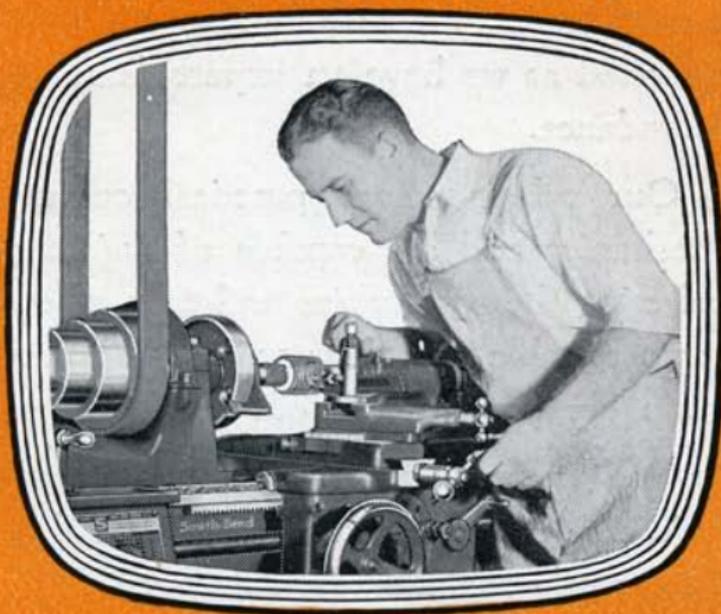


**Headquarters in Philadelphia and Vicinity
For Precision Tools, Machinery
and Shop Equipment
For Industries of All Kinds.**



**W. B. RAPP
MACHINERY**

**132 NORTH THIRD STREET
PHILADELPHIA, PENNSYLVANIA**

Phone: Market 4345



Fig. 1. Interior View of W. B. Rapp Machinery Store, Philadelphia, Pennsylvania.

THE W. B. Rapp Machinery Store carries one of the most complete lines of back-gear, screw cutting metal working precision lathes that can be found in the city of Philadelphia. Some of these lathes are set up on our demonstration floor where they can be seen and operated as we have an expert demonstrator in attendance.

Our salesmen are practical engineers and mechanics and are capable of assisting you in selecting the proper size and type of equipment most suitable for your work. If interested in shop equipment, visit our store and see some of these fine precision tools and attachments.

We carry a very good stock of lathes on the floor ready for immediate delivery.

Prices F. O. B. South Bend, Indiana

All prices in this catalog are net f.o.b. South Bend. We carry but one quality lathe and sell it at the same price to all.

W. B. Rapp, Machinery

132 North Third St.

Philadelphia, Pa.

Phone: Market 4345

Modern Machine Equipment

We carry a complete line of large and small metal working and wood working machines for the machine shop and manufacturing plant. In this catalog we show only a few of the popular sizes and types of machines. The complete line may be seen on our display floor.

We carry the following items in stock:

Back-Geared Screw
Cutting Metal
Working Lathes
Bench Lathes
Milling Machines
Shapers

Power Hack Saws
Grinders
Drill Presses
Wood Working
Machinery
Small Tools

We sell shop machinery for use in:

Manufacturing
Plants
Tool Rooms
Auto Maintenance
Shops

School Shops
Home Shops
Machine Shops
Repair Shops
Laboratories

If you are interested in any particular size or type of machinery for your shop, we invite you to visit our store or write for information.

A partial list of customers in this territory to whom we have sold shop equipment is shown on the inside back cover of this catalog.

Attachments, Chucks and Tools

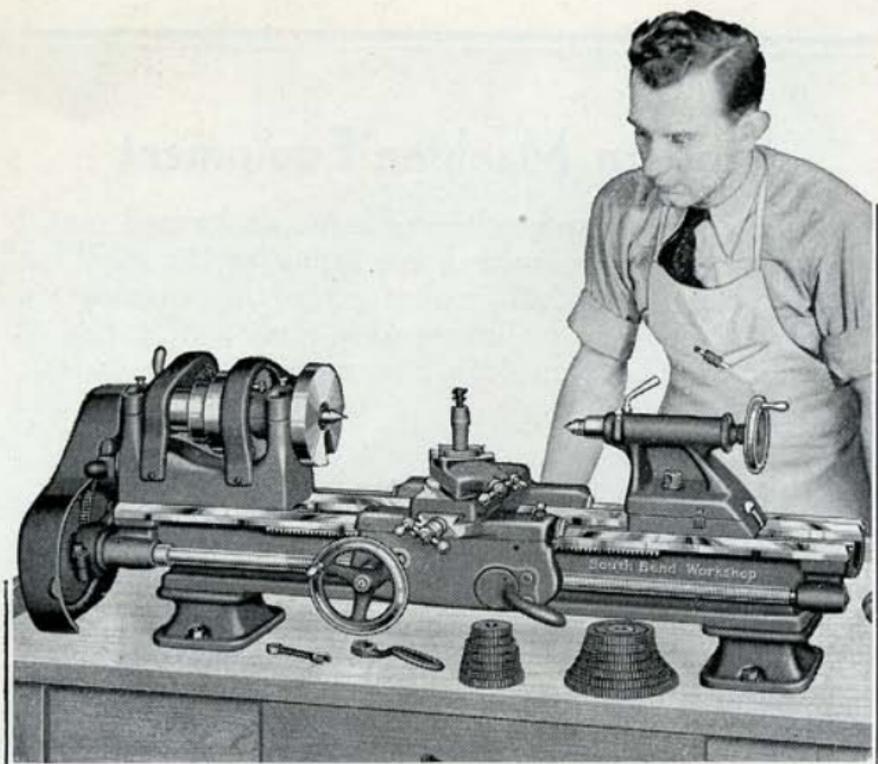
These Machines can be fitted at any time with a variety of attachments, chucks and tools, a few of which are shown in this catalog.

Automotive Shop Equipment

For Automotive servicing we can supply attachments for servicing armatures, valves, pistons, bushings, connecting rods, differentials, flywheels, crankshafts, brake drums, etc. Ask for information and prices.

Motors and Switches

Motor Driven lathes shown in this catalog are priced with motors, switches, etc. If you wish one of these lathes fitted with a motor of different current specifications, ask for a quotation and specify the exact electrical current requirements in your shop.



9' x 3' "Workshop" Bench Lathe with Equipment but not Drive.. \$75.00

9-inch "Workshop" Bench Lathe With Regular Equipment but Without Drive

The 1936 Model 9-inch "Workshop" South Bend Back-Gearred, Screw Cutting Precision Bench Lathe is recommended for manufacturing plants, machine shops, automotive repair shops, laboratories, electrical shops, home work shops and school shops, for all classes of small accurate metal turning. This lathe is the same in accuracy, high quality and workmanship as our \$900.00 Tool Room Lathe. Ask for free Catalog No. 15-W describing the lathe.

Regular Equipment included in the price consists of: graduated compound rest; face plate 5" dia., forged steel tool post, two 60-degree lathe centers, headstock spindle sleeve; wrenches; set of change gears for screw threads and feeds; installation plan blue print; and book, "How to Run a Lathe".

Lathe Features

- Back-gearred headstock, six spindle speeds
- Hollow steel spindle, $\frac{3}{4}$ " hole
- Reverse for screw threads and longitudinal feeds.
- Compound rest graduated 180°, swivels to any angle
- Tailstock has $\frac{3}{8}$ " set-over for taper turning
- Micrometer graduations on feed screws
- Automatic longitudinal power feeds to carriage
- Precision lead screw for screw thread cutting
- Half-nuts for screw thread cutting and power feeds
- Three V-ways and one flat-way on lathe bed
- Adjustable gibs on cross feed and compound rest

Lathe Specifications

- Swing over bed..... $9\frac{1}{8}$ in.
- Swing over carriage..... $5\frac{1}{2}$ in.
- Hole through spindle $\frac{3}{4}$ "..... Collet capacity $\frac{1}{4}$ " to $\frac{1}{2}$ ".
- Cuts standard screw threads, right or left.... 4 to 40 per in.
- Six spindle speeds..... 39, 68, 122, 202, 353, 630 R.P.M.
- Width of cone pulley belt..... 1 in.
- Size of spindle nose..... $1\frac{1}{2}$ in. diam., 8 threads
- Lathe tool shank $\frac{3}{8}$ " x $\frac{3}{4}$ "..... Cutter Bits... $\frac{1}{4}$ x $\frac{1}{4}$ x 2 in.
- Head and tail spindle centers.... No. 2 Morse Taper
- Lead screw, Acme thread..... $\frac{3}{4}$ in. diam., 8 threads

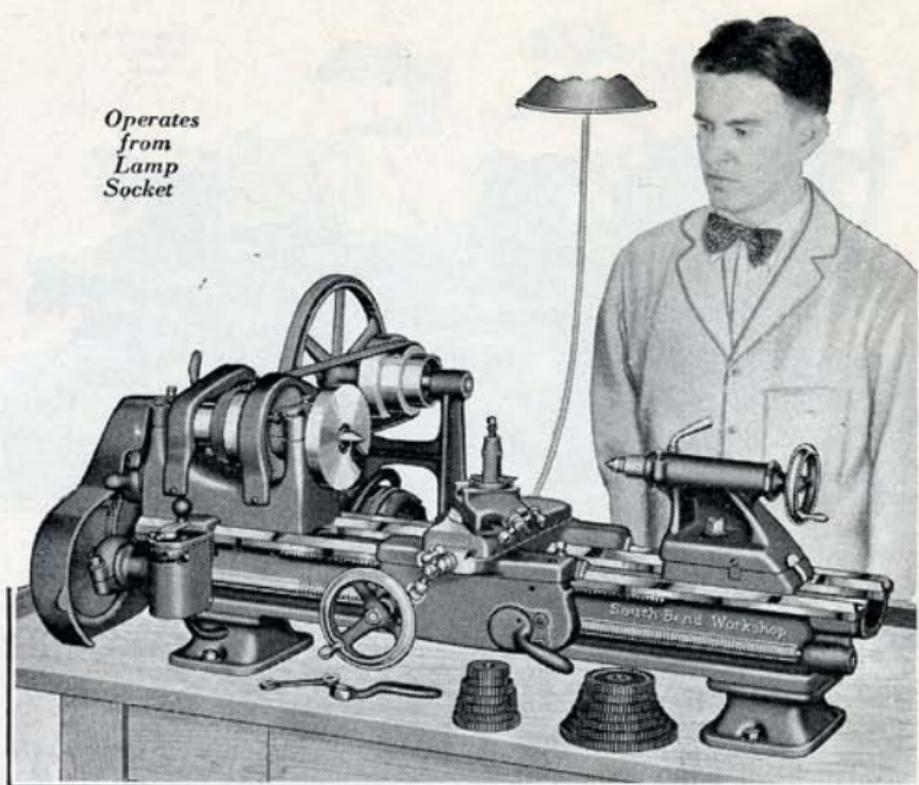
Prices of 9-inch "Workshop" Lathe, Without Drive*

Cat. No. of Lathe	Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Power Required H.P.	Approx. Weight Crated Pounds	Net Factory Price
15-YB	$9\frac{1}{8}$	3	17	$5\frac{1}{2}$	$\frac{1}{4}$	250	\$ 75.00
15-ZB	$9\frac{1}{8}$	$3\frac{1}{2}$	23	$5\frac{1}{2}$	$\frac{1}{4}$	275	87.00
15-AB	$9\frac{1}{8}$	4	29	$5\frac{1}{2}$	$\frac{1}{4}$	300	99.00
15-RB	$9\frac{1}{8}$	$4\frac{1}{2}$	35	$5\frac{1}{2}$	$\frac{1}{4}$	350	116.00

*Price of Double Friction Countershaft for above lathe, \$12.00.

The above lathe can be supplied with floor legs instead of bench legs for \$10.00 extra.

Operates
from
Lamp
Socket



9" x 3' "Workshop" Horizontal V-Belt Motor Driven Bench Lathe \$98.25

9" "Workshop" Motor Driven Bench Lathe Plain Type Horizontal Countershaft

The 9-inch "Workshop" Horizontal Motor Driven Bench Lathe illustrated above and at bottom of page is exactly the same "Workshop" Lathe as on page 2 and has the same regular equipment, features and specifications. The only difference is that this lathe is equipped with the horizontal motor drive equipment as listed below. Drive may be mounted on bench, wall or ceiling.

Prices 9" "Workshop" Horizontal Motor Driven Lathe

	9" x 3' Cat. No. 415-Y	9" x 3 1/2' Cat. No. 415-Z	9" x 4' Cat. No. 415-A	9" x 4 1/2' Cat. No. 415-R
9-inch "Workshop" South Bend Bench Lathe with Graduated Compound Rest and Regular Equipment, but not Bench.....	\$ 75.00	\$ 87.00	\$ 99.00	\$116.00
Price of Motor Drive Equipm't				
Horizontal Countershaft, Plain Type* ..	7.00	7.00	7.00	7.00
1/4 H.P. Start-and-Stop Reversing Split-phase Motor, 1725 R.P.M. (1-phase, 60-cycle, A.C. 110-volt)	8.75	8.75	8.75	8.75
V-Groove Pulley for Motor .....	.50	.50	.50	.50
Drum Reversing Switch (Style R-12) and Bracket for Mounting	5.00	5.00	5.00	5.00
V-Belt, Motor to Drive Unit	1.00	1.00	1.00	1.00
Flat Leather Belt and Lacing	1.00	1.00	1.00	1.00
Price, Lathe and Equipment, Complete..	\$ 98.25	\$110.25	\$122.25	\$139.25
Distance Between Spindle Centers	17 in.	23 in.	29 in.	35 in.
Ship. Wt., Lathe and Motor Drive Equip.	310 lbs.	335 lbs.	360 lbs.	410 lbs.

