This catalog is the last of its kind, and is to be kept in permanent catalog file.
Return to -
M.E. Johnson,
Rivett Lathe and Grinder Corp.,
Brighton District, Boston, Mass.

RIVETT LATHES

RIVETT PRECISION TOOLS

Lathes

Milling Machines and Grinders a Specialty

MANUFACTURED BY

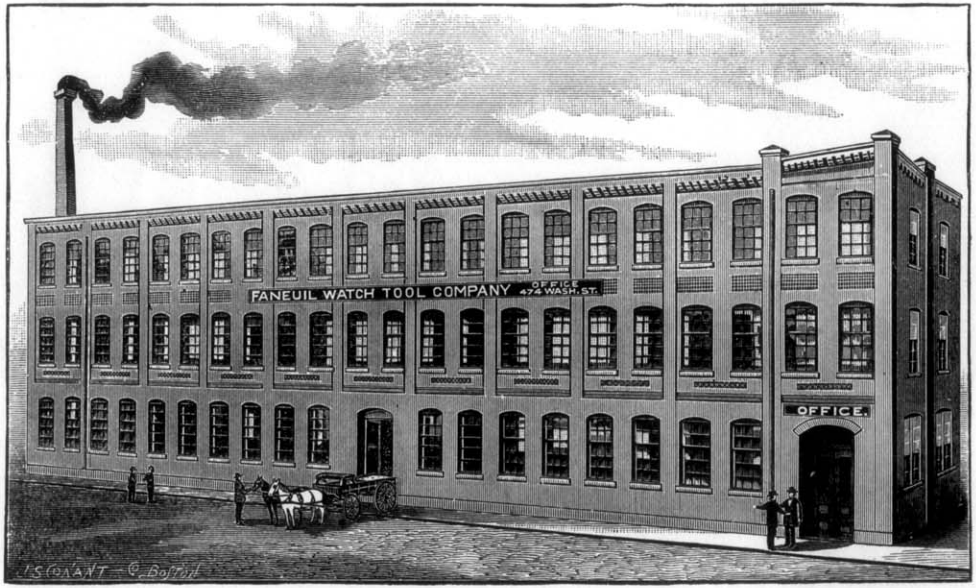
FANEUIL WATCH TOOL CO.

Brighton, Boston, Mass., U.S.A.

JOHN D. CROSBY, Treasurer

1901

EDWARD RIVETT Pres. and Manager



Our Factory is situated in the City of Boston, Brighton District, Ward 25, six miles from the business center. It can be reached by the Boston & Albany R. R., to Faneuil Station, (100 ft. from the depot), or by Electric Cars, Oak Sq. Line to Fairbanks St., or No. Beacon St. Watertown Line to Arsenal Gates.

INTRODUCTORY.

IN submitting the following pages illustrative of the Rivett Tools to the mechanical world, we desire to express our deep appreciation of the reception always accorded our productions, and, as we have faithfully endeavored in the past to deserve the word "Best" as invariably applied to our tools, we shall as earnestly try to hold that record in the future.

The four sizes of lathes and attachments shown in our catalogue are all made in the same manner, and with the same skill and care, for our tools must win entirely and only on their merits; and though it is pleasant for us to know that we are awarded the Gold Medals and First Prizes at our great International Exhibitions, yet we do not parade these to influence trade, preferring rather to let the judgment of those who have and use our tools pronounce the verdict by which we are to stand or fall.

In 1884, our Mr. Edward Rivett, himself a skilled mechanical engineer, recognized the peculiar necessity of a small, fine, accurate lathe, which to the scientist and advanced mechanic of any profession would be capable of doing the thousand and one odd pieces of work, which for the want of special machinery, not warranted by the single operation then contemplated, have always been laboriously and inaccurately performed with hand tools.

With this necessity in view our No. 3 Bench Lathe was designed and built, meeting with such success that in 1890 the No. 4 Bench Lathe was brought out. This tool found such universal approval that the idea of combining the bench lathe with all the advantages of an engine lathe was conceived and followed out with the utmost judgment and care, with the result that the Rivett 8-inch Precision Lathe, stands today unrivalled as a machine tool, in which absolute accuracy of work is combined with a variety of operations possible to no other in the world.

The lathes are well designed for tool making and the attachments are covered by numerous patents. Several mechanics have expressed their opinion as to our tools, saying that our lathe would be the last tool in their shop that they would be willing to part with.

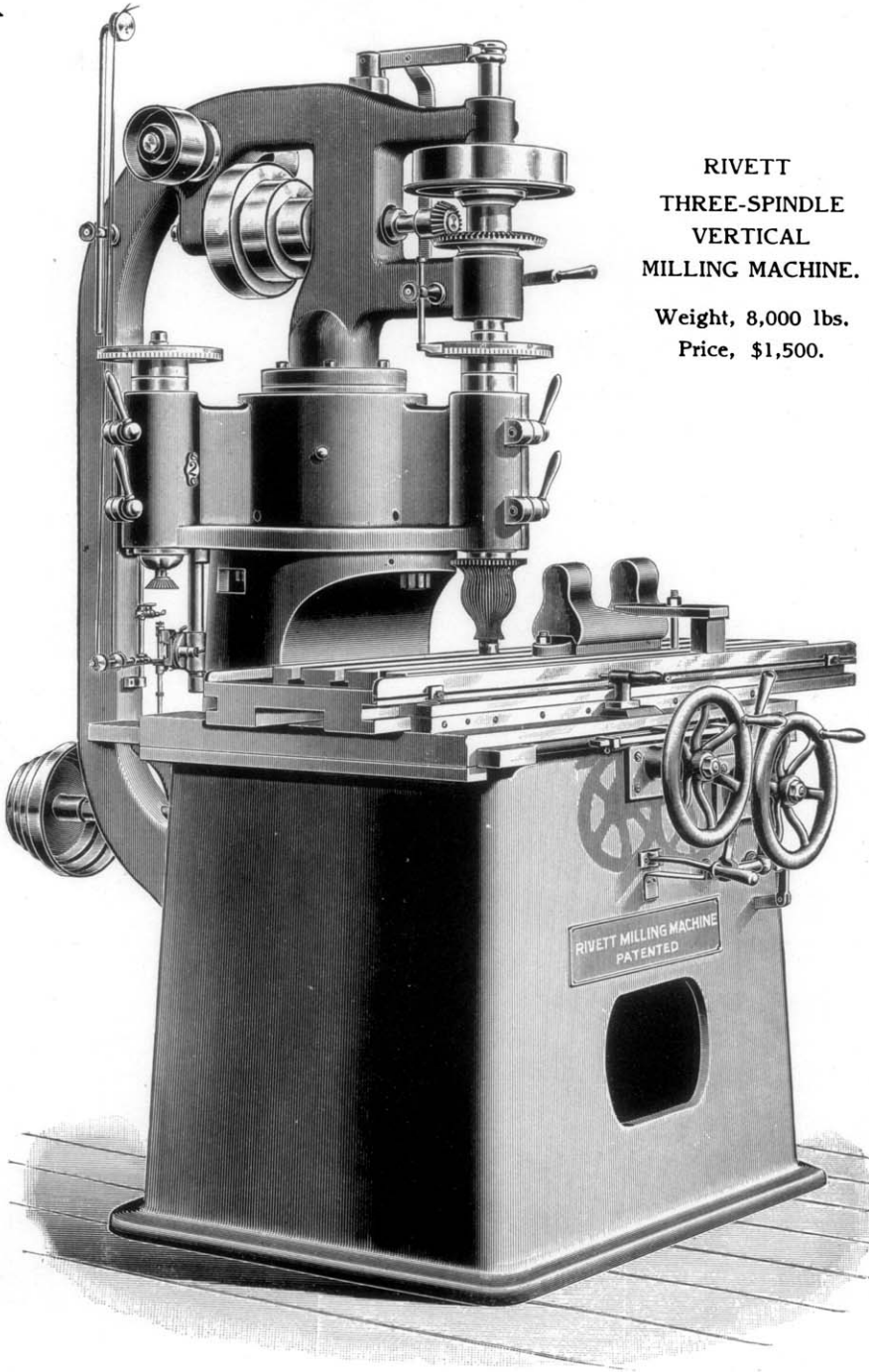
If intending customers would write us before placing their orders, explaining what work they wish to do, we might often, out of our varied experience, suggest an outfit that would suit them better than what they usually select.

We produce but one class of goods, with no variation as to quality, and have no second grade, and if our prices seem high in comparison with the productions of cheap labor and contract work, let it be remembered that all parts of our tools are made with great care.

We do not build cheap lathes, and our tools are not meant for unskilled hands, and we would prefer that our lathes should be overlooked by those not capable of handling them, for men of this class, well meaning as they may be, neither appreciate nor understand the value of machines like these, and in ruining them, only serve to injure our reputation and make enemies for us instead of friends.

The high grade skilled mechanic of any profession will find in these tools the full value of his investment and faithful servants to last him a lifetime.

Not one person that we know of that has visited ours and the other factories, but has given us the preference in their orders.



RIVETT
THREE-SPINDLE
VERTICAL
MILLING MACHINE.

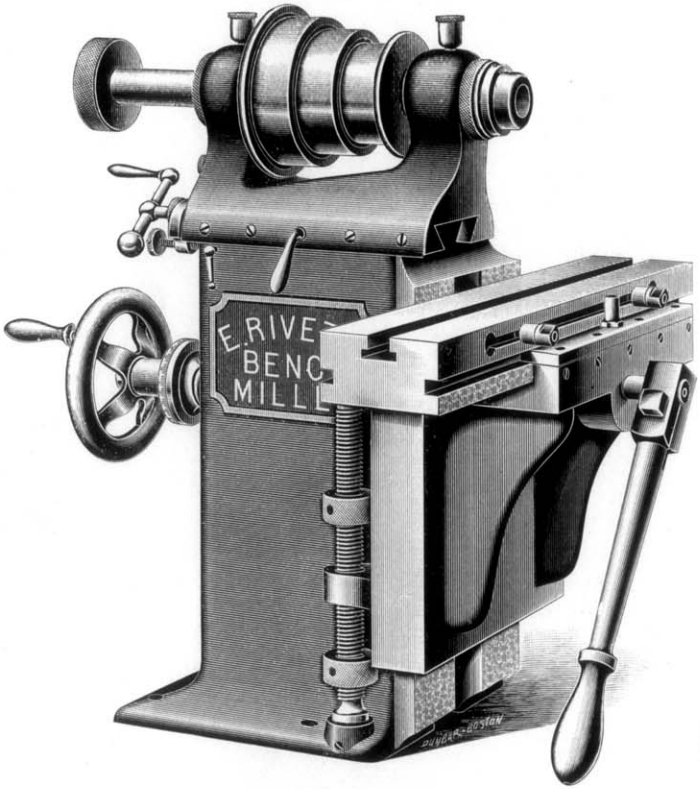
Weight, 8,000 lbs.
Price, $1,500.

Rivett Three-Spindle Vertical Milling Machine.

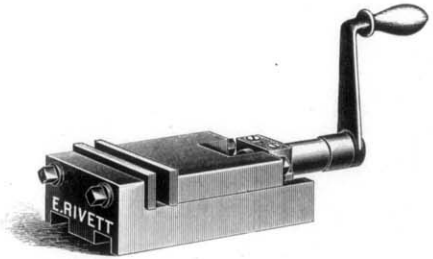
ON the opposite page we show one of our tools especially designed and made by us. This is a Three-Spindle Vertical Milling Machine, and, as can be seen, roughing and finishing cutters can be used successively without disturbing the work, and the cutters can be ground on their own arbors at the back of the machine, so that the grit from the emery does not interfere with the work, nor the grinding operation with the adjustment of the cutter. The machine is equally good for large or small work, and all who see our specimens of milling pronounce them to be the finest ever seen.

The weight of the machine is four tons, and its rigidity such that it takes a cut so smooth that the final polishing of the work amounts to very little comparatively, and this is the reason why we can finish our lathes so cheaply; we explain this matter as some people think that it is the outside finish of this lathe that makes it cost so much, but this is not the case, and everyone who has seen our method of finishing these lathes acknowledges that we can finish them almost as cheaply as by painting.

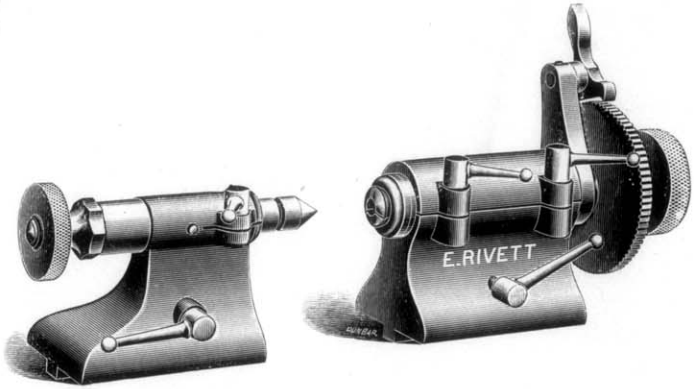
This Milling Machine is made only to order.



RIVETT BENCH MILLER. (Plain.)
Weight, 200 lbs.



VISE.



TAIL AND HEADSTOCK CENTERS FOR BENCH MILLER.
Weight, 25 lbs.

Rivett Bench Miller.

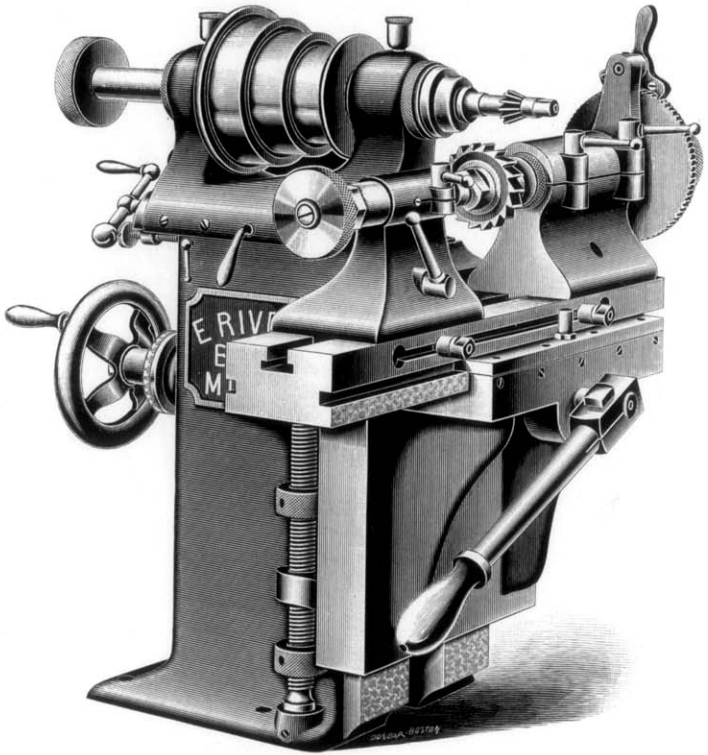
THE cut on the opposite page shows our Bench Milling Machine. All milling machines have a certain similarity but though this machine is small, it is very rigid, as the stock is disposed so as to give strength where it is especially needed, and it will do work more rapidly and smoother than a great many milling machines four times its size.

The work table is adjustable from two points; by the lever shown in the cut, and by a hand-wheel at the back of the machine which is graduated to read in 1000ths of an inch. The screw is entirely under cover and protected from the dirt and chips. It has also a rigid stop.

The same chucks are used for both the heads, and they are interchangeable with the No. 4 and Precision lathes. Capacity $\frac{1}{64}$ to $\frac{1}{2}$ inch.

The machine is well adapted for steam gauge makers, small gears, cutters, saws, and all straight milling, also for the various parts of clocks, and other mechanical motions.

This Miller has to be seen to be properly appreciated, as few people realize its capacity; we have often furnished only one machine for work which our customers had estimated they would want four. We have several in our factory in constant use.



Rivett

Bench Miller.

Weight, 225 lbs.

Rivett Bench Miller.

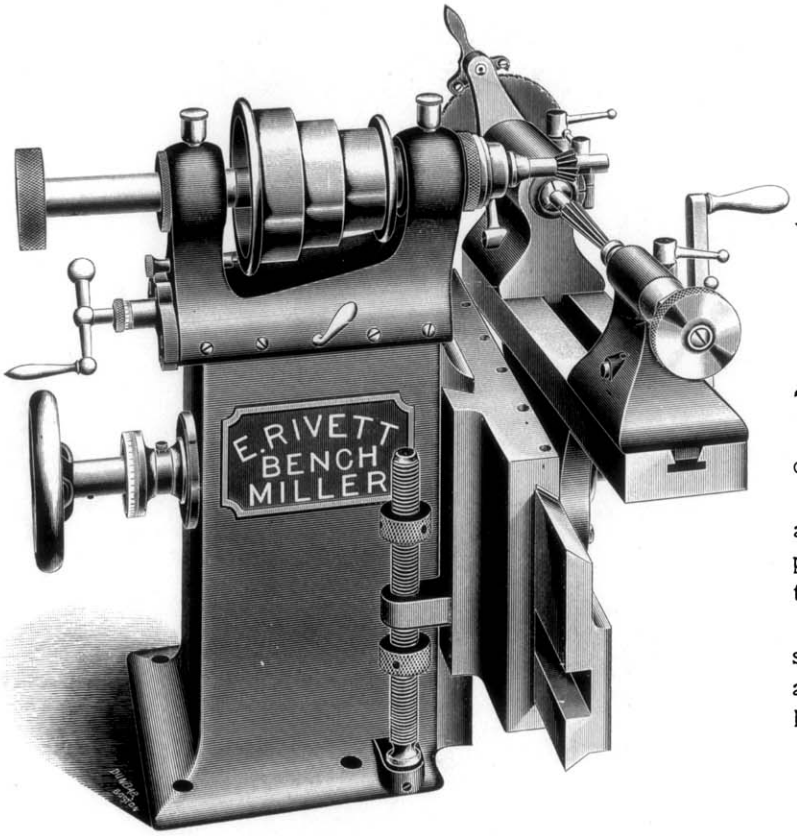
THE opposite cut shows the straight Miller with the Head and Tailstock in use. The hand-wheel graduated in 1000ths of an inch is also shown on the back of the machine.

DIMENSIONS.

Distance between centers,	7 inches.	Swing, 6 inches.
Vertical movement,	6 inches.	Vise, 3½ x 3½ inches.

PRICES.

Bench Miller, plain, ...	$250.00
Head and Tailstock centers, including 8 Index plates,	100.00
Vise, ...	15.00
Countershaft, ...	23.00



Weight, 250 lbs.

Rivett Bench Miller,

WITH SWIVEL TABLE FOR ANGLES.

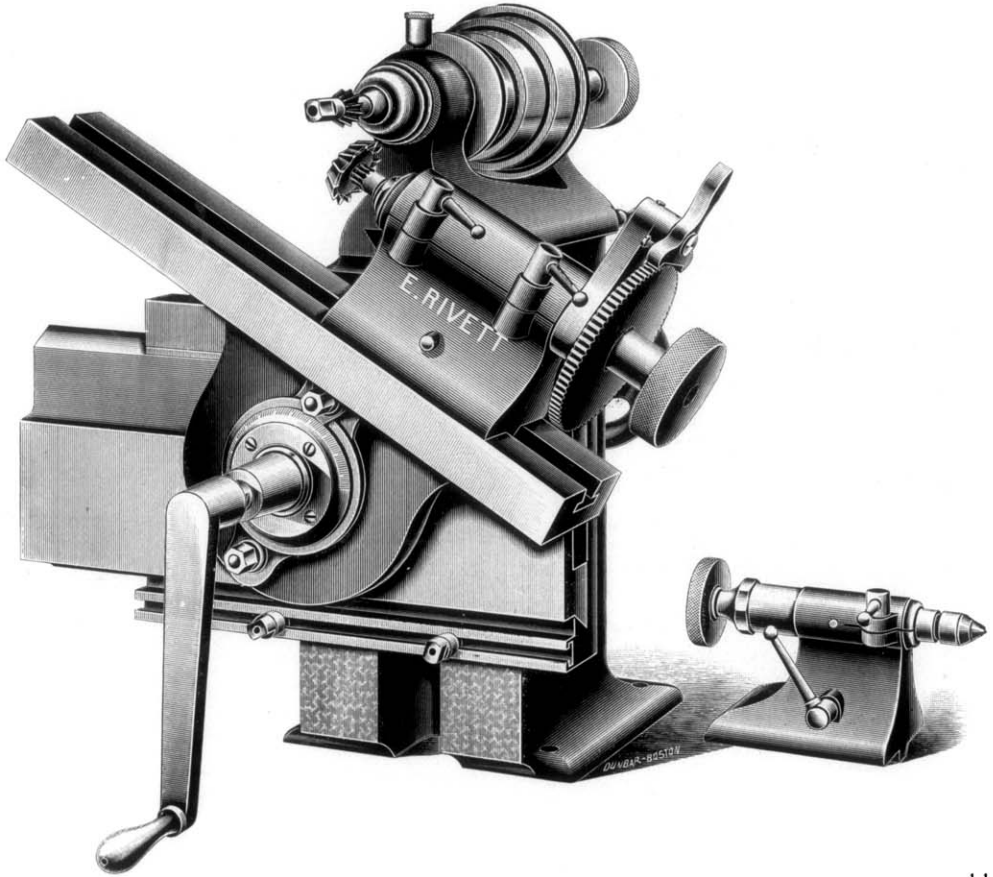
THE body of this machine is the same as that shown on pages 6 to 9, with the addition of a swivel table for milling angles.

