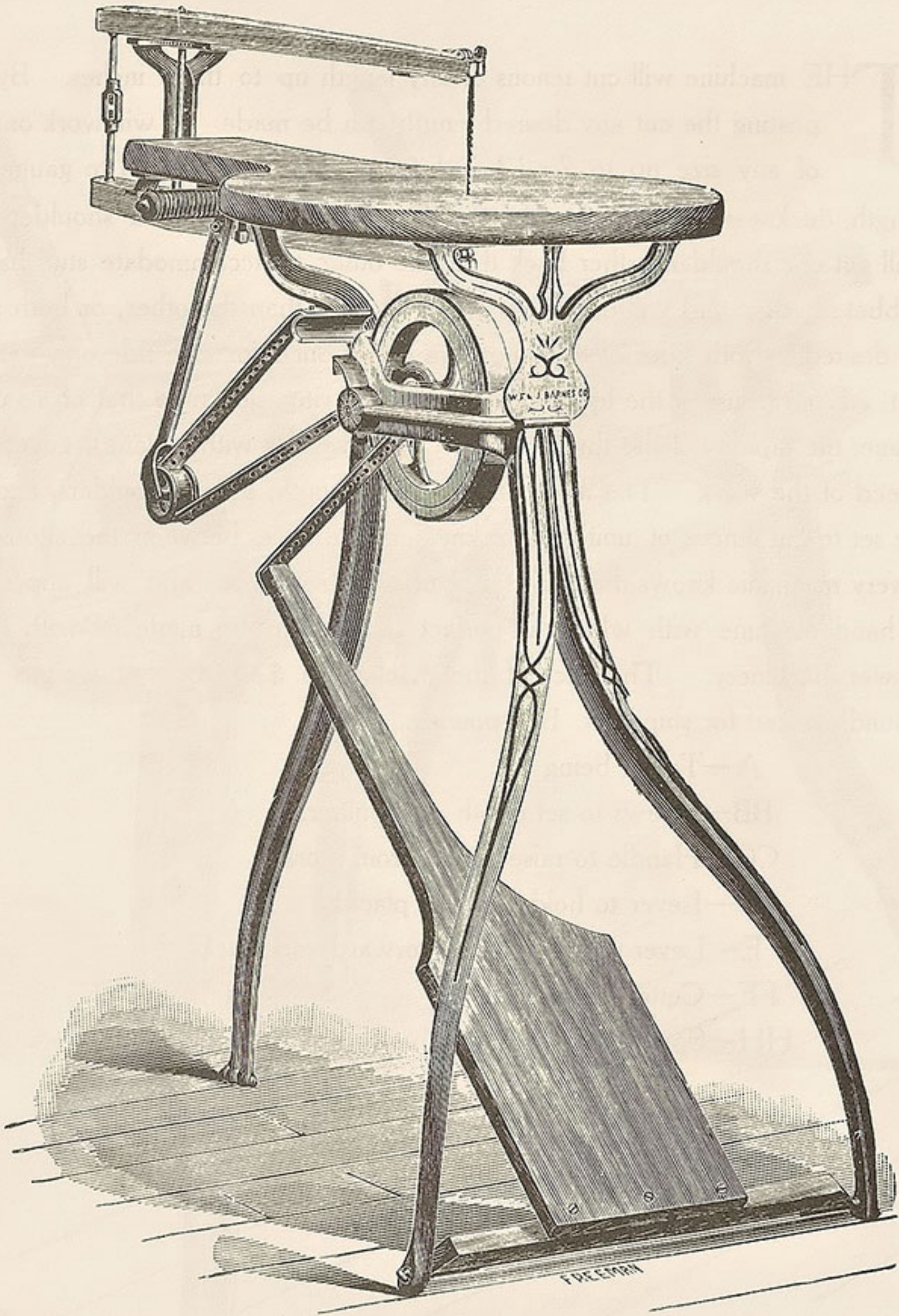
E—Lever to drive cutters forward and back.

FF—Cutter heads.

HH—Spring to press cutter heads against work.

No. 7 Scroll Saw Improved

Price \$15.00



Scroll Saw No. 7

Price \$15.00

This machine is designed for practical service in the workshops of carpenters and builders, cabinet makers and other wood workers.

WARRANTY

We warrant it to be well made, of good material and workmanship, and with reasonable practice to saw at the following rates: Pine, 2 inches thick, 1 foot per minute; 1 inch thick, 4 feet per minute; walnut, 3 inches thick, $\frac{1}{2}$ foot per minute; 1 inch thick, 2 feet per minute, and other woods and thicknesses at proportionate rates.

The ordinary rate of speed when sawing is from 800 to 1200 strokes per minute. The saw leaves the work as smooth as is possible for any saw to do, and can be taken out and replaced in an instant for inside work.

The swing around the blade under the arm is 24 inches.

The length of the blade is 7 inches.

The table and arms are made of hard maple.