For Instant Reversing Motor, Special Drum Reversing Switch and Bracket in lieu of Start-and-Stop Reversing Motor, Style R-12 Drum Reversing Switch and Bracket, add: For 3-phase, \$14.00; for 1-phase, \$21.00; for direct current, \$19.00.

*For Adjustable Type Horizontal Countershaft in lieu of Plain Type add \$5.00.

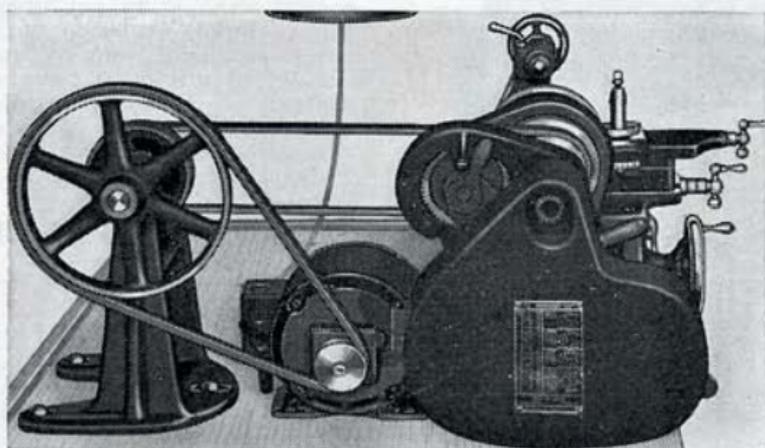


Fig. 2. Lathe with Plain Type Horizontal Countershaft.

Operates from
an Electric
Lamp
Socket



9" x 3' "Junior" Horizontal Motor Drive Bench Lathe \$188.00

9-inch "Junior" South Bend Bench Lathe Horizontal V-Belt Motor Drive Type

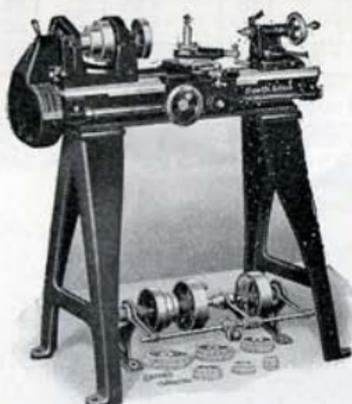
The 9-inch "Junior" South Bend Back-Geared, Screw Cutting Lathe machines all kinds of metal, wood, composition, fibre, etc. Has the power to reduce the diameter of a steel shaft $\frac{3}{8}$ " in one cut.

Regular Equipment: Graduated compound rest; change gears for threads and feeds; face plate; tool post; two 60° lathe centers; spindle sleeve; wrenches; installation plan and "How to Run a Lathe".

Prices of 9-inch "Junior" South Bend Bench Lathe Horizontal V-Belt Motor Drive, Adjustable Type.

	9" x 3' 422-YN Enkoy	9" x 3½' 422-ZN Enlav	9" x 4' 422-AN Enlix	9" x 4½' 422-RN Enloz
9-inch "Junior" South Bend Bench Lathe with Graduated Compound Rest and Regular Equipment, less Bench.....	\$157.00	\$167.00	\$177.00	\$187.00
Price of Motor Drive Equipment				
Horizontal Countershaft, Adjustable....	10.00	10.00	10.00	10.00
¼ H. P. Start and Stop Reversing Split-phase Motor, 1725 R.P.M. (1-phase, 60-cycle, A.C. 110 Volt)†.....	11.50	11.50	11.50	11.50
V-Groove Pulley for Motor.....	.50	.50	.50	.50
Reversing Switch (Drum Type).....	5.00	5.00	5.00	5.00
Bracket for Supporting Switch.....	.50	.50	.50	.50
Wiring to Switch—Tagged for Motor...	1.25	1.25	1.25	1.25
V-Belt, Motor to Drive Unit.....	1.00	1.00	1.00	1.00
Flat Leather Belt.....	1.25	1.25	1.25	1.25
Price, Lathe and Equipment, Complete...	\$188.00	\$198.00	\$208.00	\$218.00
Distance Between Spindle Centers... 16⅞ in.	21⅞ in.	27⅞ in.	34⅞ in.	
Weight Crated, Lathe and Drive Equip. 416 lbs.	441 lbs.	466 lbs.	491 lbs.	

†Instant Reversing Motor, in lieu of Start-and-Stop Type Motor: For 3-phase add \$16.50; for 1-phase add \$17.50; for Direct Current add \$21.50.

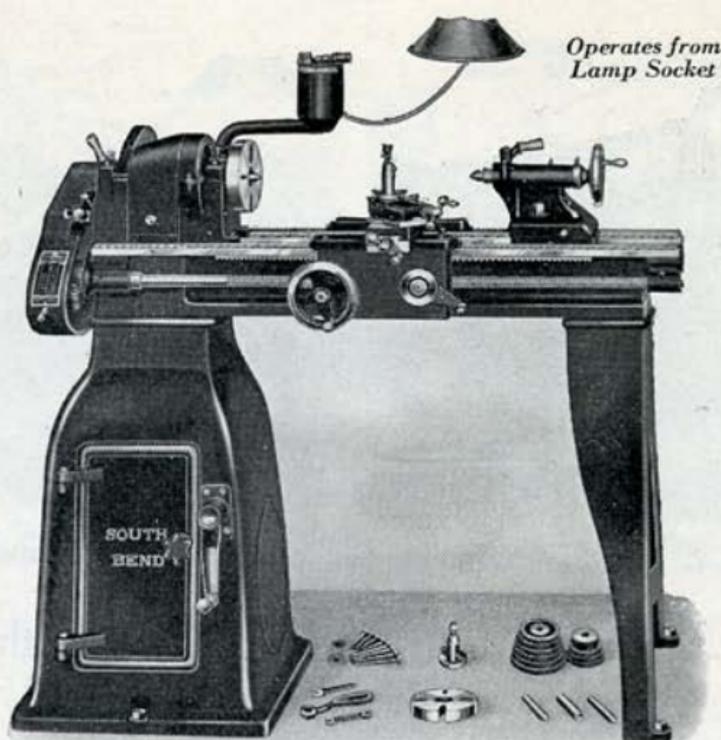


9" "Junior" South Bend Floor Leg Lathe Countershaft Drive

The 9-inch "Junior" South Bend Lathe illustrated at the left is the same lathe as shown above except that it is equipped with Floor Legs instead of Bench Legs, and is driven by an overhead double friction countershaft instead of by horizontal motor drive. A wall type countershaft can also be supplied. Prices on request.

Prices of 9" "Junior" South Bend Floor Leg Lathe Overhead Countershaft Drive.

Cat. No. of Lathe	Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Power Required H. P.	Approx. Weight Crated Pounds	Net Factory Price
22-Y	9¼	3	16⅞	6⅞	¼	427	\$180.00
22-Z	9¼	3½	21⅞	6⅞	¼	452	190.00
22-A	9¼	4	27⅞	6⅞	¼	477	200.00
22-R	9¼	4½	34⅞	6⅞	¼	502	210.00



Operates from
Lamp Socket

9" x 3' "Junior" Underneath Belt Motor Driven Lathe
with Regular Equipment.....\$278.00

9-inch "Junior" South Bend Lathe Underneath Belt Motor Drive Type

The 9-inch "Junior" South Bend Underneath Belt Motor Driven Lathe, illustrated above, is similar to the lathe shown on page 4. The only difference is that this lathe has floor legs and is equipped with the Underneath Belt Motor Drive as illustrated and described on pages 12 and 13.

Lathe Equipment included in price: Graduated compound rest; face plate; tool post; two 60° lathe centers; spindle sleeve; change gears for threads and feeds; wrenches; installation plan and book, "How to Run a Lathe".

Electrical Equipment included in price: Motor drive mechanism; reversing motor; drum reversing switch; wiring enclosed in metal conduit; V-belt; flat leather belt and wiring diagram.

Lathe Features

- Back-Geared Headstock, six spindle speeds.
- Hollow steel headstock spindle, $\frac{3}{4}$ " hole entire length.
- Spring latch reverse for right or left threads and feeds.
- Compound rest graduated 180° swivels to any angle.
- Carriage lock for accurate facing and cutting off.
- Tailstock has $\frac{3}{4}$ " set-over for taper turning.
- Automatic longitudinal power feeds to carriage.
- Micrometer graduations on compound rest and cross feed.
- Precision lead screw and half-nuts for screw thread cutting.

Lathe Specifications

- Swing over bed 9 $\frac{1}{4}$ in.
- Swing over carriage 6 $\frac{3}{8}$ in.
- Hole through spindle $\frac{3}{4}$ ".....Collet Capacity $\frac{1}{64}$ " to $\frac{1}{2}$ in.
- Cuts standard screw threads, right or left....4 to 40 per in.
- Six spindle speeds.....39, 64, 110, 208, 348, 596 R.P.M.
- Width of cone pulley belt.....1 $\frac{1}{4}$ in.
- Lathe tool shank, $\frac{3}{8}$ " x $\frac{11}{16}$ ".....Cutter bits $\frac{1}{4}$ " x $\frac{1}{4}$ " x 2 in.
- Head and tail spindle centers.....No. 2 Morse Taper
- Lead screw, Acme thread..... $\frac{3}{4}$ in. diam., 8 threads
- Size of spindle nose.....1 $\frac{1}{2}$ in. diam., 8 threads

Prices of 9-inch "Junior" South Bend Lathe* Underneath Belt Motor Drive Type

Cat. No. of Lathe	Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Power Required H. P.	Approx. Weight Crated Pounds	Net Factory Price
122-Y	9 $\frac{1}{4}$	3	16 $\frac{3}{8}$	6 $\frac{3}{8}$	$\frac{1}{4}$	740	\$278.00
122-Z	9 $\frac{1}{4}$	3 $\frac{1}{2}$	21 $\frac{3}{8}$	6 $\frac{3}{8}$	$\frac{1}{4}$	765	288.00
122-A	9 $\frac{1}{4}$	4	27 $\frac{3}{8}$	6 $\frac{3}{8}$	$\frac{1}{4}$	790	298.00
122-R	9 $\frac{1}{4}$	4 $\frac{1}{2}$	34 $\frac{3}{8}$	6 $\frac{3}{8}$	$\frac{1}{4}$	815	308.00

*Prices include 1-Phase, 60-Cycle A.C. Motor, Instant Reversing Type. If 1-phase, 60. cycle A.C. 110-Volt Start-and-Stop Reversing Motor is wanted deduct \$15.00.



9" x 3' South Bend Horizontal V-Belt Motor Driven Bench Lathe, Standard Change Gear Type, Complete as Shown \$243.00

9-inch Standard Change Gear Lathe Horizontal V-Belt Motor Drive Type

The 9-inch Standard Change Gear Lathe, shown above, is a Back-Geared, Screw Cutting Precision Lathe recommended for machining all classes of small accurate work. Lathe has adjustable type horizontal motor drive countershaft which permits adjustments to any desired belt tension between the cone pulley on the countershaft and lathe. Adjustment is made in a few moments by the turn buckle as shown on page 7.

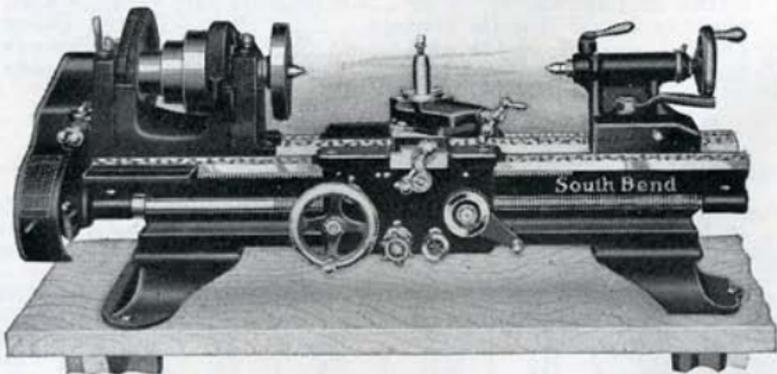
Features of Lathe: Carriage has automatic friction longitudinal feeds and automatic friction cross feeds; cuts standard screw threads 4 to 40 per inch; has precision lead screw, used for screw thread cutting; has six spindle speeds 39 to 596 R.P.M.; 3/4" hole through spindle; carriage lock; compound rest graduated 180°; micrometer collars on feed screws.

Equipment included in price: Large and small face plates; tool post; thread cutting stop; two 60° lathe centers; spindle sleeve; center rest; follower rest; change gears for threads and feeds; wrenches; installation plan and book, "How to Run a Lathe".