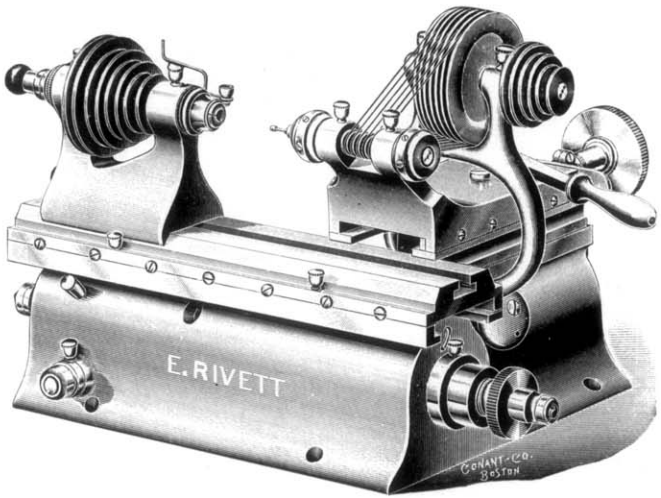
This Swivel Table is different in design from anything that has ever before been produced. Its principal feature being its rigidity, with the ability to cut any angle up to 45°.

The same head, and tailstock, chucks, and vise shown on the preceding pages fit this machine, and it is well adapted for such work as Taper Reamers, Bevel Gears, etc.

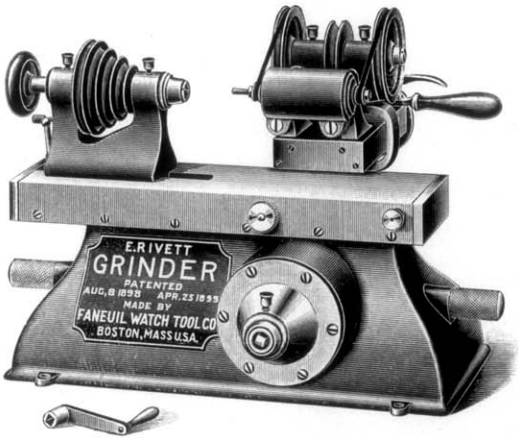
Rivett Bench Miller, with Swivel Table for Angles.

Weight, 225 lbs.
Price, (without Head and Tailstock Centers), $300.00.





RIVETT INTERNAL GRINDER No. 1.
Weight, 18 lbs.



RIVETT INTERNAL GRINDER No. 2.
Weight, 25 lbs.

Rivett Grinders. Nos. 1 and 2.

THE No. 1 Grinder was the result of our initial attempt to produce an internal grinder with a linear speed equal to that ordinarily used for external grinding. This machine will do very nice work although it is not furnished with the reciprocating motion, nor the improvements in the fast speed quil which have been added to our later machines.

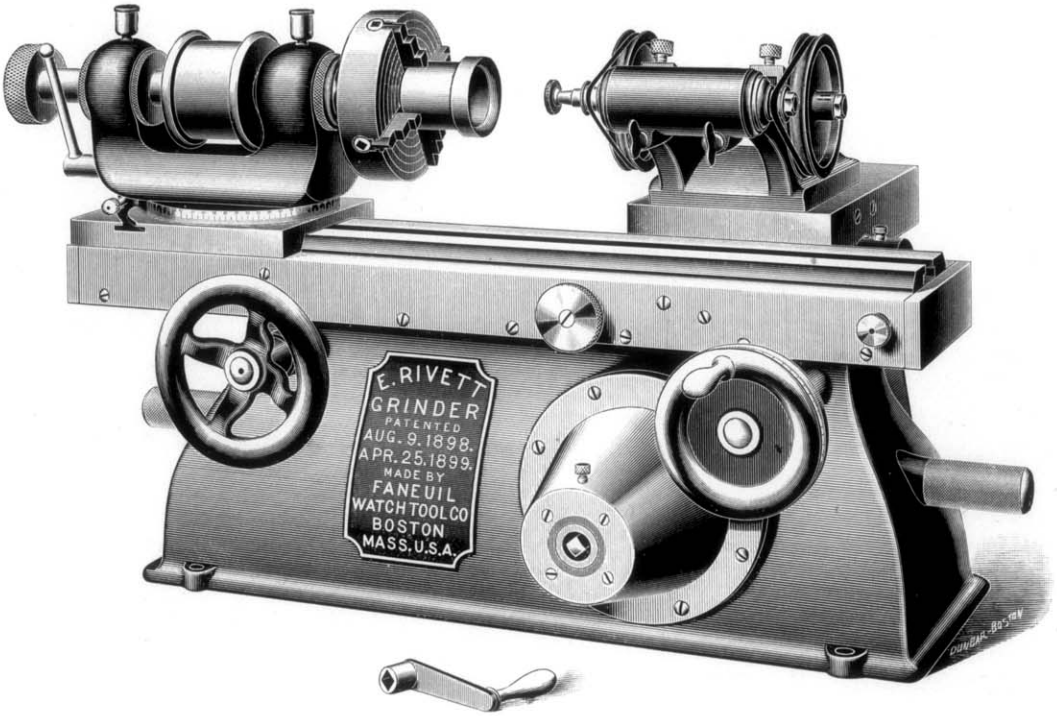
Capacity from $\frac{10}{1000}$ inch to $\frac{1}{4}$ inch diameter, $\frac{1}{2}$ inch stroke.

Price, including countershaft, $300.00.

THE No. 2 Grinder is one of our latest designs, on which nice delicate work can be done to the very best advantage. It is furnished with our improved Patent Quil, and Reciprocating Motion.

Capacity from $\frac{10}{1000}$ inch to $\frac{1}{2}$ inch diameter; $\frac{3}{4}$ inch stroke.

Price, including countershaft, $450.00.



RIVETT INTERNAL GRINDER No. 3.
Weight, 315 lbs.

Rivett Grinders.

THERE is progress everywhere, but one of the greatest strides that has been made during the past few years in the art of grinding is here shown.

Mr. Rivett, our mechanical expert, has been for several years at work on what some of the finest mechanics have thought to be an impossibility, viz: — the production of a linear speed for inside grinding as great as is already produced for outside grinding. This we have accomplished, and are now able to attain any speed from 10,000 to 100,000 revolutions per minute; but in devising a bearing to stand this great speed lay one of the difficulties to be overcome.

Everybody is aware of course, that it is the speed at which a wheel is run that gives to it its ability to cut, and that the quicker it can be run, the better and more quickly it does its work. We can now grind a hole $\frac{10}{1000}$ inch in diameter, as true and as easily as we can a larger hole. For small holes we use a steel plug charged with diamond powder instead of emery.

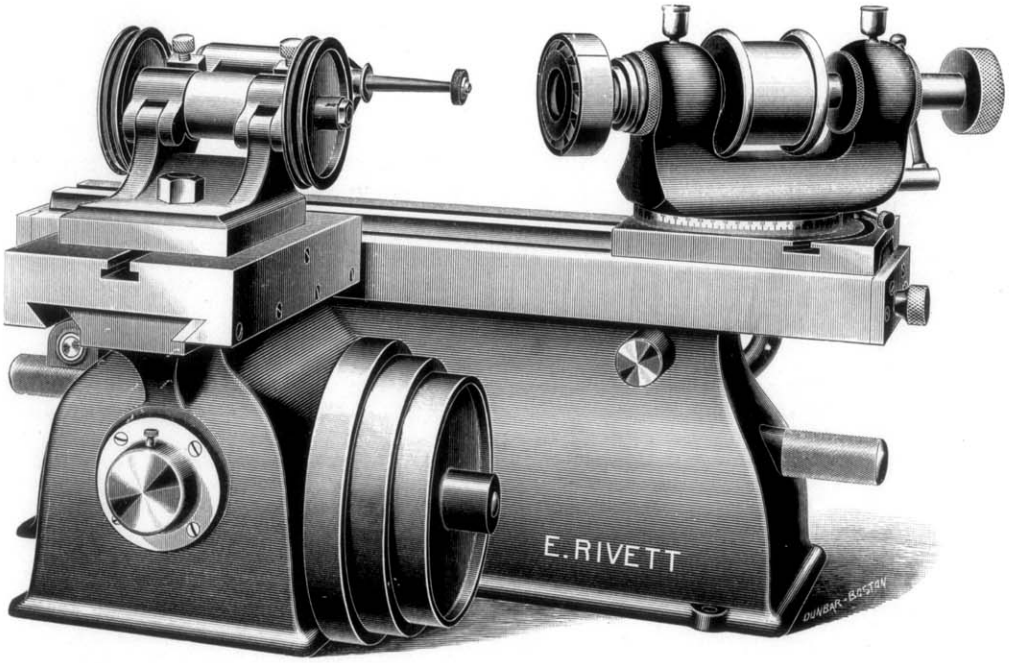
The grinder is now ready for the market, and for any grinding that is required, both rapid and accurate, and for all work such as gauges, bicycle bearings, rollers for sewing machines, and in fact anything which has to be ground accurately, quickly, and at a minimum cost, this machine is just the thing.

In addition to the matter of speed, this machine has several other features interesting to the lovers of ingenious special machinery.

The Automatic Feed, controlled by a patent device, is regular, and the reciprocating motion perfect, it is adjusted so that the length of the stroke will not vary $\frac{1}{1000}$ inch from one stroke to another. The carriage is arranged so that the slide can be disengaged and the head pushed back, for testing the work without removing it from the machine; this can be done and the carriage re-engaged in a moment.

The head is adjusted on a swivel, the base of which is graduated, allowing grinding of any angle to be done.

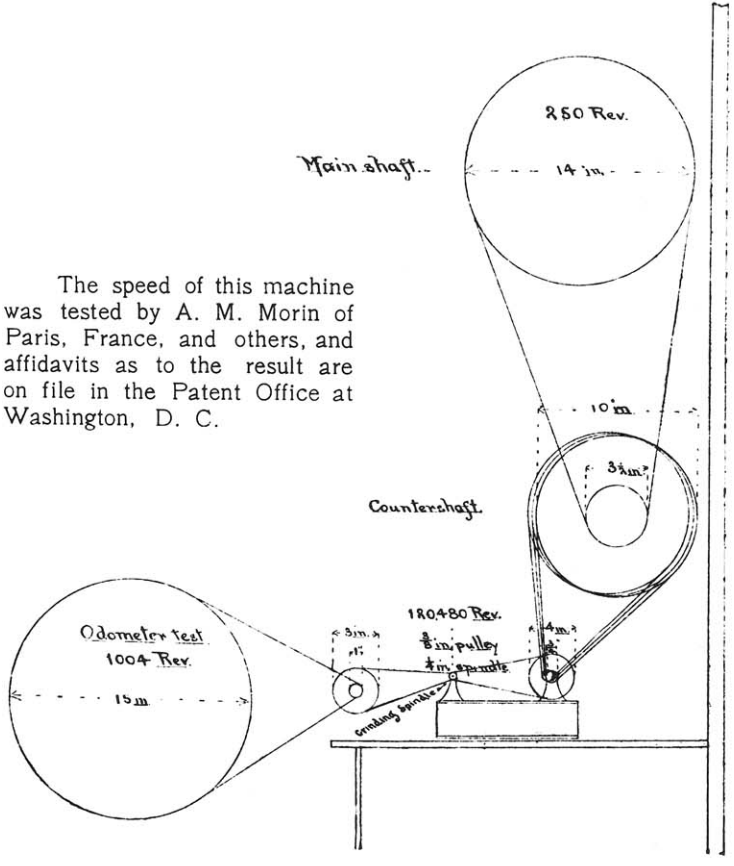
In visiting various shops throughout the country our Mr. Rivett has been astonished at the quantity which use the old method of truing small holes after hardening, by lapping, spending hours where a few minutes would do the work on a grinder.



RIVETT INTERNAL GRINDER No. 3.

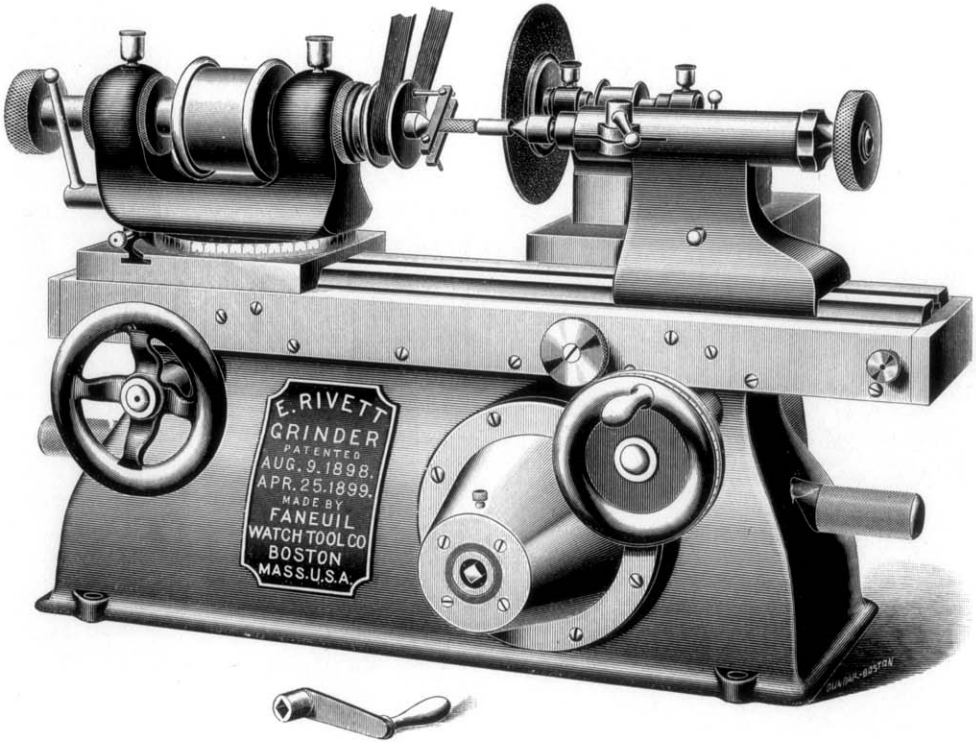
(Showing rear of machine.)

The speed of this machine was tested by A. M. Morin of Paris, France, and others, and affidavits as to the result are on file in the Patent Office at Washington, D. C.



WE recognize the fact that the speed of this machine is not only a great deal higher than what anybody else has been able to produce, but that it is utterly incomprehensible by some, as our Mr. Rivett has been flatly told that such a speed was impossible. We show, therefore, the way in which we have tested the speed of the spindle, so that no one will be able to say that we are simply deceiving ourselves as to its powers.

There is of course no odometer made that will register the speed that we wished to prove, and so with a system of pulleys arranged as shown, we reduced the speed to where it was practical to measure it in the ordinary manner, with the very pleasing result that it showed 120,480 revolution per minute for the spindle, though actually it must have been more than this on account of the slipping of the belts on the speed reversing pulleys. The Brown & Sharpe Mfg. Co. of Providence, R. I., report they are very well pleased, with the grinders made for them, and we feel highly complimented at this, because they are the largest manufacturers of grinders, and recognized as the best in their field.



RIVETT GRINDER No. 3, with Head and Tailstock for External Grinding.
Weight, 315 lbs.

Rivett External Grinder.

THE continuous and increasing demand for a grinder for small external work, similar to our machine for internal grinding has resulted in our making a special head and tailstock by which the work runs between dead centers, and grinding is the cheapest way to get both the truth and the finish.

While it is well-known that small work can be ground on a large machine, it is done to very much greater advantage on a machine especially adapted to it, where the emery wheel is of the proper size for the work.

Our patent device for reversing the slide has no lost motion, and can grind close to a shoulder without any variation from one stroke to another.

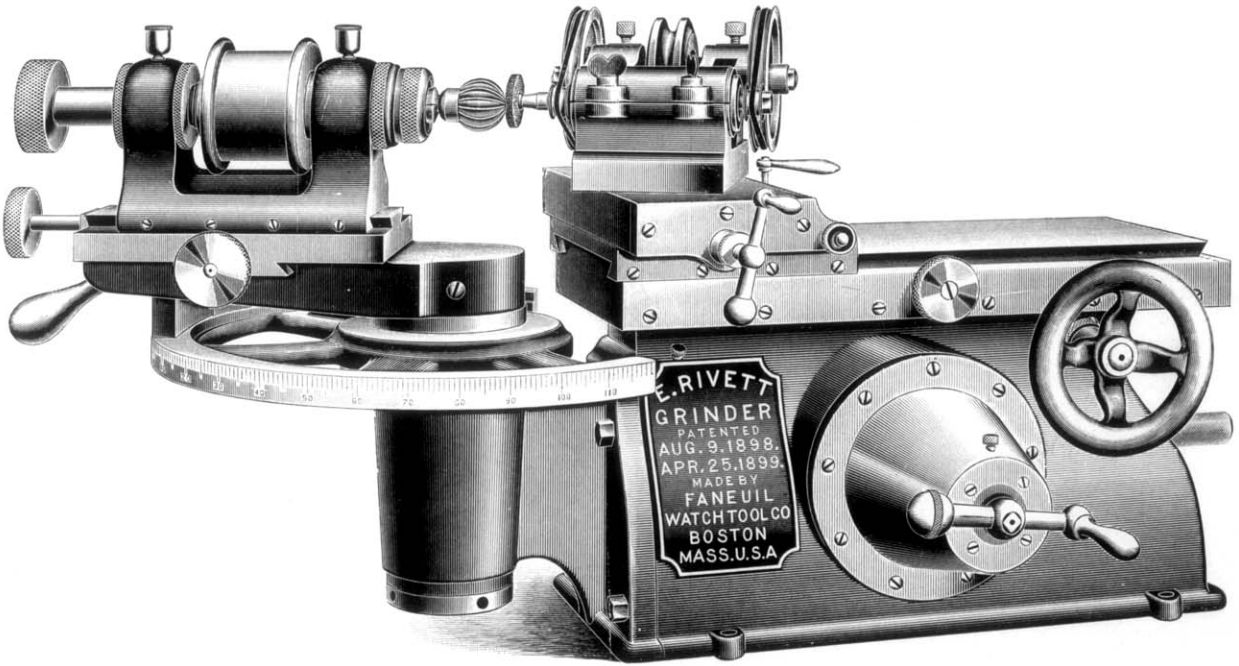
Capacity up to 2 inches diameter.

Length of feed adjustable by thousandths of an inch up to 2 inches.

Distance between centers, 6 inches.

PRICES.

Internal Grinder, including countershaft, ...	$600.00
External Grinder, " "	600.00
Internal Grinder, with extra Head and Tailstock for External Grinding,	700.00
Extra Quils, each, ...	100.00



RIVETT GRINDER No. 4.
Weight, 335 lbs.

Rivett Grinder No. 4.

THE No. 4 Grinder shown on the opposite page is designed for doing a great variety of work, which cannot be done to advantage on any other grinder.

Grinding can be done straight, or at two or three or any number of different angles, at one holding without changing the work.

It is especially well designed for grinding die plates for drawing steel where straight holes and two different angles are required.

Also for grinding ball cutters and any of the various curved milling cutters.

Also any internal or external segments of circles from ¼ inch up to 4 inches diameter, which makes it well adapted for cup and cone bearings of Motor Carriage and other similar work.

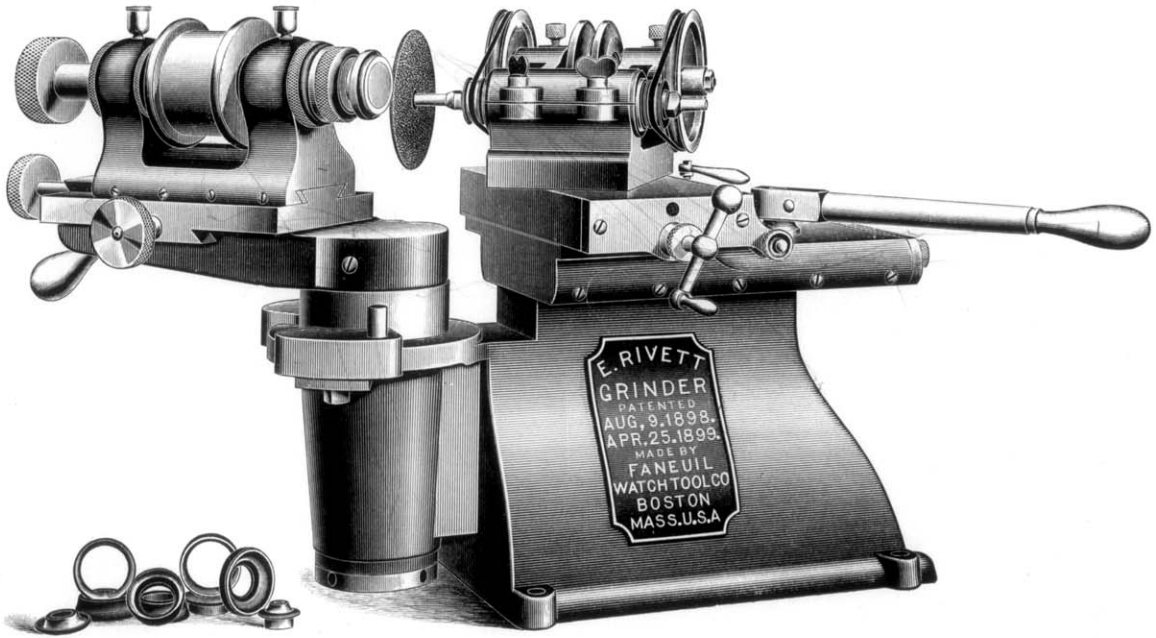
This machine is supplied with the same patented reciprocating motion as our No. 3 Grinder. The stroke being 2 inches long.