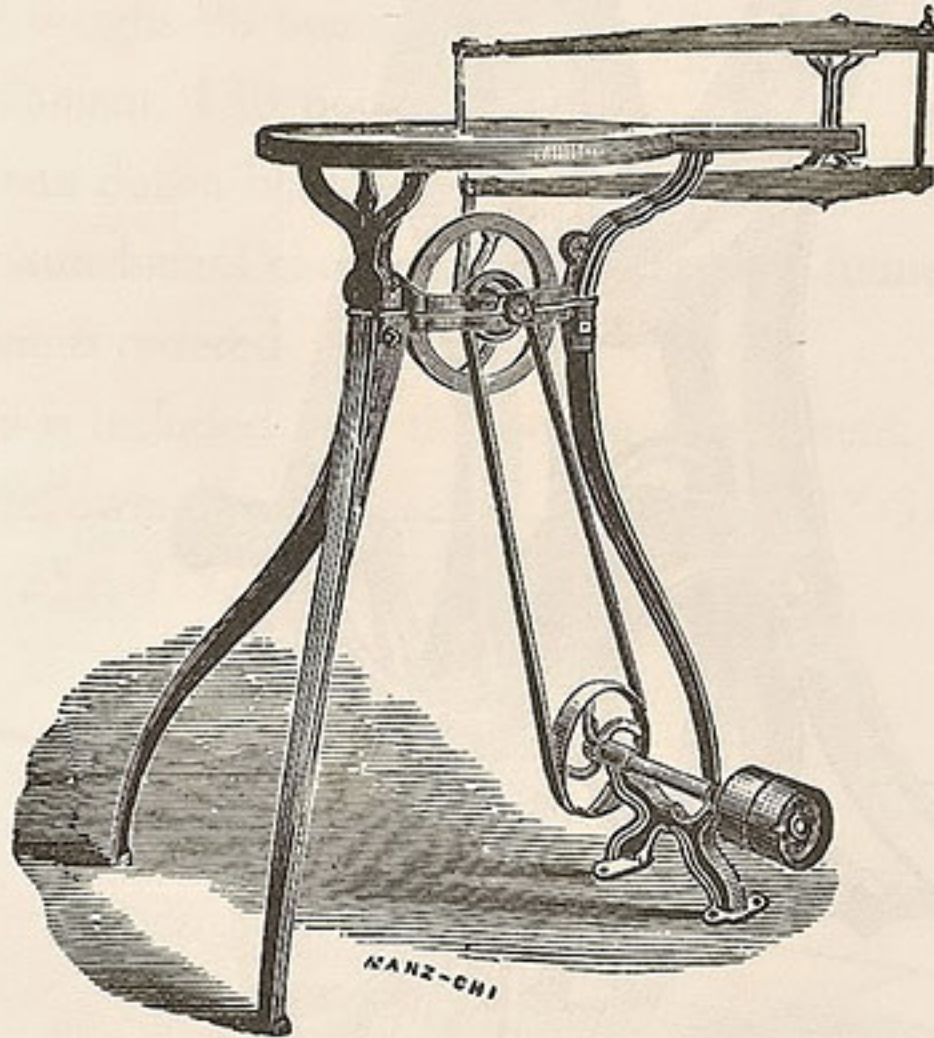
The frame is made of cast iron, strong, yet light.

The balance wheel runs on a steel arbor.

The machine weighs 60 pounds.

Boxed for shipment, 95 pounds.

We include one dozen blades with each machine.



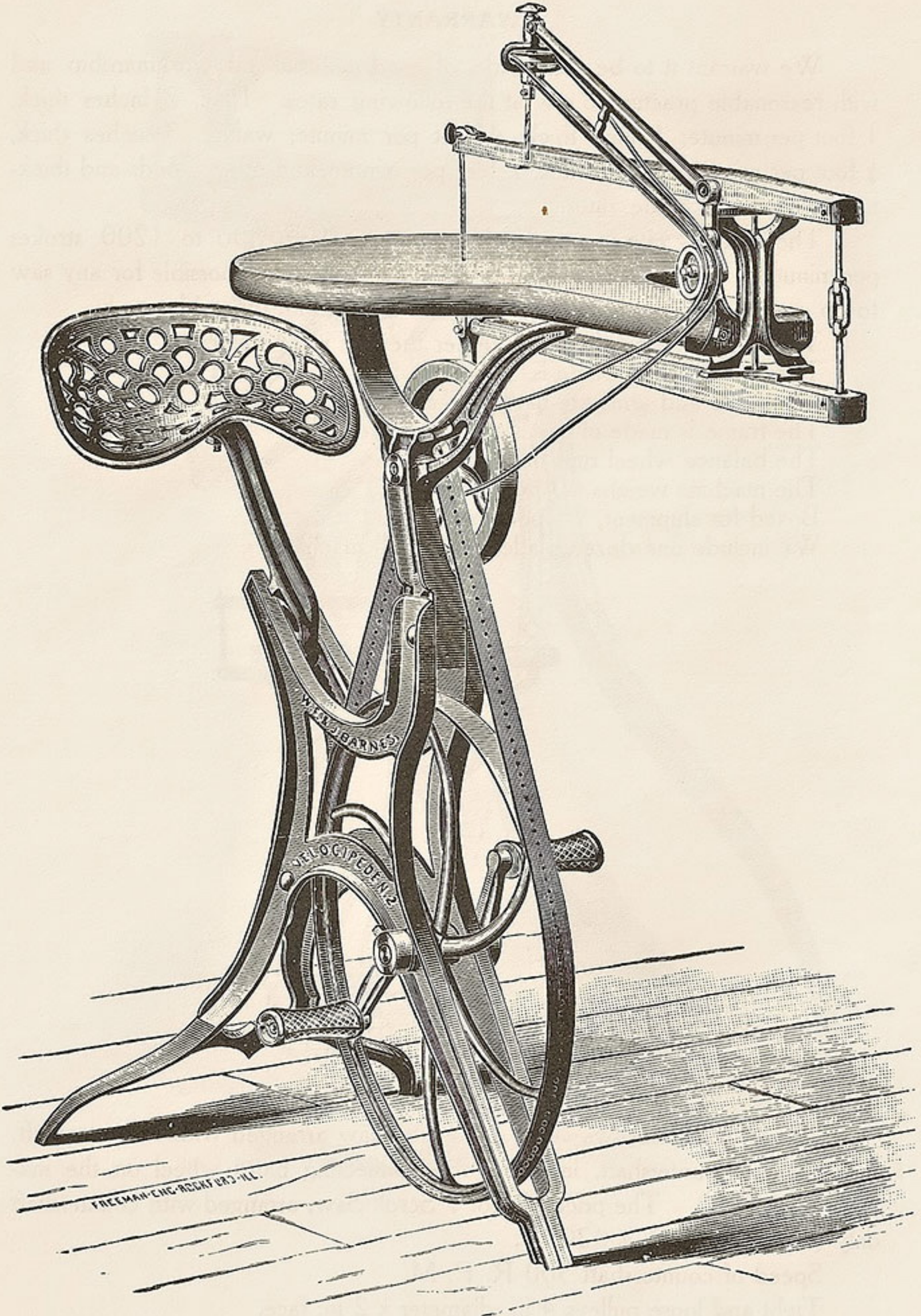
The above cut shows our No. 7 Scroll Saw arranged with a countershaft. The price of countershaft, including the connecting band wheel on the machine, is \$10.00. The price of No. 7 Scroll Saw, arranged with countershaft only (no foot power), is \$20.00.

