

SEBASTIAN  
LATHE CO



CATALOG NO. 14

CINCINNATI, OHIO.

DESIGNED AND PRINTED BY THE REVELLE PRESS, VEVAY, INDIANA

IN PAYMENT INVOICE

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|-------|------------------|------|------|
|       | 477              |      |      |
|       | 587              |      |      |
|       | 175              |      |      |
|       | <u>1239</u>      |      |      |
| TOTAL | 25 <sup>14</sup> |      |      |

**HARRON, RICKARD & McCONE**  
MACHINERY MERCHANTS

Los Angeles, Nov 18 1910

Received from J. L. Ryder  
General and 14/100

Dollars

In full of acct to date  
\$1214

HARRON, RICKARD & McCONE,

*Est. H. W.*

ASS'T. SECRETARY.

C & O

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HARRON, RICKARD & McCUNE  
164-8 N. Los Angeles St.  
LOS ANGELES, CAL.



# SEBASTIAN LATHE CO.

MANUFACTURERS OF

ENGINE <sup>AND</sup> SPEED LATHES

AND

DEALERS IN

PLANERS, SHAPERS, DRILL  
PRESSES, MACHINISTS  
TOOLS & SUPPLIES.

CINCINNATI, OHIO.

P.O. BOX NO. 729.

WORKS LOCATED AT SOUTH END OF C & O  
R.R. BRIDGE, COVINGTON, KY.

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## Foreword



WE build only LATHES, and we aim to build them right. Our constantly increasing trade and duplication of orders encourages us in the belief that our efforts are appreciated, and we shall endeavor to retain this good opinion and shall keep our tools in the front rank as heretofore.

¶ Every lathe is subjected to a careful inspection and actual operation before leaving our works.

¶ Having our factory equipped with the latest and most approved machinery, specially adapted to the work proposed, and employing only the most skillful labor, we can with confidence commend our tools to your favorable consideration.

¶ We are at all times prepared to give any inquiries that you may submit to us our most careful attention and we invite correspondence. We are

Yours very truly,

SEBASTIAN LATHE CO.

CINCINNATI, OHIO, U. S. A.

P. O. Box 729

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# SEBASTIAN (S) LATHE Co.

HARRON, RICKARD & McGUIRE  
164-8 N. Los Angeles St.  
LOS ANGELES, CAL.

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## General Remarks.

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**HOW TO ORDER**—The cheapest and best way to order a machine or tool is to send the amount with your order and have shipment made direct to you. This saves delay and expense of collection.

¶ On receipt of ten per cent of the amount of the order, we will ship any machine shown in our catalog by cheapest freight route, and collect the balance through bank by draft, with bill of lading attached, exchange and collection charges to be paid by you. This proposition does not apply to foreign shipments however.

**DELIVERY**—We deliver all shipments *in good order* free on board boat or cars at factory, and unless otherwise instructed will ship by most direct route.

**REMITTANCES**—Should be by either Postal Note, Express Order or Bank Draft, *never send us your personal check.*

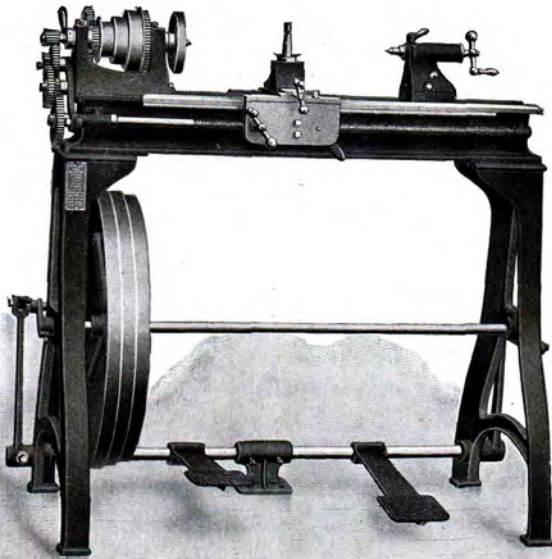
**REPAIRS**—Should it become necessary to order repairs, please designate the swing of the lathe and the style of the rest. Should you be in doubt as to the proper designation of the part wanted, send us a sketch of the part, or a drawing of it. It is seldom necessary to return us broken parts, as all parts of our lathes are made to a standard size and duplicates will fit.

**OUR TERMS ARE CASH**—Unless you have an account with us please do not ask us to make you a shipment *to be paid for when received.*

*Ask any Bank as to Our Responsibility.*

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## NEW 9-INCH SCREW CUTTING LATHE.

**LATEST DESIGN. HIGHEST GRADE. BEST WORKMANSHIP.**

The above cut shows our new 9-inch screw cutting foot lathe as it is now built. The design, material and construction are of the highest grade, and the tool is fully guaranteed. It has all the essential features of a high-grade engine lathe of larger dimensions, and it is without doubt the leading small foot lathe now on the market. With our improved **FOOT-MOTION**, which is the best foot power now in use, the lathe is easily operated, and is at all times under the perfect control of the operator, who may run it while either sitting or standing.

The **headstock** has a three-speed cone for a one-inch belt, the largest cone being 5 inches in diameter. The **back gear** is thrown in and out by a cam. The **head** is detachable, so as to admit of readjustment should the spindle become untrue. The **spindle** is made of  $1\frac{1}{4}$ -inch special steel, having a  $\frac{1}{2}$ -inch hole its entire length; it runs in gun-metal bearings, provision being made to take up all wear.

The **tailstock** has an adjustable side movement for taper-turning; the spindle is  $\frac{1}{8}$ -inch in diameter, and is self-discharging. The centers are made to correspond with Morse Taper No. 1.

The **front bearing** is  $1\frac{1}{8}$  inches in diameter and  $1\frac{3}{4}$  inches long. The bed has 4 V's, is  $6\frac{1}{2}$  inches wide, 5 inches deep, and is thoroughly braced.

# SEBASTIAN LATHE Co.

The **CARRIAGE** and **REST** are of the most approved design; the carriage is gibbed to the bed, both front and back, rendering it very rigid. It is detachable for hand work, and can be thrown into feed instantly for turning or screw-cutting.

The **RACK** and **GEARS** are cut from the solid metal, and are as true and noiseless as it is possible for metal gears to be.

With each lathe is furnished a 5-inch face plate, two pointed centers, steady rest, wrenches, gears to cut all standard threads from 3 to 40, and either a foot motion or countershaft, but when both are wanted the price will be \$9.00 extra.

Pulleys on countershaft are 5 x 2½; speed should be 225.

This lathe is furnished with gears to cut the following threads: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 36, and 40.

### DIMENSIONS, ETC.

|                                     |  |
|-------------------------------------|--|
| Swings over bed . . . . . 9 inches. | Swings over carriage . . . . 7 inches. |
| Length of bed . . . . . 40 inches.  | Takes between centers . . 25 inches.   |
| Weight, 350 lbs. Price \$           |  |

Weight, boxed for export, 450 lbs. Size of case, 26 x 21 x 52 inches.

We build this lathe one foot longer, to take 37 inches between centers, weight, 350 lbs. Price \$

The above prices include delivery on board boat or cars here in good shipping order.

We can furnish a **PAIR OF BLOCKS**, to raise the head and tailstocks so as to swing 11 inches, for \$10.00 extra. We will put the lathe on short legs, to be used as a **BENCH LATHE**, with countershaft, at same price as for lathe with foot motion, or without either foot motion or countershaft at \$5.00 less than that price.

### EXTRAS.

We will put on a **compound rest** instead of the plain rest for \$10.00 extra.

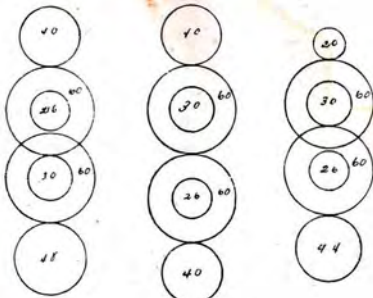
Reverse head, \$10.00 extra.

Set of 10 metal-turning tools, ready for use, \$2.00.

Set of wood-turning tools, handled, \$3.75. Extra gears, \$1.50 each.

Hand rest, \$1.75. Follower rest, \$1.75. Belt, \$1.00.

### To Arrange Gears for Screw Cutting on our 9-inch and 10-inch Lathes.



No. 1

No. 2

No. 3

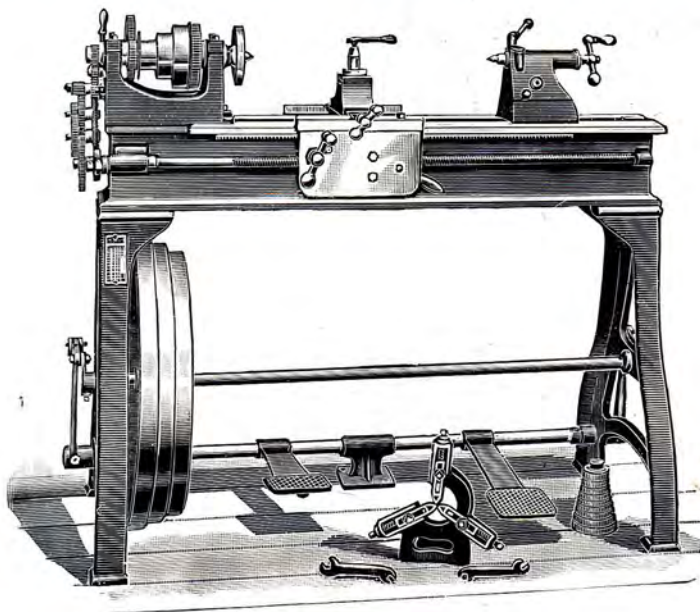
No. 1 shows arrangement for cutting 3 threads. R. H.

No. 2 shows arrangement for cutting 5 threads. R. H.

No. 3 shows arrangement for cutting 22 threads. R. H.

To cut other threads change only screw gear as per index.

To cut left hand threads on 9" lathe, arrange the 20 gear on yoke above the screw gear.



## NEW 10-INCH SCREW CUTTING FOOT LATHE.

This cut represents our new and improved 10-inch Screw-Cutting Foot Lathe, which has been designed to do accurate and substantial work with ease and rapidity.

This lathe swings 11 inches over shears, 8 inches over carriage, and is made in three lengths, to take 28, 40 and 52 inches between centers.

The **HEADSTOCK** has a three-speed cone for a  $1\frac{1}{4}$ -inch belt, the cones being  $5\frac{1}{2}$  inches, 4 inches, and  $2\frac{1}{2}$  inches in diameter. The **back gear** is thrown in and out by a cam. The **head** is detachable, so as to admit of readjustment should the spindle become untrue. The **bed** has four V's, is 8 inches wide, 7 inches deep, and is thoroughly braced.

The **head-spindle** is made of  $1\frac{3}{8}$ -inch steel, having  $\frac{1}{8}$ -inch hole in its entire length, and runs in gun-metal boxes, provision being made to keep them true and take up all wear. The **tailstock** has an adjustable side movement for turning tapers. The spindle is  $1\frac{1}{8}$  inches in diameter, and is self-discharging. The centers are made to correspond with No. 2 Morse Taper. The **front bearing** is  $1\frac{1}{8}$  inches in diameter and  $2\frac{1}{2}$  inches in length.

The **carriage and rest** are of the most approved and latest design. The carriage is gibbed to the bed, both front and back, rendering it very stiff. It is detachable for hand work, and can be thrown into feed instantly for turning or screw-cutting. The **gears and rack** are cut from the solid metal with the best machinery known for that purpose. The lathe will cut either right or left-hand thread, or will feed either right or left, without change of gearing, having the reverse movement on the headstock.



# SEBASTIAN (S) & LATHÉ Co.

## DIMENSIONS.

Swings over bed.....11 inches. Swings over carriage....8 inches.  
Length of bed .....48 inches. Takes between centers...28 inches  
Front bearing....1 $\frac{7}{8}$  x 2 $\frac{1}{2}$  inches. Hole through spindle....1 $\frac{7}{8}$  inches.