Also with our patent high speed quil, which is described in the following pages.

The bearings in the head are hardened steel, just the same as we put into our lathes.

The Swivel is a long cone bearing of two different angles, which makes it very stiff and rigid, and it will practically last for years.

Price, $700.00.



RIVETT GRINDER No. 5.
Weight, 200 lbs.

Rivett Grinder No. 5.

ESPECIALLY ADAPTED FOR BALL BEARINGS.

THE Grinder shown on the opposite page was especially designed for grinding ball races when we saw the dire necessity of such a machine, and it is of particularly great advantage in grinding round races. It is acknowledged by some of our best Bicycle and Motor Carriage manufacturers to be the best way to make a ball race, and that until we adapted our grinder for this work there was no machine made for it.

Motor Carriage manufacturers should investigate this machine, as it is a great labor saver and we have proved to a great many that it is just as cheap to grind the races for ball bearings on this machine as to polish them in the ordinary way, and in addition they get a true bearing, thus eliminating one cause of motor carriage accidents.

The machine is adjustable so that it will grind anything from the smallest bearing up to 3½ inches in diameter, and is provided with our patent bearings and fast speed spindle. It works very rapidly, some pieces being finished in less than 30 seconds.

Price, $600.00.

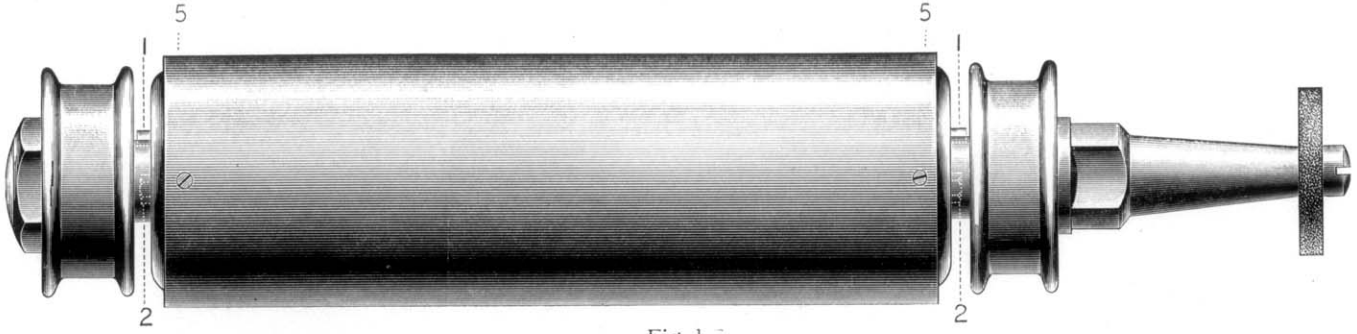


Fig. 1.

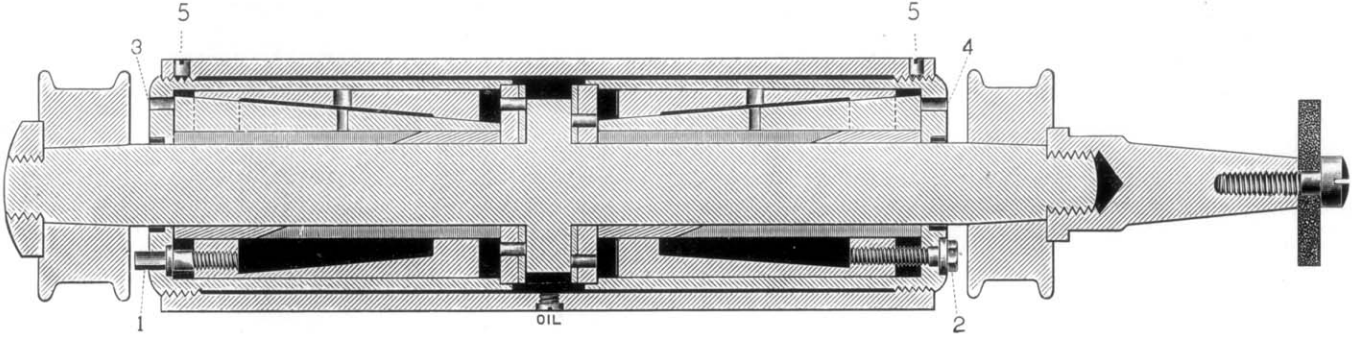


Fig. 2.

RIVETT PATENT ANTIFRICTION BEARING.

(ADDITIONAL PATENTS PENDING.)

Rivett Patent Antifriction Bearing.

AFTER several years of hard study, and troublesome times with spindles in grinders, our Mr. Rivett designed his Fast Speed Spindle shown opposite. A spindle of this size will run from 30,000 to 75,000 revolutions per minute for a long time without any perceptible wear, and with very little care.

As may be seen expansion due to heating is compensated for and will not interfere with the end shake, as the end shake is held in the center, so that the spindle can be kept well oiled, and still there is no suction to draw grit and dirt from the wheel.

DIRECTIONS FOR ADJUSTING.

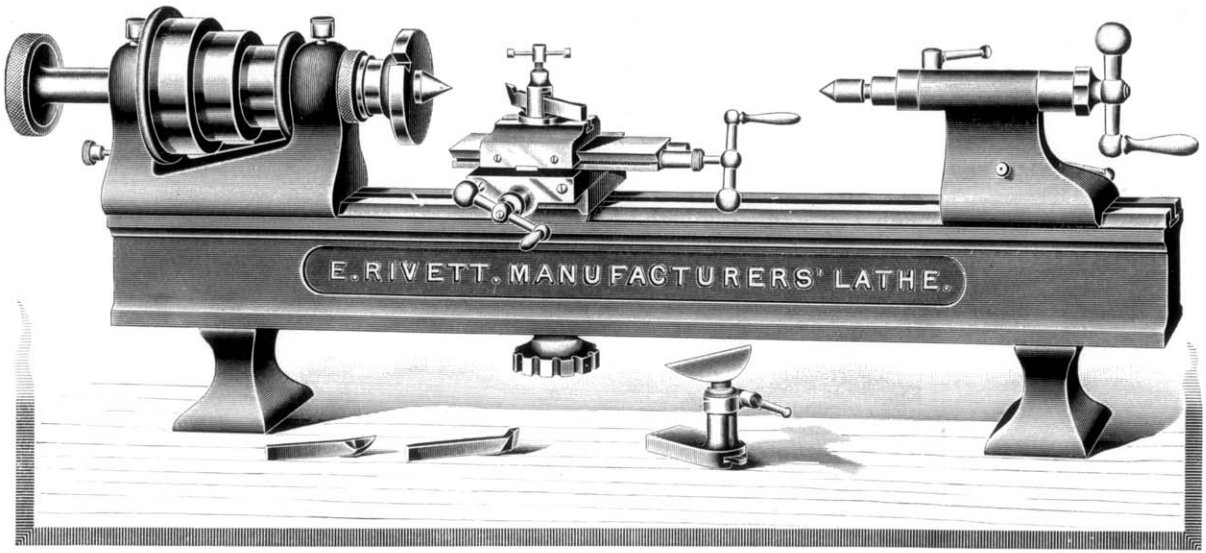
The spindle can be adjusted for side shake without interfering in any way with the end shake, and vice versa.

Both ends of the spindle are entirely separate, and the figures 1, 2, 3, 4, and 5 apply to both ends alike.

To adjust Side Shake; first screw No. 1, then on the same end screw No. 2 until you get the proper tension on the spindle. No. 1 acts only as a check to prevent No. 2 loosening after being set.

To adjust End Shake; insert wrench in holes No. 3 and No. 4 and adjust, checking with No. 5.

The spindle while in use should be oiled once a day, always in the center, removing for this purpose the screw shown in the cut.



RIVETT MANUFACTURERS' LATHE No. 5.

Weight: Lathe, 165 lbs.; Slide Rest, 17 lbs.

Rivett Manufacturers' Lathe No. 5.

THIS lathe, our latest production, has been designed especially for manufacturing, where there is needed a large capacity through the chucks.

The lathe is made, not as a good many are when the size of the chuck is increased,—simply by making the hole through the spindle larger; but every part of the lathe is re-enforced, so that with the increase in the size and capacity of the chuck it loses nothing in strength and rigidity.

We believe that this is the extreme in size and weight for a bench lathe; and while we would not recommend it to take the place of our toolmaker's lathe, we have determined to give the best lathe in the world for a reasonable price.

The Slide Rest to go with this lathe is of the ordinary pattern, though differing from that we formerly made for this lathe. It is exactly the same Slide Rest as other manufacturers sell for $75.00.

This lathe with our Cutting Off Slide, which has proved such a success, the Automatic Chuck Closer and Turret, makes the strongest and most complete screw machine in the country.

We invite requests for estimates from intending purchasers, as to what the lathe will do, and would say that though the lathe looks small in comparison with a 16-inch lathe, a good many of the latter have spindles no larger than is put into this lathe.

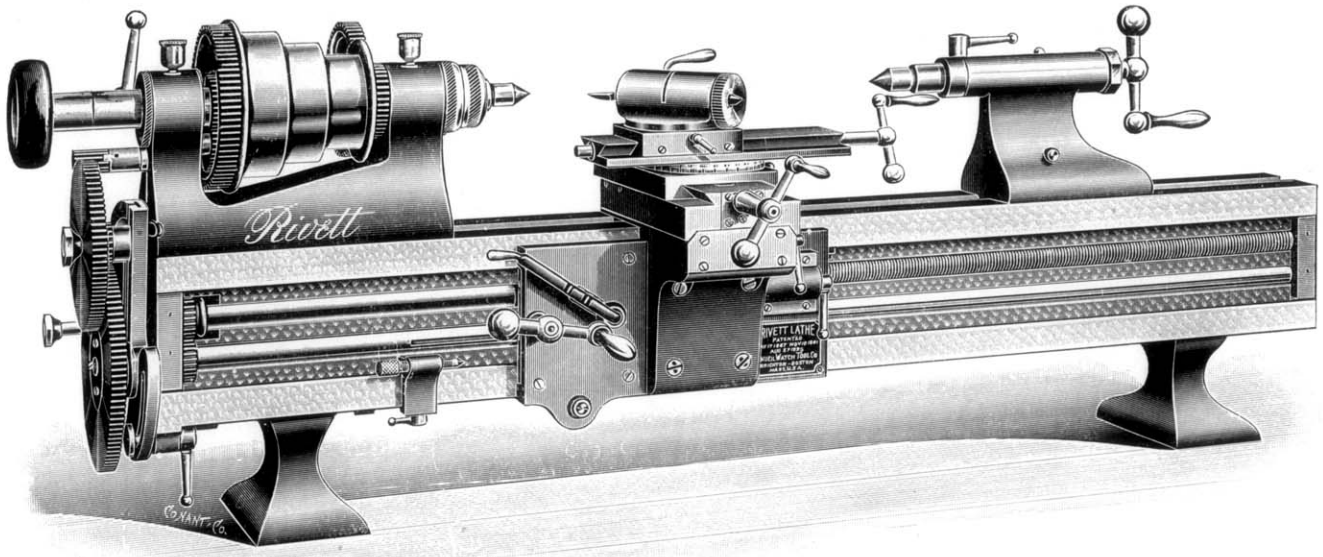
Hardened spindle, bushings hardened and ground. Cone has steps 1½ inches wide, 3, 4 and 5 inches diameter.

Capacity of chucks is from $\frac{1}{32}$ inch to $\frac{3}{4}$ inch, full size of chuck as shown on page 80.

Length of Bed, 42 inches. Swing, 8 inches. Distance between centers, 18 inches.

PRICES.

No. 5 Manufacturers' Lathe, . . .	$125.00	Split Chucks, each, ...	$ 3.00
No. 5 Manufacturers' Slide Rest, . .	40.00	Arbor Chucks, each, ...	3.00
Countershaft, 3 speeds, ...	$23.00		



RIVETT BACK-GEARED PRECISION LATHE.

Rivett Back-Geared Precision Lathe.

THIS lathe is precisely the same as our 8-inch Precision Lathe shown and fully described in the following pages, with the exception of the Back Gear.

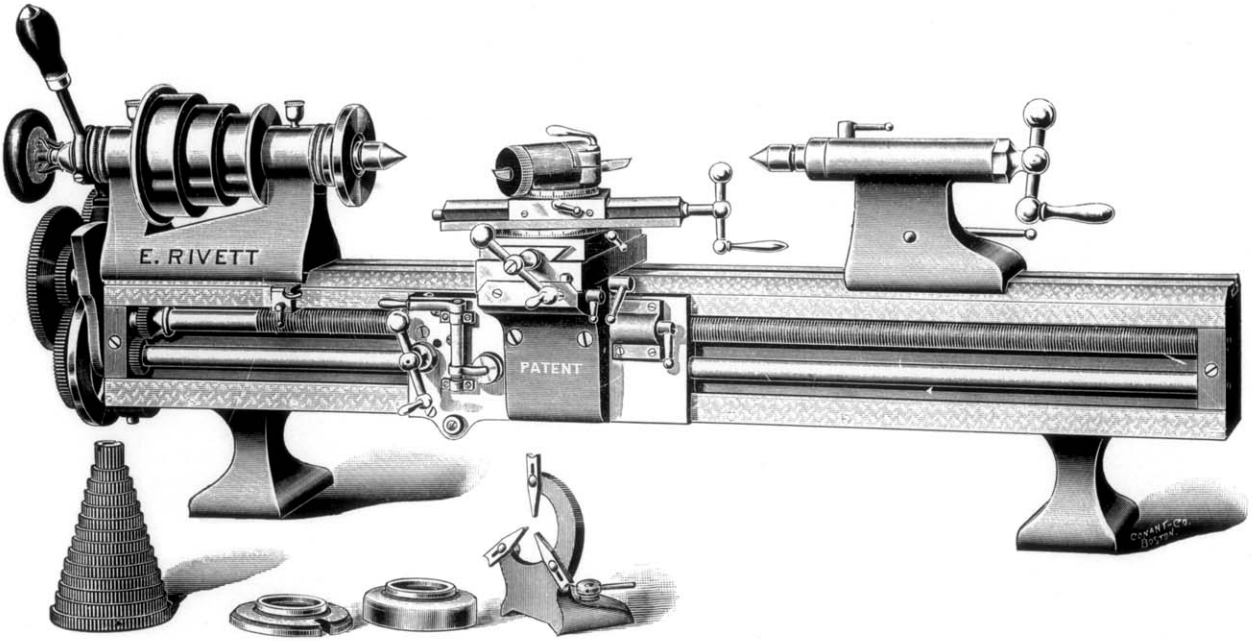
The Back Gear was added to this lathe in order to get more variation in the speed than was possible with the three-step cone only, and besides the added strength we can now get the slow speeds so much needed on work of large diameter.

The first back-geared head we got out was for the U. S. Mint in Philadelphia, three years ago, and they claim that it is a great addition to the lathe for their particular work.

The strength of this lathe, and the accuracy with which it does its work, surprises everybody who sees it for the first time. As will be seen the cone on this lathe is reversed, contrary to all other engine lathes, and this leaves the casting strong where strength is needed, at the thrust-bearing end of the spindle.

The adjustment of this lathe head is designed differently from anything hitherto on the market. The cone does not run on the bare spindle but in composition bearings on the quil of the gear. This construction needs to be seen by a mechanic to be properly appreciated, as when the cone runs directly on the spindle it will wear it in time, so as to throw it out of true.

It depends, of course, on what kind of work a man has to do whether the back-geared head is advisable or not, and we will cheerfully give the benefit of our experience to anyone who will write us, believing, as we do, that our customers' best interests and our own are identical.



RIVETT EIGHT-INCH PRECISION LATHE.

Weight, 250 lbs. Price (without Auto. Chuck Closer), $450.00.

Our Precision Lathe has proved so popular that most other lathe makers have copied the name "Precision," though not the lathe nor the workmanship; one lathe with this name being listed as low as $16.00.

Rivett 8-Inch Precision Lathe.

WE have now the pleasure of presenting and describing our truly superb production, the 8-inch Precision Lathe, and we take an honest pride in calling attention to its numerous and varied points of superiority.

The lathe is built for engineers, tool makers, scientists and skilled operators of every profession, and is, we believe, the most complete tool of the kind ever conceived. With this lathe, starting with plain turning, the operations which may be performed are endless, and the operator has the comfort of knowing that they are, at the same time, absolutely correct and accurate.

The lathe bed is 40 inches long, of the best grade of cast iron, milled and scrape finished, polished on all sides. Distance between centers, 22 inches; swing, 8½ inches. The large spindle bearing is 2⅛ inches in diameter, and tapered at converging angles nearest to the curve of least resistance, both spindle bearings being 2⅜ inches long.

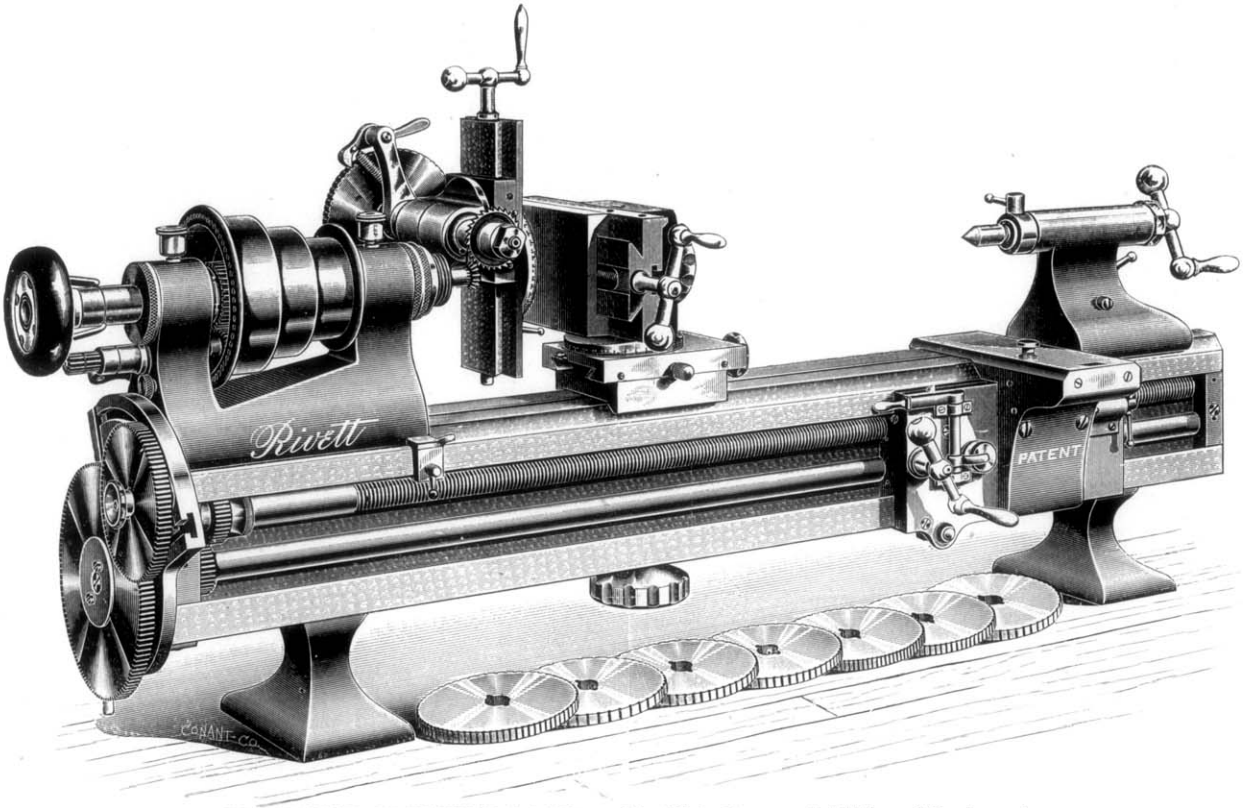
The bearings are not boxes of iron, bronze, or softer alloys with caps to tighten until the journals are ruined and the alignment lost, but are cylindrical in form, of the best tool steel, and as are the spindles, made as hard as fire and mercury will make them, and then ground with diamond to perfect fits.

The slide rest is like the head and tail stocks, the same as the No. 4, but here the similarity ends, as in this lathe it becomes part of the carriage, merging thereby into the regular automatic cross feed compound slide rest.

The carriage is gibbed to the side of the bed, the V's being internal and out of the way of chips, as are also the feed rod and lead screw. The lead screw is cut from the steel best adapted for such work, and with one of the best master screws in the country. Both long and cross feeds are automatic, the former controlled by the Rivett Friction Gear, acknowledged to be ahead of any in simplicity and strength of its grip, and the latter thrown in or out by the regular lever movement. The long feed is also regulated by an Automatic Stop, which may be adjusted to any point on the bed. The full capacity of the long feed is the whole of the distance between centers.