Speed of countershaft 500 R. P. M.

Tight and loose pulleys 4 in. diameter x 2 in. face.

Velocipede Scroll Saw No. 2.

Price, with Boring Attachment, \$20.00
Without Boring Attachment, \$18.00



Velocipede Scroll Saw No. 2.

PRICE:

With Boring Attachment,	\$20.00
Without Boring Attachment,	18.00

THIS machine has about the same capacity as Scroll Saw No. 7, the warranty as to what that machine will do applying equally to it, but this is preferred by many on account of the velocipede foot power, and because of its having a Boring Attachment to open for inside work.

The swing around the blade under the arm is 24 inches.

The length of the blade is 7 inches.

The table and arms are of hard maple.

The frame is of cast iron.

The balance and drive wheels run on steel arbors.

The machine weighs 90 pounds.

Boxed for shipment, 130 pounds.

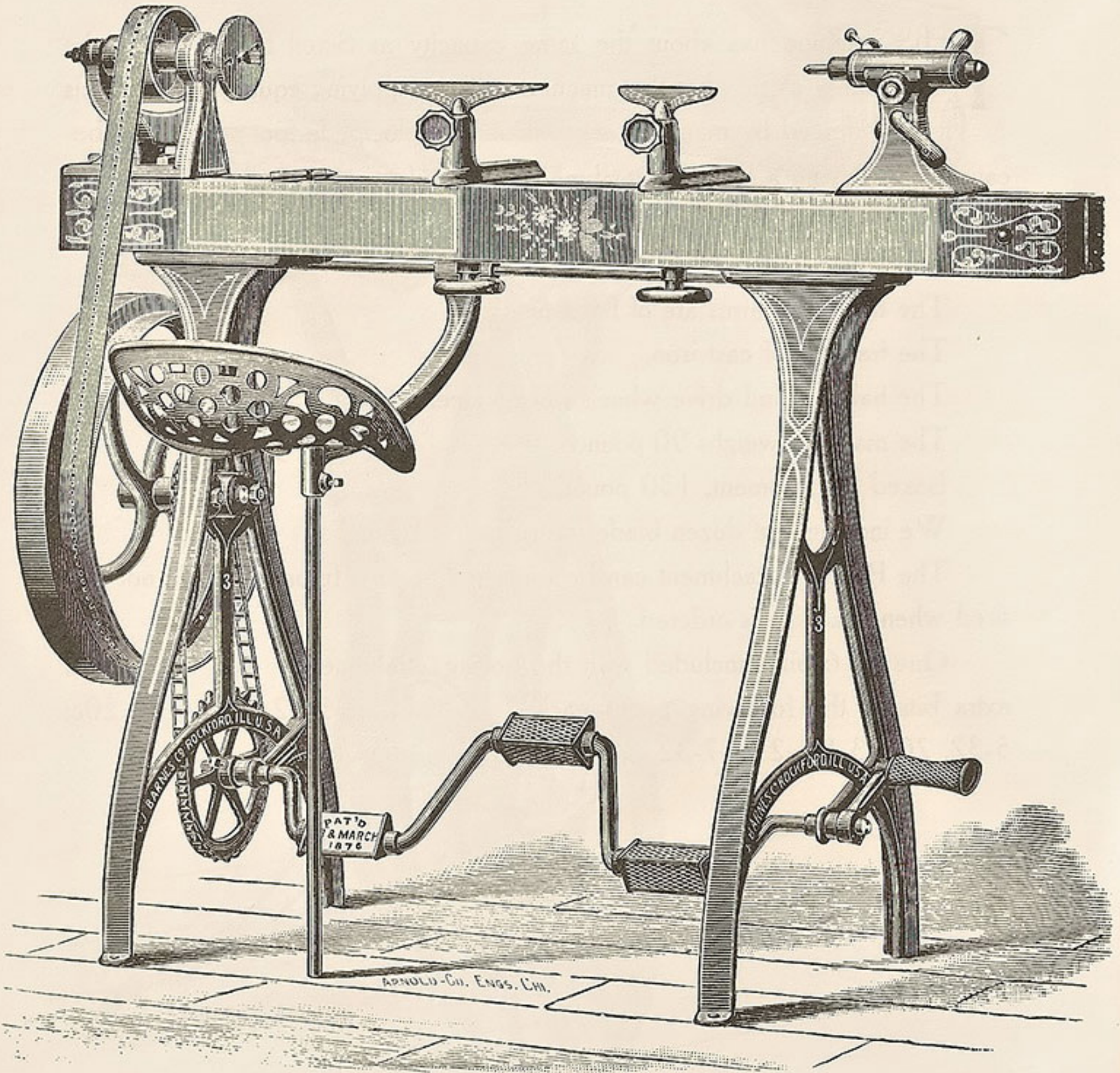
We include one dozen blades with each machine.