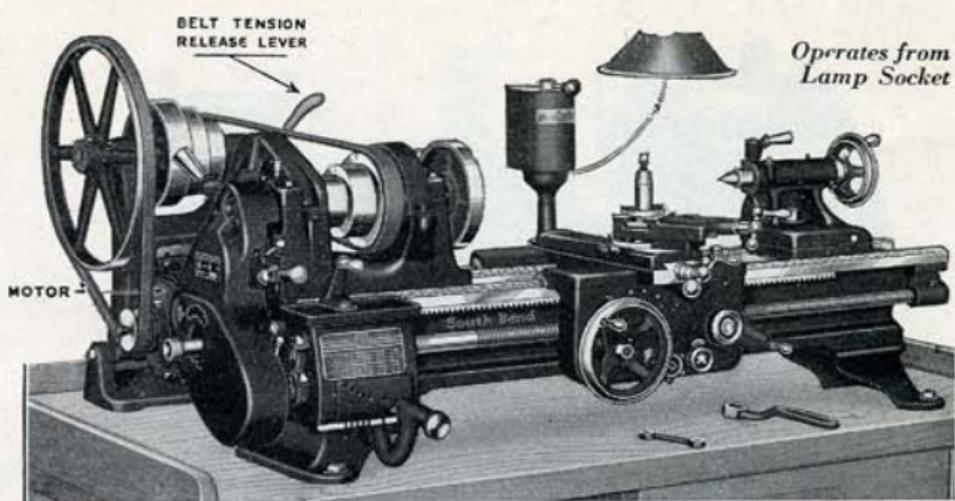
Prices of 9-inch Standard Change Gear Bench Lathe Horizontal V-Belt Motor Drive Type

9-inch South Bend Standard Change Gear Bench Lathe with Graduated Compound Rest, Regular Equipment, less bench	9" x 3' Cat. No. 430-YN	9" x 3 1/2' Cat. No. 430-ZN	9" x 4' Cat. No. 430-AN	9" x 4 1/2' Cat. No. 430-RN
	\$212.00	\$222.00	\$232.00	\$242.00
Price of Motor Drive Equipm't				
Horizontal Countershaft, Adjustable	10.00	10.00	10.00	10.00
1/4 H.P. 1725 R.P.M. Start-and-Stop Reversing Motor (1-phase, 60-cycle, A.C. 110-volt)	11.50	11.50	11.50	11.50
V-Groove Pulley for Motor . . . . .	.50	.50	.50	.50
Drum Reversing Switch	5.00	5.00	5.00	5.00
Bracket . . . . .	.50	.50	.50	.50
Wiring connected to switch—tagged for motor	1.25	1.25	1.25	1.25
V-Belt, Motor to Drive Unit	1.00	1.00	1.00	1.00
Flat Leather Belt and Lacing	1.25	1.25	1.25	1.25
Price, Lathe and Equipment, Complete	\$243.00	\$253.00	\$263.00	\$273.00
Distance Between Spindle Centers	16 3/8 in.	21 3/8 in.	27 3/8 in.	34 3/8 in.
Weight Crated, Lathe and Drive Eq.	461 lbs.	486 lbs.	511 lbs.	536 lbs.

For Instant Reversing Motor, Special Drum Reversing Switch and Switch Bracket in lieu of Start-and-Stop Reversing Motor, Drum Reversing Switch and Switch Bracket add: For 3-phase, \$16.50; for 1-phase, \$17.50; for direct current, \$21.50.



9" x 3' South Bend Standard Change Gear Precision Bench Lathe, With Double Friction Countershaft, but less Bench \$225.00



9" x 3' South Bend Horizontal V-Belt Motor Driven Bench Lathe, Quick Change Gear Type, Complete as Shown \$284.00

9-inch Quick Change Gear Lathe Horizontal V-Belt Motor Drive Type

The 9-inch Quick Change Gear Lathe, shown above, is a Back-Gearred, Screw Cutting Precision Lathe recommended for machining all classes of small accurate work. Lathe has adjustable type horizontal countershaft as shown below. This type countershaft is recommended for use in shops that do a great amount of machine and tool work, as it permits adjustments to any desired belt tension.

Features of Lathe: Carriage has automatic friction longitudinal feeds and automatic friction cross feeds; cuts standard screw threads 2 to 112 per inch; has precision lead screw used for screw thread cutting; has six spindle speeds 39 to 596 R.P.M.; $\frac{3}{4}$ " hole through spindle; carriage lock; compound rest graduated 180°; micrometer collars on feed screws.

Equipment included in price: Large face plate; small face plate; tool post; thread cutting stop; two 60° lathe centers; spindle sleeve; center rest; follower rest; wrenches; installation plan and book, "How to Run a Lathe".

Prices of 9-inch Quick Change Gear Bench Lathe Horizontal V-Belt Motor Drive Type

	9" x 3' Cat. No. 480-YN	9" x 3½' Cat. No. 480-ZN	9" x 4' Cat. No. 480-AN	9" x 4½' Cat. No. 480-RN
9-inch South Bend Quick Change Gear Bench Lathe with Graduated Compound Rest, Regular Equipment, but without Bench	\$252.00	\$262.00	\$272.00	\$282.00
Price of Motor Drive Equipm't				
Horizontal Countershaft, Adjustable . . .	10.00	10.00	10.00	10.00
$\frac{1}{4}$ H.P. 1725 R.P.M. Start-and-Stop Reversing Motor (1-phase, 60-cycle, A.C. 110-volt)	11.50	11.50	11.50	11.50
V-Groove Pulley for Motor . . . . .	.50	.50	.50	.50
Drum Reversing Switch	5.00	5.00	5.00	5.00
Switch Stand	1.50	1.50	1.50	1.50
Wiring connected to switch—tagged for motor	1.25	1.25	1.25	1.25
V-Belt, Motor to Drive Unit	1.00	1.00	1.00	1.00
Flat Leather Belt, 1¼" x 64" and Lacing	1.25	1.25	1.25	1.25
Price, Lathe and Equipment, Complete	\$284.00	\$294.00	\$304.00	\$314.00
Distance Between Centers of Lathe	16 $\frac{3}{8}$ in.	21 $\frac{3}{8}$ in.	27 $\frac{3}{8}$ in.	34 $\frac{3}{8}$ in.
Weight Crated, Lathe and Drive Equip.	471 lbs.	496 lbs.	521 lbs.	546 lbs.

For Instant Reversing Motor, Special Drum Reversing Switch and Switch Stand in lieu of Start-and-Stop Reversing Motor, Drum Reversing Switch and Switch Stand, add: For 3-phase, \$16.50; for 1-phase, \$17.50; for direct current, \$21.50.

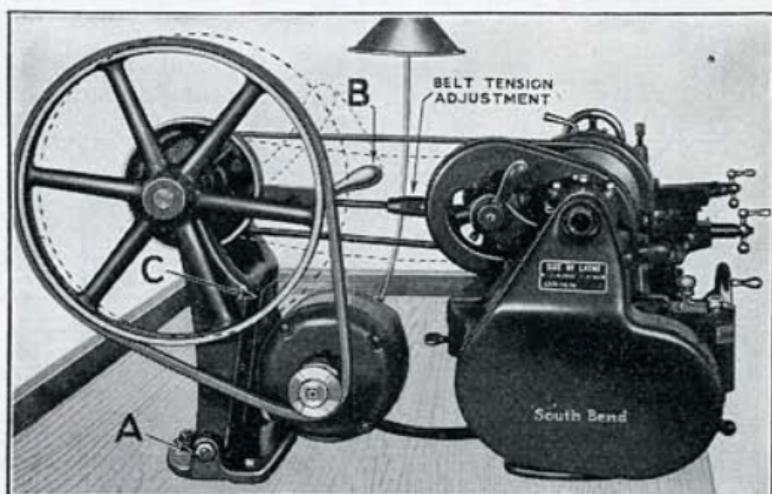
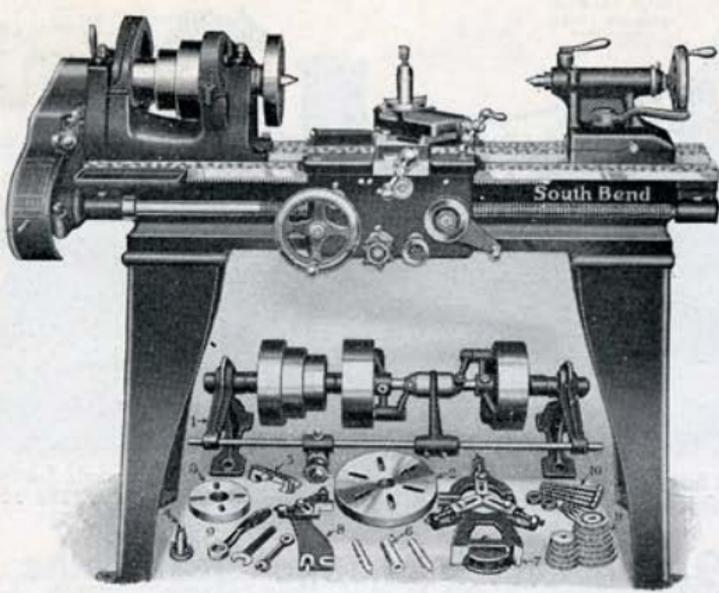


Fig. 3. Horizontal V-Belt Countershaft, Adjustable Type.



9" x 3' South Bend Standard Change Gear Lathe, Countershaft Drive Type, Complete as Shown.....\$235.00

9" to 16" Standard Change Gear Lathes Overhead Countershaft Drive Type

South Bend Standard Change Gear Countershaft Driven Back-Gear, Screw Cutting Precision Lathes in sizes 9", 11", 13" and 16" swing are priced below. These lathes are recommended for accurate machine work of all kinds in the manufacturing plant, machine shop, tool room and laboratory. A wide range of automatic friction longitudinal feeds and automatic friction cross feeds are provided. Standard screw threads right or left hand can be cut from 4 to 40 per inch on the 9" and 11" lathes and from 2 to 40 per inch on the 13" and 16" Standard Change Gear Lathes.

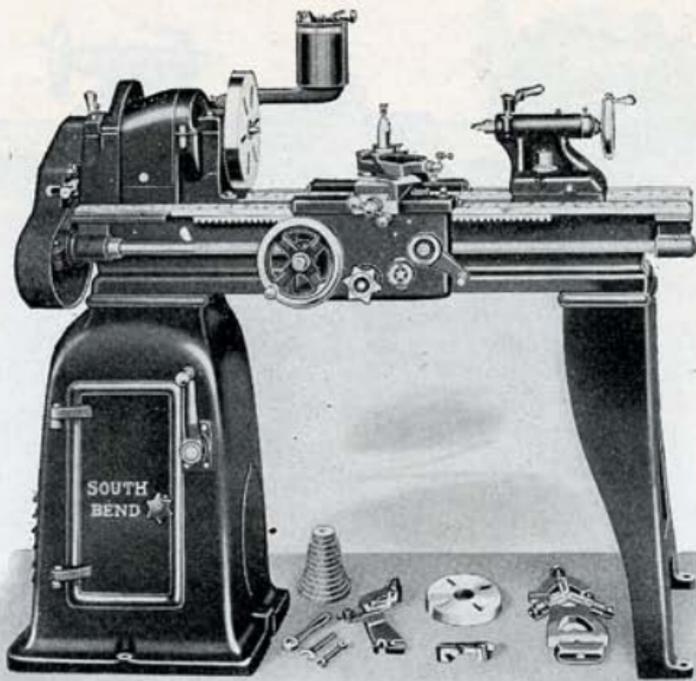
Features of Lathe: 6 spindle speeds on 9" and 11" lathes; 8 spindle speeds on 13" and 16" lathes; compound rest graduated 180°; hollow spindle; precision lead screw for screw thread cutting; carriage lock for accurate facing; spring latch reverse for feeds and threads; phosphor bronze bearings; set-over tailstock; semi-steel lathe bed having three "V" ways and one flat way. Principal specifications are listed in the tabulation below.

Equipment included in price consists of: Double friction countershaft; large and small face plates; tool post complete; two 60° lathe centers; spindle sleeve; center rest; follower rest; change gears for threads and feeds; wrenches; installation plan and instruction book, "How to Run a Lathe."

Prices 9" to 16" Standard Change Gear Floor Leg Lathes With Overhead Countershaft Drive

Cat. No. of Lathe	Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Power Required H.P.	Approx. Weight Crated Pounds	Net Factory Price
9-inch Standard Change Gear Lathe†							
30-X	9 1/4	2 1/2	9 3/8	6 3/8	1/4	447	\$225.00
30-Y	9 1/4	3	16 3/8	6 3/8	1/4	472	235.00
30-Z	9 1/4	3 1/2	21 3/8	6 3/8	1/4	497	245.00
30-A	9 1/4	4	27 3/8	6 3/8	1/4	522	255.00
30-R	9 1/4	4 1/2	34 3/8	6 3/8	1/4	547	265.00
11-inch Standard Change Gear Lathe†							
33-Y	11 1/4	3	12	7 5/8	1/2	650	\$276.00
33-Z	11 1/4	3 1/2	18	7 5/8	1/2	680	288.00
33-A	11 1/4	4	24	7 5/8	1/2	710	300.00
33-B	11 1/4	5	36	7 5/8	1/2	780	312.00
33-S	11 1/4	5 1/2	42	7 5/8	1/2	815	324.00
13-inch Standard Change Gear Lathe†							
35-A	13 1/4	4	16	9	3/4	1040	\$337.00
35-B	13 1/4	5	28	9	3/4	1090	352.00
35-C	13 1/4	6	40	9	3/4	1140	367.00
35-D	13 1/4	7	52	9	3/4	1195	384.00
35-E	13 1/4	8	64	9	3/4	1255	403.00
16-inch Standard Change Gear Lathe							
41-C	16 1/4	6	34	11 1/8	1	1840	\$480.00
41-D	16 1/4	7	46	11 1/8	1	1920	500.00
41-E	16 1/4	8	58	11 1/8	1	2000	520.00
41-G	16 1/4	10	82	11 1/8	1	2160	564.00
41-H	16 1/4	12*	106	11 1/8	1	2390	627.00
41-K	16 1/4	14*	130	11 1/8	1	2615	682.00

*Includes Center Leg. If Countershaft is not wanted deduct: For 9" Lathe, \$13.00; for 11" Lathe, \$14.00; for 13" Lathe, \$20.00; for 16" Lathe, \$31.00.
†If bench legs are wanted deduct \$10.00.