This lathe is in daily use, chasing fine taps in the shops of some of our finest tap manufacturers; on this work where great accuracy is necessary, we claim it of great advantage.

The change gears apply the same to the lead screw of the lathe, and that of the compound rest. Table of gears given with this lathe will be seen on page 61.



EIGHT-INCH PRECISION LATHE, with Slide Rest and Milling Attachment.

Rivett 8-Inch Precision Lathe,

WITH CUTTER MILLING AND GEAR CUTTING ATTACHMENT.

THE lathe is shown in this plate with the slide rest removed and set up for cutter milling or gear cutting, the carriage being run to the lower end of the bed out of the way.

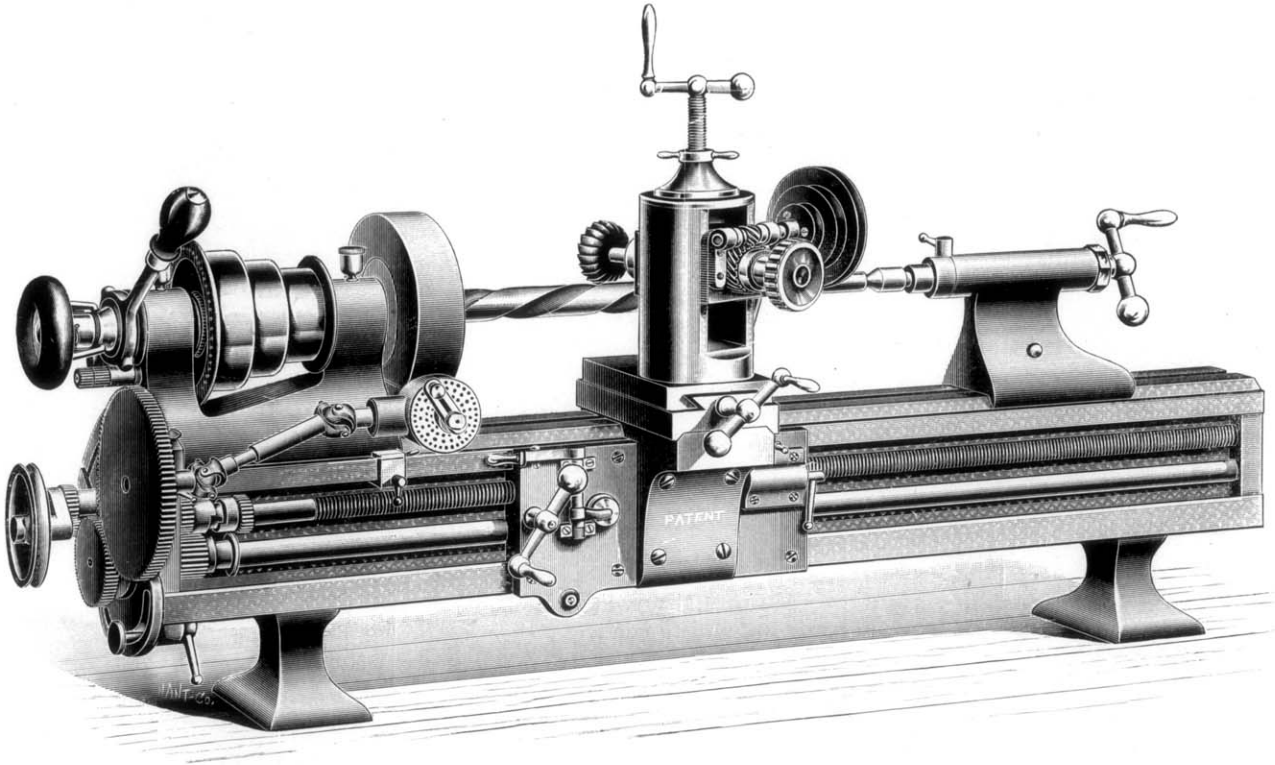
As the description of the cutter milling attachment is given on page 43, we will not repeat it, the attachment being the same for both lathes.

No extra belts are required, as previously mentioned; neither is it necessary to reverse the headstock, as is the case with certain lathes of other makes, which reversing is neither pleasing to the operator nor good for a lathe, no matter how carefully it may be done.

In this view of the lathe will also be seen the large friction gear on the end of the feed rod.

This friction gear takes the place of a belt and cone feed, and is far superior to the latter, as it not only allows the feed to slip in case of work jambing or other accident, but also has no limit to the variation of feeds allowed by the use of the change gears of the lathe, this feature being very important when taken in connection with the use of the Traverse Miller and Grinder shown on pages 34 and 74.

This friction received the highest award at the World's Columbian Exposition, and shop rights have been sold to several of the most prominent tool-making concerns.



RIVETT EIGHT-INCH PRECISION LATHE, with Spiral Attachment (Patent applied for) and Traverse Miller.

Our Precision Lathe has proved so popular that most other lathe makers have copied the name "Precision," though not the lathe nor the workmanship; one lathe with this name being listed as low as $16.00.

The Spiral Attachment and Traverse Miller.

MADE ONLY FOR THE RIVETT 8-INCH PRECISION LATHE.

OUR spiral attachment will be found indispensable, where there is no regular milling machine, and where there is, this machine could be used on fine jobs as economically, and do the work more accurately than any machine on the market especially made for the purpose.

Spiral cutters, spiral mills, drills—any length up to 22 inches and not over ½ inch diameter, etc., etc., can be made to advantage.

On pages 71 to 73 a few samples may be seen of work done on this machine.

The Traverse Miller and Grinder is so named because it will mill and grind work the entire length of the lathe, being traversed by either the feed rod or the lead screw. This attachment is used for all kinds of fluting, channeling, grooving, keyway cutting, etc. It is easy of adjustment, requiring about one minute to set up, and, with the graduated base, adjustable to any angle.

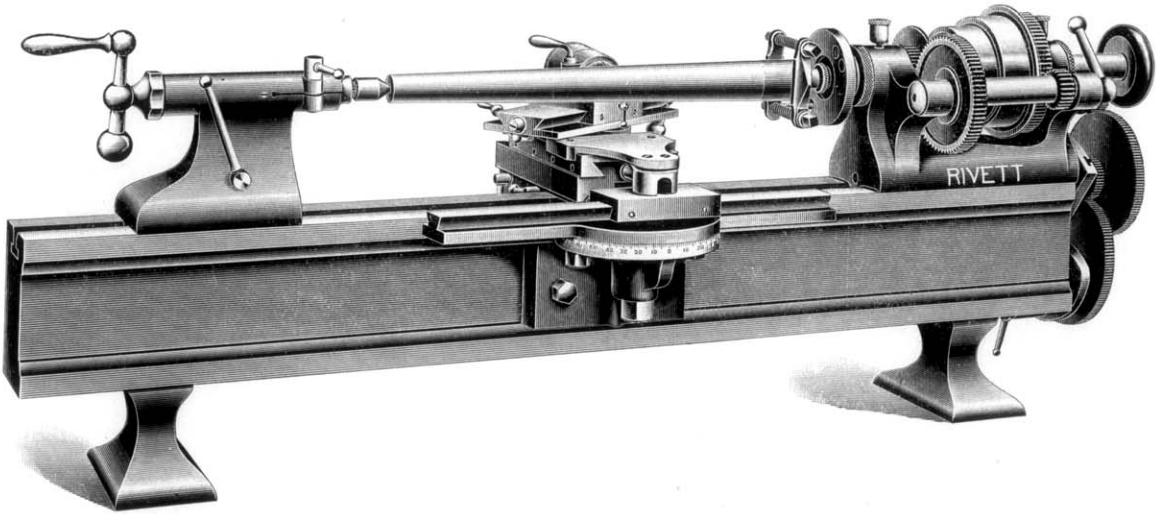
The attachment consists of a powerfully-geared milling head attached to the slide rest, the cutter being driven with a steel worm and composition spiral gears, giving the smoothest possible cut without chatter, and the range of fineness in work done by the lathe thus set up exceeds anything of the kind in the world today.

With this Miller, the operator may put a keyway in a shaft as small as one-eighth of an inch in diameter, the full length of the lathe between centers, or flute a reamer three inches in diameter.

For fluting taps, reamers, broaches, counterbores, or any work requiring flutes or channels, this miller will do the work quickly and with perfect accuracy.

The Grinder is simply a spindle and bearing fitting the spindle of the miller, and used for following up the work of the cutter after the work is hardened.

The split and arbor chucks fit the spindle of the traverse miller, the same as they do the spindles of the lathe and the cutter miller.

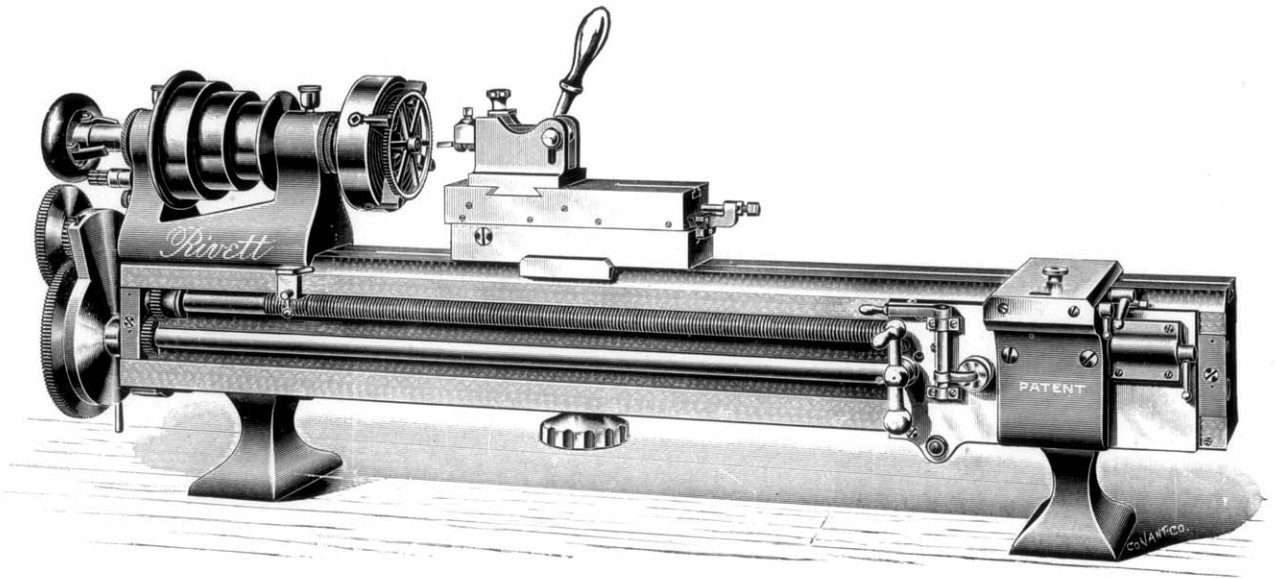


RIVETT PRECISION LATHE, with Taper Attachment.
(Rear View.)

Rivett Precision Lathe, with Taper Attachment.

THE taper attachment shown on the opposite page with the Precision Lathe is for long tapers; for short tapers up to 4 inches in length our regular Slide Rest answers admirably, but the attachment shown here will turn tapers of any length up to 15 inches.

This attachment as will be seen is built very stiffly and rigidly, and is easy of adjustment as are all of our attachments.



RIVETT EIGHT-INCH PRECISION LATHE, with Slotting Attachment mounted on base of Forming Slide.

Our Precision Lathe has proved so popular that most other lathe makers have copied the name "Precision," though not the lathe nor the workmanship; one lathe with this name being listed as low as $16.00.

Rivett Slotting Attachment.

MADE FOR THE No. 4, AND 8-INCH PRECISION LATHE.

IN connection with the Traverse Miller and its work of splining shafts, we would next submit our Slotting Attachment. How many mechanics, especially in the experimental line of engineering, but have often had to key a very small wheel to an equally small shaft. With a large wheel or wheel of large bore, it is a comparatively easy matter, even if not blessed with a regular slotting machine, but with a small hole, the misery of scratching away with a delicate chisel and thin file is well known, and the results are never satisfactory.

With the Rivett Slotter, however, it is but the work of a minute to put a key-seat in as small a hole as a cutter may be made to stand the work.

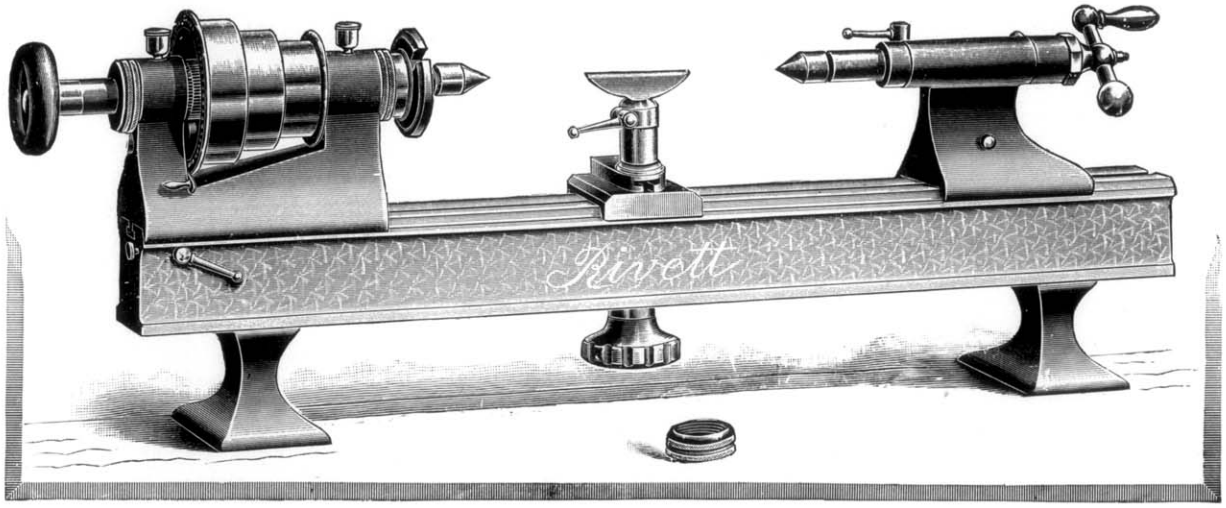
The entire time necessary to put a key-seat in a hole of 1/4 inch diameter and 3/4 inch long is from forty seconds to two minutes, according to the metal worked.

These figures are not guess work, but are taken from regular shop practice.

The attachment, as shown in the plate, consists of a small shaper head, stiffly and strongly built, resting in V's on the cutting off slide of the screw machine, the slide fitting the bed of the lathe both transversely and laterally.

The stroke is made by hand, giving extreme delicacy of cut, and the feed is also by hand, allowing nicety of depth. The thrust is toward the live head.

By the use of this attachment a wheel may be key-seated without removal from the chuck, where it may have been turned or faced, and that with a certainty that it will fit when finished.



RIVETT No. 4 BENCH LATHE.

Weight, 140 lbs. Price, $125.00.

Rivett No. 4 Bench Lathe.

The Popular Lathe for Tool Manufacturers.

WE now come to the No. 4 Bench Lathe, shown in the opposite cut. This lathe was designed after our No. 3, and in our own shop we find it much more appropriate than the earlier production, and think that this lathe is much cheaper in proportion than any of our other lathes. We make everything for it in great quantities, as it has proved such a popular tool. It is intended for all kinds of fine, accurate work, and is especially adapted to the use of tool-makers, model-makers, electricians, etc.

The head and tail stocks of this lathe, as well as all parts of the bed, are the same in size, build and finish as for our 8-inch Precision Lathe.

Split or spring chucks are made for this lathe, holding from $\frac{1}{32}$ to $\frac{1}{2}$ inch diameter, the drawbar being hollow, enabling stock of any length to be run through the live spindle.

The cone is a three-step reversed for $1\frac{1}{4}$ inch belt, the large flange being drilled as an index plate, useful for indexing and spacing work, etc.

The bed, feet, and all parts of this lathe are milled with forming cutters, scrape finished and polished, leaving no skin of casting to cause unequal strain and false alignment.

Length of bed, 36 inches; swing, 8 inches; distance between centers, 18 inches; hole through spindle, $\frac{3}{4}$ inch.

For rapid manufacturing our Automatic Chuck Closer with this lathe is a great labor-saving device, and no one who has used it has anything but praise for it, and our aim, as before stated, is to advise such tools as will give the most satisfaction after being used.

RIVETT No. 4 BENCH LATHE, with Slide Rest and Milling Attachment.

Rivett No. 4 Bench Lathe,

WITH SLIDE REST AND MILLING ATTACHMENT.

THE Cutter Milling and Gear Cutting Attachment, mounted in conjunction with the Slide Rest, as seen in this cut, is also the same as that made for the 8-inch Precision Lathe.

This attachment has two rotary, as well as horizontal, vertical and angular movements, enabling cutters of any possible shape up to a diameter of 4 inches to be cut.

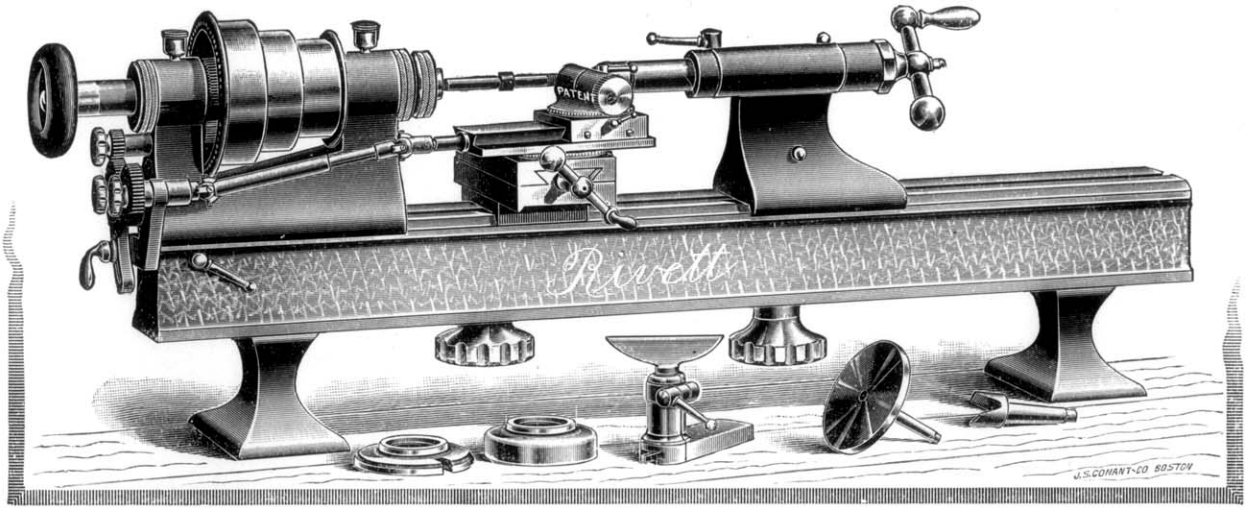
The cross feed is 4 inches in length, the vertical and angular feed 5 inches.

Eight index plates are furnished, of the numbers 45, 56, 60, 64, 72, 80, 84 and 100. Any others possibly desired will be supplied at a low cost.

This attachment will mill balls from ⅛ to 1½-inch in diameter, flute taps, mill cutters, counterbores, cut gears etc., and requires no extra belting as with most other machines.

We would call attention on pages 85 to 91 to some of the various shapes of cutters made with this attachment, one of which, on page 86, as will be noticed, was cut at our works on a wager in twenty-seven minutes, and another on page 91, in eighteen and one-half minutes.

Though we have milling machines of the best makes in our shops, we cut nearly all our angle cutters for our large milling machine on either our No. 4 or 8-inch Precision Lathe, for the simple reason that we can do it to better advantage.



RIVETT No. 4 BENCH LATHE, with Screw Cutting Attachment for Slide Rest.

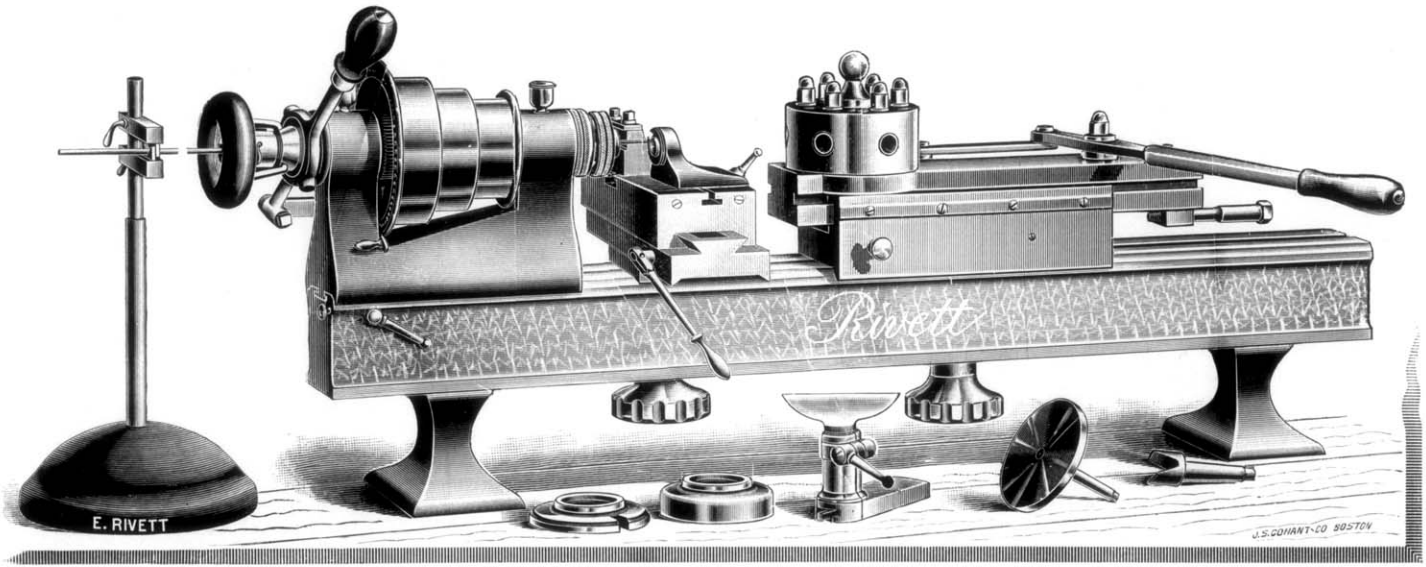
Rivett No. 4 Screw Cutting and Taper Attachment, for Slide Rest.