The Boring Attachment can be furnished at any future time, if not desired when machine is ordered.

One 3-16 bit is included with the boring attachment. We can furnish extra bits at the following prices each: 1-16, 15c; 3-32, 15c; 1-8, 20c; 5-32, 20c; 3-16, 25c; 7-32, 30c; 1-4, 35c.

No. 3 Lathe

Price \$40.00



No. 3 Lathe

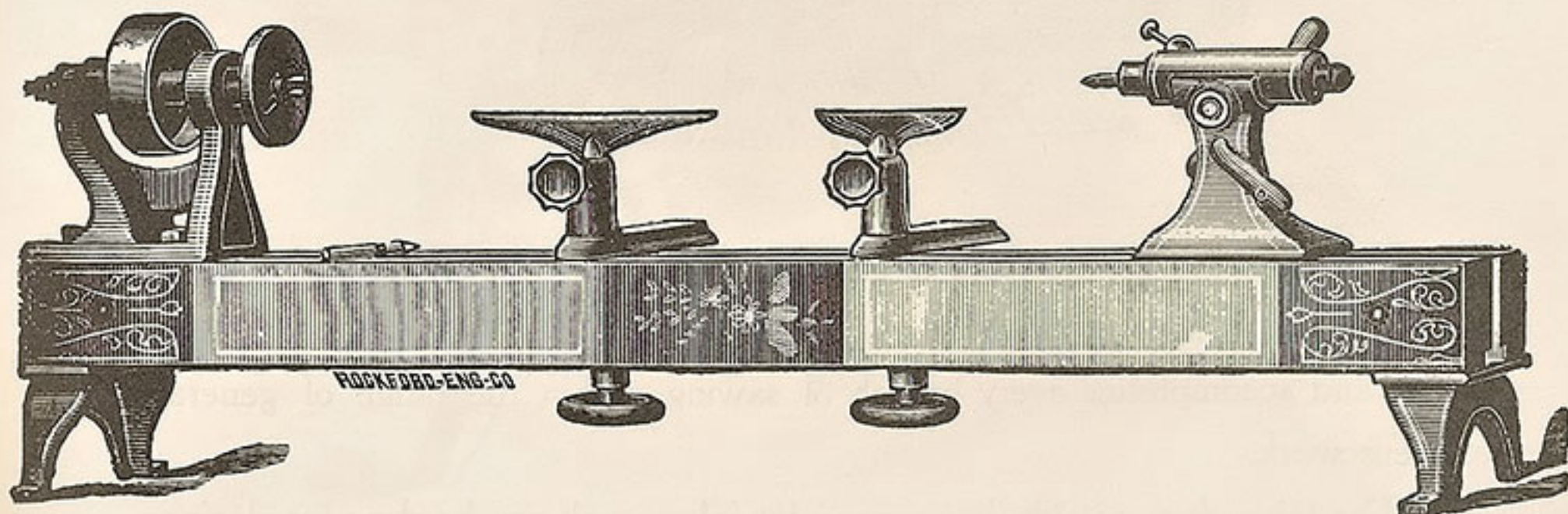
THIS Lathe is designed for wood turning. It will take in stuff 12 inches in diameter and 3 feet long. Having our patent velocipede foot power and improved seat, the operator sits comfortably in the best possible position for the management of his work, and can work steadily without fatigue. The speed can be varied from 1,000 to 2,000 revolutions per minute, and the motion can be started, stopped or reversed instantly, at the will of the operator. Greater power can be applied on the work than with any old-style foot power, and with greater ease. The seat can be readily moved along to any part of the bed that the work requires. This lathe is made entirely of iron and steel, except the bed which is of wood. The spindle is of steel, fitted up in the best manner. All the bearings are of steel, making them strong, durable and light running. The centers are accurately fitted to taper holes. No wrench is required to adjust tail stock or tool rests and sockets, hand wheels being used instead.

The price of the lathe is **\$40.00**; this includes three centers (one a spur), two tool rests and sockets, and one turned face plate.