Weight, 450 lbs. Price, \$

Weight boxed for export, 625 lbs. Size of case, 26 x 24 x 56 inches.

We will build this lathe to take 40 inches between centers for \$ or  
52 inches between centers for \$

With each lathe is furnished a face plate, steady and follower rests, two pointed centers, wrenches as shown in cut, gears to cut all standard threads from 3 to 40, as follows: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 18, 20, 22, 24, 26, 28, 30, 32, 36 and 40, and either a foot motion or countershaft. When both are wanted the price will be \$10 extra.

Pulleys on countershaft are 6 x 3; speed should be 225.

## EXTRAS.

We will put on a compound rest instead of a plain rest for \$12.00 extra.

Set of 10 metal turning tools, ready for use, \$2.50.

Set of wood turning tools, handled, \$3.75.

Hand rest, \$1.75. Belt, \$1.50. Extra gears, \$1.50 each. 9-inch face plate, \$2.00.

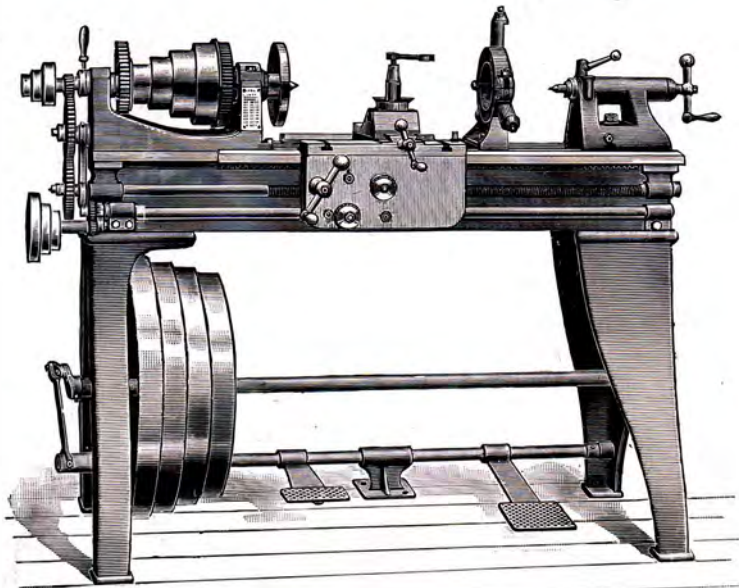
We will furnish a pair of raising blocks to raise the head and tailstocks of lathe so as to swing 13 inches over bed for \$10.00 extra.

We will put this lathe on short legs, to be used as a bench lathe, with countershaft, at same prices as for foot lathe, or without either countershaft or foot motion, at \$8.00 less than that price.



EMERY OR SAW ARBOR.

$\frac{1}{2}$ -inch, \$1.50;  $\frac{3}{4}$ -inch, \$2.50.



**13-INCH SCREW CUTTING FOOT LATHES.  
BUILT WITH EITHER GAP OR STRAIGHT BED.**

The above cut represents our new 13-inch Swing Screw-Cutting Foot Lathe, which is built from entirely new patterns and designs, and is made with special care. Good material, extra workmanship, and truth and accuracy are guaranteed.

It has a **four-speed** cone for a two-inch belt. The cones are turned inside and out to insure smooth running at a high rate of speed; they are 8 inches  $6\frac{1}{2}$  inches, 5 inches and  $3\frac{1}{2}$  inches in diameter. The **spindle** is made of  $2\frac{1}{4}$ -inch steel, and is run in gun-metal bearings, provision being made to take up wear and keep them true. The **front bearing** is  $2\frac{1}{8}$  inches in diameter and  $3\frac{1}{2}$  inches long; the **back bearing** is  $2\frac{1}{4}$  inches long. There is a  $1\frac{1}{8}$ -inch hole entirely through the spindle. The **tailstock** has an adjustable side movement for turning tapers. The cross-feed is graduated.

The back gear is thrown in and out by a cam motion. The lathe will cut either right or left-hand threads, or will feed either right or left. The **carriage** is of the most approved design, and is intended for solid work; it is gibbed to the bed, both front and back. All parts are made of steel, where this would best serve the purpose. All the works are securely protected from chips and dirt, thus insuring long wear and durability to the most costly and vital parts of the lathe. The lathe swings  $7\frac{1}{2}$  inches over carriage.

It has both the **independent rod** and **screw feeds**, as well as **power cross feed**.

# SEBASTIAN LATHES Co.

The **bed** is thoroughly braced throughout, has four V's, and is planed and polished. The **rack**, as well as the gears, are cut from the solid metal. We build this lathe either with or without the gap, as may be ordered, and at the same price.

Each lathe is furnished complete with a large and small face plate, two pointed centers, steady and follower rests, wrenches, and the gears to cut all standard threads from 5 to 36, as follows: 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30, 32 and 36 threads; also the foot motion, the flywheel of which weighs 150 lbs., or a friction countershaft, or both foot motion and countershaft will be furnished for \$18.00 extra.

### DIMENSIONS, ETC. .

Swings over bed .....13 inches.  
 Swings over carriage.....7½ inches.  
 Length of bed .....6 feet.  
 Takes between centers .....40 inches.  
 Front bearing.....2⅞ inches diameter by 3½ inches long  
 Hole through spindle .....1⅞ inches  
 Cones are 8, 6½, 5 and 3½ inches diameter by 2 inches wide.

Friction Countershaft \$18.00 extra.

Weight, 1,100 lbs. Weight, boxed for export, 1,400 lbs. Size of case, 30 x 30 x 84 inches. Price quoted on application.

**Compound Rest or Raise and Fall Rest**, \$18.00 extra. **Taper Attachment**, shown on page 17, \$30.00 extra.

Beds up to 12 feet in length can be furnished at \$10.00 extra per foot over price for 6 foot bed. Set of 10 tools for metal-turning, ground and tempered, ready for use, ½ x 1-inch, \$5.00. Hand rest, \$3.50. Extra gears, \$1.75. Belt, \$2.00.

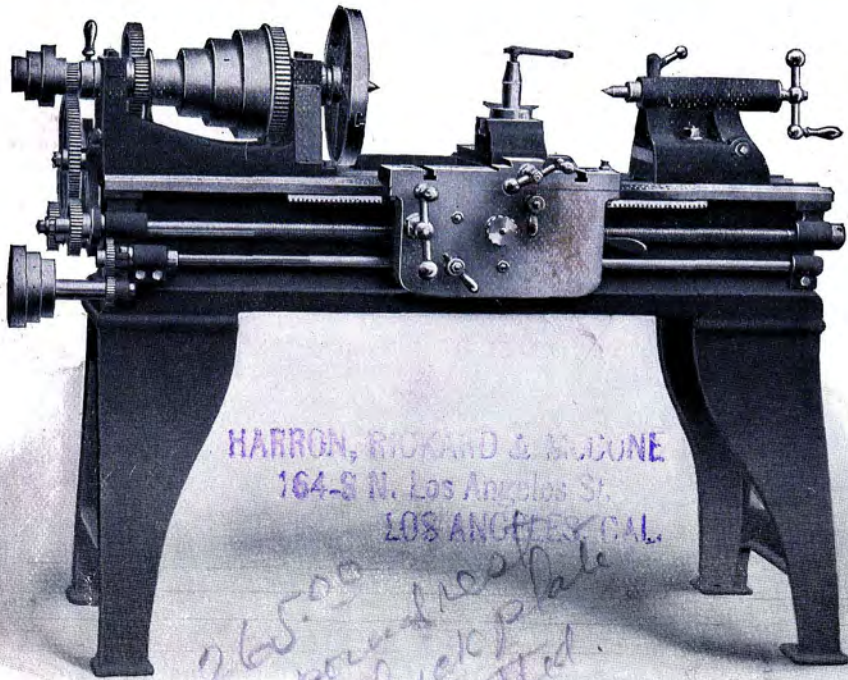
We will furnish a pair of **raising blocks** 2 inches high, including bolts, extra tool post and ring, for this lathe, for \$20.00.

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### RULE FOR ASCERTAINING THE PROPER SIZE OF PULLEY FOR MAIN SHAFT.

Multiply the diameter of the pulley on the countershaft by the number of revolutions the countershaft should run; divide this by the number of revolutions of the main shaft; the result will be the diameter of the driving pulley to be placed on the main shaft.

# SEBASTIAN S<sup>CO</sup> LATHE CO.



HARRON, RICKARD & MCDONE  
164-S N. Los Angeles St.  
LOS ANGELES, CAL.

265.00  
Compound rest  
Compound plate  
fitted.

## 13-INCH ENGINE LATHES.

MODERN, PRACTICAL, HIGH GRADE, LOW PRICE.

Arranged with either Gap or Straight Bed.

This lathe is made from entirely new patterns and designs, and is built with special care, good material, extra workmanship, and truth and accuracy are guaranteed.

The spindles are made of a high-grade special steel, and the boxes are the best phosphor bronze. Provision is made for taking up any wear and for constant and easy lubrication. The spindle is hollow, having a  $1\frac{1}{8}$ -in. hole its entire length. The centers conform to Morse Taper No. 3. The front bearing is  $2\frac{1}{8}$  inches in diameter and  $3\frac{1}{2}$  inches long. The back bearing is  $2\frac{1}{4}$  inches long.

It has a four-speed cone for two-inch belt. The cones are turned inside and out, and carefully balanced, thus insuring smooth running at a high rate of speed. They are 8,  $6\frac{1}{2}$ , 5 and  $3\frac{1}{2}$  inches in diameter. The tailstock has an adjustable side movement for turning tapers. It is solid and substantial having a heavy spindle and center.

The carriage is of the most approved design, has a long bearing on the ways, and is provided with ample lubricating devices. It is gibbed to the bed, both front and back. The lathe will cut either right or left-hand threads, or will feed either right or left hand.

# SEBASTIAN S & C LATHES Co.

Each lathe is provided with **both screw and rod feeds** as well as **power cross feed**. The bed is thoroughly braced throughout, has four V's, and is planed and polished. Sliding surfaces are accurately hand-scraped to a bearing. The rack and gears are cut from solid metal. The cross-feed is graduated.

We also build this lathe with a **gap bed**, when so ordered. This gap, as shown in cut on page 16, being directly under and in front of the face plate, will permit a swing of 20 inches in diameter and  $7\frac{3}{4}$  inches wide. The bed is just as stiff at the gap as at any other point, being doubly braced, and the carriage is so arranged that it will run over the gap, and connect on the other side without letting down. We make no extra charge for the gap.

With each lathe we **furnish** a large and a small face plate, pointed centers, steady and follower rests, wrenches, and the gears to cut all standard threads from 5 to 36, as follows: 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30, 32 and 36 threads; also a friction countershaft.

## DIMENSIONS, ETC

Swings over bed .....13 inches.  
Swings over carriage..... $7\frac{1}{2}$  inches.  
Length of bed .....6 feet.  
Takes between centers..... 40 inches.  
Front bearing ..... $2\frac{3}{8}$  inches diameter by  $3\frac{1}{2}$  inches long  
Hole through spindle..... $1\frac{5}{8}$  inches.  
Cones are 8,  $6\frac{1}{2}$ , 5 and  $3\frac{1}{2}$  inches in diameter.  
Pulleys on countershaft, 9 x 3. Speed, 190.

Weight, 1,100 lbs.

Weight, boxed for export, 1,400 lbs. Size of case, 30 x 30 x 84 inches.

PRICES QUOTED ON REQUEST.