THIS attachment is like that for the No. 3 Bench Lathe and 8-inch Precision Lathe, used for screw cutting or plain work on short traverse, feeding four inches, and by means of the splined sleeve and ball joints, capable of turning tapers to an angle of sixty degrees.

The cone is internally geared, having reverse motion as on larger lathes, and the quadrant carrying the change gears, together with the splined shaft are set up or removed in the fraction of a minute. The simplicity of this attachment is marked and has only to be seen to be appreciated.

EXTRA GEARS TO CUT ANY THREADS UP TO 360 PER INCH SUPPLIED TO ORDER.

Chasing bars will be furnished when desired, with the No. 3 and No. 4 lathes, but they are not recommended by us. Everyone knows that chasing bars are not used for nice work on large lathes, and what is not practical on large lathes, is not on small ones. Of course, these bars are used mostly on brass work, and when desired will be furnished.



RIVETT No. 4 BENCH LATHE FITTED UP AS A SCREW MACHINE,

with Turrett Attachment and Cutting-off and Forming Slide, and Automatic Chuck Closer.

The Screw Machine.

WE take up now the description of a form of attachment only made in connection with the No. 4 and Precision Lathe; namely, the Screw Machine.

This cut shows the lathe set up with regular six-hole turret, cutting-off slide, closer, etc., and second to no other as an accurate Screw Machine.

The split chucks used in this connection, as well as in other operations of the lathe, are all hardened and then ground true with diamond, and are therefore absolutely accurate, and our Patent Automatic Closer is, we believe, ahead of any in the extreme simplicity of its action and strength of its grip.

The cutting-off slide has an improved tool holder, for horizontal adjustment and holding forming cutters of various shapes, giving great range of angles and curves in the heads and necks of screws or studs. This machine will be found extremely useful where a screw machine is wanted for but a few hours at a time, for the change from the plain lathe to the screw machine is made inside of two minutes.

Size of holes in turret, $\frac{11}{16}$ inch; length of turret stroke, 4 inches; length of bearing of turret slide, $9\frac{1}{2}$ inches.

With this machine any and all forms of screws, studs (from $\frac{1}{2}$ inch down), and, in fact, anything that is made on screw machines, may be made, precisely the same as on the commercial screw machine, which admits of no change of operation from that for which it is especially designed.

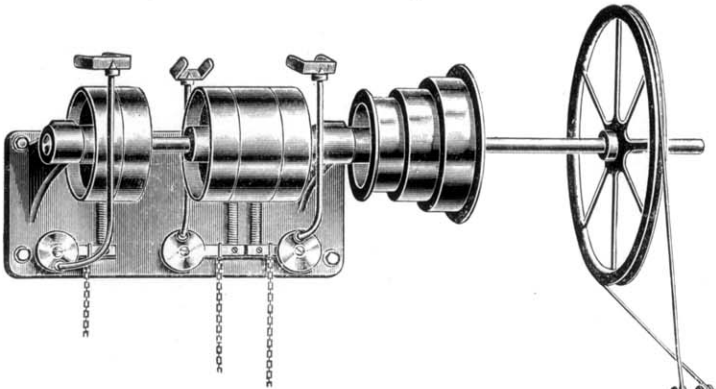
The extreme solidity of all the component parts is noticeable in this cut.

On the under side of the cut-off slide is seen a square tongue which comes into use when the slide is set parallel on the shears and used as a slotter, as shown on page 38, fitting into the T slot of the bed, securing central alignment and firm bearing.

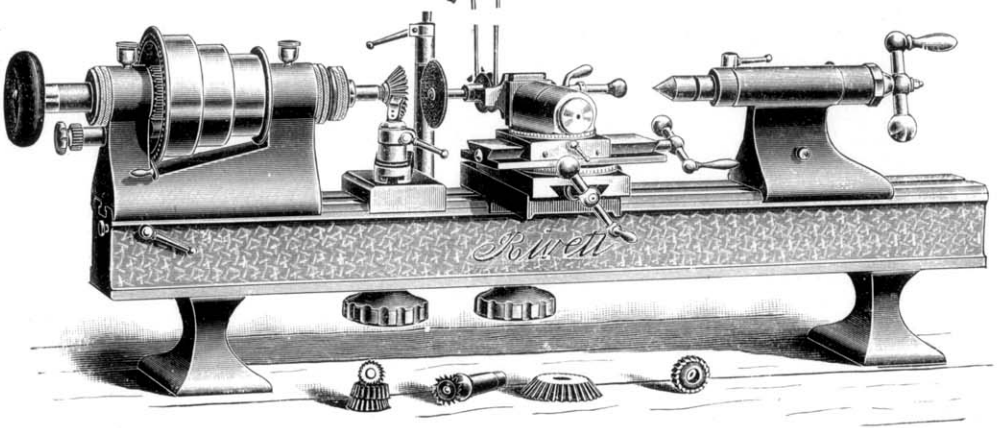
If you are in need of a screw machine do not go by this without investigation, for in this you would get a head and turret that are far superior in their construction to the ordinary screw machine. See samples on page 92.

WIRE HOLDER.

This wire holder will be found much more handy than anything for this purpose ever shown before. It is very easy to adjust for wire of different sizes; and the heavy base allows it to be moved any distance from the lathe and still hold the wire in proper position.

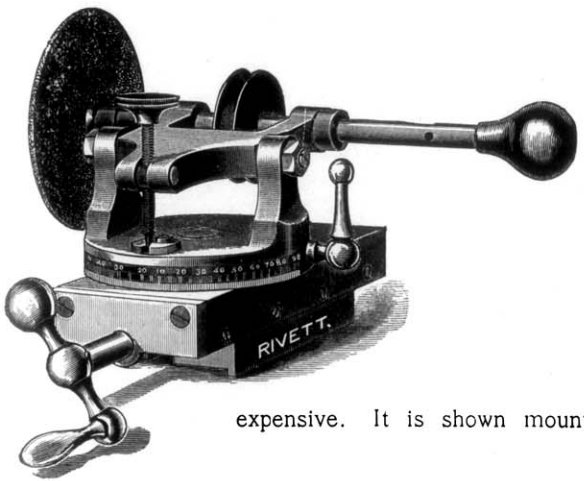


RIVETT No. 4 BENCH LATHE,
with Slide Rest, Grinding Attachment, and
Countershaft.



Rivett No. 4 Grinding and Lapping Attachment, for Slide Rest.

THIS attachment requires about twenty seconds to set up ready for any kind of grinding or diamond lapping, external, internal, angular, or surface, and in the simplicity of its arrangement and ease of manipulation is second to none in the world.

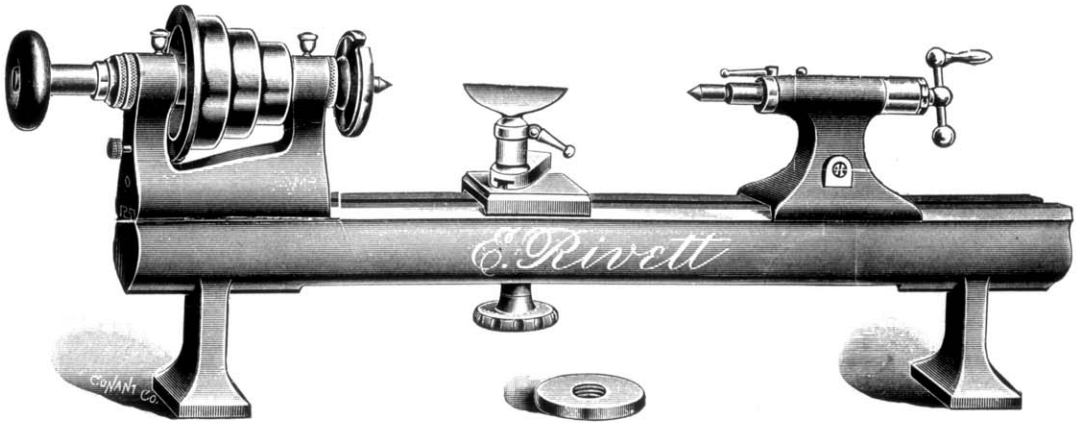


The spindle is of fine tool steel, hardened and ground, has adjustment in every direction, and is finished like the rest of our work. with scraped surfaces and hardened bearings.

The grooved wheel of aluminum on the countershaft, with which the grinder is driven, is a great improvement over the wooden drum of old times, the round belt being guided by the idler pulleys on the curved columm seen in the cut.

A good and well made tool cannot be too stiff, and this desideratum has been most carefully watched in all parts of the lathe and its attachments.

We make a special grinding attachment, as shown herewith, for $75,00 to order, but advise our Grinder for Slide Rest, as this grinder is arranged to work fully as stiffly and is much less expensive. It is shown mounted on the opposite page, and again on page 67.



RIVETT No. 3 BENCH LATHE.

Weight, 95 lbs. Price, $90.00.

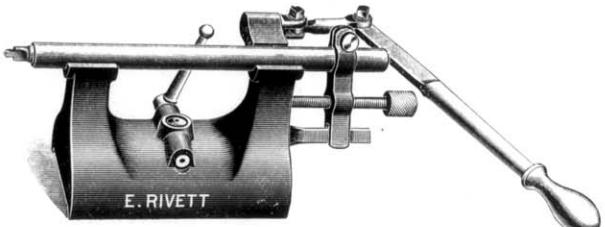
Rivett No. 3 Bench Lathe.

THE cut on the opposite page shows our No. 3 Bench Lathe, which is our original production in this line. This lathe has hardened spindle and bearings in the headstock, and also a hardened and ground tailstock spindle. Since we made this lathe first we have got out an improved bearing, and this with the other improvements we have made from time to time has been added to it, so that it is made and finished in precisely the same manner as our larger tools.

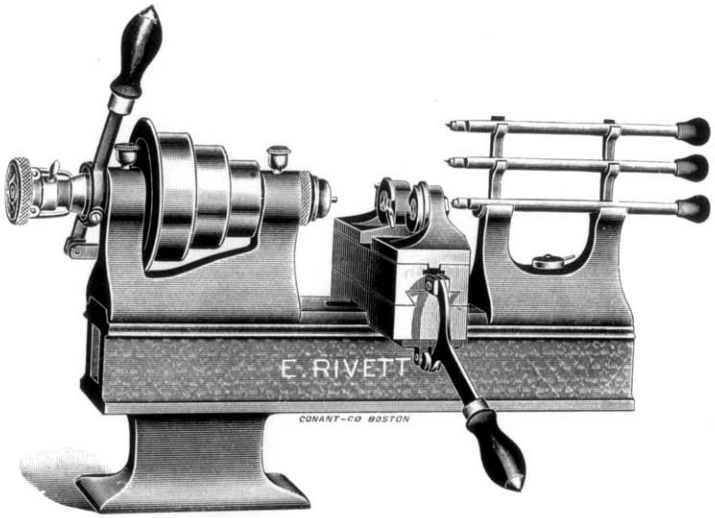
We furnish to order in size proportionate for this lathe the cutter milling and gear cutting, screw and taper cutting, and grinding attachments, made in the same style as those on our larger lathes.

A chasing bar will be furnished with this lathe when desired, but we do not recommend it. Everyone knows that chasing bars are not used for nice work on large lathes, and what is not practical on large lathes is not on small ones. These bars are used mostly of course on brass work, and when desired will be furnished.

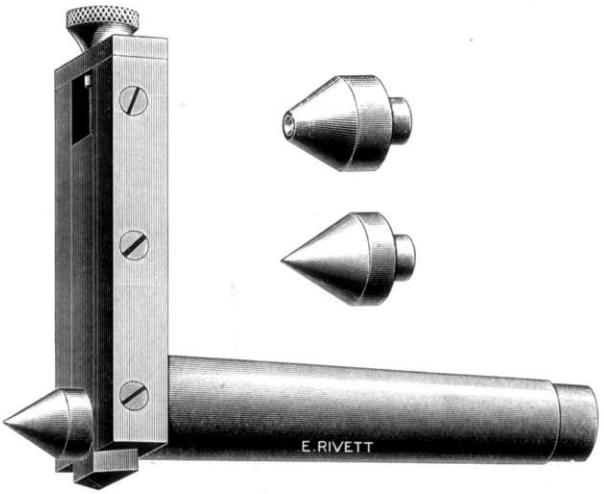
Length of bed of No. 3 Lathe, 32 inches; swing, 7 inches; distance between centers, 18 inches; hole through spindle, $\frac{18}{32}$ inch; largest size of spring chuck for this lathe, $\frac{13}{32}$ inch.



HALF OPEN TAILSTOCK.



RIVETT MANUFACTURERS' LATHE No. 3.
Weight, 65 lbs.



TAILSTOCK CENTER, Adjustable off Center.

Rivett Manufacturers' Lathe No. 3.

THE accompanying cut shows our No. 3 Manufacturers' Lathe, especially designed for rapid manufacturing.

For electrical, and optical work, forming, drilling, tapping, etc., this machine can be handled much more rapidly than a turret.

The forming slide is the same heavy attachment shown on pages 46, and 68, and is capable of taking a 1¼-inch chip.

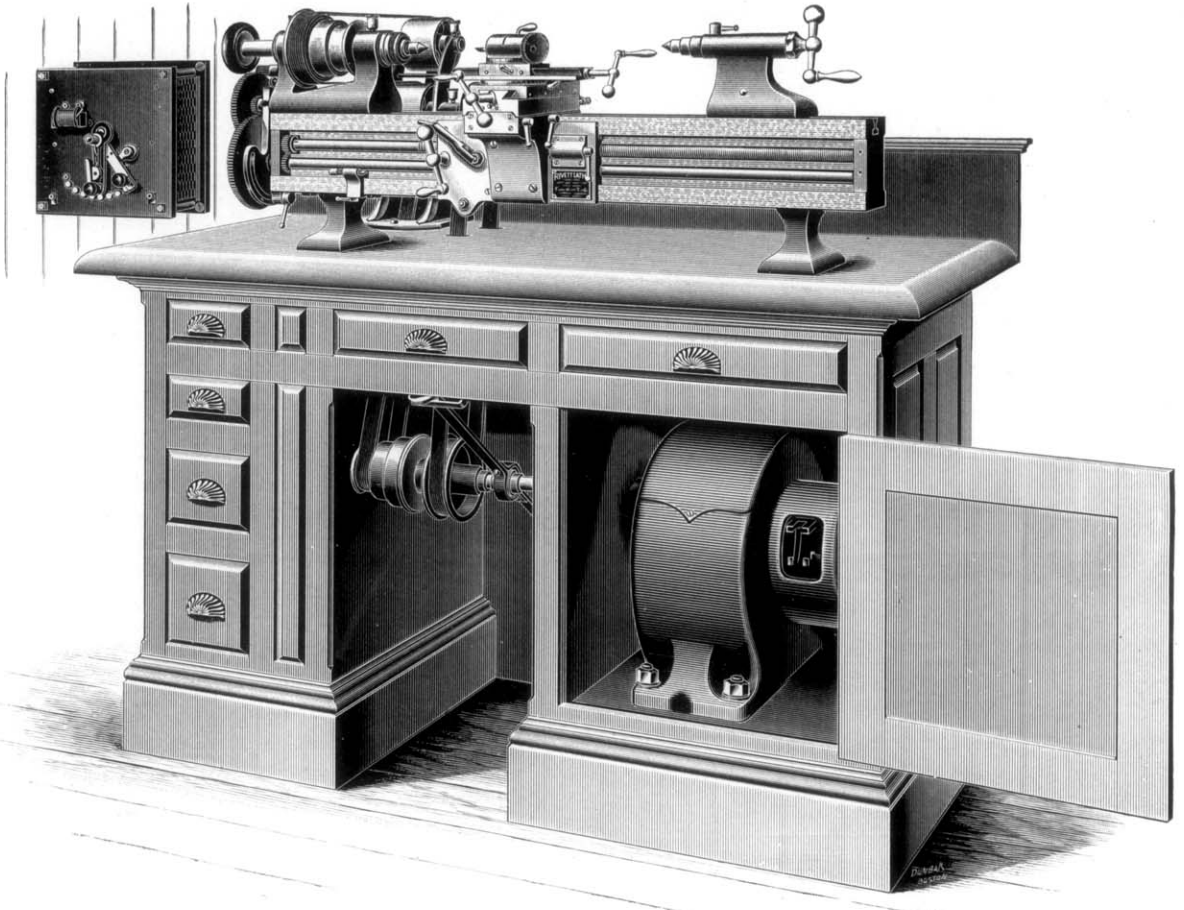
Swing, 7 inches.

Distance between centers, with tailstock shown, 6 inches.

Distance between centers, with regular tailstock, 5 inches.

PRICES.

Lathe, as shown,	$175.00
Tailstock, with lever,	25.00
Half-open Tailstock, with Spindle and Dog,	25.00
Tailstock Center, adjustable off center,	10.00
Extra Spindles and Dogs, each, soft,	5.00
Extra Spindles and Dogs, each, hardened and ground,	10.00
Split Chucks, each	2.00
Countershaft,	23.00



Rivett Precision Lathe,

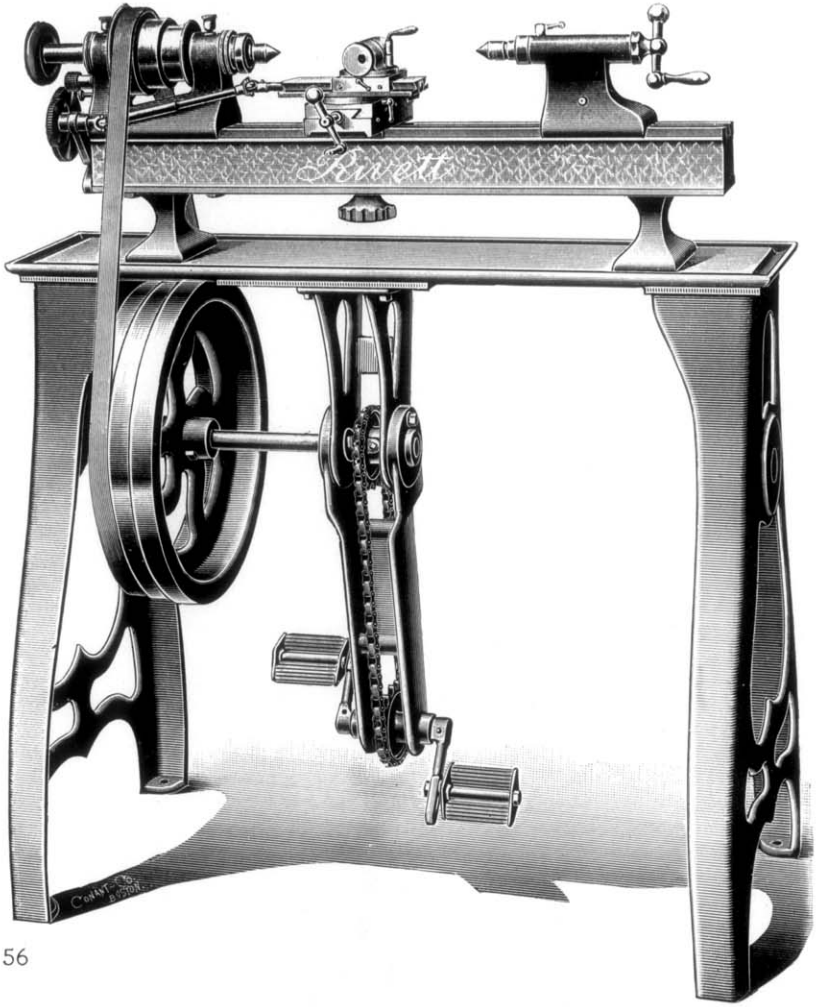
WITH ELECTRIC MOTOR AND QUARTERED OAK BENCH.

FOR mechanical experts, amateurs and others who have use for a lathe in their private office, or in their study at home, a Rivett Precision Lathe mounted as shown opposite will make a forcible appeal, as the nicest work can be done on this lathe.

The Bench is arranged so that it can be placed without soiling or in any way injuring the other fittings of the room, and may be made of any kind of wood to harmonize with the decorations.

Price of Bench Quartered Oak Antique Finish as shown, $100.00.