It weighs 230 pounds. Boxed for shipment, 320 pounds.

If wanted we can furnish the Lathe with extra length bed to take four feet between centers—price of lathe with extra length bed, **\$45.00**.

No. 3 Lathe with Bench Legs



We will furnish, when desired, the upper portion of No. 3 Lathe with short bench legs, as shown in the above cut. Price **\$25.00**.

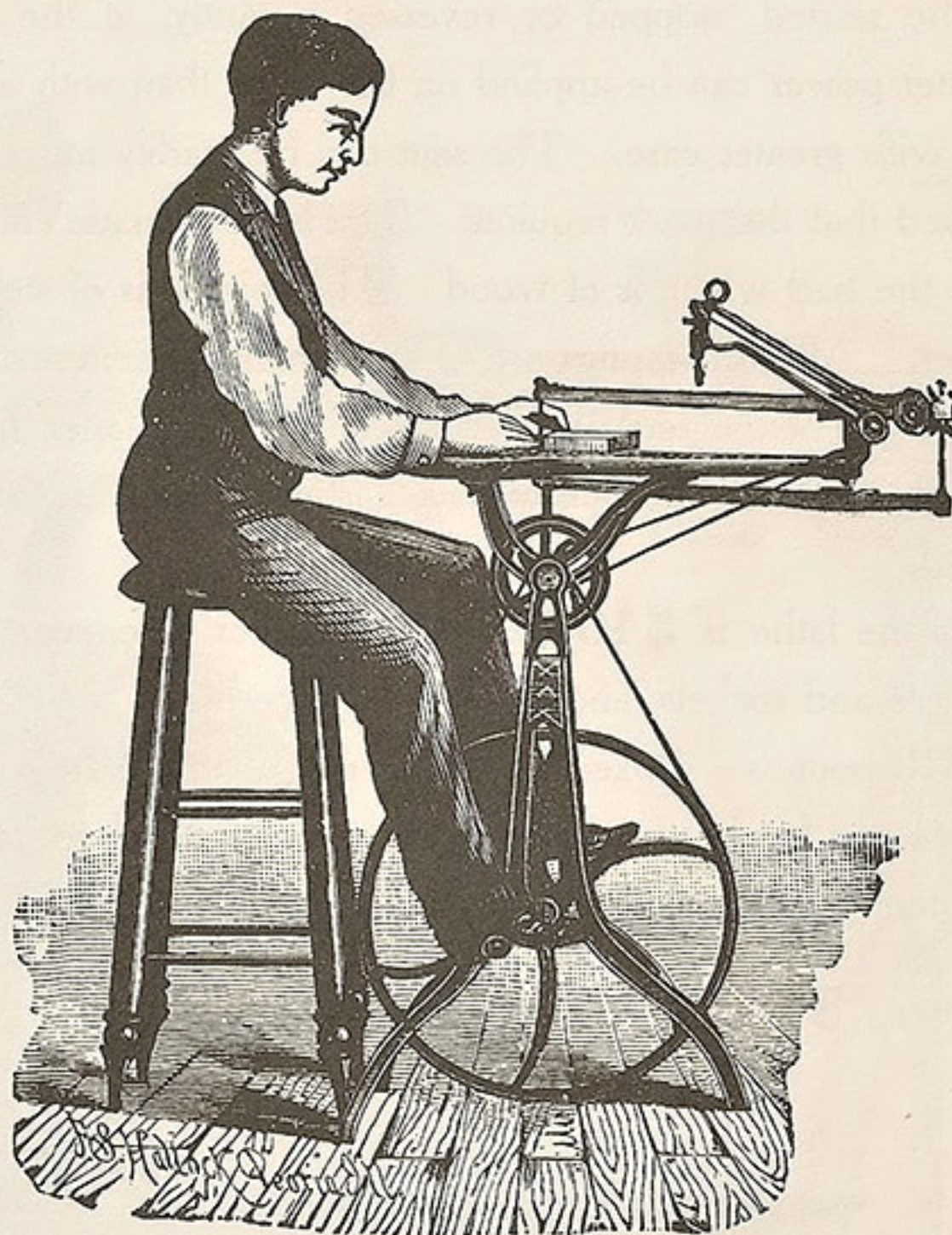
Price of countershaft, **\$10.00**.

Speed of countershaft, 500 R. P. M.

Tight and loose pulleys, 6 inch diameter by 2 inch face.

No. 1 Amateur Saw.

Complete with Borer,	-	\$10.00
Without Borer,	- - -	8.00



This machine will cut pine of any thickness up to $1\frac{1}{2}$ inches, and harder woods of proportionate thicknesses. It admits a swing of 18 inches around the blade, and accomplishes every branch of sawing within the range of general amateur work.

The table does not tilt, but sawing for inlay work can be done by placing a beveled strip under the stuff being sawed.