## EXTRAS

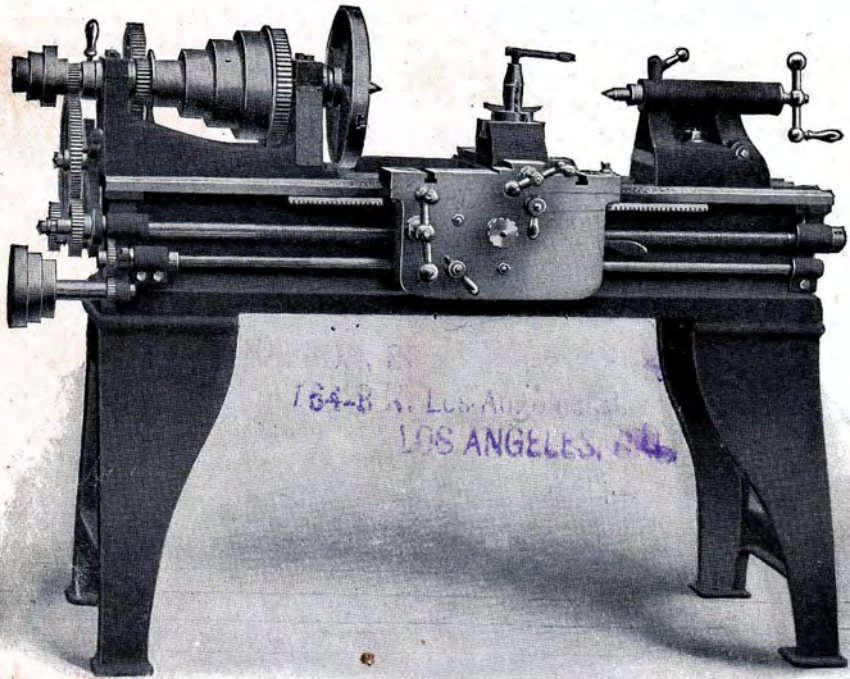
We can furnish any length of bed up to 12 feet long at \$10.00 extra per foot over price for 6 foot bed.

**Compound rest or raise and fall rest** will be furnished instead of the regular plain rest for \$18.00 extra.

**Taper attachment**, shown on page 17, \$30.00 extra. Set of 10 metal turning tools, ground and sharpened, ready for use, \$5.00.

**Hand rest**, \$3.50 extra.

**Extra gears**, \$1.75 each.



### 14-INCH ENGINE LATHE.

MODERN, PRACTICAL, HIGH GRADE, LOW PRICE.

This lathe is of the latest design, and is constructed of the very best material throughout, and the workmanship and finish are of the highest grade.

It has a four-speed cone for a two-inch belt, the largest cone being 8 inches in diameter. The spindle is made of a special high-grade steel, has a  $1\frac{1}{8}$ -inch hole entirely through it. The centers conform to Morse Taper No. 3. The boxes are of the best phosphor bronze. Provision is made for taking up wear and for constant and easy lubrication.

The front bearing is  $2\frac{1}{8}$  inches in diameter and  $3\frac{1}{2}$  inches long. The back bearing is  $2\frac{1}{4}$  inches long. The tailstock has an adjustable side movement for turning tapers.

The carriage has a long bearing on the ways. It is gibbed to the bed both front and back, and has ample lubricating devices. This lathe will cut either right or left-hand threads, or feed either right or left. The cross feed is graduated.

# SEBASTIAN (S) LATHES Co.

Each lathe is furnished complete with both screw and rod feeds, as well as power cross feed. The bed is thoroughly braced throughout, has four V's, is planed and polished. Sliding surfaces are accurately hand-scraped to a bearing.

We can furnish this lathe with the gap bed as shown in cut on page 16. It will permit a swing of 21 inches in diameter and 7¾ inches wide in the gap. No extra charge is made for the gap bed. The bed is thoroughly braced at the gap and the carriage is so arranged that it will run over and connect on the other side of the gap without letting down.

With each lathe we furnish a large and a small face plate, pointed centers, steady and follower rests, wrenches, and the gears to cut all the standard threads from 5 to 36, as follows: 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30, 32, and 36, threads; also a friction countershaft.

## DIMENSIONS, ETC.

Swings over bed .....14 inches.  
 Swings over carriage .....8½ inches.  
 Length of bed.....6 feet.  
 Takes between centers .....40 inches.  
 Front bearing .....2⅞ inches diameter by 3½ inches long.  
 Hole through spindle .....1⅝ inches.

Cones are 8, 6½, 5 and 3½ inches in diameter.

Pulleys on countershaft, 9 x 3. Speed, 190.

Weight, 1,150 pounds.

Weight boxed for export, 1,450 lbs. Size of case, 30 x 30 x 84 inches.

PRICES QUOTED ON REQUEST.

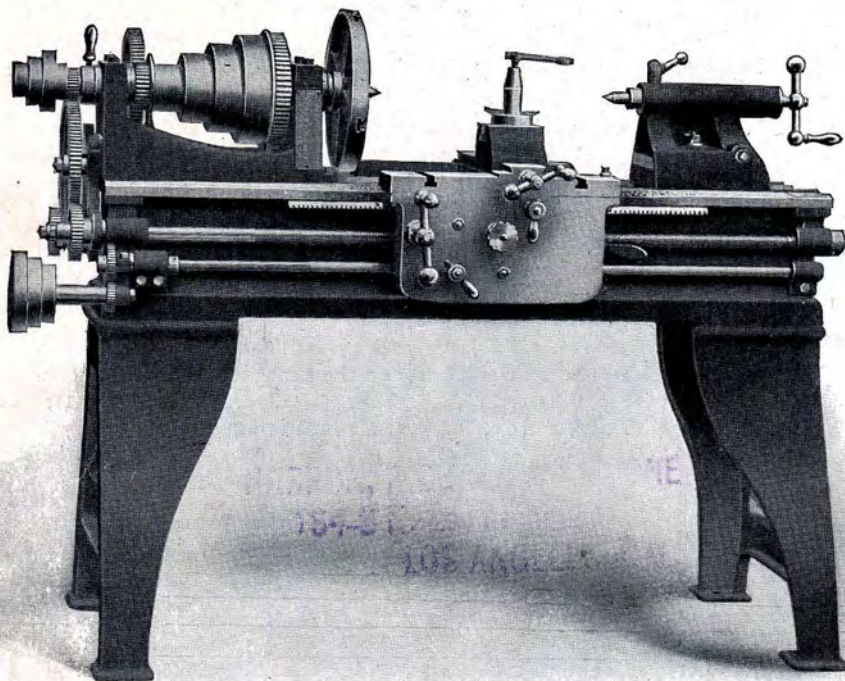
## EXTRAS.

We can furnish this lathe in any length up to 12 feet at \$10.00 per foot over price for 6 foot length.

We will furnish it with compound rest or raise and fall rest, instead of the plain rest, for \$18.00 extra.

Set of 10 metal-turning tools, ground and tempered, ready for use, \$5.00.

Hand rest, \$3.50. Extra gears, \$1.75 each. Taper attachment, shown on page 17, \$30.00 extra.



## OUR NEW 15-INCH ENGINE LATHE.

MODERN, PRACTICAL, HIGH GRADE, LOW PRICE.

In placing this lathe on the market we are furnishing in **weight and stiffness**, and in size of cone pulleys and spindle, a machine that is the equal or many much larger lathes. We use the **best quality of stock the market affords**, the **workmanship is unexcelled**, and the wearing qualities are the best throughout. The construction and convenience in handling will enable the machine to get out a large amount of work in a minimum of time, and the extra features incorporated make it particularly adapted for a large range of work.

The spindles are made of a **high-grade special steel**, and the boxes are the best **phosphor bronze**. Provision is made for taking up wear and for constant and easy lubrication. The spindle is hollow, having a  $1\frac{1}{8}$ -inch hole its entire length. The centers conform to Morse Taper No. 3. The **front bearing** is  $2\frac{1}{8}$  inches in diameter and  $3\frac{1}{2}$  inches long; the **back bearing** is  $2\frac{1}{4}$  inches long.



# SEBASTIAN (S) LATHES Co.

*Model M.C.C.  
58-16*

It has a **four-speed cone** for two-inch belt. The cones are turned inside and out to insure smooth running at a high rate of speed; they are 8 inches, 6½ inches, 5 inches and 3½ inches in diameter. The **tailstock** has an adjustable side movement for turning tapers. It is solid and substantial, and has a heavy spindle and center.

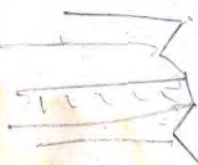
The **carriage** is of the most approved design, has a long bearing on the ways, and is provided with ample lubricating devices. It is gibbed to the bed both front and back. The lathe will cut either right or left-hand threads, or feed either right or left. The cross feed is graduated.

The lathe has **both the screw and rod feeds and power cross feed**. The bed is thoroughly braced throughout, has four V's, and is planed and polished. Sliding surfaces are accurately hand-scraped to a bearing. The rack, as well as the gears, are cut from the solid metal.

We also build this lathe with a **gap bed**, as shown in cut on page 16. This gap being directly under and in front of the face plate, it will permit a swing of 22 inches in diameter and 7¾ inches wide. The bed is just as stiff at the gap as at any other place, being doubly braced, and the carriage is so arranged that it will run over the gap and connect on the opposite side without letting down. We make no extra charge for the gap.

With each lathe we furnish a large and small face plate, pointed centers, steady and follower rests, wrenches, and the gears to cut all standard threads from 5 to 36, as follows: 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 28, 30, 32, and 36 threads; also a friction countershaft.

## DIMENSIONS, ETC.



- Swings over bed .....15 inches.
- Swings over carriage .....9½ inches.
- Length of bed.....6 feet.
- Takes between centers .....40 inches.
- Front bearing .....2⅞ inches diameter by 3½ inches long.
- Hole through spindle .....1⅝ inches.

Cones are 8, 6½, 5 and 3½ inches in diameter.

Pulleys on countershaft, 9 x 3. Speed, 190.

Weight, 1,200 lbs.

### PRICES QUOTED ON REQUEST.

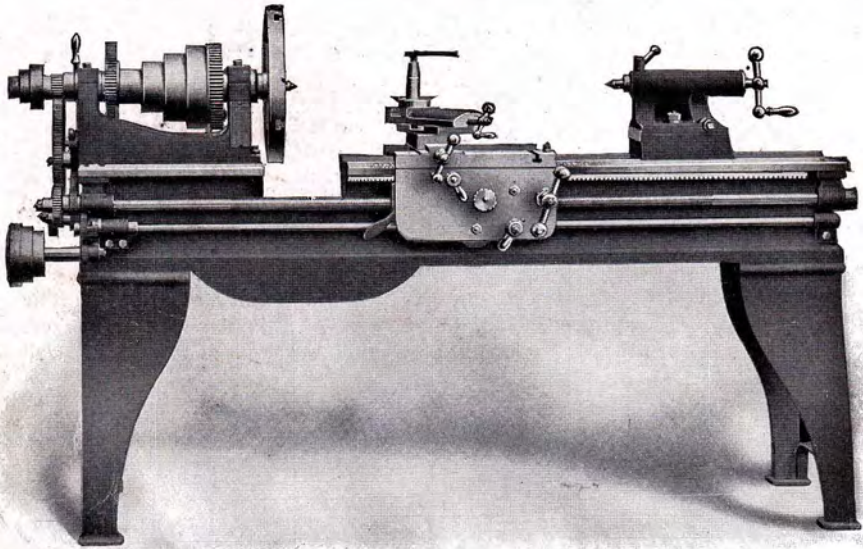
Weight boxed for export, 1,500 lbs. Size of case, 30 x 30 x 84 inches.

We can furnish any length of bed up to 12 feet long at \$10.00 extra per foot over price for 6 foot bed.

**Compound rest or raise and fall rest** will be furnished instead of the regular plain rest for \$18.00 extra.

**Taper attachment**, shown on page 17, \$30.00 extra. Set of 10 metal turning tools, ground and sharpened, ready for use, \$5.00.