11" x 4' Underneath Belt Motor Driven Lathe, Standard Change Gear Type, Complete as Shown.....\$439.00

9" to 16" Standard Change Gear Lathes Underneath Belt Motor Drive Type

9-inch to 16-inch South Bend Underneath Belt Motor Driven Back-Gear, Screw Cutting Precision Lathes are priced below. A wide range of automatic friction longitudinal feeds and automatic friction cross feeds are provided. Standard screw threads, right or left hand, from 4 to 40 per inch, can be cut on 9" and 11" Lathes and from 2 to 40 per inch on 13" and 16" Standard Change Gear Lathes. For illustration and description of the motor drive unit see pages 12 and 13.

Equipment included in price: Large and small face plates; tool post; thread cutting stop; two 60° lathe centers; spindle sleeve; center rest; follower rest; change gears for threads and feeds; wrenches; installation plan and book, "How to Run a Lathe".

Electrical Equipment included in price: Motor drive mechanism mounted in cabinet leg under headstock; reversing motor; drum reversing switch; wiring enclosed in metal conduit; V-belts, motor to drive pulley; flat leather belt and wiring diagram.

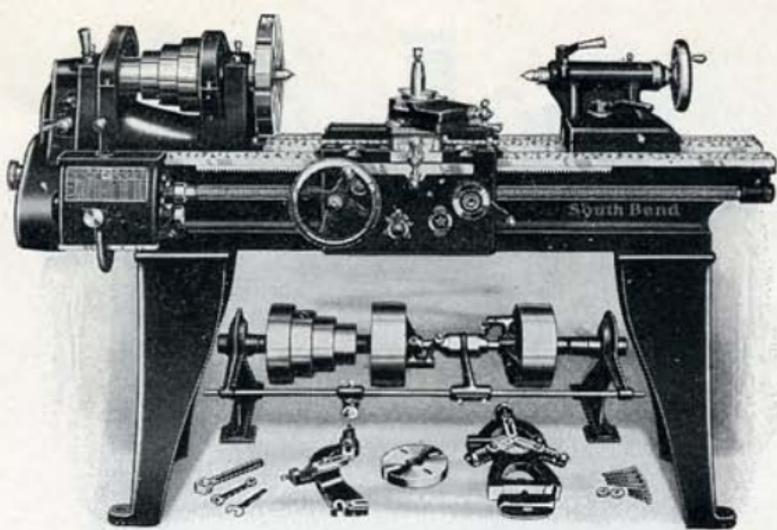
Prices of 9" to 16" Standard Change Gear Lathes With Underneath Belt Motor Drive

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Power Required H.P.	Swing Over Carriage Inches	Hole Thru Spindle Inches	Approx. Weight Crated Pounds	Cat. No.	Net Factory Price
9" Underneath Belt Motor Driven Lathe (1-phase A.C. Motor.)*								
9 $\frac{1}{4}$	2 $\frac{1}{2}$	9 $\frac{3}{8}$	$\frac{1}{4}$	6 $\frac{3}{8}$	$\frac{3}{4}$	760	130-X	\$323.00
9 $\frac{1}{4}$	3	16 $\frac{3}{8}$	$\frac{1}{4}$	6 $\frac{3}{8}$	$\frac{3}{4}$	785	130-Y	333.00
9 $\frac{1}{4}$	3 $\frac{1}{2}$	21 $\frac{3}{8}$	$\frac{1}{4}$	6 $\frac{3}{8}$	$\frac{3}{4}$	810	130-Z	343.00
9 $\frac{1}{4}$	4	27 $\frac{3}{8}$	$\frac{1}{4}$	6 $\frac{3}{8}$	$\frac{3}{4}$	835	130-A	353.00
9 $\frac{1}{4}$	4 $\frac{1}{2}$	34 $\frac{3}{8}$	$\frac{1}{4}$	6 $\frac{3}{8}$	$\frac{3}{4}$	860	130-R	363.00
11" Underneath Belt Motor Driven Lathe (3-phase A.C. Motor.)†								
11 $\frac{1}{4}$	3	12	$\frac{1}{2}$	7 $\frac{5}{8}$	$\frac{7}{8}$	890	133-Y	\$415.00
11 $\frac{1}{4}$	3 $\frac{1}{2}$	18	$\frac{1}{2}$	7 $\frac{5}{8}$	$\frac{7}{8}$	920	133-Z	427.00
11 $\frac{1}{4}$	4	24	$\frac{1}{2}$	7 $\frac{5}{8}$	$\frac{7}{8}$	950	133-A	439.00
11 $\frac{1}{4}$	5	36	$\frac{1}{2}$	7 $\frac{5}{8}$	$\frac{7}{8}$	1020	133-B	451.00
11 $\frac{1}{4}$	5 $\frac{1}{2}$	42	$\frac{1}{2}$	7 $\frac{5}{8}$	$\frac{7}{8}$	1055	133-S	463.00
13" Underneath Belt Motor Driven Lathe (3-phase A.C. Motor.)†								
13 $\frac{1}{4}$	4	16	$\frac{3}{4}$	9	1	1440	135-A	\$510.00
13 $\frac{1}{4}$	5	28	$\frac{3}{4}$	9	1	1490	135-B	525.00
13 $\frac{1}{4}$	6	40	$\frac{3}{4}$	9	1	1540	135-C	540.00
13 $\frac{1}{4}$	7	52	$\frac{3}{4}$	9	1	1595	135-D	557.00
13 $\frac{1}{4}$	8	64	$\frac{3}{4}$	9	1	1655	135-E	576.00
16" Underneath Belt Motor Driven Lathe (3-phase A.C. Motor.)†								
16 $\frac{1}{4}$	6	34	1	11 $\frac{1}{8}$	1 $\frac{3}{8}$	2265	141-C	\$692.00
16 $\frac{1}{4}$	7	46	1	11 $\frac{1}{8}$	1 $\frac{3}{8}$	2345	141-D	712.00
16 $\frac{1}{4}$	8	58	1	11 $\frac{1}{8}$	1 $\frac{3}{8}$	2425	141-E	732.00
16 $\frac{1}{4}$	10	82	1	11 $\frac{1}{8}$	1 $\frac{3}{8}$	2585	141-G	776.00
16 $\frac{1}{4}$	12**	106	1	11 $\frac{1}{8}$	1 $\frac{3}{8}$	2815	141-H	839.00
16 $\frac{1}{4}$	14**	130	1	11 $\frac{1}{8}$	1 $\frac{3}{8}$	3040	141-K	894.00

**Price includes center leg.

*Prices of lathes with 3-phase and D.C. Motors will be quoted on request.

†Prices of lathes with 1-phase and D.C. Motor will be quoted on request.



13" x 5' South Bend Countershaft Driven Lathe, Quick Change Gear Type, Complete as Shown.....\$402.00

9" to 16" Quick Change Gear Lathes Overhead Countershaft Drive Type

South Bend Quick Change Gear Countershaft Driven Back-Geared, Screw Cutting Precision Lathes in sizes 9", 11", 13" and 16" swing sizes are priced below. These lathes are recommended for accurate machine work of all kinds in the manufacturing plant, machine shop, tool room and laboratory. A wide range of automatic friction longitudinal feeds and automatic friction cross feeds are provided. Standard screw threads can be cut from 2 to 112 per inch, right or left-hand.

Features of Lathe: Six spindle speeds on 9" and 11" lathes, eight spindle speeds on 13" and 16" lathes; compound rest graduated 180°; hollow spindle; precision lead screw for screw thread cutting; carriage lock for accurate facing; spring latch reverse for feeds and threads; phosphor bronze bearings; set-over tailstock; semi-steel lathe bed having three "V" ways and one flat way. Principal specifications are listed in the tabulation below.

Equipment included in price: Double friction countershaft; large and small face plates; tool post complete; two 60° lathe centers; spindle sleeve; center rest; follower rest; wrenches; installation plan and instruction book, "How to Run a Lathe".

Prices 9" to 16" Quick Change Gear Floor Leg Lathes With Overhead Countershaft Drive

Cat. No. of Lathe	Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Power Required H.P.	Approx. Weight Crated Pounds	Net Factory Price
9-inch Quick Change Gear Lathe†							
80-X	9¼	2½	9¾	6¾	¼	457	\$265.00
80-Y	9¼	3	16¾	6¾	¼	482	275.00
80-Z	9¼	3½	21¾	6¾	¼	507	285.00
80-A	9¼	4	27¾	6¾	¼	532	295.00
80-R	9¼	4½	34¾	6¾	¼	557	305.00
11-inch Quick Change Gear Lathe†							
84-Y	11¼	3	12	7½	½	665	\$316.00
84-Z	11¼	3½	18	7½	½	695	328.00
84-A	11¼	4	24	7½	½	725	340.00
84-B	11¼	5	36	7½	½	795	352.00
84-S	11¼	5½	42	7½	½	830	364.00
13-inch Quick Change Gear Lathe†							
86-A	13¼	4	16	9	¾	1060	\$387.00
86-B	13¼	5	28	9	¾	1110	402.00
86-C	13¼	6	40	9	¾	1160	417.00
86-D	13¼	7	52	9	¾	1215	434.00
86-E	13¼	8	64	9	¾	1275	453.00
16-inch Quick Change Gear Lathe							
92-C	16¼	6	34	11½	1	1875	\$540.00
92-D	16¼	7	46	11½	1	1955	560.00
92-E	16¼	8	58	11½	1	2035	580.00
92-G	16¼	10	82	11½	1	2195	624.00
92-H	16¼	12*	106	11½	1	2425	687.00
92-K	16¼	14*	130	11½	1	2650	742.00

*Includes Center Leg. If Countershaft is not wanted deduct: for 9" Lathe, \$13.00; for 11" Lathe, \$14.00; for 13" Lathe, \$20.00; and for 16" Lathe, \$31.00.

†If Bench Legs are wanted, deduct \$10.00.



16" x 6' Underneath Belt Motor Driven Lathe, Quick Change Gear Type, Complete as Shown . . . \$752.00

9" to 16" Quick Change Gear Lathes Underneath Belt Motor Drive Type

South Bend Underneath Belt Motor Driven Quick Change Gear, Back-Geared, Screw Cutting Precision Lathes in sizes 9", 11", 13" and 16" swing, are priced below. A wide range of automatic friction longitudinal feeds and automatic friction cross feeds are provided. Standard screw threads, right or left hand, can be cut from 2 to 112 per inch. For illustration and description of the underneath belt motor drive unit see pages 12 and 13.

Equipment included in price: Large and small face plates; tool post complete; thread cutting stop; two 60° lathe centers; spindle sleeve; center rest; follower rest; wrenches; installation plan and instruction book, "How to Run a Lathe."

Electrical Equipment included in price: Motor drive mechanism; reversing motor; drum reversing switch; wiring enclosed in metal conduit; V-belts; flat leather belt and wiring diagram.

Prices of 9" to 16" Quick Change Gear Lathes With Underneath Belt Motor Drive

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Thru Spindle Inches	Power Required H. P.	Approx. Weight Crated Pounds	Cat. No.	Net Factory Price
9-inch Underneath Belt Motor Driven Lathe (1-phase A.C. Motor)*								
9 $\frac{1}{4}$	2 $\frac{1}{2}$	9 $\frac{3}{8}$	6 $\frac{3}{8}$	3 $\frac{3}{4}$	1 $\frac{1}{4}$	770	180-X	\$363.00
9 $\frac{1}{4}$	3	16 $\frac{3}{8}$	6 $\frac{3}{8}$	3 $\frac{3}{4}$	1 $\frac{1}{4}$	795	180-Y	373.00
9 $\frac{1}{4}$	3 $\frac{1}{2}$	21 $\frac{3}{8}$	6 $\frac{3}{8}$	3 $\frac{3}{4}$	1 $\frac{1}{4}$	820	180-Z	383.00
9 $\frac{1}{4}$	4	27 $\frac{3}{8}$	6 $\frac{3}{8}$	3 $\frac{3}{4}$	1 $\frac{1}{4}$	845	180-A	393.00
9 $\frac{1}{4}$	4 $\frac{1}{2}$	34 $\frac{3}{8}$	6 $\frac{3}{8}$	3 $\frac{3}{4}$	1 $\frac{1}{4}$	870	180-R	403.00
11-inch Underneath Belt Motor Driven Lathe (3-phase A.C. Motor)†								
11 $\frac{1}{4}$	3	12	7 $\frac{5}{8}$	7 $\frac{7}{8}$	1 $\frac{1}{2}$	905	184-Y	\$455.00
11 $\frac{1}{4}$	3 $\frac{1}{2}$	18	7 $\frac{5}{8}$	7 $\frac{7}{8}$	1 $\frac{1}{2}$	935	184-Z	467.00
11 $\frac{1}{4}$	4	24	7 $\frac{5}{8}$	7 $\frac{7}{8}$	1 $\frac{1}{2}$	965	184-A	479.00
11 $\frac{1}{4}$	5	36	7 $\frac{5}{8}$	7 $\frac{7}{8}$	1 $\frac{1}{2}$	1035	184-B	491.00
11 $\frac{1}{4}$	5 $\frac{1}{2}$	42	7 $\frac{5}{8}$	7 $\frac{7}{8}$	1 $\frac{1}{2}$	1070	184-S	503.00
13-inch Underneath Belt Motor Driven Lathe (3-phase A.C. Motor)†								
13 $\frac{1}{4}$	4	16	9	1	3 $\frac{3}{4}$	1460	186-A	\$560.00
13 $\frac{1}{4}$	5	28	9	1	3 $\frac{3}{4}$	1500	186-B	575.00
13 $\frac{1}{4}$	6	40	9	1	3 $\frac{3}{4}$	1560	186-C	590.00
13 $\frac{1}{4}$	7	52	9	1	3 $\frac{3}{4}$	1615	186-D	607.00
13 $\frac{1}{4}$	8	64	9	1	3 $\frac{3}{4}$	1675	186-E	626.00
16-inch Underneath Belt Motor Driven Lathe (3-phase A.C. Motor)†								
16 $\frac{1}{4}$	6	34	11 $\frac{1}{8}$	1 $\frac{3}{8}$	1	2300	192-C	\$752.00
16 $\frac{1}{4}$	7	46	11 $\frac{1}{8}$	1 $\frac{3}{8}$	1	2380	192-D	772.00
16 $\frac{1}{4}$	8	58	11 $\frac{1}{8}$	1 $\frac{3}{8}$	1	2460	192-E	792.00
16 $\frac{1}{4}$	10	82	11 $\frac{1}{8}$	1 $\frac{3}{8}$	1	2620	192-G	836.00
16 $\frac{1}{4}$	12**	106	11 $\frac{1}{8}$	1 $\frac{3}{8}$	1	2850	192-H	899.00
16 $\frac{1}{4}$	14**	130	11 $\frac{1}{8}$	1 $\frac{3}{8}$	1	3075	192-K	954.00