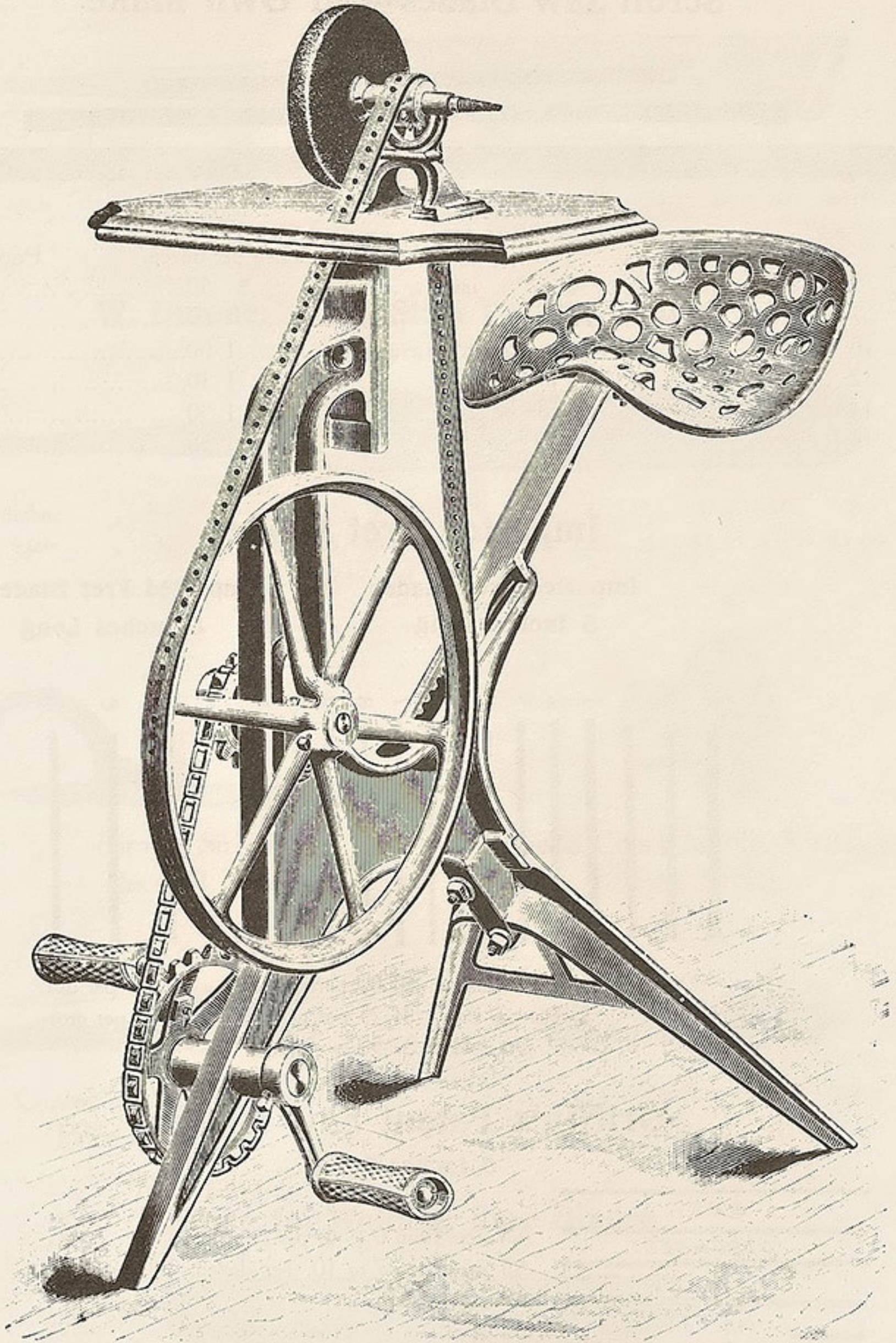
The price of the machine complete is **\$10.00.**

The price of the machine without Boring Attachment is **\$8.00.**

It weighs 40 pounds.

Boxed ready for shipment it weighs 63 pounds.

Grinding and Polishing Machine



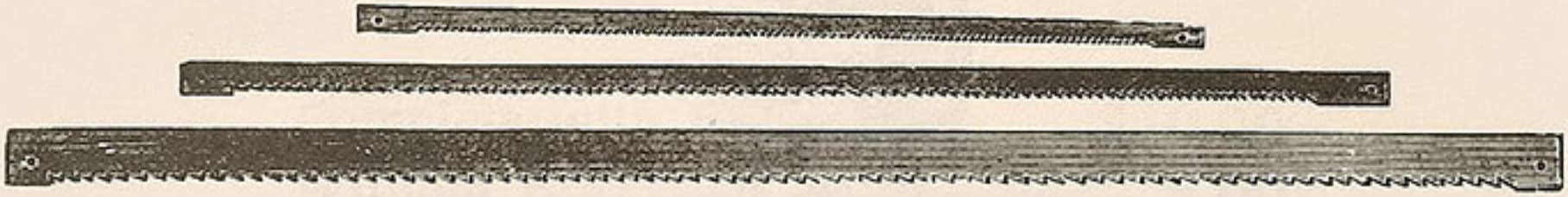
This machine is designed for light work, carrying emery and buffing wheels up to six inches diameter by one inch face.

It will be found a most useful machine by carpenters and other wood-workers for grinding plane irons, chisels and other tools, and with emery wheel of proper shape for gumming their saws.

Weight of machine, 85 pounds; boxed for shipment, 115 pounds. **Price \$18.00.**

The cut shows emery wheel on the spindle of the machine, but this is for purpose of illustration only; no emery wheel is included with the grinder.