Quotations given for lower priced Benches upon application.



Rivett

Bicycle Foot Power

FOR BENCH LATHES.

Weight, without Lathe, 350 lbs.

Price, $50.00.

Rivett Bicycle Foot Power.

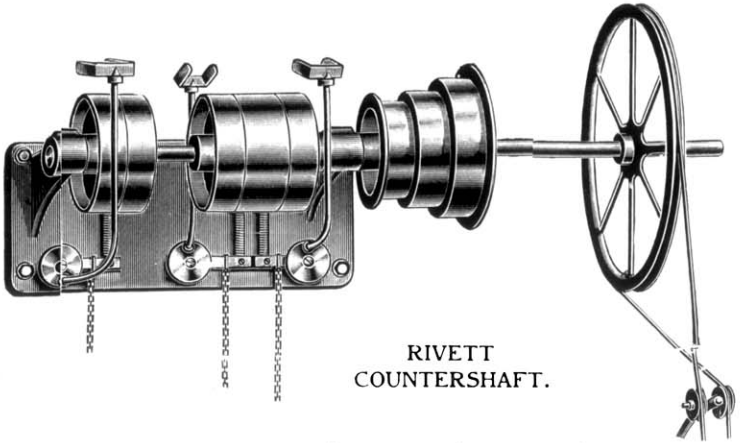
ON page 56 is shown the Table and Bicycle Foot Power as made for the No. 3, and No. 4 Lathes. This foot power is of improved form and superior construction, and is furnished to order, when desired, by those who do not have steam or other power at command. We do not recommend a foot power, but when it is necessary we have the best.

The table, which is far better than a wooden bench, is of cast iron, well balanced and stiff, with the top planed and polished, giving a clean, true surface, which is much to be preferred to the old style of mounting small lathes.

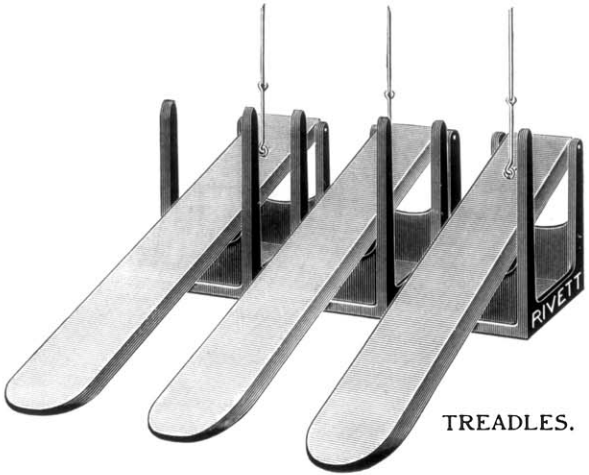
The foot power has been given the same careful attention that is characteristic of all our work, and will be found equally pleasing to the operator. The wheel is very heavy, giving regularity of motion with a greater power than a lighter one. The chain has adjustment for wear, and the whole is well finished. Weight of table and foot power, 350 pounds.

Those who use this power are highly pleased with it, and we shall be glad to furnish references regarding it to any one contemplating the purchase of the same.

Our lathes are not made for amateurs, but for manufacturers, still we think that when a good mechanic needs a lathe in his home, that which has proved to be the best and most popular for fine tool work in the shop will also be the most suitable for a good mechanical amateur.

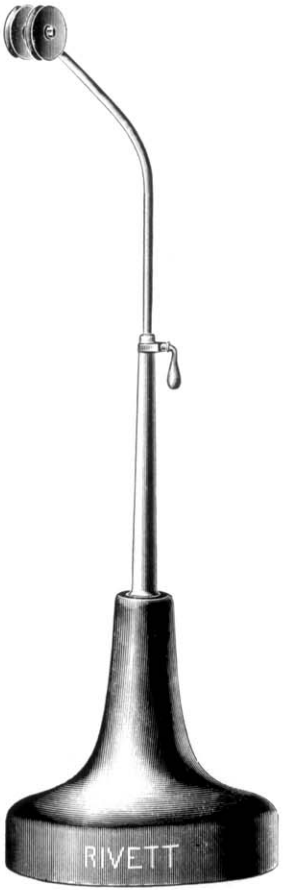


RIVETT
COUNTERSHAFT.



TREADLES.

LEADER FOR
OVERHEAD BELTING,
for use
with
Grinding Attachment.



Speed for Countershaft.

A GOOD medium speed for the countershaft for general work is 700 revolutions per minute for fast speed, and 350 for slow speed and reverse motion; for electrical, brass, or very light work, 100 revolutions or so may be added to this speed, but for turning tool steel, or work of large diameter, cutters, etc., the speed should be decreased all of 100 revolutions.

COUNTERSHAFT.

THE countershaft shown opposite is for our No. 3, 4, 5, and Precision Lathes. It has three speeds, fast, slow, and reverse.

The pulleys are furnished with perforated bushings, and chambered oil wells, securing silence as well as ease in running.

The Straight Pulleys are 5 inches diameter by 1½ inch face, and the Cone Pulley steps 4½ inches, 5¼ inches, and 6 inches diameter respectively by 1¼ inches wide.

Our arrangement of the countershaft allows of its being placed at the left of a window while the lathe stands directly in front, thus securing unobstructed light for the work.

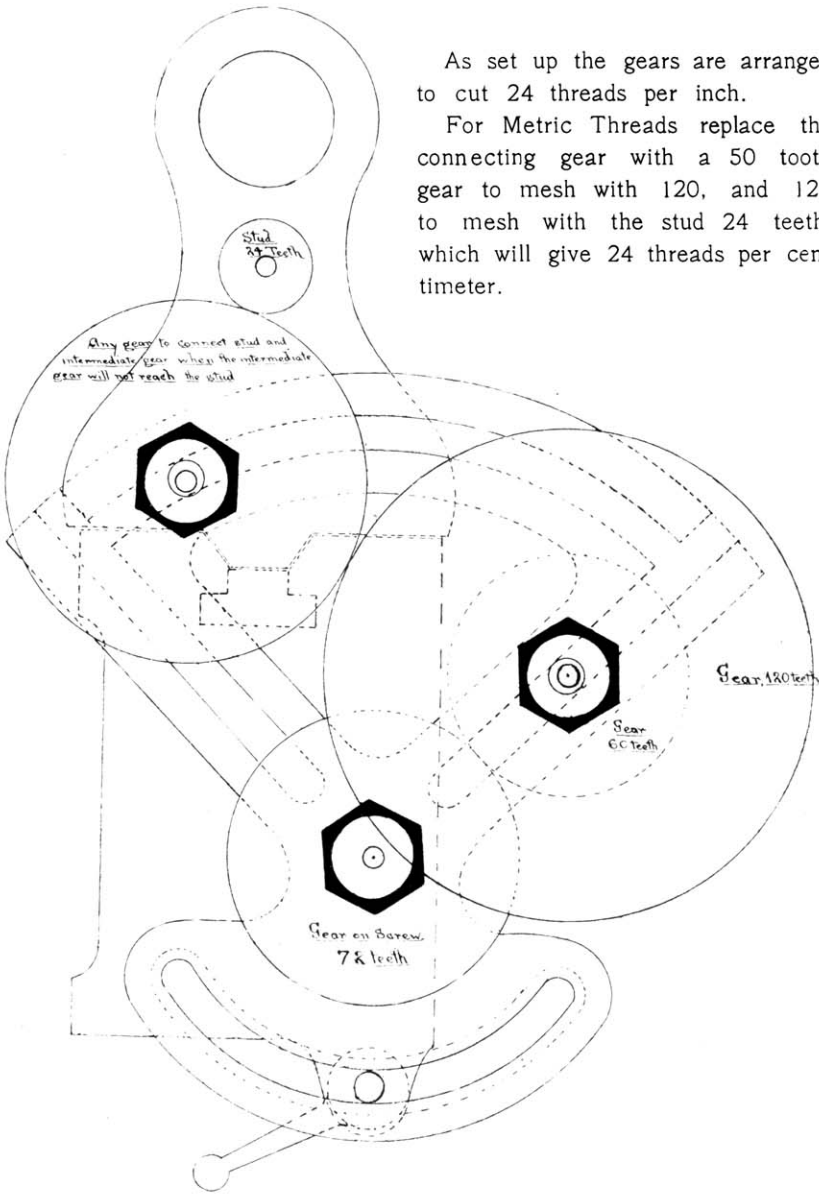
The Aluminum Pulley, 14 inches diameter, with the Leader is used with the Grinding attachment and is a great improvement over the old-fashioned drum.

In setting up the countershaft as above, the additional size of the Aluminum Pulley will be easily accommodated in the embrasure of the window, without building the countershaft out from the wall.

Three Treadles are furnished with each countershaft all ready to screw to the floor. Common iron wire is generally used to attach these to the countershaft.

We do not include our countershaft with the price of our lathes as none of the other makers of bench lathes do, and were we to do so it would apparently make the price of our lathes much higher in proportion, consequently we list the parts separately.

Countershaft, price $23.00. Leader and Aluminum Pulley, price, $15.00.



As set up the gears are arranged to cut 24 threads per inch.

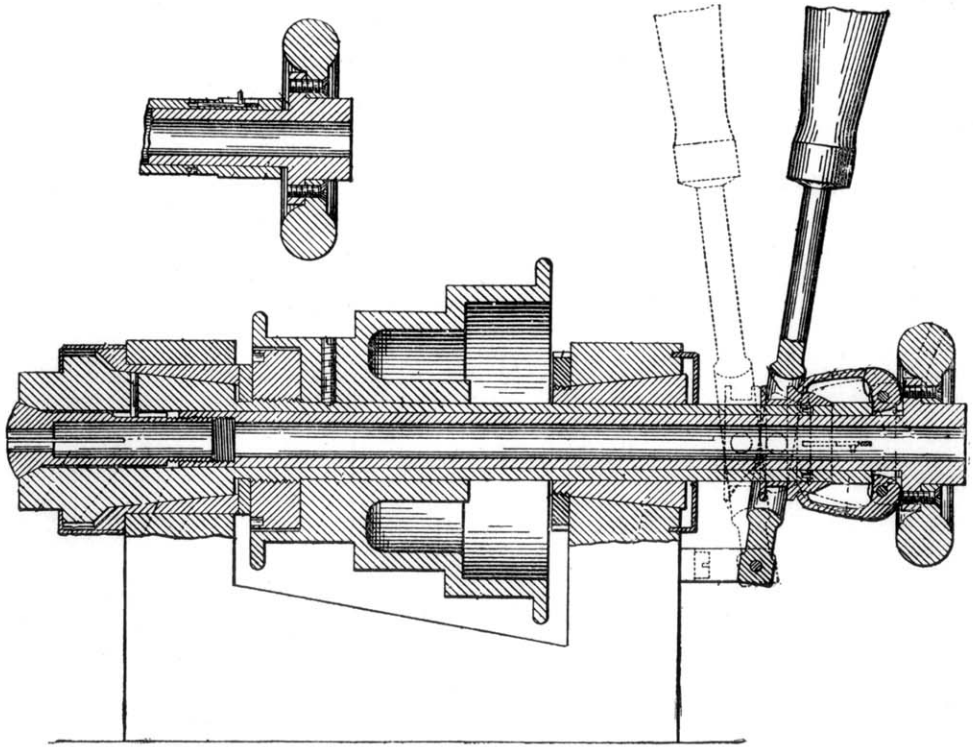
For Metric Threads replace the connecting gear with a 50 tooth gear to mesh with 120, and 127 to mesh with the stud 24 teeth, which will give 24 threads per centimeter.

RIVETT GEAR TABLES.

8-IN. PRECISION LATHE.				
No. Threads.	Stud.	Compound.		Screw.
10	24	–	–	60
11	24	–	–	66
12	24	–	–	72
13	24	–	–	78
14	24	–	–	84
15	24	–	–	90
16	24	–	–	96
17	24	–	–	102
18	24	–	–	108
19	24	–	–	114
20	24	–	–	120
22	24	120	60	66
24	24	120	60	72
26	24	120	60	78
28	24	120	60	84
30	24	120	60	90
32	24	120	60	96
34	24	120	60	102
36	24	120	60	108
38	24	120	60	114
40	24	120	60	120
44	24	120	30	66
48	24	120	30	72
52	24	120	30	78
56	24	120	30	84
60	24	120	30	90
64	24	120	30	96
68	24	120	30	102
72	24	120	30	108
76	24	120	30	114
80	24	120	30	120

No. 4 LATHE.				
No. Threads.	Stud.	Compound.		Screw
10	15	–	–	30
11	15	–	–	33
12	15	–	–	36
13	15	–	–	39
14	15	–	–	42
15	15	–	–	45
16	15	–	–	48
17	15	–	–	51
18	15	–	–	54
19	15	–	–	57
20	15	–	–	60
22	15	96	48	33
24	15	96	48	36
26	15	96	48	39
28	15	96	48	42
30	15	96	48	45
32	15	–	–	96
34	15	96	48	51
36	15	96	48	54
38	15	96	48	57
40	15	96	48	60
44	15	96	24	33
48	15	96	24	36
52	15	96	24	39
56	15	96	24	42
60	15	96	24	45
64	15	96	24	48
68	15	96	24	51
72	15	96	24	54
76	15	96	24	57
80	15	96	24	60

No. 3 LATHE.				
No. Threads.	Stud.	Compound.		Screw.
10	30	–	–	30
11	30	–	–	33
12	30	–	–	36
13	30	–	–	39
14	30	–	–	42
15	30	–	–	45
16	30	–	–	48
17	30	–	–	51
18	30	–	–	54
19	30	–	–	57
20	30	–	–	60
22	30	96	48	33
24	30	96	48	36
26	30	96	48	39
28	30	96	48	42
30	30	96	48	45
32	30	–	–	96
34	30	96	48	51
36	30	96	48	54
38	30	96	48	57
40	30	96	48	60
44	30	96	24	33
48	30	96	24	36
52	30	96	24	39
56	30	96	24	42
60	30	96	24	45
64	30	96	24	48
68	30	96	24	51
72	30	96	24	54
76	30	96	24	57
80	30	96	24	60



RIVETT AUTOMATIC CHUCK CLOSER.

(PATENTED.)

Rivett Automatic Chuck Closer.

(PATENTED.)

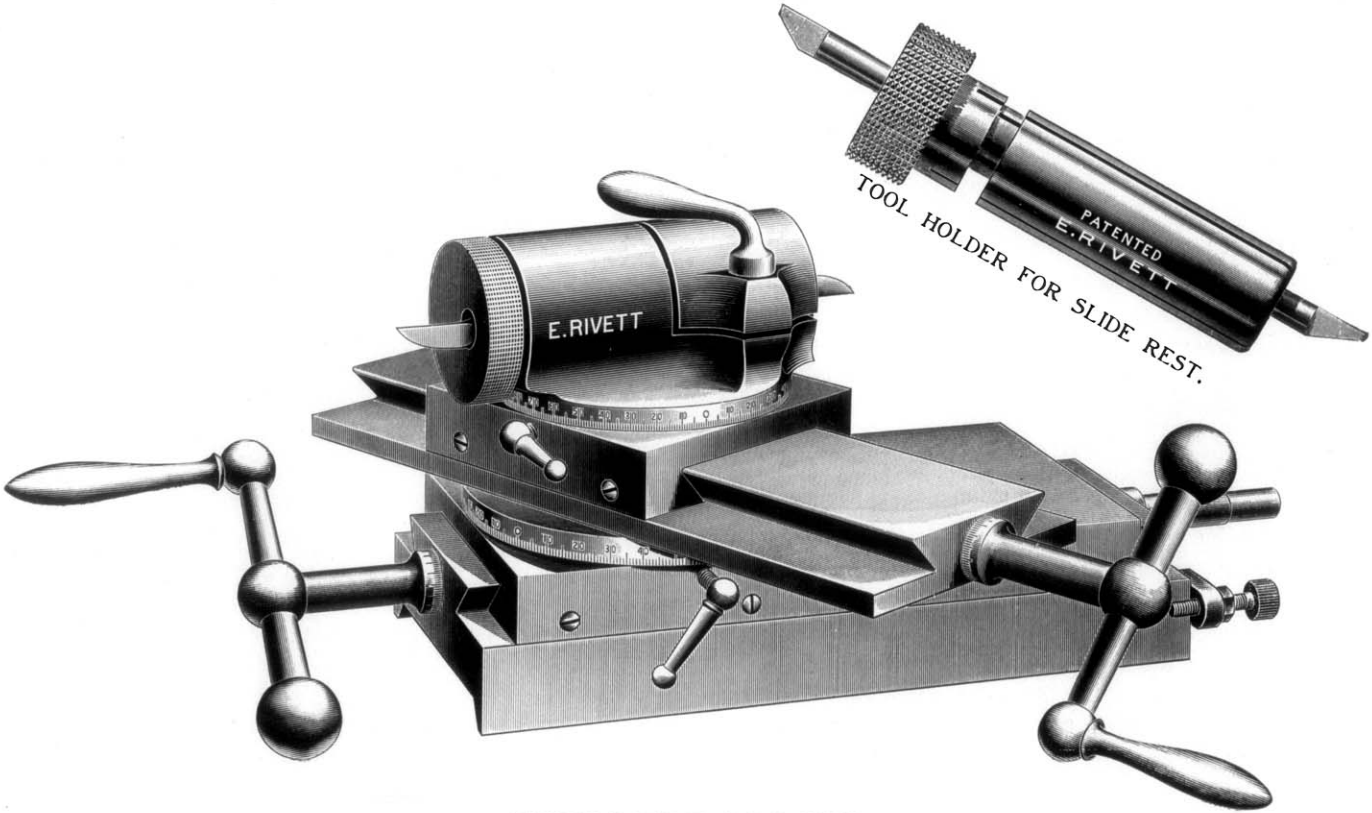
OUR Rivett Automatic Chuck Closer is one of the greatest time and labor saving devices of the present day. With its assistance work can be done from two to five times as quickly, according to the metal worked—as is possible without it.

This Closer removes all the objections which have hitherto been advanced to the detriment of the split chuck, as there is no wear on the thread of the chuck, and it can be opened and closed more rigidly than by hand, while the lathe is in motion.

We find this Closer very advantageous even on jobbing work, as there are very few pieces that have not to be chucked two or three times, and it takes no longer to adjust the chuck in this closer than in an ordinary draw-in spindle.

The mechanism consists of a sliding collar moved by a lever, this collar operating two dogs or levers that press against a collar placed at the end of the spindle, and force the draw tube back. This arrangement, of course, leaves the hand wheel to be used in the ordinary manner when a chuck is first put in place, or when for any reason it is preferable. The sliding collar is also provided with a locking pin, which prevents the draw tube from tightening or loosening itself when once adjusted.

For the past two years we have sent this Automatic Chuck Closer on approval, with all our lathes ordered by well-known manufacturing concerns. None have been returned to us, and many firms have thanked us profusely, some saying that this attachment alone was worth the whole outfit of any other make.



TOOL HOLDER FOR SLIDE REST.

RIVETT PATENT SLIDE REST.

The Rivett Slide Rest.

THE Rivett Compound Slide Rest as used on the No. 3, and No. 4 Lathes, and which becomes, when placed on the Precision Lathe, an Automatic Cross Feed Compound Slide Rest, is, with its rotary tool holder, worthy of especial examination. As will be seen in the cut, the rest has two circular graduated bases, which by setting at any point renders turning to exact angles extremely simple, and adjusting tools, such as inside and outside thread tools, a matter of ease together with absolute accuracy. An illustration of the latter advantage is given on pages 76 and 77.

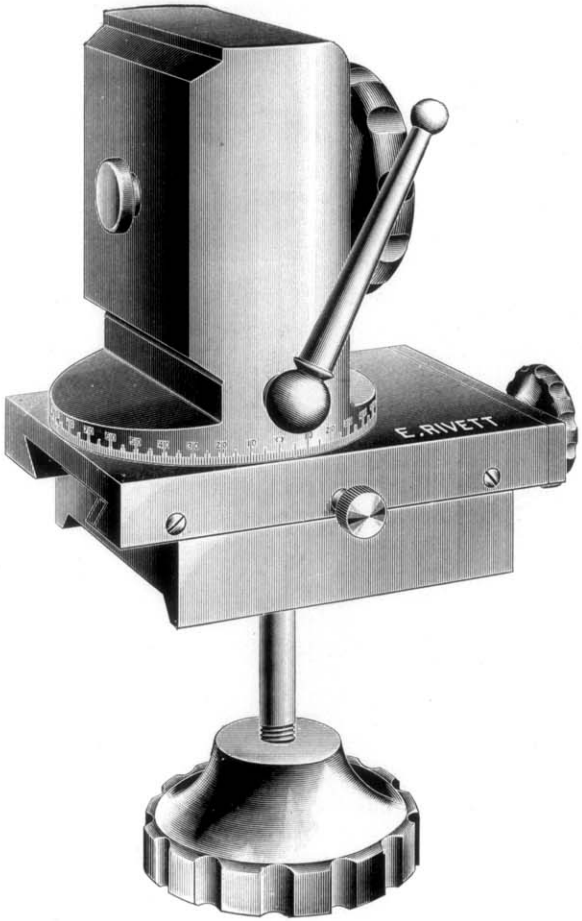
Our plan of securing the revolving parts is so carefully arranged that a slight pressure on the small thumb levers seen in the cut is sufficient to hold them securely.