**Includes Center Leg.

*Prices of lathes with 3-phase and D.C. Motors will be quoted on request.

†Prices of lathes with 1-phase and D.C. Motors will be quoted on request.

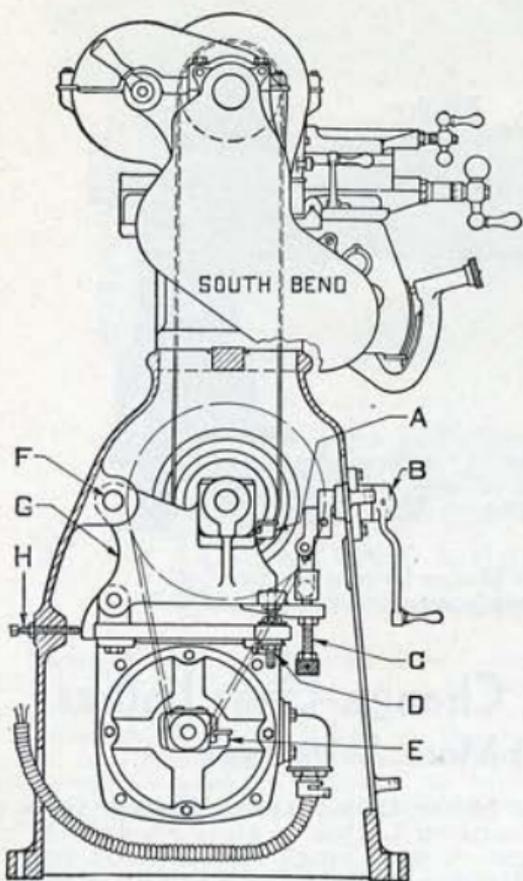


Fig. 4. Drawing showing Principal Working Parts of Underneath Belt Motor Drive Mechanism.



Fig. 5. 13" x 5' S Pan, a

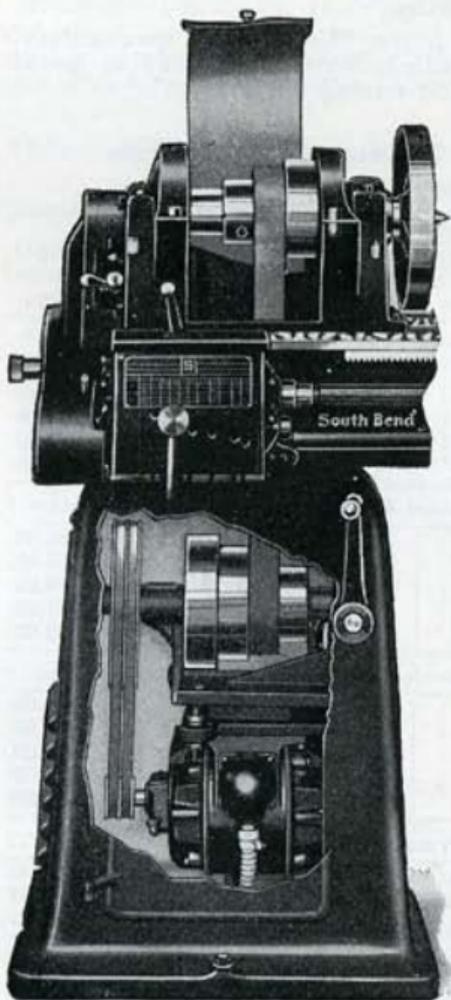


Fig. 6. Front view showing arrangement of drive mechanism.

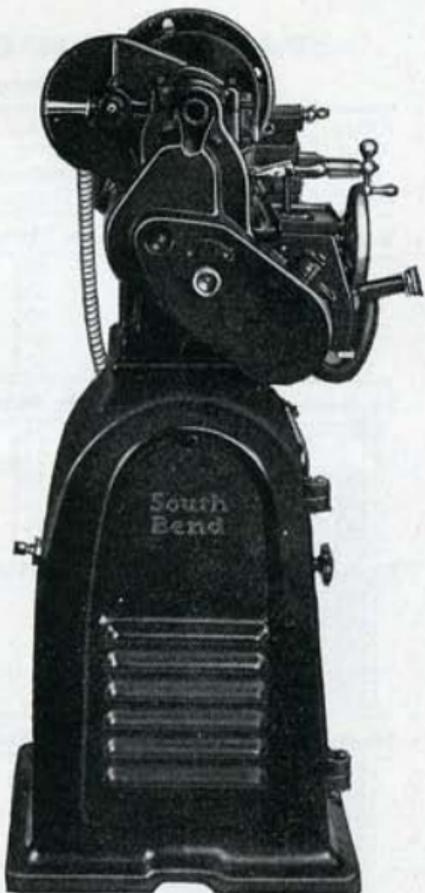
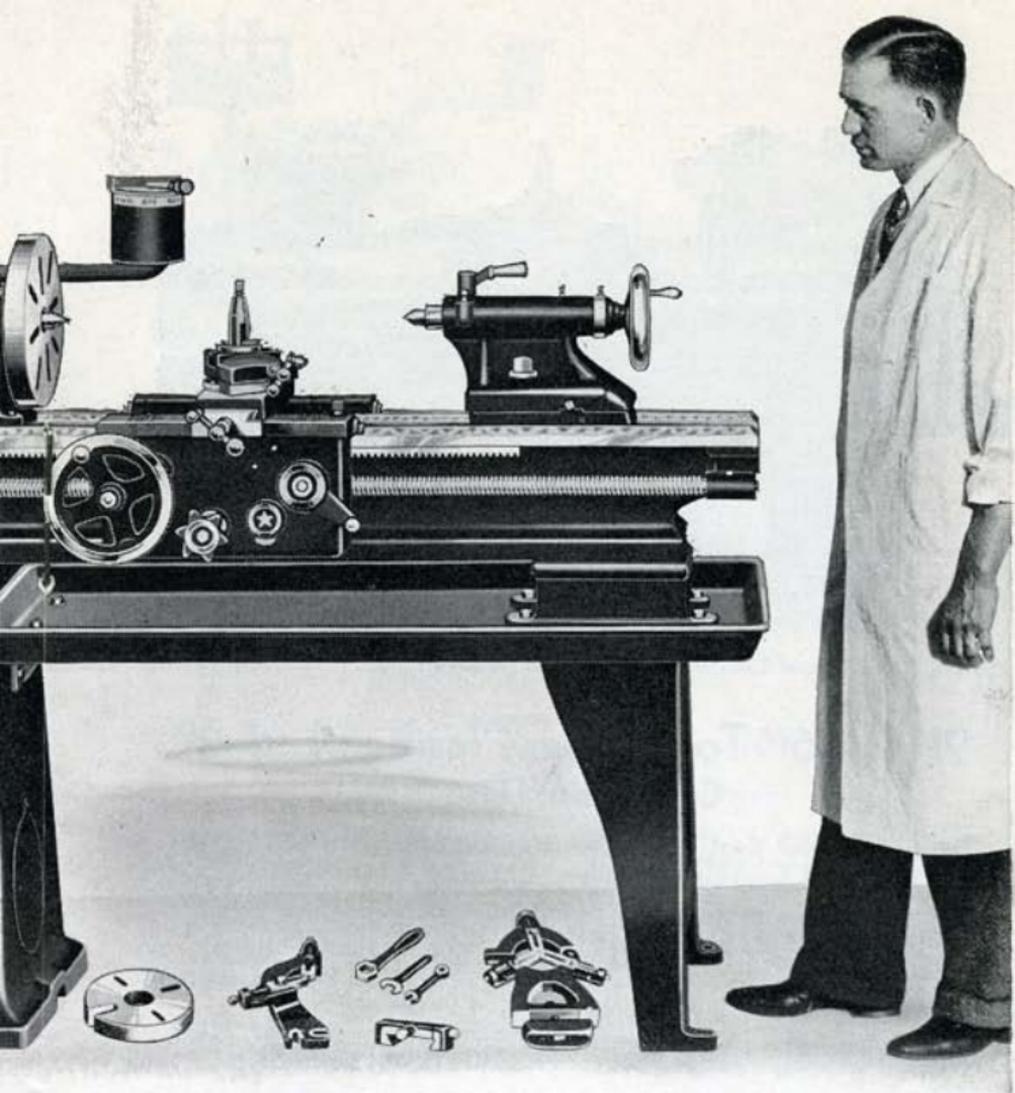


Fig. 7. End view of Underneath Belt Motor Driven Lathe.



South Bend Underneath Belt Motor Driven Precision Lathe with Chip
as shown.....\$602.00, without Chip Pan.....\$575.00.

Features of the New South Bend Underneath Belt Motor Driven Lathes

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Drive Mechanism enclosed within cabinet leg. 2. Drive to spindle. 3. Cone Pulley enclosed. 4. Multiple V-Belt Drive. 5. Clear vision overhead. 6. No exposed belts or gears. | <ol style="list-style-type: none"> 7. Silent and powerful. 8. Adjustable Belt Tension. 9. Easy Belt Shifting. 10. Increased efficiency. 11. Requires small floor space. 12. Precision and accuracy. 13. Finish—Machine Tool Gray. |
|--|--|

The Underneath Belt Motor Drive, South Bend Lathe illustrated above is new in design, modern in appearance, powerful and noiseless in operation. The Underneath Belt Motor Drive is one of the most practical methods for operating a back-gearred, screw cutting lathe.

Motor and Drive Mechanism are Completely Enclosed within the cabinet leg. A hinged cover on the headstock encloses the cone pulley. There are no exposed belts, pulleys or gears. The absence of overhead constructions provides clear vision over the room and permits efficient lighting.

Power is transmitted by flat leather belt to the headstock cone pulley. Multiple V-belts convey the power from the motor to the lower drive cone pulley. Belt tension adjustments and release for easy belt shifting are provided.

*Prices of 9" to 16" South Bend Underneath Belt Motor Driven Lathes are listed on pages 5, 9, 11 and 15.

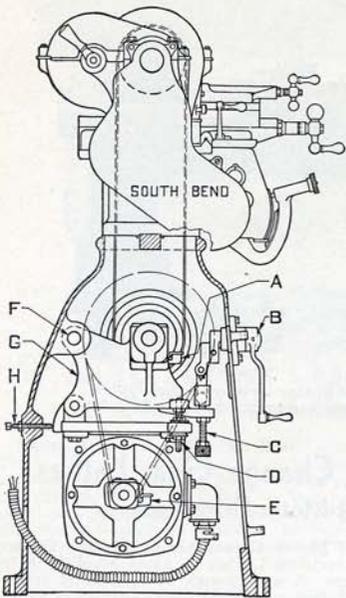


Fig. 4. Drawing showing Principal Working Parts of Underneath Belt Motor Drive Mechanism.