**Hand rest**, \$3.50 extra. **Extra gears**, \$1.75 each.



## GAP ENGINE LATHES.

Showing Compound Rest. Built only to Order, 13-inch, 14-inch and 15-inch Swing.

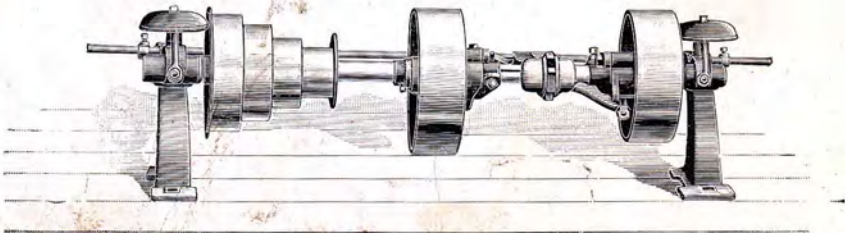
The above cut represents our new and improved **Gap Bed Engine Lathe**.

We build either the 13-inch, 14-inch or 15-inch engine lathe with a gap bed when so ordered, and make no extra charge therefor. The bed is just as stiff at the gap as at any other point, being carefully braced and protected. The carriage is so arranged as to run over the gap and connect at the opposite side without letting down.

The gap in all these sizes is  $7\frac{3}{4}$  inches long and  $3\frac{1}{2}$  inches deep, thus increasing the swing of the lathe in the gap by 7 inches.

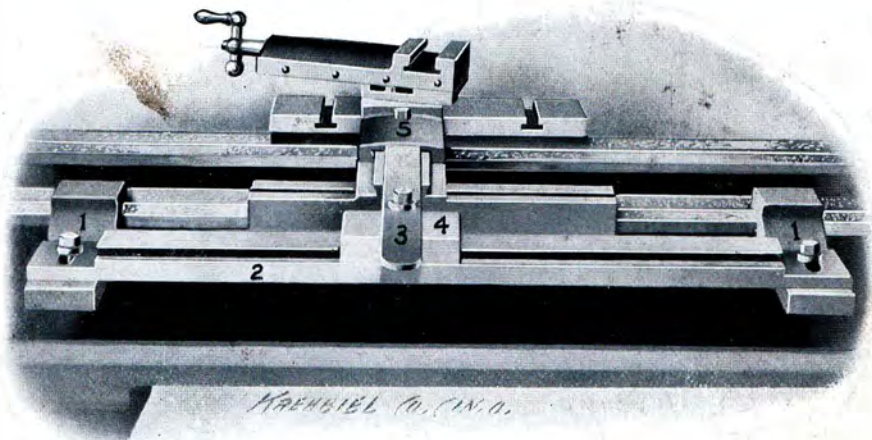
The **Dimensions, Prices, etc.**, are the same as similar size straight-bed lathes as given in our catalogue.

We also furnish a **BRIDGE** or block to close up the gap when so desired at an additional cost of \$12.00. This bridge or block is planed to a close fit in the gap, and renders the bed solid. It can be readily removed by simply unbolting it. This bridge can not be fitted to the lathe after it is built.



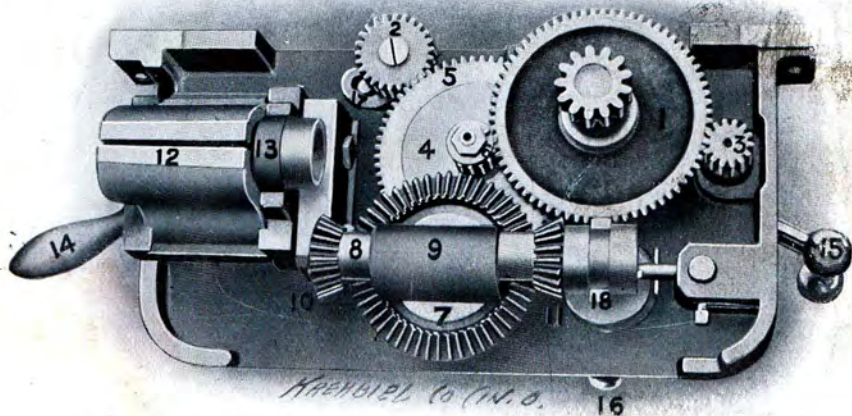
Cut of friction countershaft furnished with our 13-inch, 14-inch and 15-inch engine lathes. Pulleys are  $9 \times 3$ ; speed should be 190.

# SEBASTIAN (S) LATHES Co.



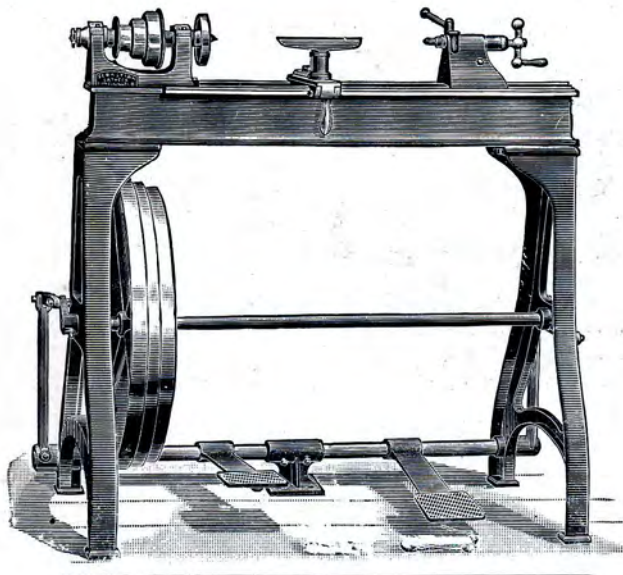
The above cut shows the TAPER ATTACHMENT as attached to our engine lathes.

1—Brackets. 2—Rail. 3—Slide attached to compound rest. 4—Slide on rail. 5—Screw attaching slide to compound rest.



The above cut shows the apron mechanism of our engine lathes described herein.

1—Rack gear. 2—Cross feed gear. 3—Apron bush gear. 4—Friction plate. 5—Friction gear. 6—14 tooth gear attached to friction plate. 7—Large bevel gear. 8—Rod sleeve. 9—Rod bearing. 10—Small bevel gear. 11—Bevel gear attached to shifter. 12—Lead screw nut. 13—Nut plate. 14—Nut eccentric. 15—Handle for longitudinal feed. 16—Handle for reverse. 17—Tumbler plate. 18—Shifter Fork.



## HAND OR SPEED LATHES.

The above cut represents our 9-inch and 10-inch Hand or Speed Lathes, arranged with foot motion. These tools are of the same general dimensions as our 9-inch and 10-inch Screw-Cutting Lathes. They are in all respects carefully and accurately built and finished in the best manner. They are furnished complete with steel spindles, gun-metal boxes, heavy bearings, and proper adjustments for wear.

With each lathe is furnished a face plate, pointed centers, unless wood centers are ordered, hand rest, and either a foot motion or a countershaft, as may be desired.

Prices quoted on request.

### DIMENSIONS.

|                |                            |                 |
|----------------|----------------------------|-----------------|
| 9-inch swing,  | 25 inches between centers, | weight 260 lbs. |
| 9-inch swing,  | 37 inches between centers, | weight 300 lbs. |
| 10-inch swing, | 28 inches between centers, | weight 400 lbs. |
| 10-inch swing, | 40 inches between centers, | weight 450 lbs. |
| 10-inch swing, | 52 inches between centers, | weight 500 lbs. |

We will put the back gear on the 9-inch lathe for \$10.00 extra, and on the 10-inch lathe for \$12.00 extra.

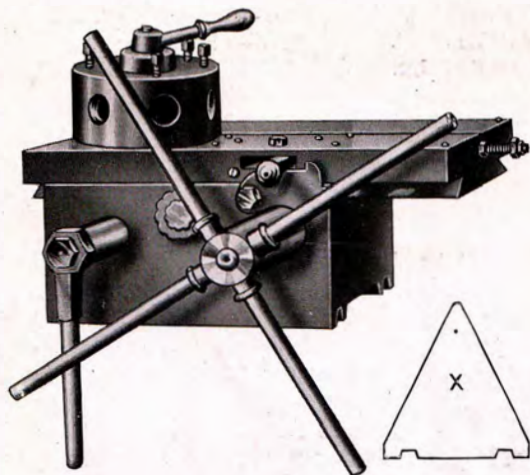
We will put a slide rest instead of a hand rest, same as we use on our regular screw-cutting lathes, to be operated by hand by a gear working into the rack, for \$10.00 extra for the 9-inch lathe, and \$12.00 extra for the 10-inch lathe.

All these lathes have hollow spindle, same as similar sizes in our screw-cutting lathes.

Lever feed for tailstock can be furnished instead of screw feed, when desired, at the same price. Both are furnished for \$3.00 extra.

# SEBASTIAN LATHE CO.

## NEW AUTOMATIC TURRET.

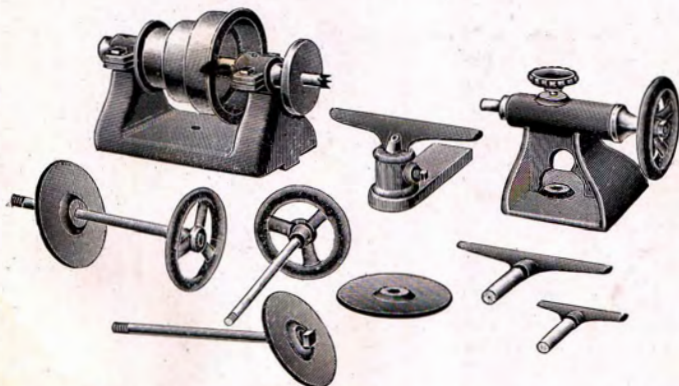


This cut shows our new Automatic Turret, which we fit to our 13-inch and 15-inch lathes when desired. It can also be fitted to any lathe swinging from 12 to 15 inches. The diameter of the turret is 7 inches, and the height is 4 inches. Slide is 18 inches, base 14 inches, longitudinal movement 8 inches, diameter of holes  $\frac{7}{8}$ -inch.

In ordering for other makes of lathes, a templet as shown in cut, should be sent us. With each turret will be sent a set of tools for boring and reaming the turret holes in place to insure perfect line. The tools are to be returned to us. Price of Turret complete, fitted to lathe, quoted on request.



## LATHE SETS.



These sets are offered to meet the demand for a machine of low price. They are well made, and the bottoms are planed to bring the centers in line. The No. 1 and No. 2 have steel head spindles running in cast iron bearings. The Nos. 3 and 4 have Babbitt bearings, and the centers are the No. 2 Morse taper. The

cones are carefully balanced, being turned on the inside, and no better made lathes have ever been placed upon the market. Each set consists of one head stock, one rest socket, one face plate, one common center, three bolts, one tail stock, two T rests, one spur center, two hand wheel nuts, three flanges. Any additional parts wanted will be an extra charge.