Scroll Saw Blades--Our Own Make

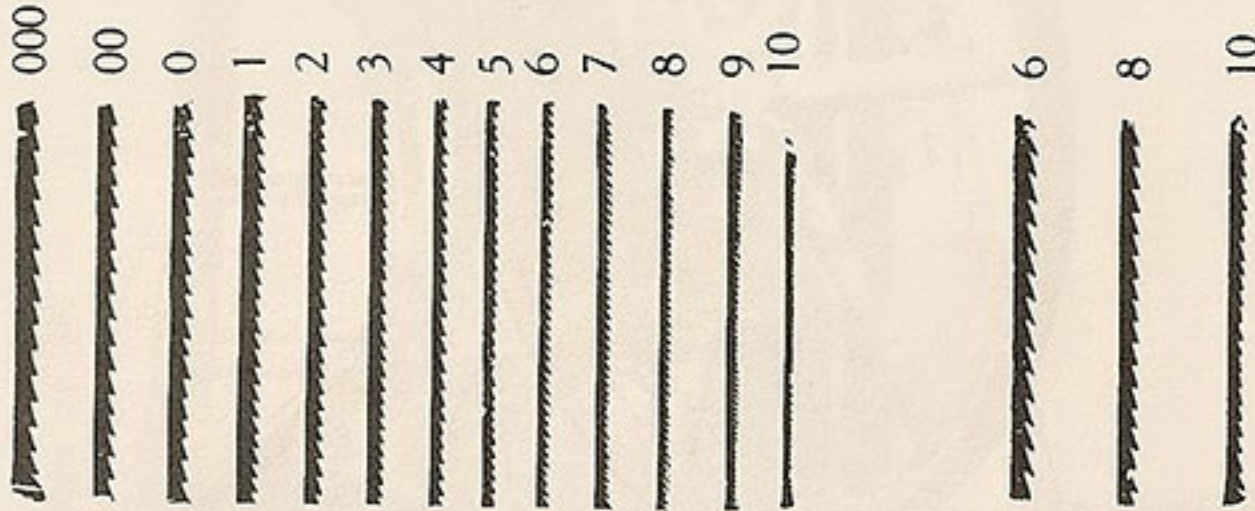


		Price per dozen.	Price each
5 inches.....	$\frac{1}{16}$ to $\frac{3}{16}$ inch.....	\$ 50.....	\$ 05
7 ".....	$\frac{1}{16}$ to $\frac{1}{4}$ ".....	65.....	06
10 ".....	$\frac{1}{8}$ to $\frac{1}{4}$ ".....	1 00.....	10
12 ".....	$\frac{1}{8}$ to $\frac{5}{16}$ ".....	1 10.....	10
14 ".....	$\frac{3}{16}$ to $\frac{5}{16}$ ".....	1 30.....	15
16 ".....	$\frac{3}{16}$ to $\frac{3}{8}$ ".....	1 50.....	15

Imported Fret Blades

Imported Fret Blades
5 Inches Long

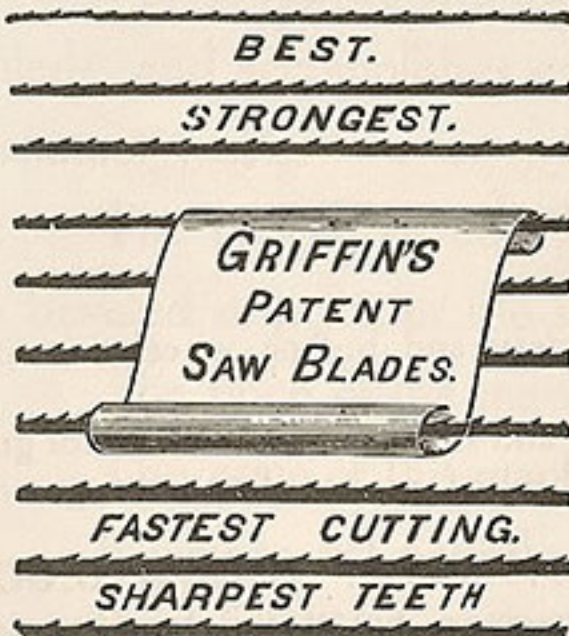
Imported Fret Blades
8 Inches Long



Nos. 000 to 5, 10 cts. per dozen.	\$1.00 per gross.	30 cts. per doz.
Nos. 6, 7 and 8, 15 cts. per doz.	\$1.25 per gross.	\$3.00 per gross.
Nos. 9 and 10, 20 cts. per doz.	\$1.50 per gross.	

Griffin's Patent Saw Blades

5 inches Long



All sizes from 0 to 6, per dozen,	\$ 10
All sizes from 7 to 10, per dozen,	15
Per gross, assorted,	1 10
Per gross, all one size, 0 to 4,	90
Per gross, all one size, 5 to 7,	1 00
Per gross, all one size, 8 to 10,	1 25

Of these and the imported Fret Blades we do not sell less than a dozen of one size.