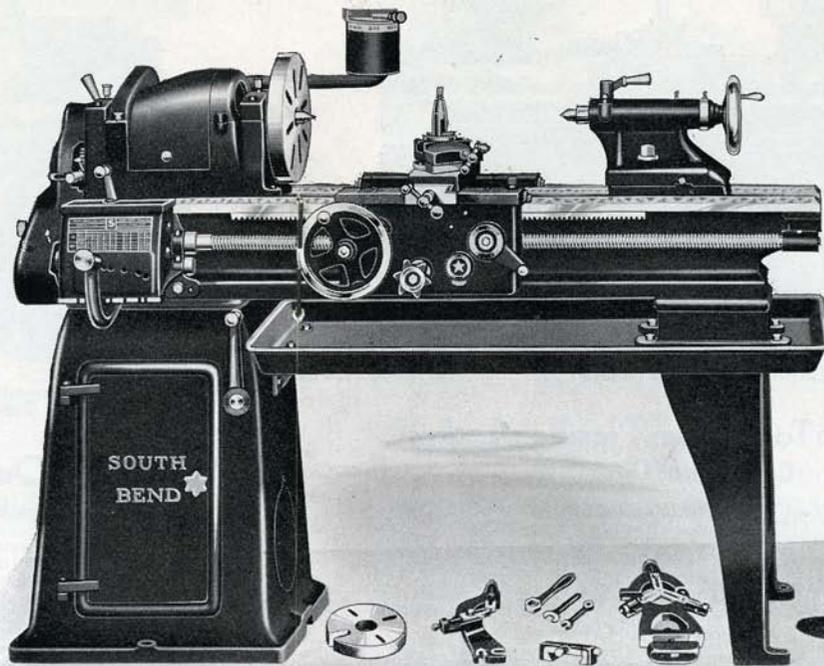


Fig. 5. 13'' x 5' South Bend Underneath Belt Motor Driven Precision Lathe with Chip Pan, as shown.....\$602.00, without Chip Pan.....\$575.00.

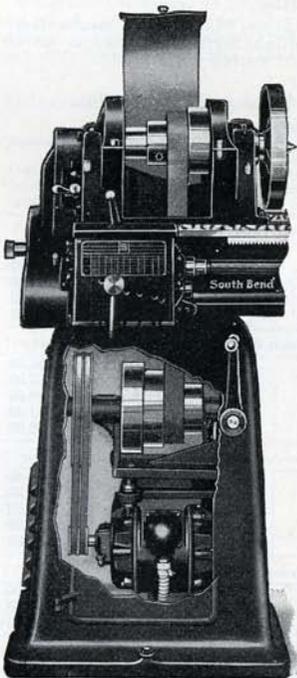


Fig. 6. Front view showing arrangement of drive mechanism.

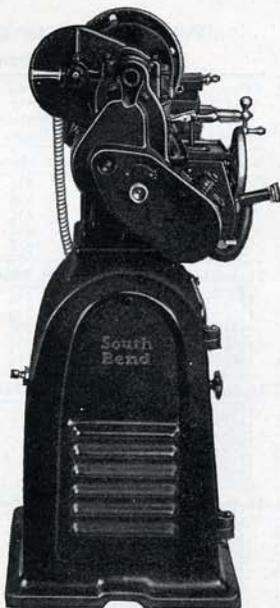


Fig. 7. End view of Underneath Belt Motor Driven Lathe.

Features of the New South Bend Underneath Belt Motor Driven Lathes

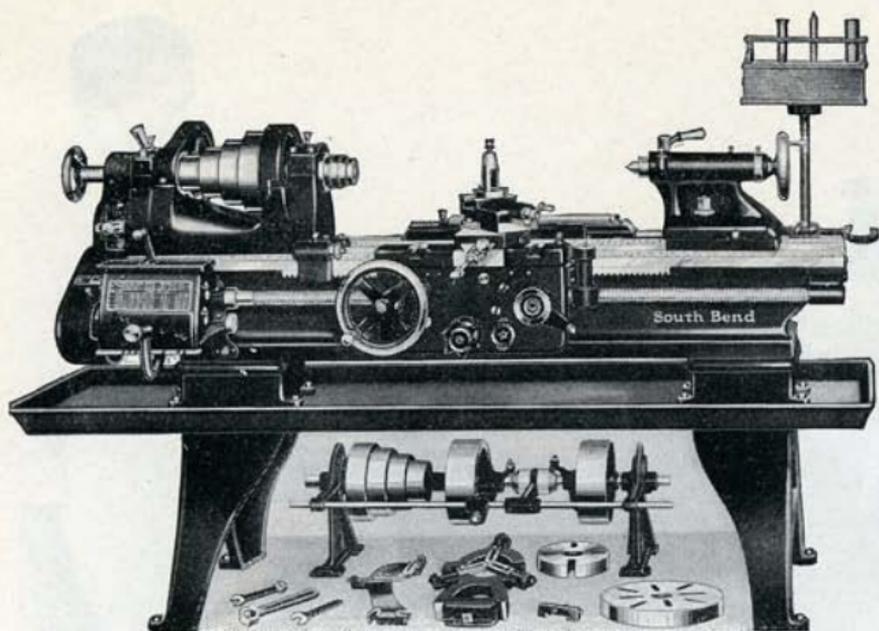
1. Drive Mechanism enclosed within cabinet leg.
2. Drive to spindle.
3. Cone Pulley enclosed.
4. Multiple V-Belt Drive.
5. Clear vision overhead.
6. No exposed belts or gears.
7. Silent and powerful.
8. Adjustable Belt Tension.
9. Easy Belt Shifting.
10. Increased efficiency.
11. Requires small floor space.
12. Precision and accuracy.
13. Finish—Machine Tool Gray.

The Underneath Belt Motor Drive, South Bend Lathe illustrated above is new in design, modern in appearance, powerful and noiseless in operation. The Underneath Belt Motor Drive is one of the most practical methods for operating a back-geared, screw cutting lathe.

Motor and Drive Mechanism are Completely Enclosed within the cabinet leg. A hinged cover on the headstock encloses the cone pulley. There are no exposed belts, pulleys or gears. The absence of overhead constructions provides clear vision over the room and permits efficient lighting.

Power is transmitted by flat leather belt to the headstock cone pulley. Multiple V-belts convey the power from the motor to the lower drive cone pulley. Belt tension adjustments and release for easy belt shifting are provided.

*Prices of 9" to 16" South Bend Underneath Belt Motor Driven Lathes are listed on pages 5, 9, 11 and 15.



16" x 6' Tool Room Lathe, Countershaft Drive.....\$777.75

9" to 16" Tool Room Precision Lathes Countershaft Drive

The South Bend Tool Room Precision Lathe, Countershaft Drive, is made in sizes 9", 11", 13" and 16" swing, as priced below. This lathe is recommended for the finest class of tool, gauge and fixture work in the modern tool room. The Quick Change Gear Box provides 48 changes for cutting standard screw threads from 2 to 112 per inch, right or left-hand, and for a wide range of automatic cross feeds and automatic longitudinal feeds. Lathe features and specifications are the same as those listed on page 10.

Tool Room Lathe Attachments itemized in the tabulation may be purchased complete with the lathe or individually, as desired.

Equipment included in price: Double friction countershaft; large and small face plates; tool post; adjustable thread cutting stop; two 60° lathe centers; spindle sleeve; center rest; follower rest; wrenches; installation plan and book, "How to Run a Lathe".

Prices of 9" to 16" South Bend Tool Room Precision Lathes Overhead Countershaft Drive

South Bend Tool Room Precision Lathe, Countershaft Drive, with Regular Equipment, but less Tool Room Attachments.....	9" x 3' Cat. No. 880-Y	11" x 4' Cat. No. 884-A	13" x 5' Cat. No. 886-B	16" x 6' Cat. No. 892-C
	\$275.00	\$340.00	\$402.00	\$540.00
TOOL ROOM ATTACHMENTS				
Hand Wheel Draw-in Collet Chuck.....	32.00	35.00	40.00	50.00
Extra Collets, Each.....	2.50	3.50	4.00	4.75
Taper Attachment.....	55.00	65.00	75.00	90.00
Thread Indicator.....	9.00	10.00	11.00	13.00
Oil Pan.....	20.00	27.00	38.00	50.00
Micrometer Carriage Stop.....	11.00	12.00	13.00	15.00
Collet Cabinet and Bracket.....	12.00	12.00	12.00	15.00
Prices of Tool Room Lathe, Complete..	\$416.50	\$504.50	\$595.00	\$777.75
Distance Between Centers of Lathe....	16 $\frac{3}{8}$ in.	24 in.	28 in.	34 in.
Weight Crated, Lathe and Attachments.	582 lbs.	857 lbs.	1290 lbs.	2125 lbs.

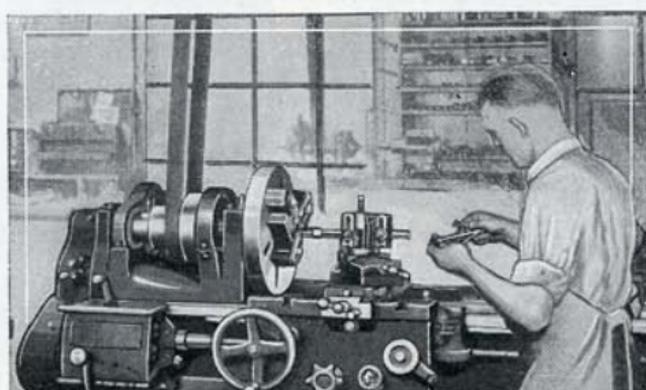
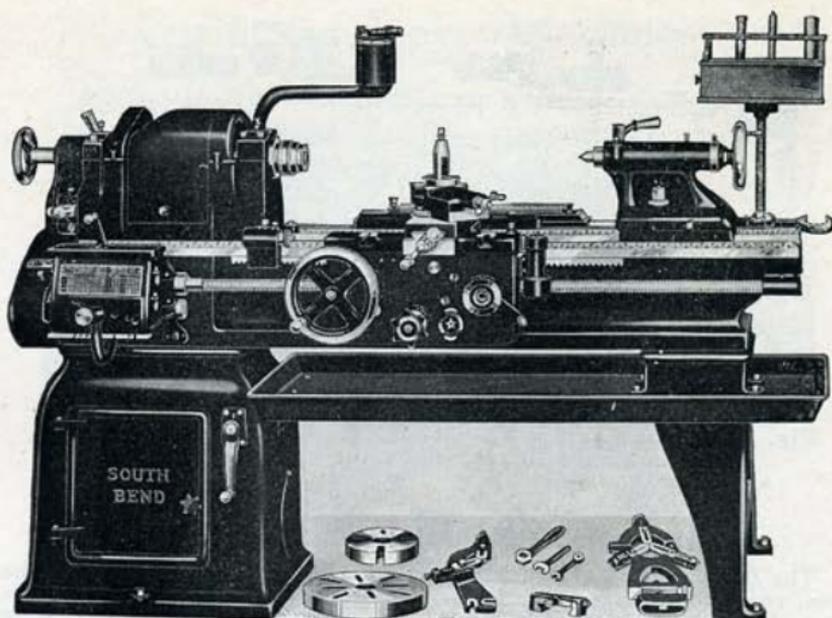


Fig. 8. Boring Special Tool Bolted on Face Plate.



16" x 6' Tool Room Lathe, Underneath Belt Motor Drive. . . . \$974.75

9" to 16" Tool Room Precision Lathes Underneath Belt Motor Drive

The South Bend Tool Room Precision Lathe, Underneath Belt Motor Drive, is made in sizes 9", 11", 13" and 16" swing, as priced below. It is practical for fine tool, gauge and fixture work. The Quick Change Gear Box provides 48 changes for cutting standard screw threads from 2 to 112 per inch and for a wide range of automatic cross feeds and automatic longitudinal feeds. Lathe features and specifications are the same as those listed on page 11. For details on the Underneath Belt Motor Drive see pages 12 and 13.

Equipment: Large and small face plates; tool post; thread cutting stop; two 60° lathe centers; spindle sleeve; center rest; follower rest; wrenches; installation plan and book, "How to Run a Lathe".

Electrical Equipment included in price: Motor drive mechanism; reversing motor; drum reversing switch; wiring enclosed in metal conduit; V-belts; flat leather belt and wiring diagram.

Prices of 9" to 16" South Bend Tool Room Precision Lathes Underneath V-Belt Motor Drive

South Bend Tool Room Precision Lathe, with Underneath Motor Drive, Regular Equipment and Electrical Equipment, but less Tool Room Attachments.	9" x 3' Cat. No. 1880-Y	11" x 4' Cat. No. 1884-A	13" x 5' Cat. No. 1886-B	16" x 6' Cat. No. 1892-C
	\$373.00*	\$479.00†	\$575.00†	\$752.00†
TOOL ROOM ATTACHMENTS				
Hand Wheel Draw-in Collet Chuck	32.00	35.00	40.00	50.00
Extra Collets, Each	2.50	3.50	4.00	4.75
Taper Attachment	55.00	65.00	75.00	90.00
Thread Indicator	9.00	10.00	11.00	13.00
Chip Pan	14.00	19.00	27.00	35.00
Micrometer Carriage Stop	11.00	12.00	13.00	15.00
Collet Cabinet and Bracket	12.00	12.00	12.00	15.00
Prices of Tool Room Lathe, Complete	\$508.50	\$635.50	\$757.00	\$974.75
Distance Between Centers of Lathe	16 3/8 in.	24 in.	28 in.	34 in.
Weight Crated, Lathe and Attachments	885 lbs.	1075 lbs.	1665 lbs.	2525 lbs.

*Price includes 1-Phase A.C. Motor †Price includes 3-Phase A.C. Motor.

Price of Lathe with 1-Phase, 3-Phase or D.C. motor will be quoted on request.

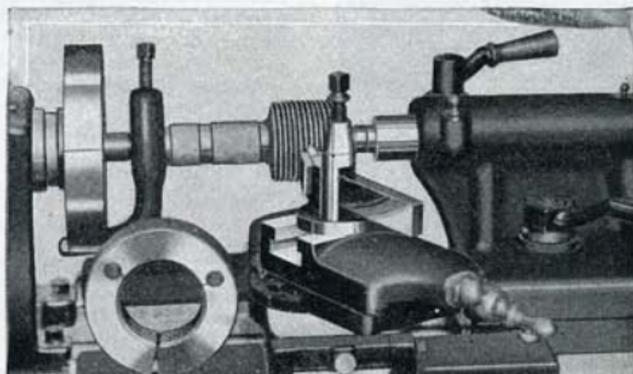


Fig. 9. Cutting the Thread on a Master Gauge.