## PRICE LIST.

| No. | Swing  | Speeds on Cone | Width of Belt | Price   | Price of Countershaft |         |
|-----|--------|----------------|---------------|---------|-----------------------|---------|
|     |        |                |               |         | T. & L. Pulleys       | Price   |
| 1   | 6 in.  | 2              | 1 in.         | \$10 00 | 3 x 1                 | \$ 7 00 |
| 2   | 8 in.  | 2              | 1 1/4 in.     | 15 00   | 4 x 1 1/2             | 8 00    |
| 3   | 11 in. | 3              | 1 1/2 in.     | 20 00   | 5 x 2                 | 9 00    |
| 4   | 13 in. | 4              | 1 3/4 in.     | 25 00   | 6 x 3                 | 10 00   |

## LATHE TOOLS.



- |                    |                     |
|--------------------|---------------------|
| 1—Left-side Tool.  | 6—Smoothing Tool.   |
| 2—Right-side Tool. | 7—Thread Tool.      |
| 3—Diamond Point.   | 8—Bent Thread Tool. |
| 4—Diamond Point.   | 9—Inside Tool.      |
| 5—Cut-off Tool.    | 10—Inside Tool.     |

### Price Per Set of Ten.

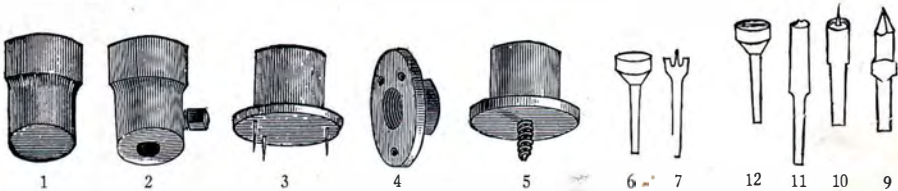
For 9-inch Lathe,  $\frac{1}{8}$  x  $\frac{1}{2}$ -inch steel.....\$2.00.  
 For 10-inch Lathe,  $\frac{3}{8}$  x  $\frac{3}{8}$ -inch steel..... 2.50.  
 For 13 and 15-inch Lathe,  $\frac{1}{2}$  x 1-inch steel.... 5.00.  
 Single tools, one-tenth of above price. The above tools are ground and tempered, ready for use.

## SET OF WOOD TURNING TOOLS.

Suitable for any Lathe.

Consisting of two Turning Gouges,  $\frac{3}{8}$  and  $\frac{1}{2}$ -inch, two Turning Chisels,  $\frac{3}{8}$  and  $\frac{1}{4}$ ; one Cutting-off Tool; one Inside Tool; one Square Graver; one pair 5-inch Double Callipers. Tools are all handled. Price per set, \$3.75.

## SPECIAL TOOLS.



|   | Prices. |        |
|---|---------|--------|
| No. 1—Blank Chuck .....                           | \$1.25  |        |
| No. 2—Drill Chuck— $\frac{3}{8}$ -inch hole ..... | 1.25    | \$1.50 |
| No. 3—Prong Chuck .....                           | 1.25    | 1.50   |
| No. 4—Chuck Plate .....                           | 1.50    | 2.00   |
| No. 5—Screw Face Plate .....                      | 1.25    | 1.50   |
| No. 6—Drill Pad .....                             | 1.25    | 1.75   |
| No. 7—Spur Center .....                           | 1.50    | 1.75   |
| No. 9—Square Center .....                         | 1.25    | 1.75   |
| No. 10—Cup Center .....                           | 1.25    | 1.75   |
| No. 11—Taper Plugs to fit Chucks .....            | 1.25    | 1.50   |
| No. 12—Crouch Center .....                        | 1.25    | 1.75   |
| Pointed Centers .....                             | 1.25    | 1.75   |

Milling or Knurling Wheel, with Handle, Price, \$1.00.

Extra Wheels, 50 cents each.

## USEFUL BOOKS FOR AMATEURS AND MECHANICS.

(Sent free on receipt of price.)

**THE COMPLETE PRACTICAL MACHINIST**, embracing lathe work, vise work, drills and drilling, taps and dies, hardening and tempering, the making and use of tools, tool grinding, marking out work, etc. By Joshua Rose. Illustrated by 356 engravings, 15th edition, thoroughly revised, and a great part rewritten. 12mo. 439 pages. Price, \$2.50.

**THE MODERN MACHINIST**. By John T. Usher, machinist. 8vo., 322 pages, 257 illustrations. Price, \$2.50. A practical treatise, embracing the most approved methods of modern machine shop practice, embracing the applications of recent improved appliances, tools, devices for facilitating, duplicating and expediting the construction of machines and their parts. A new book from cover to cover.

**SPON'S MECHANIC'S OWN BOOK**. A book that is a book. It should be on the book-shelf of every man or boy that is interested in mechanics, lathe work, painting, carpentry, mechanical movements, etc. Price, \$2.50.

**MODERN AMERICAN LATHE PRACTICE**, by Oscar E. Perrigo, M. E., 424 Octavo pages, 314 engravings, price \$2.50. An up-to-date book on lathe work. It is the only complete American work on the subject, written by a man who knows not *only* how the work ought to be done, but knows also how to do it, and how to convey this knowledge to others.

**SELF PROPELLED VEHICLES**. A practical treatise on the theory, construction, operation, care and management of all forms of automobiles. By J. Holman, with 500 illustrations and diagrams. 660 pages, price \$2.00.

**THE AUTOMOBILE POCKET BOOK**. By E. W. Roberts, M. E. It gives clear and concise information on the operation and care of an automobile; tells what to do in case of an emergency, etc. Simple and plain. 325 pages, 52 illustrations, price \$1.50.

**GAS, GASOLINE AND OIL ENGINES**. By Gardner D. Hiscox, M. E. 450 pages, 351 engravings, price \$2.50 net. This is a very complete work treating fully on the subject and the use of these engines in every way.

The above prices are net cash with order. We will send any of them by mail on receipt of the price named. No discount applies to any of them.

## PRIVATE CODE WORDS FOR LATHES.

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To enable our customers to wire or cable us, we have adopted the following words for the various lathes of our make. By using these words in connection with the code words of Lieber's Code, a complete message may be arranged. Our Cable address is "Sebastian, Cincinnati."

### FOR 9-INCH SCREW CUTTING LATHE, COMPOUND REST.

|                     |          |         |
|---------------------|----------|---------|
| Length of Bed,      | 40"      | 52"     |
| With Treadle,       | ▣abais,  | ▣abunt, |
| With Counter Shaft, | ▣abarch, | ▣acelo, |
| With both,          | ▣abei,   | ▣acian, |

For plain rest, prefix the letter A to the word; for reverse head lathe, add "sed" to the word.

### FOR 10-INCH SCREW CUTTING LATHE WITH COMPOUND REST.

|                     |          |          |           |
|---------------------|----------|----------|-----------|
| Length of Bed,      | 48"      | 60"      | 72"       |
| With Treadle,       | ▣agmar,  | ▣agstar, | ▣ahlia,   |
| With Counter Shaft, | ▣agops,  | ▣aguit,  | ▣aily     |
| With both,          | ▣agries, | ▣aher,   | ▣aintify, |

For plain rest, prefix the letter A to the word.

### FOR 13-INCH SCREW CUTTING FOOT LATHE, STRAIGHT BED, AND COMPOUND REST.

|                    |          |          |          |
|--------------------|----------|----------|----------|
| Length of Bed,     | 6'       | 7'       | 8'       |
| With Treadle,      | ▣amados, | ▣amals,  | ▣amhout, |
| Both Tr. and C. S. | ▣amalio, | ▣ambord. | ▣amnas,  |

If gap bed is wanted, prefix "gap" to the word; if bridge is wanted, use word "bridged."



# SEBASTIAN LATHES Co.

HARRON, RICKARD & McCUNE  
 164-B N. Los Angeles St.

## ENGINE LATHES WITH GAP BED, AND COMPOUND REST.

| Length of Bed, | 6'       | 7'        | 8'       | 9'       | 10'       | 12'       |
|----------------|----------|-----------|----------|----------|-----------|-----------|
| Swing 13"      | danific, | dampf,    | damsels, | damwild, | dancing,  | dangeros, |
| " 14"          | damnum,  | dampiere, | damson,  | danai,   | dadelion, | danistis, |
| " 15"          | damosel, | daplank,  | damuzza, | danaran, | dadified, | dankbar,  |

If straight bed instead of gap is wanted, use the word "straight;" if bridge in gap is wanted, use the word "bridged."

## HAND OR SPEED LATHES.

| Swing and Length of Bed, | 9 x 40   | 9 x 52   | 10 x 48  | 10 x 60  | 10 x 72   |
|--------------------------|----------|----------|----------|----------|-----------|
| With Foot Motion only,   | danois,  | daones,  | dapico,  | dardada, | darmalge, |
| With Counter Shaft,      | dansais, | dapalis, | dapifer, | darebbe, | darmleer, |
| With both,               | danspop, | daphne,  | dapper,  | daricus, | darmvet.  |

## POWER SPEED LATHES, GAP BED.

| Length,   | 6'        | 7'      | 8'       | 9'       | 10'      | 11'      | 12'      |
|-----------|-----------|---------|----------|----------|----------|----------|----------|
| Swing 13" | darob,    | dartel, | dashond, | dastard, | datidis, | daturos, | dauli,   |
| " 14"     | darrofen, | datros, | dasjes,  | databas, | datrice, | daubing, | daunia,  |
| " 15"     | dartars,  | darum,  | daskon,  | datais,  | dattero, | daucus,  | dauphin, |

If straight bed instead of gap, use the word "straight;" if with slide rest, use "rest;" for back gear, use "gear;" for lever feed tail stock, use "lever;" if both lever and screw feed, use "both."

## POWER EQUIPMENTS.

We are in a position to make very close prices on **PULLEYS, HANGERS, SHAFTING** and **COUPLINGS**, of all kinds and we invite specifications.

We shall be glad to submit prices on any kind of **BELTING** that may be wanted, in any quantity.

## SPECIAL NOTICE.

The machines, tools and articles listed on the following pages are not of our manufacture, but have been selected by us from the manufacturers of others, to fill orders which we often receive for such articles.

We can commend each article listed to your favorable consideration, however, and will make you the lowest manufacturer's price on anything offered you.

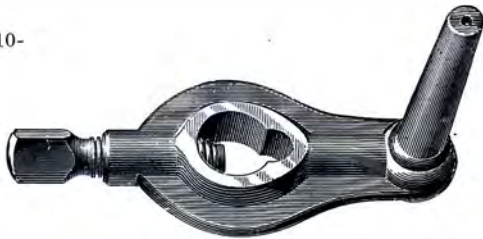
### LIGHT DOGS.

Adapted for use on our 9 and 10-inch Lathes.

|       |               |               |               |    |                |                |       |
|-------|---------------|---------------|---------------|----|----------------|----------------|-------|
| No.   | 1             | 2             | 3             | 4  | 5              | 6              | 7     |
| Bore  | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{3}{4}$ | 1  | $1\frac{1}{4}$ | $1\frac{1}{2}$ | 2 in. |
| Price | 30            | 35            | 45            | 50 | 60             | 65             | 75c.  |

Set of four,  $\frac{3}{8}$  to 1-inch, \$1.50.

Set of seven, \$3.50.



### HEAVY LATHE DOGS.

Adapted for use on our 14 and 15-inch Lathes.

|       |               |               |    |                |                |                |      |                |       |
|-------|---------------|---------------|----|----------------|----------------|----------------|------|----------------|-------|
| No.   | 1             | 2             | 3  | 4              | 5              | 6              | 7    | 8              | 9     |
| Bore  | $\frac{1}{2}$ | $\frac{3}{4}$ | 1  | $1\frac{1}{4}$ | $1\frac{1}{2}$ | $1\frac{3}{4}$ | 2    | $2\frac{1}{2}$ | 3 in. |
| Price | 50            | 60            | 70 | 80             | 95             | 1.10           | 1.20 | 1.45           | 1.60  |

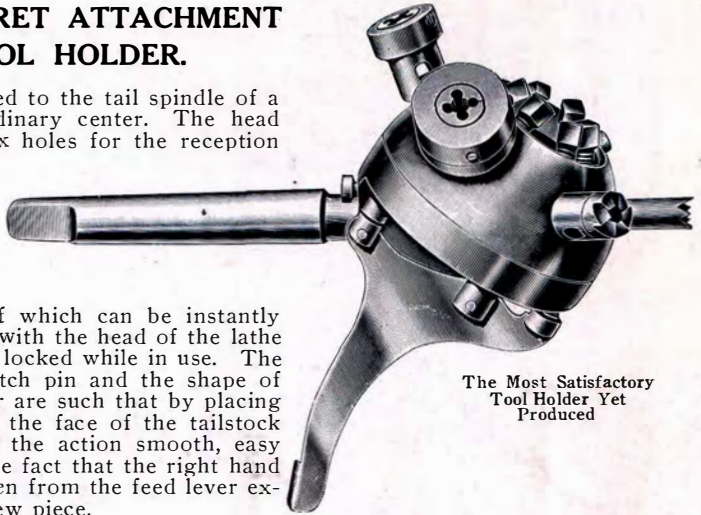


### IMPROVED HAND VISE.

We claim this tool to be the handiest one of the kind in use. It is of metal throughout, the jaws being forged steel. The workmanship is first class and warranted in every particular. For holding wire there is a hole through the handle and screw. Every mechanic who has used it speaks its praise. Price, \$1.50.