The tool-holder, which is shown removed from the rest, is an eccentric device, easily adjusted to the center, and by its use we are enabled to shorten the cutting tool to the work, making it very solid, with no tendency to vibrate or chatter while cutting.

The simplicity of the Rivett tools renders it very easy for any one to make his own tools, as there is no forging needed. Sets of tools will be furnished to order.

Some people claim that because our Slide Rest is cheaper than others it cannot be as good, but it only needs an examination of the construction to convince any mechanic of its superiority.

We are the largest manufacturers of Slide Rests in the country, if not in the world, and make up each size in lots of one hundred at a time; the low price being due to the quantity made and our facilities for turning them out.



Milling Attachment

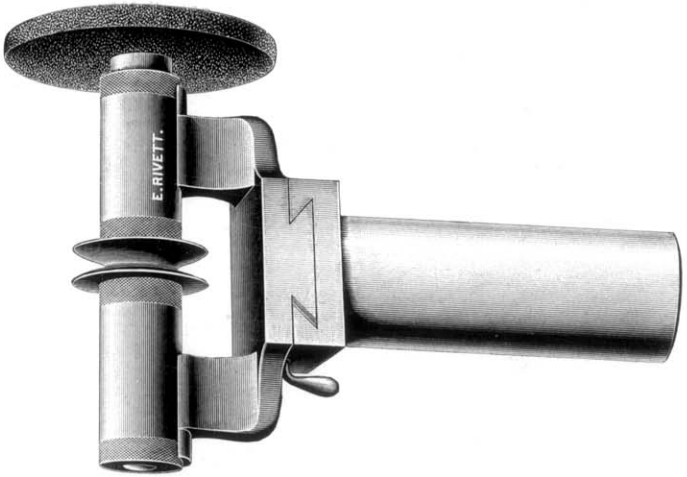
For Nos. 3, 4, and Precision Lathes.

THE revolvable tailstock is used in connection with the cutter milling attachment, and carries the slide in this adjustment. As seen, it is heavily built, has rotary as well as lateral motion, and is graduated at the base, thereby insuring perfect angles on cutters and other milled work.

On pages 32 and 42 it may be seen mounted on the lathe.

Price, with 8 index plates, for No. 3 lathe . . . . $60.00.
Price, with 8 index plates, for No. 4, and Precision lathes, 75.00.

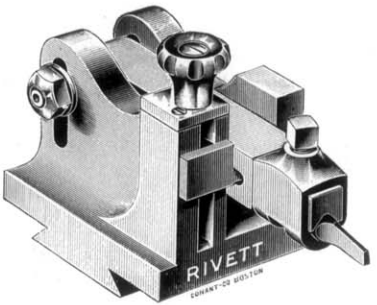
INSIDE GRINDER FOR SLIDE REST.
Price, $25.00.



EXTERNAL GRINDER FOR SLIDE REST.
Price, $35.00.

Grinding Attachments.

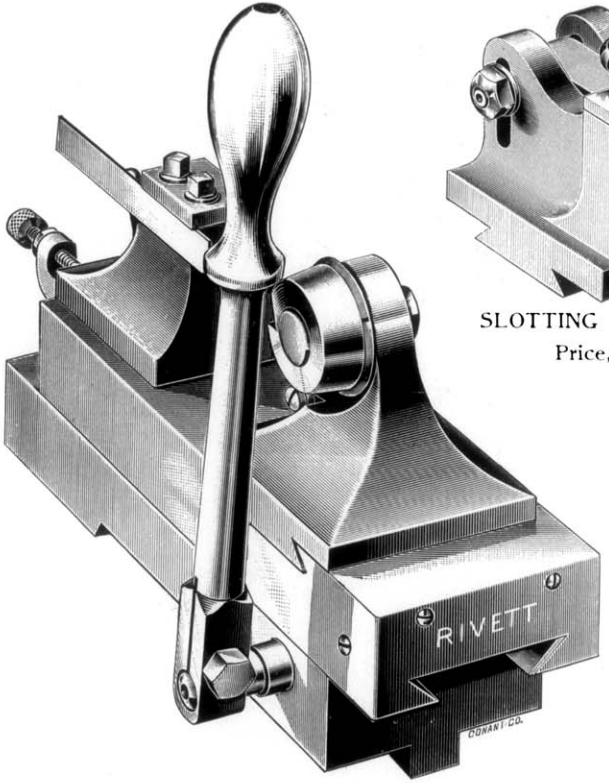
THESE attachments are fitted to the Slide Rest, and are used in place of the tool-holder. They are intended for internal and external grinding, and for facing and sharpening or backing off cutters. The Internal Grinder will do outside grinding very nicely, but where outside grinding alone is to be done the external grinder is preferable. Shown mounted on the lathe and more fully described on pages 48 and 49.



SLOTTING ATTACHMENT.
Price, $25.00.

Rivett Slotting Attachment.

IN use this Slotting Attachment is mounted on the base of the Forming Slide, and makes one of the most useful attachments. A full description will be found on pages 38 and 39, where it is shown on the lathe. When the base of the forming slide is wanted for use only with the Slotter, it will be furnished without its regular tools for $30.00, making the price of the Slotter complete, $55.00.



CUTTING-OFF AND FORMING SLIDE. Price, $50.00.

Rivett Forming Slide.

FROM the manner in which this forming slide is made, the operator is enabled to take a large cut. A cut 1¼ inches wide is easily made as the tool is very stiff.

On the opposite page is shown a few samples of the pieces we are constantly making in our factory with this forming slide on our No. 4 lathe.

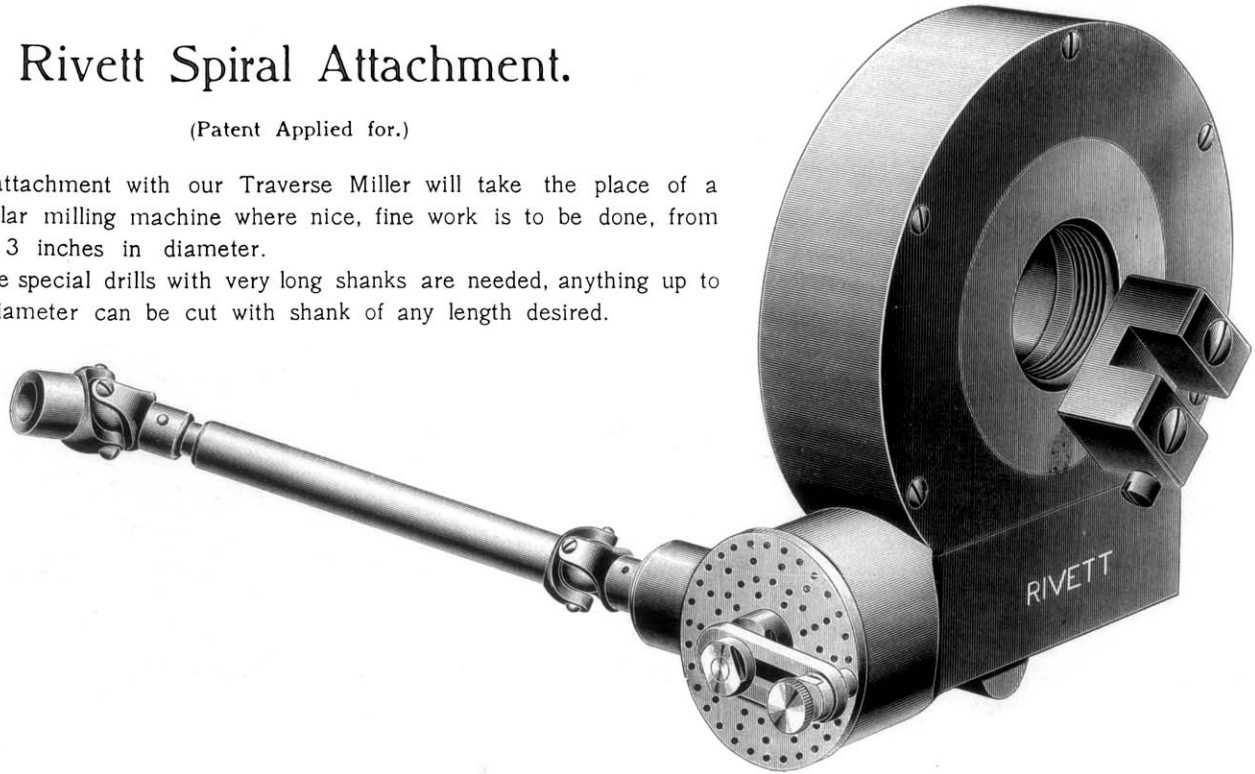
SAMPLES OF FORMING SLIDE WORK.

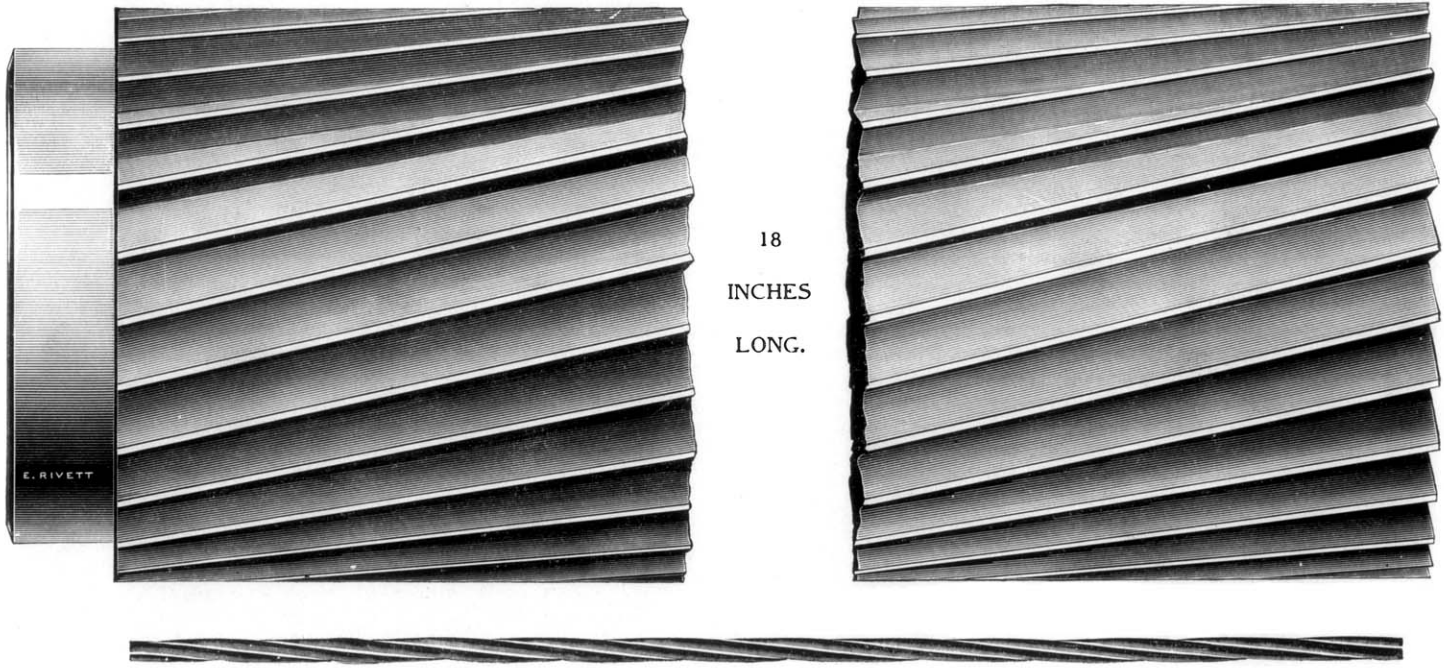
Rivett Spiral Attachment.

(Patent Applied for.)

THIS attachment with our Traverse Miller will take the place of a regular milling machine where nice, fine work is to be done, from $\frac{1}{16}$ up to 3 inches in diameter.

Where special drills with very long shanks are needed, anything up to $\frac{1}{2}$ inch diameter can be cut with shank of any length desired.

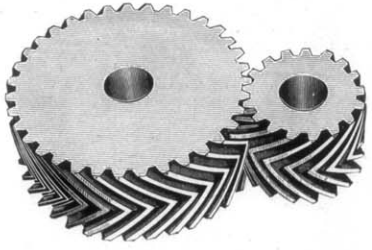




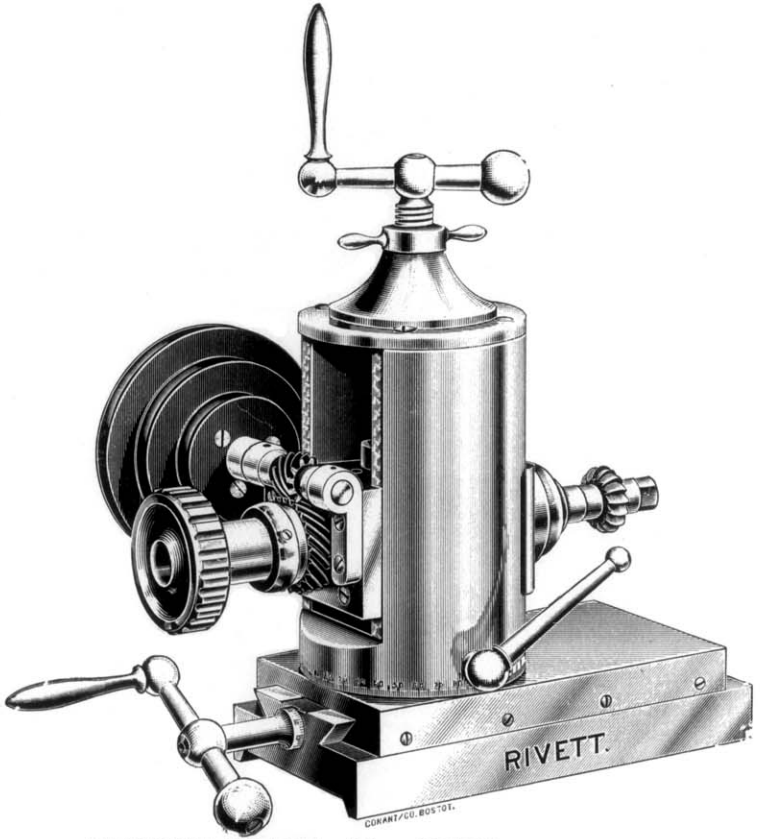
SAMPLES OF SPIRAL MILLING.

SAMPLES OF SPIRAL MILLING, HOBS, TAPS, Etc.

Screws and Spirals accurately cut on our Precision Lathe, from 10 to 400 threads per inch.



SAMPLES OF SPIRAL GEARS CUT ON THE RIVETT PRECISION LATHE.



TRAVERSE MILLER. Price, $125.00.

GRINDER FOR
TRAVERSE MILLER.
Price, $25.00.

Rivett Traverse Miller and Grinder.

THE attachments shown on the opposite page and already illustrated on page 34, set up on the Precision Lathe, are some of our most noteworthy tools. For any nice, delicate work they are easier to manipulate than a regular milling machine, as they can be set up ready to cut in five minutes.

We do not claim that this lathe will take the place of a regular milling machine, but for any work within its compass, from $\frac{1}{16}$ up to 3 inches in diameter and up to 22 inches in length,—the full distance of the lathe between centers—it will do the work more accurately, and is easier to handle.

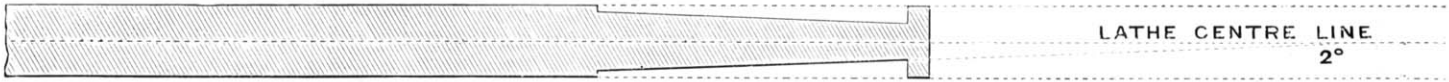


FIG. A

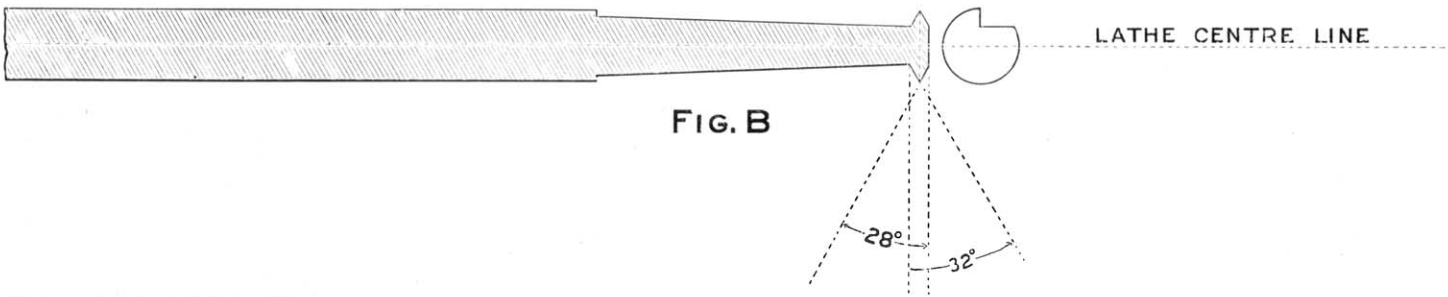


FIG. B

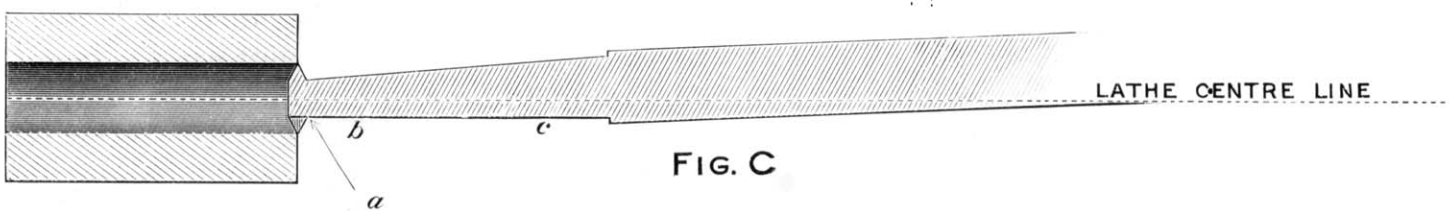


FIG. C

RIVETT INSIDE THREADING TOOLS.

50 Cents Each.

Rivett Lathe Tools.

THE Toolholder (page 64) is one of the numerous improvements to which we would respectfully call special attention, as it is a radical departure from the general run of lathe tool posts, and with its close fitting tools of round instead of rectangular stock, absolute adjustment as to angles is obtained, the tools being revolvable on their own axis, and thereby enabling the same tools to be used for either right or left hand work, but few tools are needed, where with the old style post for the same work a large number must be provided.

On page 78 we show cuts of tools in every day use, and on page 76 we give a section cut of the Rivett Inside Threading tool, and offer at the same time a slight explanation regarding the same.

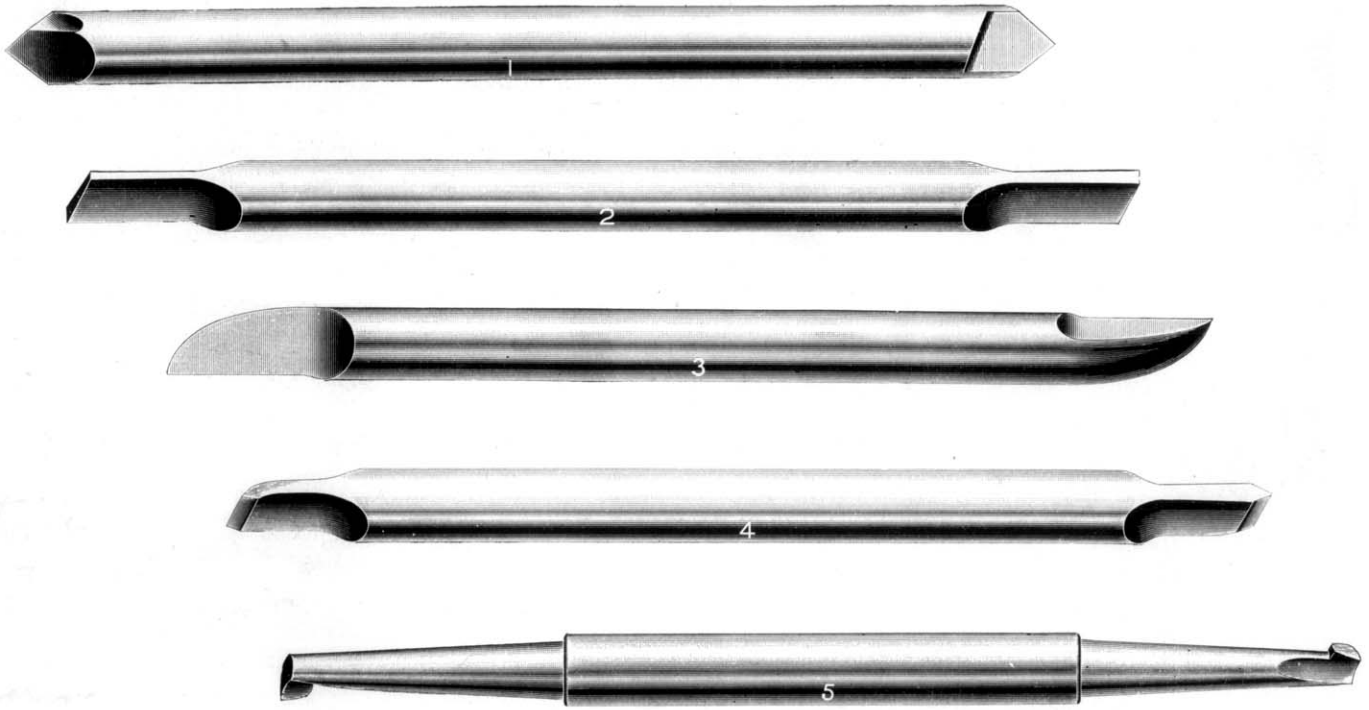
Every mechanic is aware of the difficulty with which an inside threading tool is ground and set exactly by the use of the thread gauge to cut a fine, perfect thread close to the shoulder.