W. Butcher's Cast Steel Turning Chisels

Warranted



Size, inches	. .	1/8	3/16	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Price, each	. .	.25	.25	.25	.27	.30	.33	.37	.41	.48	.60	.77	.93	\$1.10

Price per set, (13) \$6.31

W. Butcher's Cast Steel Turning Gouges

Warranted

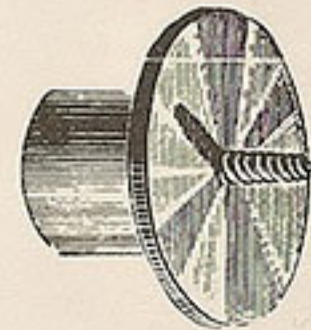


Size, inches	. .	1/8	3/16	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Price, each	. .	.32	.32	.32	.36	.40	.43	.51	.58	.65	.85	\$1.11	\$1.31	\$1.60

Price per set, (13) \$8.76



Turner's Sizer.
Price \$1.25



Screw Chuck for No. 3 Lathe.
Price \$1.50

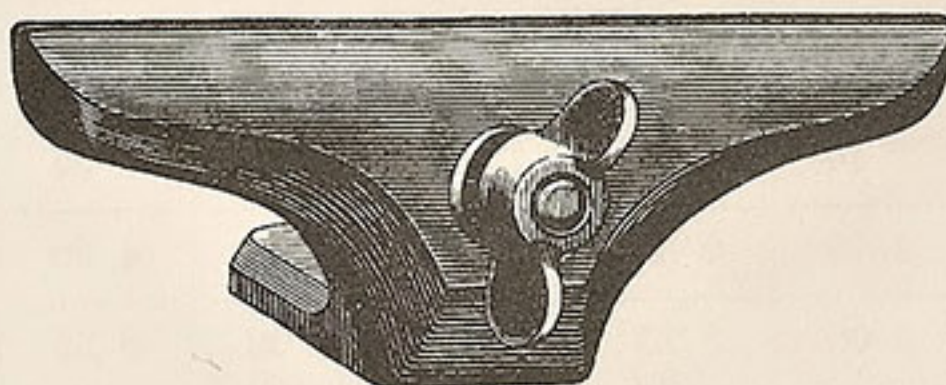


Spur Center for No. 3 Lathe.
Price \$1.50



Cup Center for No. 3 Lathe.
Price \$1.50

Vise for Holding Saw Blades



Price 30 cents.

Postage 20 cents.

Circular Saws

Patent Ground and Tempered Solid Teeth Circular Saws



Diameter	Thickness	Size of Hole	Price Each
1 1/2 inch.....	24 gauge.....	5/16 inch.....	\$ 55
2 ".....	23 ".....	5/16 ".....	60
2 1/2 ".....	22 ".....	5/16 ".....	65
3 ".....	21 ".....	5/16 ".....	70
3 1/2 ".....	20 ".....	5/16 ".....	80
4 ".....	19 ".....	3/4 ".....	1 00
5 ".....	19 ".....	3/4 ".....	1 20
6 ".....	19 ".....	3/4 ".....	1 40
7 ".....	18 ".....	3/4 ".....	1 70
8 ".....	18 ".....	3/4 ".....	2 00
10 ".....	16 ".....	1 ".....	3 00
12 ".....	15 ".....	1 ".....	3 75

Setting and filing saws, 4 cents extra per inch.

Always state whether cross-cut or rip-saw is wanted.

Price List of Emery Wheels

These are guaranteed to be the best emery wheels in the market.

THICKNESS OF WHEELS IN INCHES.

DIAMETER OF WHEELS IN INCHES.	THICKNESS OF WHEELS IN INCHES.							
	1/4	3/8	1/2	3/4	1	1 1/2	2	
3	\$ 50	\$ 65	\$ 80	\$ 95	\$ 1 10	\$ 1 40	\$ 1 70	
4	75	95	1 10	1 35	1 60	2 10	2 60	
5	1 00	1 20	1 40	1 80	2 20	3 00	3 80	
6	1 40	1 60	1 75	2 40	3 05	4 35	5 65	
8	2 10	2 35	2 60	3 60	4 60	6 60	8 60	
10	3 00	3 35	3 65	5 00	6 35	9 05	11 75	

Prices of larger wheels quoted on application.

How to Order.

The best way is to send remittance with order and thereby secure the discount for cash. The best way of making remittances is by draft on New York or Chicago, postoffice or express money order, or by registered letter. Do not send local checks.

Machines on Trial.

We will send machines on trial on the following terms: On receipt of *\$5.00 with order we will ship any machine described in this catalogue. For the balance due on machine we will send collection by express. The goods will be marked and consigned to ourselves, and the bill of lading which we will endorse will be sent with collection, and when you pay same the express agent will give you bill of lading, which will of course be an order on your freight agent for the machine. The express agent will be instructed to hold the money on deposit until you try the machine and are satisfied whether you do or do not want it. If the machine does not prove satisfactory, you will reship it to us and the express agent will refund you the amount deposited with him. When the machine reaches us we will pay freight and will return to you out of the amount sent with order such balance as may be your way.

We would advise, however, that full amount be sent with order, as it will give you the benefit of cash discount and will save us the trouble and work of sending out and keeping track of the collection. Where order is made on the cash basis, full amount being sent, purchaser has the same privilege of returning the machine as though it were sent on trial, and in case machine is returned, we will refund amount paid, deducting only amount to cover charges. Shipment will always be made by freight, unless purchaser positively instructs for shipment by express.

W. F. & JOHN BARNES CO.

*Where order is for more than one machine, an advance will be required for each machine. Customers ordering from points where the freight both ways will be more than the amount above given, will be required to increase the advance payment correspondingly.