## A NEW TURRET ATTACHMENT OR TOOL HOLDER.

This tool is fitted to the tail spindle of a lathe with an ordinary center. The head is pierced with six holes for the reception



The Most Satisfactory  
Tool Holder Yet  
Produced

of tools, either of which can be instantly brought into line with the head of the lathe and automatically locked while in use. The position of the latch pin and the shape of the releasing lever are such that by placing a suitable stop in the face of the tailstock it is self-tripping, the action smooth, easy and rapid, from the fact that the right hand need never be taken from the feed lever except to insert a new piece.

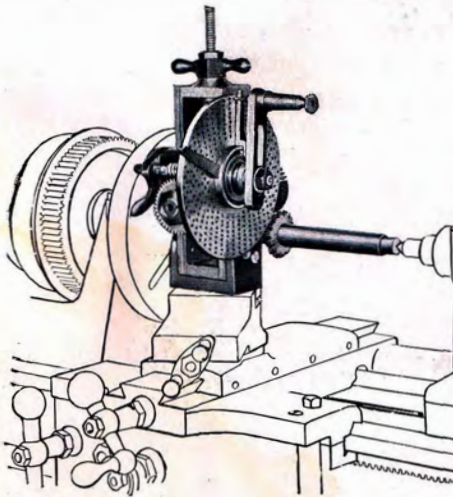
No. 1 size,  $3\frac{1}{2}$  in. diameter, weight 4 lbs., tool holes  $\frac{1}{2} \times 1$  in. deep \$13.75.

No. 2 size,  $5\frac{1}{8}$  in. diameter, weight  $12\frac{1}{2}$  lbs., tool holes  $\frac{7}{8} \times 1\frac{1}{2}$  in. deep, \$26.

No. 1 for lathes 9-in. swing up. No. 2 for lathes 12-in. swing up.

The prices given do not include the tools or the center shown in the cut.

## GEAR CUTTING ATTACHMENT FOR LATHES.



For any one having use for small spur, bevel or mitre gears, this attachment is indispensable and will often pay for itself on a single job.

The blank to be cut is held on a mandrel fitting a taper socket in the spindle of the sliding head, and is revolved by a steel worm working in a gear connected with the dials.

The cutters are held on a mandrel between the centers of the lathe, the cross feed screw of the lathe being used to feed the work over the cutters. Neither mandrel nor cutter are furnished with the attachment.

The spindle has a vertical adjustment of 4 inches and the diameter of the gear which can be cut depends upon the swing of the lathe.

It can be used for a great variety of work such as can be done on an index milling machine.

Two dial plates giving 133 changes and dividing all numbers to 50, and all even numbers to 100, together with a great variety of other divisions are furnished with each machine.

Price \$40.00.



## THE STANDARD DRILL CHUCK.

This chuck will hold drills and tools within its capacity as stated below, has a hole entirely through it, and is made to fit a taper arbor, or can be threaded to fit the spindle of a lathe. They are made in the best possible manner, all the parts being of steel, the jaws and screws are carefully tempered. We guarantee this chuck will not injure the drill in any way.

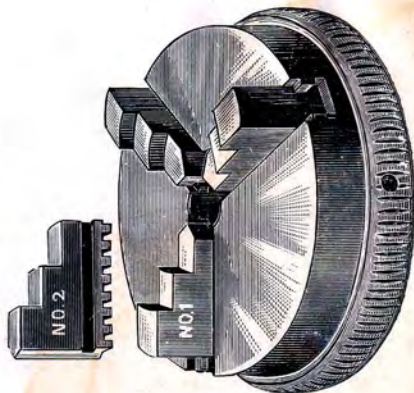
- No. 000—Diameter,  $1\frac{3}{8}$  inches, holding Drills 0 to  $\frac{1}{4}$  inch.... Price, \$ 6.00
- No. 100—Diameter,  $2\frac{1}{8}$  inches, holding Drills 0 to  $\frac{1}{2}$  inch.... Price, 7.00
- No. 101—Diameter,  $2\frac{7}{8}$  inches, holding Drills 0 to  $\frac{3}{4}$  inch.... Price, 8.00
- No. 102—Diameter,  $3\frac{1}{2}$  inches, holding Drills 0 to 1 inch.... Price, 10.00

## CHAMPION LEVER SCROLL CHUCKS.

These Chucks are very tastily designed, and are intended for use on foot and light-power Lathes, where they have no superior for general work. Although weighing but little, they are strong and durable, as the shells are made of malleable iron, and the scrolls and jaws of steel. The two-inch size is designed for attachment to the lathe spindle by a taper mandrel, or by being screwed on, while the larger sizes are attached by means of a face plate. Chucks are operated by hand or lever, and are furnished with No. 1 or No. 2 jaws, or with both sets, as ordered.

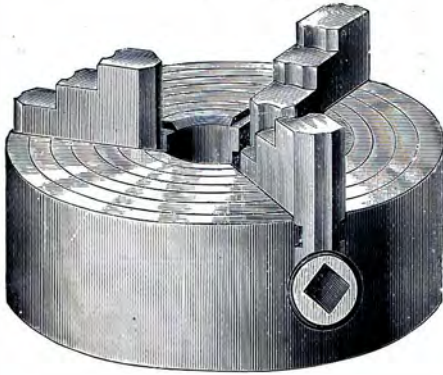
### PRICES.

| Diameter | Price<br>One Set Jaws | Price<br>Two Set Jaws |
|----------|-----------------------|-----------------------|
| 2 inches | \$ 4 50               | \$ 5 75               |
| 4 inches | 6 50                  | 8 00                  |
| 5 inches | 7 50                  | 9 00                  |
| 6 inches | 10 00                 | 12 00                 |
| 9 inches | 14 00                 | 16 00                 |



# SEBASTIAN (S) LATHES Co.

## CHAMPION INDEPENDENT JAW CHUCKS.



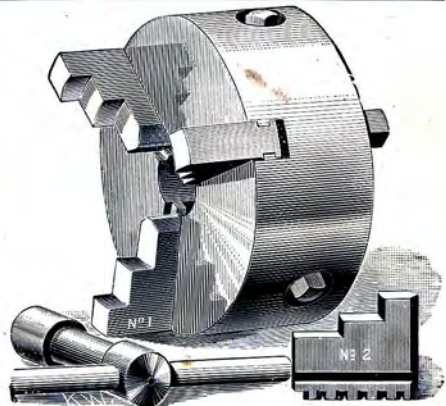
An entirely new line of independent Jaw Chucks for all kinds of light work is shown in the cut. They are provided with 3 or 4 independent reversible steel jaws, each of which is operated by separate screw. Every variety of round, square, irregular or eccentric work may be held in them to be operated upon by the tool. The chucks will hold with great firmness, and will take pieces considerably larger than the diameter of the chuck—a 5-inch chuck holding a 6-inch piece without difficulty. The cut shows the chuck with one jaw reversed.

### PRICES.

| Diameter              | Weight              | Diameter of Hole     | Price, 3 Jaws | Price, 4 Jaws |
|-----------------------|---------------------|----------------------|---------------|---------------|
| 2 inches              | $\frac{3}{4}$ lbs.  | 7-16 inches          | \$ 6 50       | \$ 8 00       |
| 3 inches              | 2 lbs.              | $\frac{1}{8}$ inches | 8 50          | 10 00         |
| 4 inches              | 4 lbs.              | 1 inches             | 10 00         | 12 00         |
| 5 inches              | $5\frac{1}{4}$ lbs. | 1 inches             | 12 00         | 14 00         |
| 6 inches              | 9 lbs.              | 1 inches             | 14 00         | 16 00         |
| $7\frac{1}{2}$ inches | 12 lbs.             | 1 inches             | 16 00         | 18 00         |
| 9 inches              | 15 lbs.             | 1 inches             | 18 00         | 20 00         |
| 10 inches             | 19 lbs.             | $\frac{1}{8}$ inches | 20 00         | 22 00         |

## PATENT GEARED SCROLL CHUCK.

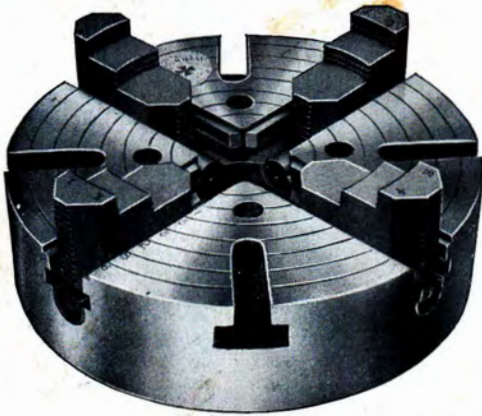
The body of this chuck is made of but one piece, there being no joints to weaken it, the danger of breakage is thus greatly reduced. It has three pinions for the three jawed chuck and two pinions for the four jawed, thus being perfectly balanced. All parts are made of the best material and workmanship and it is not excelled by any chuck of a similar class.



### DIMENSIONS AND PRICES.

| THREE JAWED CHUCKS |            |            | FOUR JAWED CHUCKS |            |
|--------------------|------------|------------|-------------------|------------|
| Size               | 1 Set Jaws | 2 Set Jaws | 1 Set Jaws        | 2 Set Jaws |
| 3                  | \$10 00    | \$12 00    | \$11 00           | \$13 60    |
| 4                  | 12 00      | 14 40      | 13 20             | 16 40      |
| 5                  | 15 00      | 18 00      | 16 50             | 20 50      |
| 6                  | 18 00      | 21 60      | 19 80             | 24 60      |
| $7\frac{1}{2}$     | 20 00      | 24 00      | 22 00             | 27 30      |
| 9                  | 24 00      | 28 80      | 26 40             | 32 80      |
| 12                 | 30 00      | 36 00      | 33 00             | 41 00      |

## FOUR JAWED INDEPENDENT CHUCK—Reversible Jaws.



The screws of this chuck are mounted in hardened bushings which provide a full bearing for the trunions of the screw and receive the end thrust, minimizing wear and the resultant end play. These hardened steel bushings are a great improvement over the ordinary method and greatly prolongs the life and the wear of the chuck, besides keeping the parts in alignment.

The screws are made of the highest grade of spindle steel and all bearings are perfectly ground. The body or shell of the chuck is made from the best quality of Grey iron, and the chuck is guaranteed fully in every respect.