With the Rivett tool, however, together with the use of the graduated compound rest, all this annoyance is absolutely obviated and perfect work produced.

The Rivett tool is made as follows:

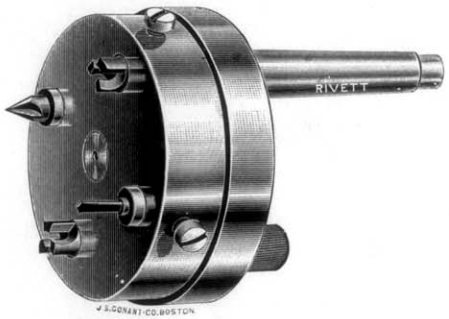
The round bar steel is first turned as in Fig. A, to an angle of two degrees off the line of the lathe, and finished at the end with a shoulder. The V of sixty degrees is then cut two degrees off the center line, that is, to angles of twenty-eight degrees and thirty-two degrees from a right angle to the lathe center line, by setting the compound rest at sixty-two and fifty-eight, and the cutting edge ground as shown in the end section, Fig. B.

The tool is then set with the compound rest two degrees off the line of the lathe, as shown in Fig. C, thereby bringing the cutting side of the neck (B C) parallel to the lathe center line, and allowing the thread to be cut to the full depth of the V at the point A. Both the inside and outside threading tools may be taken out and ground with a perfect certainty of replacing them precisely in the same position, one of the very annoying problems in the old style tool post.



FULL SIZE.

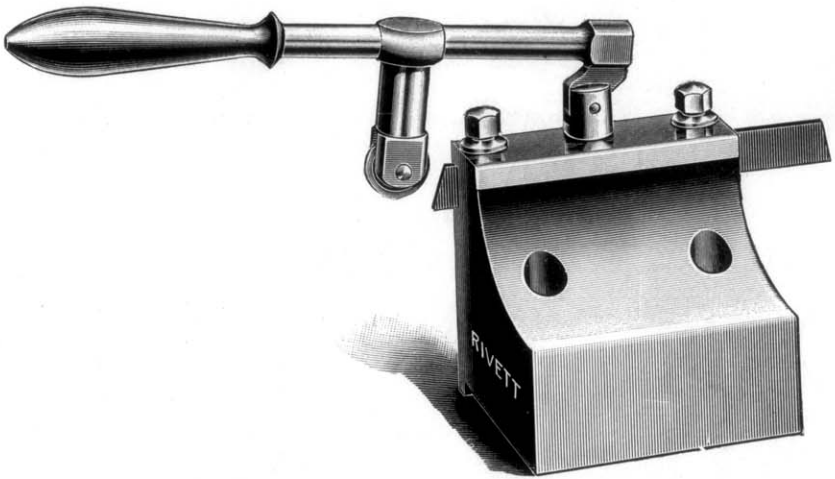
SLIDE REST CUTTERS. Price, 50 cents each.



TURRET TO GO ON TAILSTOCK.

For Quick Manufacturing.

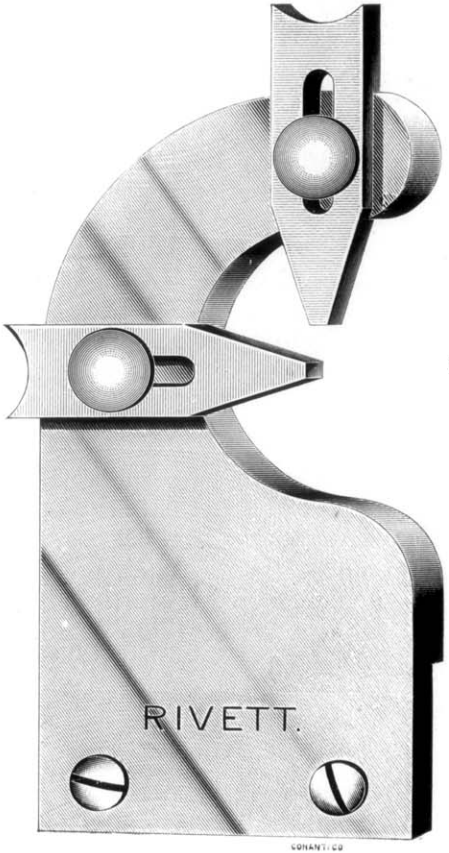
Price, $15.00.



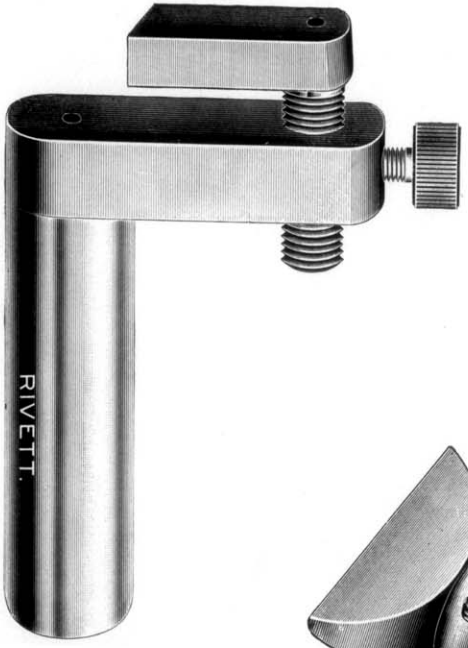
CUTTING OFF ATTACHMENT FOR SLIDE REST.

For Cutting off and Knurling, producing work rapid and accurate. Price, $15.00.

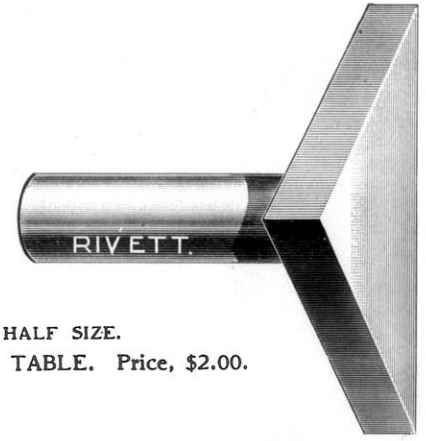
HALF SIZE.
STEADY REST.
Price, $10.00.



HALF SIZE.
FOLLOWER REST.
Price, $6.00.



FULL SIZE.
CHUCKING REST.
Price, $2.00.



HALF SIZE.
TRIANGLE TABLE. Price, $2.00.

TIP OVER T-REST. Price, $7.00.

We are the largest manufacturers of Split Chucks in the country, if not in the world. They are well known for their good design, and several manufacturers have adopted the Rivett Chucks for their machines.

FULL SIZE.

CHUCK FOR No. 3 LATHE.

Capacity of Set, from $\frac{1}{64}$ in. to $\frac{32}{32}$ in. by 64ths.

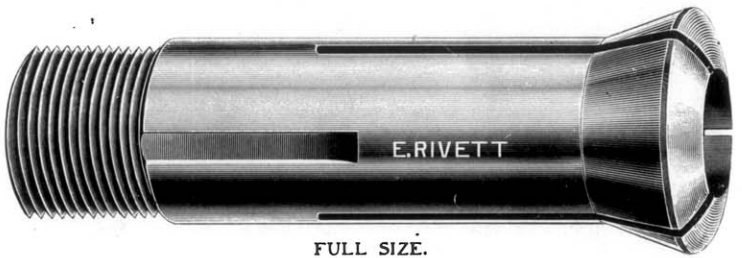
Price, $2.00 each.

FULL SIZE.

CHUCK FOR No. 4 AND 8-INCH PRECISION LATHES.

Capacity of Set, from $\frac{1}{32}$ in. to $\frac{1}{2}$ in. by 64ths.

Price, $2.50 each.



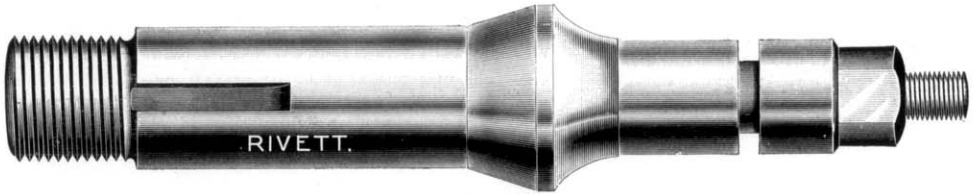
FULL SIZE.

CHUCK FOR No. 5 MANUFACTURERS' LATHE.

Capacity of Set, from $\frac{1}{32}$ in. to $\frac{3}{4}$ in. by 64ths.

Price, $3.00 each.

Our SELF-CENTERING CHUCKS are made of the Best Tool Steel, Hardened, and carefully ground with diamond.



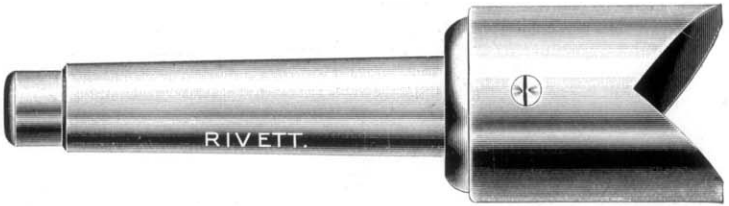
FULL SIZE.
ARBOR CHUCK.
Price. $3.00.

HALF SIZE.
STEP CHUCK.

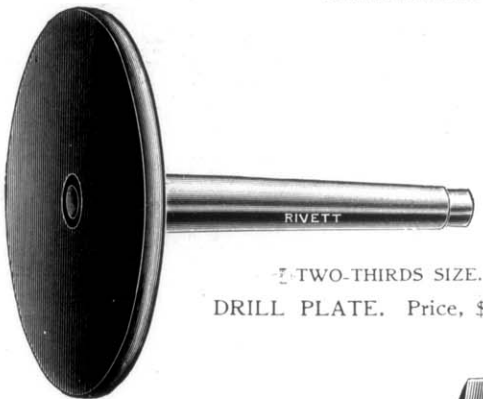
HALF SIZE.
CLOSER FOR STEP CHUCK.
Price, $4.00.

SLOTTED FACE PLATE,
8 Inches Diameter.
Price, $10.00.

Our Cast Iron Chucks are now made with steel shanks, cast iron proving too delicate to hold so large a chuck.



REVOLVABLE V CENTER. Price, $3.00.



TWO-THIRDS SIZE.

DRILL PLATE. Price, $2.00.

HOLDER FOR
INSIDE THREAD TOOL.
Price, $2.00.

V CENTER. Price, $1.50.

Samples of IRREGULAR MILLING CUTTERS made on the Rivett Lathe, using only the Attachment as shown on page 42.

SOME toolmakers and manufacturers of cheaper lathes, displeased with our unparalleled success, have introduced fanciful ideas in their lathes to offset the true worth of ours, and not satisfied with this, have copied our illustrations of cutters, claiming that they can be made on their lathes. The truth of this claim can be easily proven to the satisfaction of the interested, by requesting that the cutters be made in their presence. We are glad at all times not only to demonstrate what our lathes will do but to take visitors through our shops and show our method of manufacture, and the skill and care necessary to produce a fine tool.

This Cutter was cut in 27 minutes.

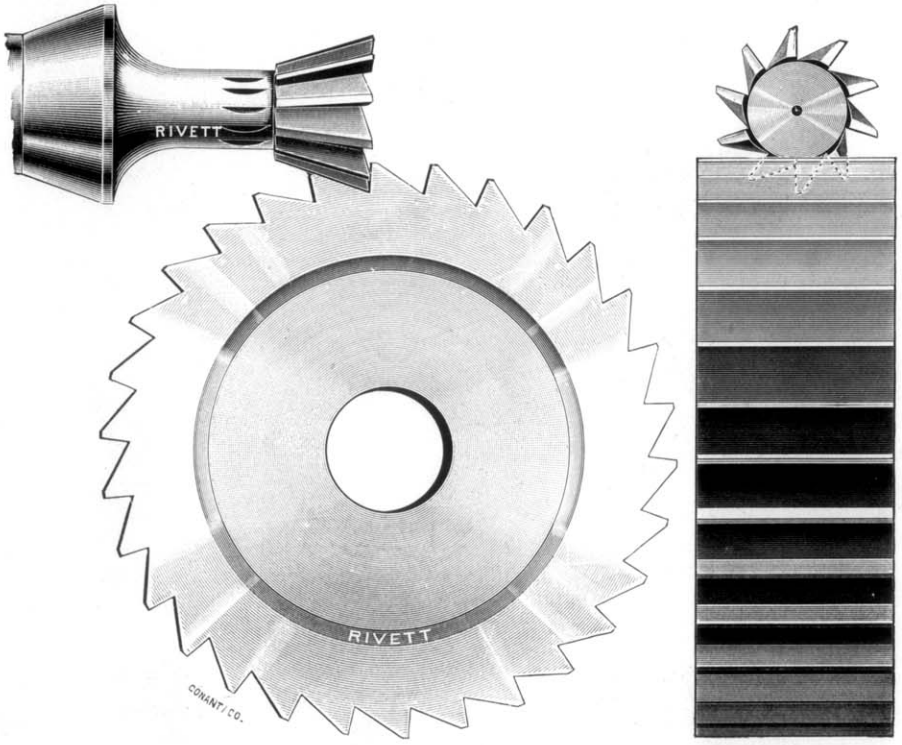
Samples of MILLING CUTTERS, made on the Rivett Lathe to advantage, from 1-8 inch to 2 1-2 inches in diameter.

SAMPLES OF MILLING CUTTERS AS MADE ON THE RIVETT LATHE, which can be produced at a lower cost than by any other tool on the market.

SAMPLES OF TAPER MILLS AND REAMERS MADE ON THE RIVETT LATHE.

SAMPLES OF MILLS AND COUNTERBORES MADE ON THE RIVETT LATHE.

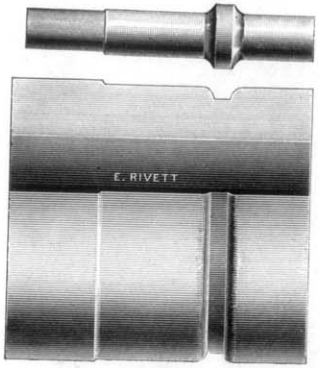
Some of the finest Knurls ever made for watch case work, etc., are made on the Rivett Lathe.

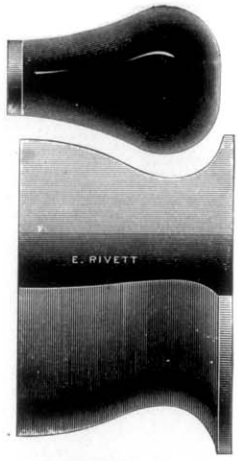


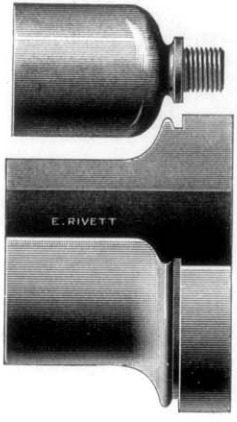
Cut in $18\frac{1}{2}$ Minutes.

The cutter shown here was cut in $18\frac{1}{2}$ minutes at the same fair, and we should be pleased to do it at any time in our shop for any one who would like to see the operation. Both cutters were made of Sanderson steel.

AT the recent fair of the Massachusetts Charitable Mechanics Association, held in Boston, the work of the Rivett Lathe was admired by hundreds of first-class mechanics. The solidity and rigidity of the lathe enabling chips to be taken in turning that many said they could not take with 16-inch lathes in their shops. We can easily take $\frac{3}{8}$ inch off 1 inch stock in machinery steel, and we took as much as $\frac{1}{2}$ inch at the fair; and in hard tool steel we took off as much as $\frac{1}{4}$ inch. The ease with which we do this turning we attribute largely to the construction of our tool holder, as we run the lathe at great speed and still the cutter stands it.







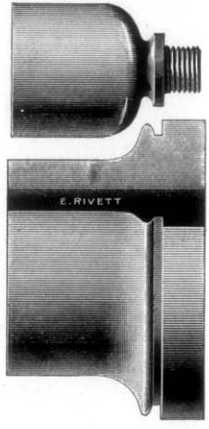
Samples of

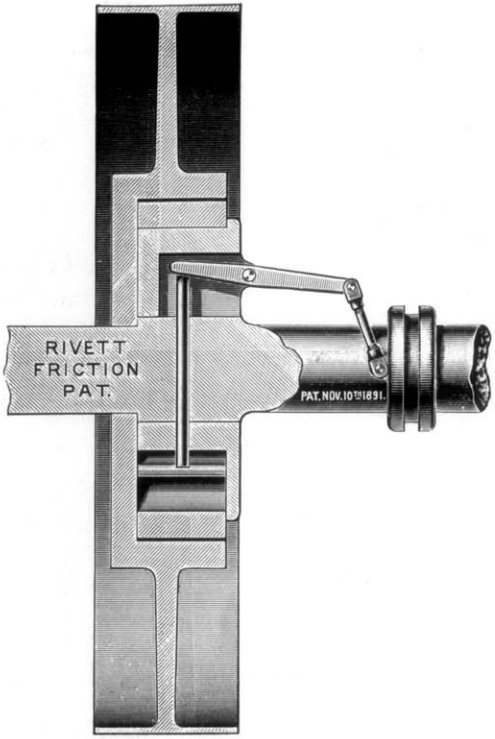
SCREW MACHINE WORK

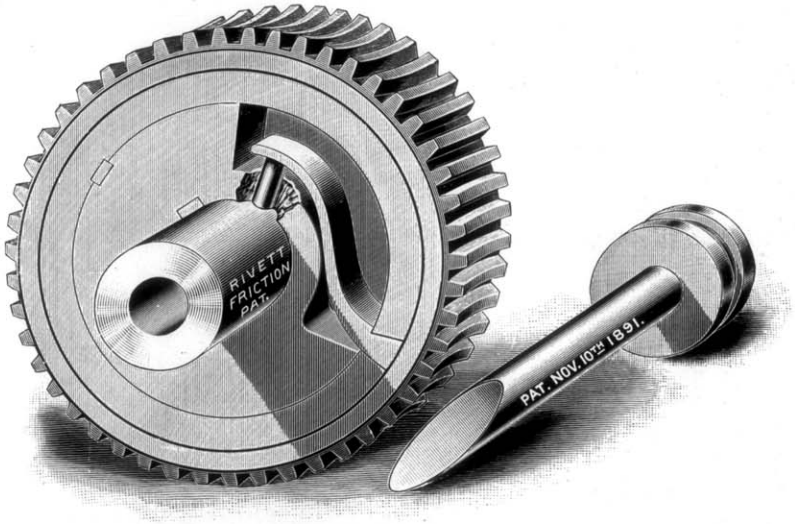
done on the

No. 4 BENCH LATHE.

If you are looking for a hand screw machine, investigate this. See page 46.







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All orders are shipped well boxed and oiled, and in perfect condition.

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In ordering, please state fully and at length just what is desired, giving figures of size and all possible information. Order as long beforehand as you can, for we have never yet been able to keep ahead of the demand, and have but a small stock on hand, in spite of our steady increase of plant and skilled labor.

We will not send you a half-finished tool, and as all of our manufacture requires time and care to make, we therefore ask you to give us as much of this time as possible. Help us to please you, and we will most carefully endeavor to do so.

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10.	Rivett Bench Miller, with Swivel Table . .	300.00
10.	Rivett Bench Miller, with Swivel Table, and Head and Tailstock Centers with 8 Index Plates	400.00
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30.	Eight-Inch Precision Lathe with Automatic Cross Feed Compound Slide Rest, and Face Plate	450.00
28.	Eight-Inch Precision Lathe with Automatic Cross Feed Compound Slide Rest, and Face Plate, with Back Geared Head	500.00
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50.	No. 3 Bench Lathe	90.00
52.	No. 3 Manufacturers' Lathe	175.00
62.	Automatic Chuck Closer	25.00
64.	No. 4 Slide Rest, Compound	60.00
64.	No. 3 Slide Rest, Compound	50.00
26.	No. 5 Slide Rest	40.00
66.	No. 3 Cutter Milling Attachment	60.00
66.	No. 4 Cutter Milling Attachment	75.00
36.	Taper Attachment	75.00
44.	No. 3 Screw Cutting Attachment	60.00
44.	No. 4 Screw Cutting Attachment	75.00

Page.		Price.
67.	Grinding and Lapping Attachment, inside	$25.00
67.	Grinding and Lapping Attachment, outside	35.00
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68.	Base of Cutting Off and Forming Slide, without toolholders	30.00
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68.	Slotting Attachment, with base of Forming Slide	55.00
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PAGE.		PRICE.
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