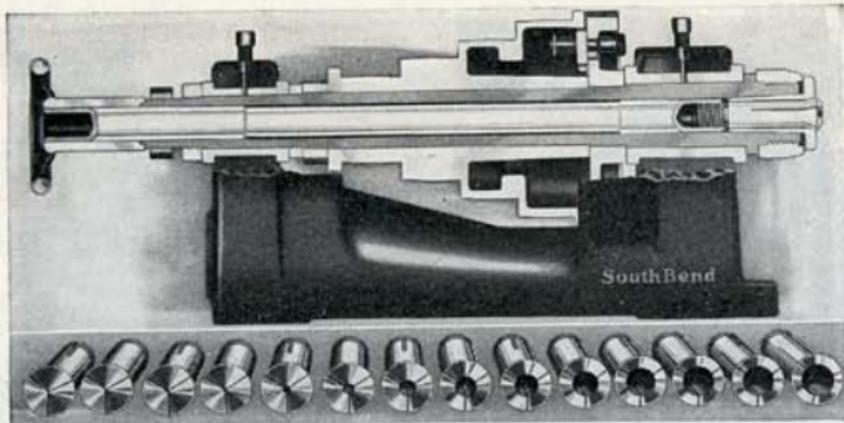


Fig. 10. Cross Section View of the Lathe Headstock Showing Draw-in Collet Chuck. Note the Group of Collets.

Draw-in Collet Chuck Attachment

The Draw-in Collet Chuck Attachment is used on the lathe in the tool room for making small, accurate tools and in the manufacturing plant for making small parts for watches, typewriters, sewing machines and similar equipment where accuracy is essential. This is the most accurate type of chuck made and will accurately center any small work. The hollow draw-bar permits bars and rods to be passed through the lathe spindle and held in the collet for machining.

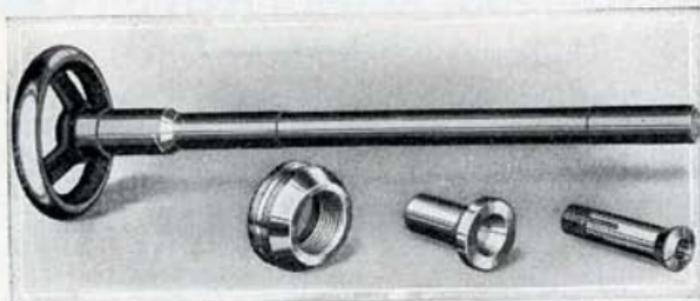


Fig. 11. Hand Wheel Draw-in Collet Chuck Attachment.

Hand Wheel Draw-in Collet Chuck Attachment

The Draw-in Collet Chuck Attachment, Hand Wheel Type, is recommended for making small tools and parts where the greatest accuracy is essential and for small lot production work.

Equipment includes: Hand wheel and hollow draw bar, spindle nose cap and wrench, tapered closing sleeve of tool steel, hardened and ground, and one split collet for round work of any one size desired up to the maximum capacity of hole in lathe spindle.

Prices of Hand Wheel Draw-in Collet Chuck with Split Collet

Size of Lathe	Catalog No.	Hole in Lathe Spindle	Collet Capacity in Sixty-Fourths (for Round Work)	Price with One Collet
Workshop	4306	$\frac{3}{4}$ in.	$\frac{1}{64}$ in. up to $\frac{1}{2}$ in.	\$25.00
9 in.	4309	$\frac{3}{4}$ in.	$\frac{1}{64}$ in. up to $\frac{1}{2}$ in.	32.00
11 in.	4311	$\frac{7}{8}$ in.	$\frac{1}{64}$ in. up to $\frac{9}{16}$ in.	35.00
13 in.	4313	1 in.	$\frac{1}{64}$ in. up to $\frac{5}{8}$ in.	40.00
16 in.	4316	$1\frac{3}{8}$ in.	$\frac{1}{64}$ in. up to $\frac{7}{8}$ in.	50.00

Split Collets for Round Work

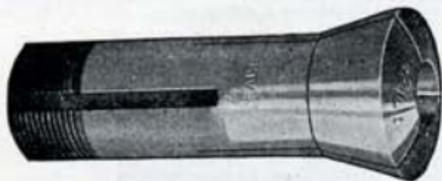


Fig. 12. Collet for Round Work.

Split collets for holding round work are made of tool steel, hardened and tempered and are ground outside and inside to insure accuracy. Collets can be supplied in steps of 64ths of an inch up to the capacity of the lathe; for example, $\frac{1}{64}$ ", $\frac{1}{32}$ ", $\frac{3}{64}$ ", etc.

Prices of Split Collets for Round Work

Size of Lathe	Catalog No.	Hole in Lathe Spindle	Collet Capacity in Sixty-Fourths (for Round Work)	Price Each
Workshop	609-W	$\frac{3}{4}$ in.	$\frac{1}{64}$ in. up to $\frac{1}{2}$ in.	\$2.50
9 in.	609	$\frac{3}{4}$ in.	$\frac{1}{64}$ in. up to $\frac{1}{2}$ in.	2.50
11 in.	611	$\frac{7}{8}$ in.	$\frac{1}{64}$ in. up to $\frac{9}{16}$ in.	3.50
13 in.	613	1 in.	$\frac{1}{64}$ in. up to $\frac{5}{8}$ in.	4.00
16 in.	616	$1\frac{3}{8}$ in.	$\frac{1}{64}$ in. up to $\frac{7}{8}$ in.	4.75

NOTE: Prices of special collets for holding square and hexagonal work, with hole dimensions in either inches or millimeters, will be supplied on request.

Graduated Taper Attachment

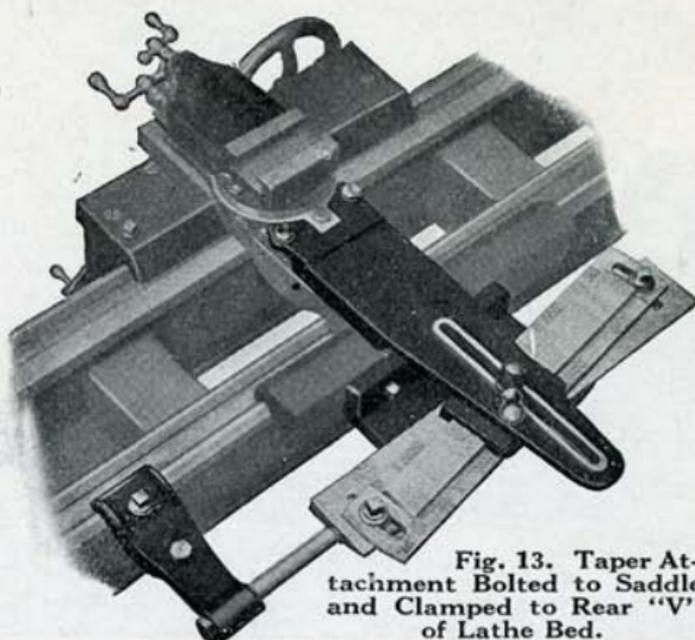


Fig. 13. Taper Attachment Bolted to Saddle and Clamped to Rear "V" of Lathe Bed.

The Taper Attachment is used for tool room work, manufacturing and production work, for turning and boring all classes of taper work. It eliminates the necessity of setting-over the tailstock for taper work and permits the boring of short and long tapers.

The attachment is bolted to the lathe carriage and can be used at any position along the lathe bed. Attachment does not interfere with straight turning, as it does not operate unless the clamp on the rear V-way of the lathe bed is locked. The swivel bar, which controls the taper, is graduated—one end in inches per foot of taper, the other end in degrees.

Net Factory Prices of Graduated Taper Attachment

Size of Lathe	Catalog No.	Maximum Taper			Approx. Shipping Weight	Price Attachment
		At One Setting	Per Foot	In Degrees		
Workshop	428	7 in.	3 in.	14	35 lbs.	\$ 45.00*
9 in.	209	9 in.	3 in.	14	40 lbs.	55.00
11 in.	211	9 in.	3 in.	14	50 lbs.	65.00
13 in.	213	10 in.	3 in.	14	65 lbs.	75.00
16 in.	216	12 in.	3 in.	14	100 lbs.	90.00

*Must be fitted to lathe in our factory.

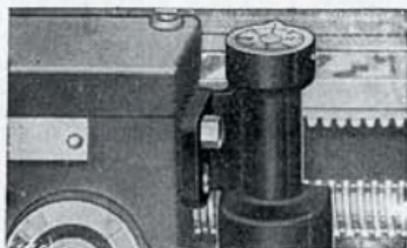


Fig. 14.

Thread Dial Indicator

The Thread Dial Indicator is useful when cutting screw threads as it permits reversing the carriage by hand instead of by power to pick up the starting point of each cut to be taken. A graduated dial shows when to clamp the half-nuts on the lead screw for the next cut.

Prices Thread Dial Indicator

Size of Lathe	Cat. No.	Price
Workshop	810	\$ 5.00
9 in.	809	9.00
11 in.	811	10.00
13 in.	813	11.00
16 in.	816	13.00

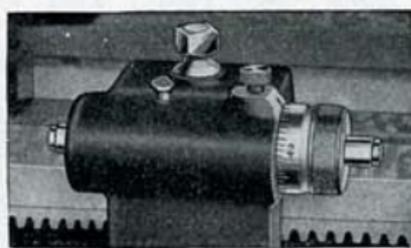


Fig. 15.

Micrometer Carriage Stop

The Micrometer Carriage Stop is useful in accurate facing, turning and boring. It is used for stopping carriage at any point along lathe bed. Has a micrometer adjustment. Can be used on either side of carriage. The stop is hardened on both ends and may be locked for doing duplicate work.

Prices Micrometer Carriage Stop

Size of Lathe	Cat. No.	Price
Workshop	968-W	\$ 8.00
9 in.	971	11.00
11 in.	972	12.00
13 in.	973	13.00
16 in.	975	15.00

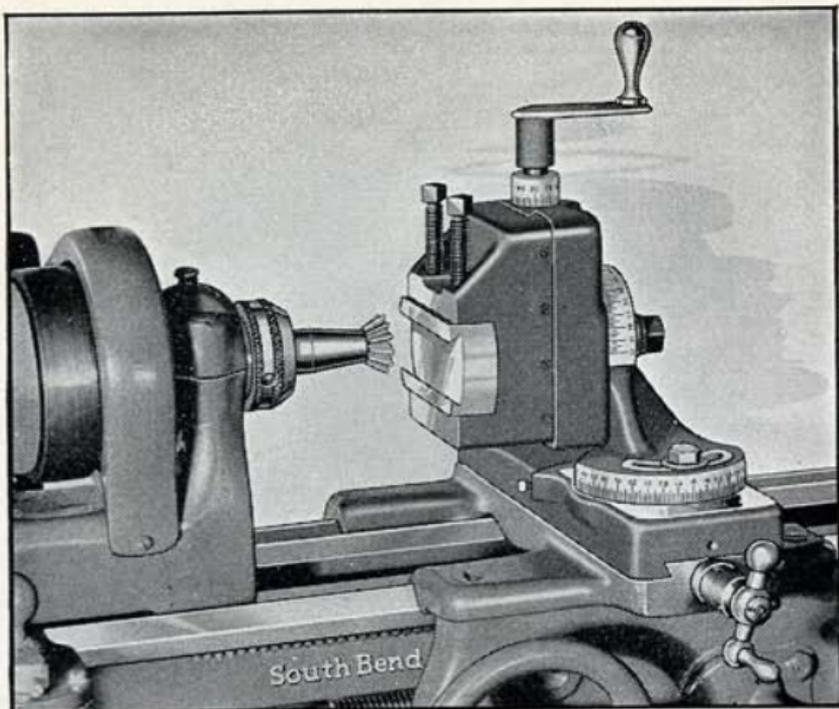


Fig. 16. Milling a Dovetail on Lathe Using Milling Attachment.

Milling and Keyway Cutting Attachment

The lathe fitted with a milling and keyway cutting attachment will handle such work as cutting keyways, squaring ends of shafts, milling dovetails, milling tapers, etc.

The attachment fits on the compound rest base of the lathe, swivels all the way around horizontally like the compound rest, and is graduated 180 degrees. In addition, the upright angle plate to which the vise is attached swivels vertically and is graduated 180 degrees. The vertical adjusting screw is equipped with a micrometer graduated collar. The automatic cross and longitudinal feeds of the carriage can be used as well as the hand feeds.

Equipment consists of milling attachment, two V-blocks for round work, crank handle for feed screw, wrench, bolts and nuts. Milling Cutters and Arbors not included in price.