### DIMENSIONS AND PRICES.

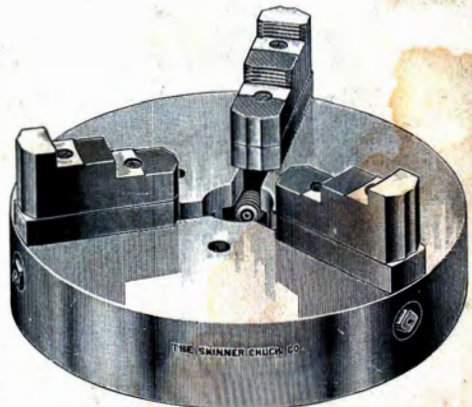
| Size | Capacity                | Hole through Center | Size of Face Plate     | Weight   | Price   |
|------|-------------------------|---------------------|------------------------|----------|---------|
| 8    | 8 $\frac{3}{4}$ inches  | 1 $\frac{3}{4}$     | 4 $\frac{1}{2}$ inches | 32 lbs.  | \$22 00 |
| 10   | 10 $\frac{3}{4}$ inches | 2                   | 5 inches               | 50 lbs.  | 26 00   |
| 12   | 12 $\frac{3}{4}$ inches | 3                   | 7 1-16 inches.         | 80 lbs.  | 30 00   |
| 14   | 14 $\frac{3}{4}$ inches | 3                   | 7 1-16 inches.         | 100 lbs. | 34 00   |
| 16   | 16 $\frac{3}{4}$ inches | 3                   | 7 1-16 inches.         | 130 lbs. | 38 00   |

Prices of larger sizes quoted on application.

## COMBINATION LATHE CHUCK.

### CONCENTRIC, ECCENTRIC, UNIVERSAL, INDEPENDENT, JAWS REVERSIBLE.

The advantages claimed in this Chuck are as follows: It is very strong and durable in all its parts; is easily operated; holds work firmly for an operation; can be readily fitted to any lathe or machine; the hole through the center is larger than the average in other chucks, which is very desirable; it can be used as an independent Jaw Chuck, a Universal Chuck, or an Eccentric Chuck; all the working parts of the Chucks are entirely protected from dirt and chips, and can be removed for oiling and cleaning without removing the body of the Chuck from the face plate or spindle of the Lathe, a very desirable feature in large chucks. The jaws are reversed by simply removing the two screws shown in the jaw and then turning the upper section of the jaw end for end on the lower section.



### PRICE-LIST, INCLUDING BOLTS AND WRENCHES.

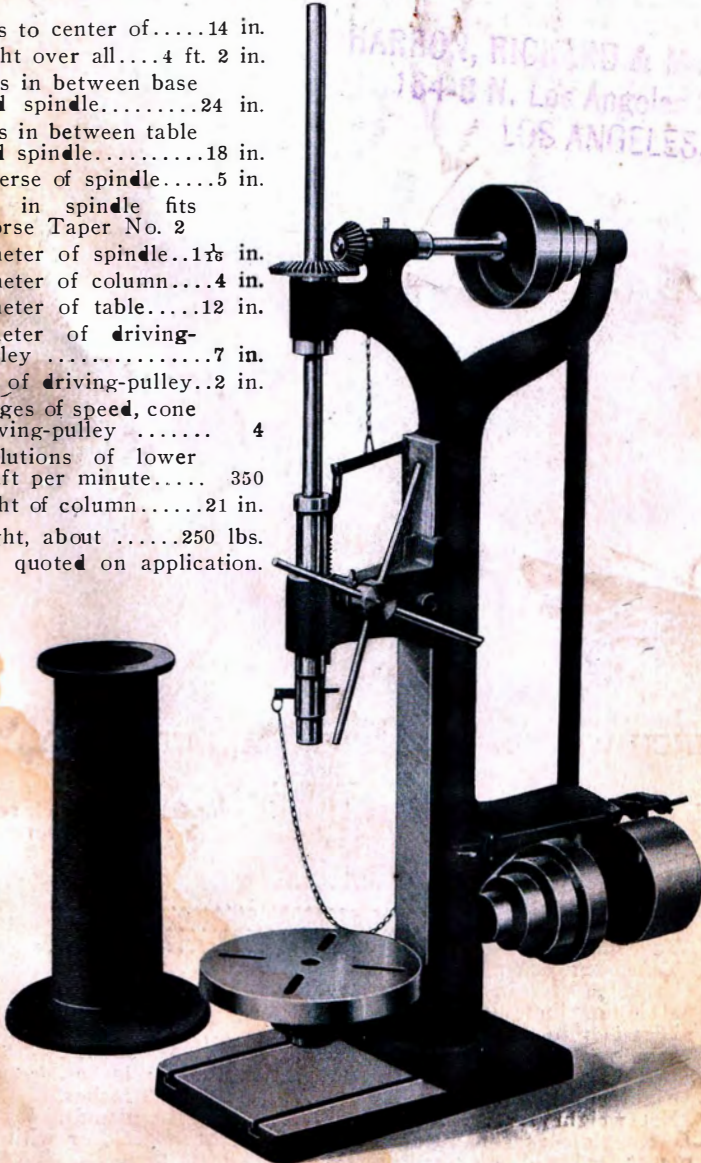
| Size      | Capacity                | Size of Holes        | Three Jaws | Four Jaws |
|-----------|-------------------------|----------------------|------------|-----------|
| 4 inches  | 4 $\frac{7}{8}$ inches  | 15-16 inch           | \$22 00    | \$26 00   |
| 6 inches  | 6 $\frac{1}{4}$ inches  | 1 $\frac{3}{4}$ inch | 26 00      | 32 00     |
| 9 inches  | 10 $\frac{1}{4}$ inches | 1 $\frac{1}{2}$ inch | 34 00      | 42 00     |
| 12 inches | 13 $\frac{1}{2}$ inches | 1 $\frac{1}{8}$ inch | 44 00      | 56 00     |
| 15 inches | 16 $\frac{1}{4}$ inches | 2 inch               | 52 00      | 64 00     |
| 18 inches | 19 $\frac{1}{4}$ inches | 2 $\frac{1}{2}$ inch | 62 00      | 75 00     |

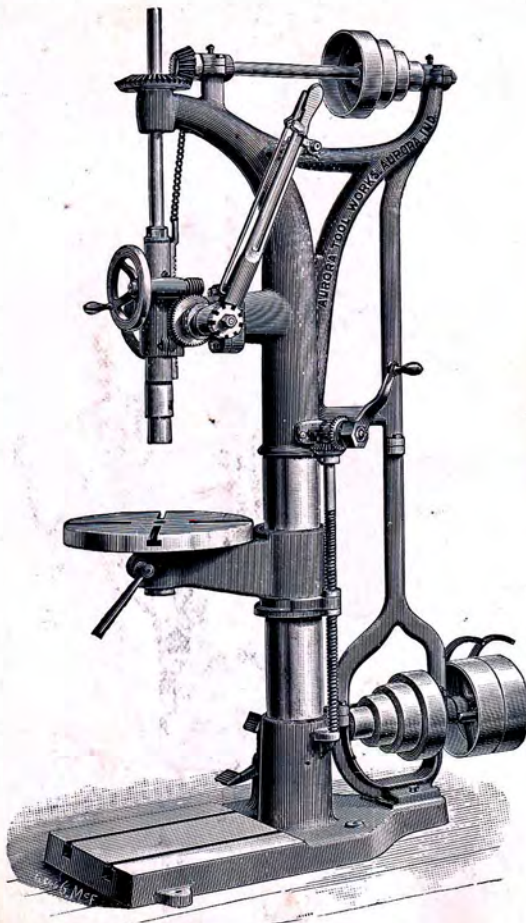
## 14-INCH SLIDING HEAD BENCH DRILL.

Will drill from 0 to  $\frac{3}{4}$ -inch hole. It is a sensitive drill, made with table arm to swing round the column. The head slides on the column and is clamped to it by means of a lever to the left of the head.

It has quick return and can be used on a bench, or we can supply it with the pedestal or column as shown in the cut, to bolt under the base, raising it to the proper height, for five dollars extra.

Drills to center of....14 in.  
 Height over all...4 ft. 2 in.  
 Takes in between base  
 and spindle.....24 in.  
 Takes in between table  
 and spindle.....18 in.  
 Traverse of spindle....5 in.  
 Hole in spindle fits  
 Morse Taper No. 2  
 Diameter of spindle...1 $\frac{1}{8}$  in.  
 Diameter of column...4 in.  
 Diameter of table....12 in.  
 Diameter of driving-  
 pulley .....7 in.  
 Face of driving-pulley..2 in.  
 Changes of speed, cone  
 driving-pulley ..... 4  
 Revolutions of lower  
 shaft per minute..... 350  
 Height of column.....21 in.  
 Weight, about .....250 lbs.  
 Price quoted on application.





**21-INCH WHEEL AND LEVER PLAIN STATIONARY HEAD DRILL.**

This is a stationary head drill with wheel and lever feed and quick return. The table swings around the column and is raised with crank and screw. A popular drill and a great seller.

**DIMENSIONS.**

- Drills to the center of .....21 inches.
- Height over all .....6 feet.
- Takes between base and spindle .....38 inches.
- Takes between table and spindle .....20 inches.
- Traverse of spindle .....7 inches.
- Hole in spindle fits Morse taper No. 3.
- Diameter of spindle.....1<sup>5</sup>/<sub>8</sub> inches.
- Diameter of column .....5<sup>3</sup>/<sub>4</sub> inches.
- Diameter of table .....16<sup>3</sup>/<sub>4</sub> inches.
- Tight and loose pulleys .....9 x 3 inches.
- Net weight .....770 pounds.

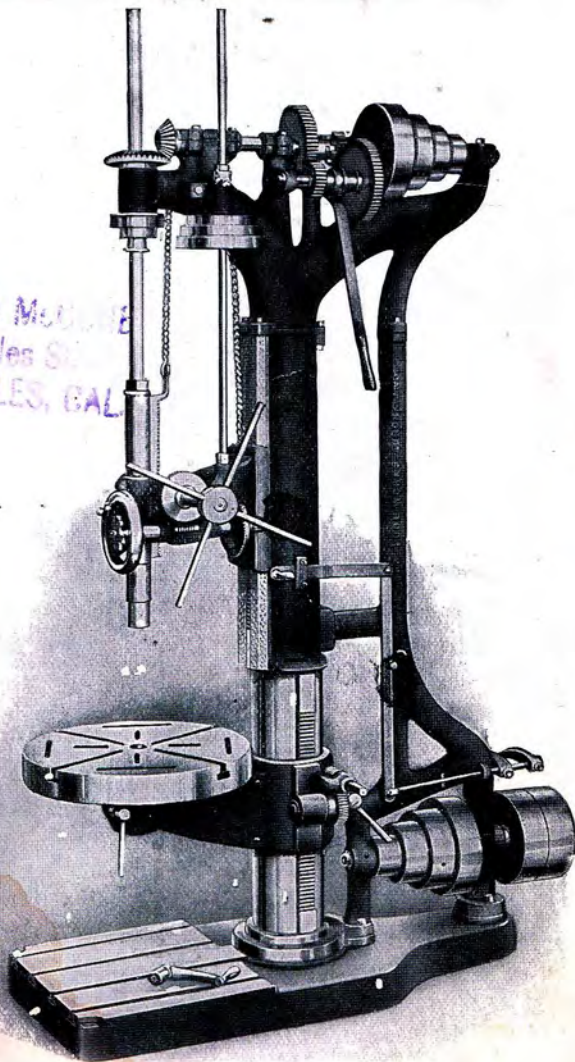
**PRICE** complete as shown, or arranged with back gear, or with back gear and power feed, will be quoted on request.



# SEBASTIAN (S) LATHÉ Co.

## NEW IMPROVED 24-INCH BACK GEARED AND POWER FEED UPRIGHT DRILL.

WITH BACK BRACE, GIBBED SLIDING HEAD, AND QUICK  
RETURN OR PATENT AUTOMATIC STOP.

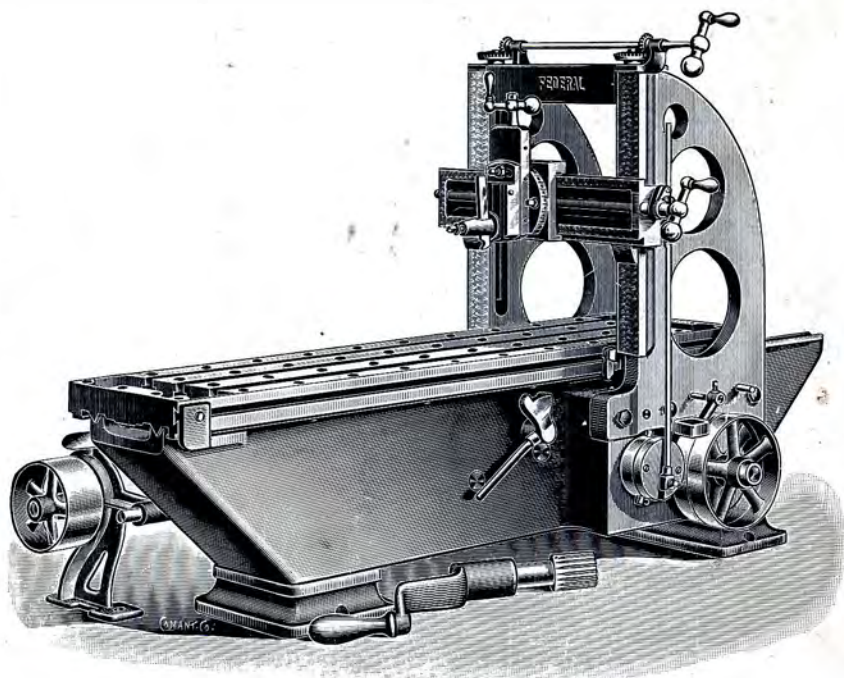


MARRON, RICKARD & Mc...  
164-B N. Los Angeles St.  
LOS ANGELES, CAL.

### DESCRIPTION.

|  |             |  |           |
|--|-------------|--|-----------|
| Drills to Center of .....                    | 24 in.      | Diameter of Column.....                    | 7 in.     |
| Height over all .....                        | 7 ft. 4 in. | Diameter of table .....                    | 22 in.    |
| Takes in between base and spindle.....       | 49 in.      | Diameter of driving pulley .....           | 10 in.    |
| Takes in between table and spindle.....      | 35 in.      | Face of driving pulley .....               | 3 in.     |
| Traverse of spindle (automatic feed).....    | 11 in.      | Changes of speed, cone driving pulley..... | 4         |
| Traverse of table .....                      | 17 in.      | Revolutions of lower shaft per minute....  | 300       |
| Hole in spindle fits Morse Taper No. 4 ..... | 1 1/8 in.   | Weight about .....                         | 1500 lbs. |
| Diameter of spindle .....                    | 1 1/8 in.   |  |           |

Price complete, as shown, quoted on application.



## FEDERAL BENCH PLANER.

No originality is claimed for this machine. The design is but the embodiment of the best practice of today.

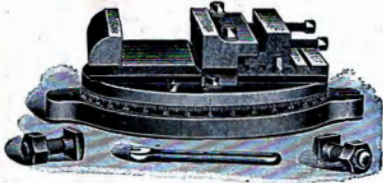
In offering this planer we think we have a tool that will meet with the approval of mechanics. This planer can be used in many shops, both large and small, to handle certain work expeditiously. The bar is very heavy and strong; the head has an automatic cross-feed in either direction, and a graduated swivel which can be set at any angle and locked in the usual manner. Every planer is set up and run before leaving the shop, and all parts are closely inspected. All the gears are cut, the pinions and rack are of steel, all the flat wearing surfaces are scraped. The table is gibbed down to prevent lifting, and has three standard T-slots cut from the solid and four rows of  $\frac{1}{2}$ " holes, jig drilled and reamed. Full width of table 9", distance between pockets 30", extreme length 36". Driven by a steel rack 36" long  $1\frac{1}{4}$ " face. Bull gear 7" diameter by  $1\frac{1}{4}$ " face.

Distance between housings 10  $\frac{1}{2}$ ". Extreme length of bed 44 $\frac{1}{2}$ " by 8" deep. Total height of planer 29 $\frac{1}{2}$ ". Diameter of driving pulleys 8", diameter of reverse pulleys 5 $\frac{3}{4}$ ". Countershaft has tight and loose pulleys 5" in diameter by 2" face. The counter should run 635 revolutions per minute. Ratio of driving belt speed to cutting speed 37 to 1.

Weight complete 475 lbs.

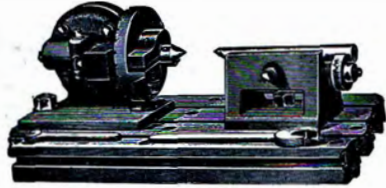
Price of Planer complete, with Countershaft and Hand-Power Attachment, quoted on request.

## FOR FEDERAL PLANER.



**PLANER CHUCK.**

Jaws 6" long, opening 4". Swivel graduated base. Holds either straight or taper work. Instantly adjusted. Price \$15.00.

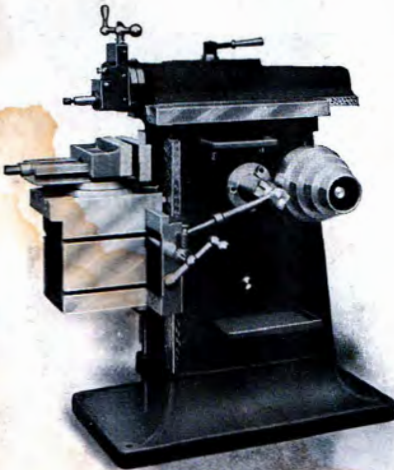


**PLANER CENTERS.**

Swing 6". Graduated tilting head, indexed, dividing circles into 24 divisions. Price \$18.00.

Both the above are substantially and accurately constructed. All screws are made of steel hardened.

## OUR NEW 14-INCH CRANK SHAPER.

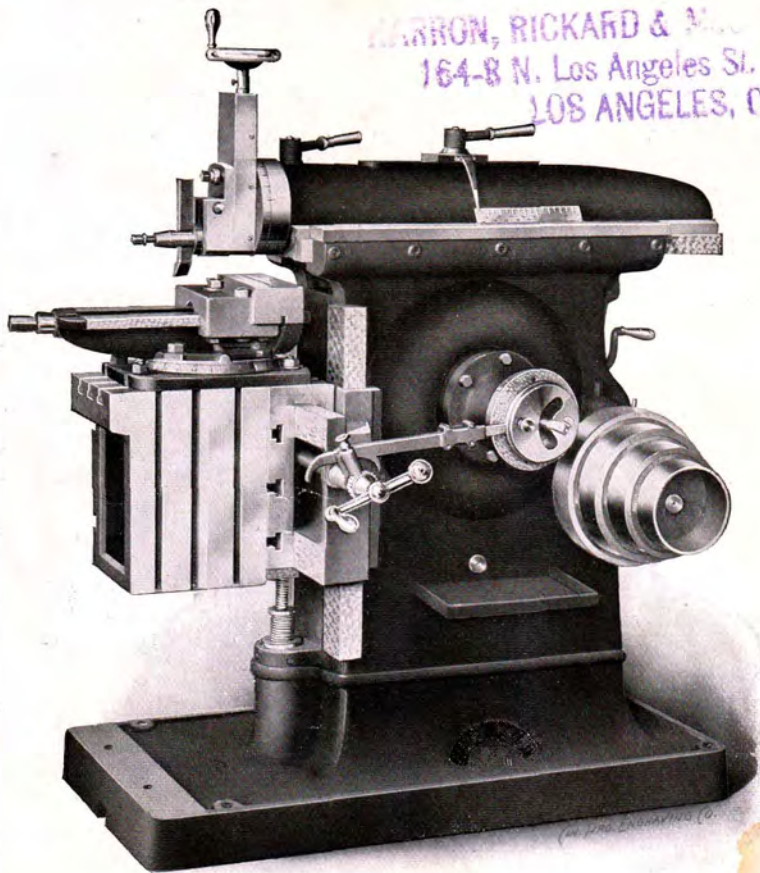


The general description of the 16" and 20" crank shapers as given on pages 34 and 35 is applicable to this shaper also. The dimensions are as follows.

- Length of stroke .....15½ inches.
- Automatic cross-feed .....14 inches.
- Verticle adjustment of table 14 inches.
- Feed of tool block......5 inches.
- Top of table .....9 x 13½ inches.
- Size of belt .....2¼ inches.
- Bearing in column slides when  
ram is at full stroke.....23 inches
- T. L. Pulleys on C. S. 10 x 2½ inches.
- Revolutions per minute.....200.
- Weight .....1400 lbs.
- Jaws of vise opens .....8 inches.
- Depth and width of jaws..2 x 9 inches.

Price, complete as shown, quoted on application.

HARRON, RICKARD & M...  
164-B N. Los Angeles St.  
LOS ANGELES, CAL



## IMPROVED 16" AND 20" CRANK SHAPERS.

The above engraving represents our latest improved 16 and 20-inch Crank Shapers, with "Whitworth" quick return of stroke. In these machines are embodied all the latest practical features which Shapers of this type should possess; besides which they contain advanced improvements which allow of all adjustments being made with ease and rapidity. Particular attention is called to the following details:

**BEARINGS.**—All flat bearings are carefully scraped to standard plates, insuring a high degree of accuracy for all operations performed on this machine. All wearing surfaces are provided with gibs, susceptible of fine adjustments. Shaft bearings are extra long and provided with liberal oil channels.

# SEBASTIAN LATHÉ Co.

**ADJUSTABLE STROKE.**—The stroke of these Shapers can be changed or adjusted instantly while the machine is in motion or at rest. The device for changing the stroke is self-locking, preventing any possible chance for the stroke to vary while the machine performs its work. The ram is adjustable to suit the position of the work, and a short stroke can be had at any extreme or intermediate point.

**THE OPENING UNDER RAM** will admit of shafts of any length being passed through the column and key way cut at any intermediate point.

**GRADUATED INDEX.**—The graduated index, showing the length of stroke the machine is taking, is attached to the top of the column, being in plain view of the operator.

**FEED SCREWS.**—Feed screws are provided with micrometer graduations; a very desirable feature for use in cutting rack, duplicating key seats and other work of like nature.

**TOOL HEAD.**—The tool head can be instantly set and very rigidly held at any angle by means of the lever shown. This has proved to be quite an improvement over the old-style way of securing the head with bolts, as it draws the tool head squarely across the face of the ram and will not move while being tightened.

**VARIABLE FEED.**—The feed can be changed instantly while the machine is in motion. The plate is drilled and graduated to correspond with the teeth in the feed ratchet, and is so arranged that the feed can take place at either end of the cut.

**TABLE.**—The table is slotted on top and both sides. It can readily be removed and work bolted to the slotted apron, to which the table is attached. Top of table being slotted its entire length, affords a very liberal clamping surface.

**WISE.**—Graduated swivel vise has steel face jaws, and can be used on the sides as well as on the top of table. Can also be attached so that the jaws will project past either side of the table. Swivels to any angle, and can be very rigidly held in any position.

## DIMENSIONS.

|  | 16-inch Shaper | 20-inch Shaper |
|--|----------------|----------------|
| Length of stroke.....                                  | 17½ inches     | 20 inches      |
| Automatic cross-feed.....                              | 19½ inches     | 25 inches      |
| Verticle adjustment of table.....                      | 16 inches      | 15 inches      |
| Feed of tool block.....                                | 7½ inches      | 8 inches       |
| Top of table.....                                      | 10 x 16 inches | 13 x 18 inches |
| Size of belt.....                                      | 2½ inches      | 3 inches       |
| Bearing in column slides when ram is at full stroke... | 27½ inches     | 32 inches      |
| T. L. pulleys on C. S.....                             | 12 x 3 inches  | 12 x 3½ inches |
| Revolutions per minute.....                            | 200            | 200            |
| Weight.....  | 2000 lbs.      | 2500 lbs.      |
| Jaws of vice opens.....                                | 9 inches       | 10½ inches     |
| Depth and width of jaws.....                           | 2 x 10 inches  | 2 x 11 inches  |

Prices quoted on application

104-8  
 LOS ANGELES, CAL.

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