Prices of Milling and Keyway Cutting Attachment

Size of Lathe	Cat. No.	Vertical Feed	Cross Feed	Vise Will Hold	Depth of Jaws	Width of Jaws	Weight Each	Price Each
W'shop	9-W	2½ in.	5½ in.	1⅜ in.	1⅝ in.	3 in.	15 lbs.	\$35.00
9 in.	1	3 in.	7 in.	1¾ in.	1⅝ in.	3½ in.	25 lbs.	45.00
11 in.	2	4 in.	8 in.	1¾ in.	1⅝ in.	3½ in.	30 lbs.	50.00
13 in.	3	4¼ in.	9 in.	2⅞ in.	1⅞ in.	4⅞ in.	40 lbs.	55.00
16 in.	5	6 in.	9¾ in.	4 in.	2 in.	5¼ in.	65 lbs.	75.00

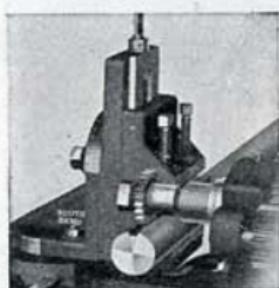


Fig. 17. Milling a Standard Keyway.

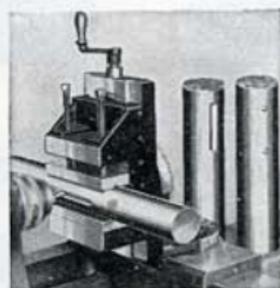


Fig. 18. End-Milling Keyway in a shaft.

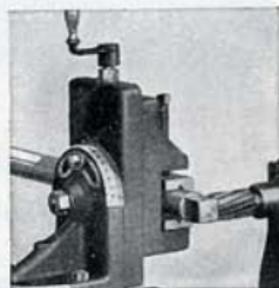


Fig. 19. Squaring the End of a Shaft.

Milling Cutters and Arbors

We can supply any of the popular milling cutters and arbors illustrated at the right, in all standard and special sizes. Cutters are of high speed steel and are guaranteed to be of the highest quality. Prices quoted on request.

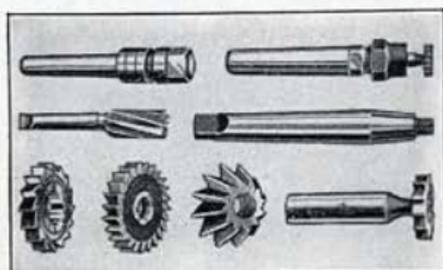
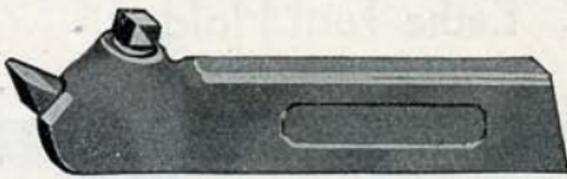


Fig. 20. Milling Cutters and Arbors



Tool Holder — Straight Shank

The straight shank tool holder illustrated above when used with cutter bits ground to various forms as shown at bottom of page, will do the work of several special tool holders. Tool Holders are made of drop forged steel, heat treated and hardened. Prices include tool holder, wrench and one unground high speed steel cutter bit.

Size of Lathe	Size of Tool Holder Shank	Size of Cutter Bit	Weight Each	Cat. No.	Price with One Unground Cutter Bit
9" W.S.	$\frac{3}{8}$ " x $\frac{3}{4}$ "	$\frac{1}{4}$ " x $\frac{1}{4}$ " x 2"	$\frac{3}{4}$ lbs.	847-S	\$1.25
9"	$\frac{3}{8}$ " x $\frac{13}{16}$ "	$\frac{1}{4}$ " x $\frac{1}{4}$ " x 2"	$\frac{3}{4}$ lbs.	849-S	2.20
11"	$\frac{5}{8}$ " x $\frac{7}{8}$ "	$\frac{1}{4}$ " x $\frac{1}{4}$ " x 2"	$\frac{3}{4}$ lbs.	851-S	2.35
13"	$\frac{1}{2}$ " x $1\frac{1}{8}$ "	$\frac{5}{16}$ " x $\frac{5}{16}$ " x $2\frac{1}{2}$ "	1 $\frac{1}{2}$ lbs.	852-S	2.65
16"	$\frac{5}{8}$ " x $1\frac{3}{8}$ "	$\frac{3}{8}$ " x $\frac{3}{8}$ " x 3"	2 $\frac{1}{4}$ lbs.	853-S	3.25

High Speed Steel Cutter Bits—Special Quality

We supply special quality cutter bits made of high speed steel, heat treated and hardened. These cutter bits are of the same quality as the South Bend Lathe Works uses in their plant and we recommend them very highly. Cutter bits may be had either ground to shape or unground for use in tool holders. When ordering an unground cutter bit, specify catalog number only. When ordering ground cutter bit, specify catalog number and the form or shape of cutter bit wanted.

Unground High Speed Steel Cutter Bits—Special Quality

Illustrated at right is an unground high speed steel cutter bit. This cutter bit requires grinding for use. Every shop should have several cutter bits on hand.



Special Quality Unground Cutter Bit

Size of Lathe	Size of Cutter Bit	Length of Cutter Bit	Single Cutter Bit		Set of 7 Cutter Bits	
			Cat. No.	Price Each	Cat. No.	Price of Set
9" W.S.	$\frac{1}{4}$ " x $\frac{1}{4}$ "	2"	1460	\$0.15	1645	\$0.95
9"	$\frac{1}{4}$ " x $\frac{1}{4}$ "	2"	1419	.15	1646	.95
11"	$\frac{1}{4}$ " x $\frac{1}{4}$ "	2"	1421	.15	1647	.95
13"	$\frac{5}{16}$ " x $\frac{5}{16}$ "	2 $\frac{1}{2}$ "	1422	.25	1648	1.60
16"	$\frac{3}{8}$ " x $\frac{3}{8}$ "	3"	1423	.40	1649	2.50

Ground High Speed Steel Cutter Bits—Special Quality

The illustration at the right shows a H.S. steel cutter bit ground to form C. We supply cutter bits ground to any of the 7 forms shown below. These forms take care of most classes of machine work and screw thread cutting in the average shop. For convenience and economy we recommend that ground cutter bits be purchased in sets.*



Special Quality Ground Cutter Bit



A
L. H. Turning



B
Round Nose



C
R. H. Turning



D
L. H. Side



E
Threading



F
R. H. Side



G
Square Nose

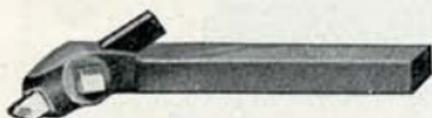
Size of Lathe	Size of Cutter Bit	Length of Cutter Bit	Single Cutter Bit		Set of 7 Cutter Bits*	
			Cat. No.	Price Each	Cat. No.	Price of Set
9" W.S.	$\frac{1}{4}$ " x $\frac{1}{4}$ "	2"	1355	\$0.25	1714	\$1.60
9"	$\frac{1}{4}$ " x $\frac{1}{4}$ "	2"	1304	.25	1715	1.60
11"	$\frac{1}{4}$ " x $\frac{1}{4}$ "	2"	1311	.25	1716	1.60
13"	$\frac{5}{16}$ " x $\frac{5}{16}$ "	2 $\frac{1}{2}$ "	1313	.35	1717	2.20
16"	$\frac{3}{8}$ " x $\frac{3}{8}$ "	3"	1316	.50	1718	3.15

*Sets of cutter bits may be made up to suit your own requirements. For example, if you do not want one each of A to G, you may order 3 of A, 3 of B, 1 of E, or any combination which you may desire.

For applications of ground cutter bits, see page 20.

Lathe Tool Holders

(Made of Drop Forged Steel)



Right-Hand Turning Tool

Price includes holder, wrench, H. S. cutter bit, not ground.

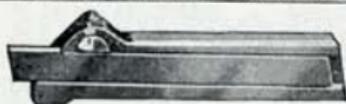
Size Lathe Inches	Size Shank Inches	Size Cutter Inches	Cat. No.	Price Complete
9 W*	$\frac{3}{8} \times \frac{3}{4}$	$\frac{1}{4} \times \frac{1}{4} \times 2$	847-R	\$1.25
9	$\frac{3}{8} \times \frac{13}{16}$	$\frac{1}{4} \times \frac{1}{4} \times 2$	849-R	2.20
11	$\frac{3}{8} \times \frac{7}{8}$	$\frac{1}{4} \times \frac{1}{4} \times 2$	851-R	2.35
13	$\frac{1}{2} \times 1\frac{1}{8}$	$\frac{5}{16} \times \frac{5}{16} \times 2\frac{1}{2}$	852-R	2.65
16	$\frac{5}{8} \times 1\frac{3}{8}$	$\frac{3}{8} \times \frac{3}{8} \times 3$	853-R	3.25



Left-Hand Turning Tool

Price includes holder, wrench, and H. S. cutter, not ground.

Size Lathe Inches	Size Shank Inches	Size Cutter Inches	Cat. No.	Price Complete
9 W*	$\frac{3}{8} \times \frac{3}{4}$	$\frac{1}{4} \times \frac{1}{4} \times 2$	847-L	\$1.25
9	$\frac{3}{8} \times \frac{13}{16}$	$\frac{1}{4} \times \frac{1}{4} \times 2$	849-L	2.20
11	$\frac{3}{8} \times \frac{7}{8}$	$\frac{1}{4} \times \frac{1}{4} \times 2$	851-L	2.35
13	$\frac{1}{2} \times 1\frac{1}{8}$	$\frac{5}{16} \times \frac{5}{16} \times 2\frac{1}{2}$	852-L	2.65
16	$\frac{5}{8} \times 1\frac{3}{8}$	$\frac{3}{8} \times \frac{3}{8} \times 3$	853-L	3.25



Straight Cutting-Off Tool

Price includes holder, wrench, H. S. steel cutter, ground.

Size Lathe Inch	Size Shank Inch	Size Cutter Inch	Cat. No.	Price Complete	Extra Cutter
9 W*	$\frac{3}{4} \times \frac{3}{4}$	$\frac{3}{32} \times \frac{1}{2}$	833-S	\$1.50	\$0.50
9	$\frac{5}{16} \times \frac{3}{4}$	$\frac{3}{32} \times \frac{1}{2}$	881-S	2.35	.50
11	$\frac{3}{8} \times \frac{7}{8}$	$\frac{3}{32} \times \frac{5}{8}$	882-S	2.50	.55
13	$\frac{1}{2} \times 1\frac{1}{8}$	$\frac{1}{8} \times \frac{3}{4}$	883-S	2.95	.75
16	$\frac{5}{8} \times 1\frac{3}{8}$	$\frac{1}{8} \times \frac{7}{8}$	884-S	3.70	1.10



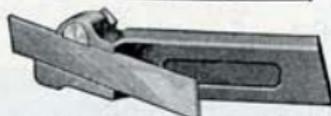
Knurling Tool Holder

Price includes knurling tool and set of knurls: fine, medium or coarse; straight or diamond.

Size Lathe Inches	Size Shank Inches	Cat. No.	Price Each
9 W*	$\frac{3}{8} \times \frac{3}{4}$	820	\$3.00
9	$\frac{5}{16} \times \frac{3}{4}$	891	4.50
11	$\frac{3}{8} \times \frac{7}{8}$	892	4.80
13	$\frac{1}{2} \times 1\frac{1}{8}$	893	5.40
16	$\frac{5}{8} \times 1\frac{3}{8}$	894	6.40

Price of Extra Knurls

Size Lathe Inch	Dimensions, Inches			Cat. No.	Price Pair
	Dia.	Face	Hole		
9 W*	$\frac{5}{8}$	$\frac{3}{16}$	$\frac{7}{32}$	817	\$1.00
9	$\frac{5}{8}$	$\frac{3}{16}$	$\frac{7}{32}$	886	1.00
11	$\frac{5}{8}$	$\frac{3}{16}$	$\frac{7}{32}$	887	1.00
13	$\frac{3}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	888	1.25
16	$\frac{3}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	889	1.25



Right-Hand Cutting-Off Tool

Price includes holder, wrench, H. S. steel cutter, ground.

Size Lathe Inch	Size Shank Inch	Size Cutter Inch	Cat. No.	Price Complete	Extra Cutter
9 W*	$\frac{3}{8} \times \frac{3}{4}$	$\frac{3}{32} \times \frac{1}{2}$	833-R	\$1.50	\$0.50
9	$\frac{5}{16} \times \frac{3}{4}$	$\frac{3}{32} \times \frac{1}{2}$	881-R	2.35	.50
11	$\frac{3}{8} \times \frac{7}{8}$	$\frac{3}{32} \times \frac{5}{8}$	882-R	2.50	.55
13	$\frac{1}{2} \times 1\frac{1}{8}$	$\frac{1}{8} \times \frac{3}{4}$	883-R	2.95	.75
16	$\frac{5}{8} \times 1\frac{3}{8}$	$\frac{1}{8} \times \frac{7}{8}$	884-R	3.70	1.10



Left-Hand Cutting-Off Tool

Price includes holder, wrench, H. S. steel cutter, ground.

Size Lathe Inch	Size Shank Inch	Size Cutter Inch	Cat. No.	Price Complete	Extra Cutter
9	$\frac{5}{16} \times \frac{3}{4}$	$\frac{3}{32} \times \frac{1}{2}$	881-L	\$2.35	\$0.50
11	$\frac{3}{8} \times \frac{7}{8}$	$\frac{3}{32} \times \frac{5}{8}$	882-L	2.50	.55
13	$\frac{1}{2} \times 1\frac{1}{8}$	$\frac{1}{8} \times \frac{3}{4}$	883-L	2.95	.75
16	$\frac{5}{8} \times 1\frac{3}{8}$	$\frac{1}{8} \times \frac{7}{8}$	884-L	3.70	1.10



Style "B" Boring Tool

Price includes holder; sleeve bar; end cap; 2 wrenches; 2 unground cutter bits.

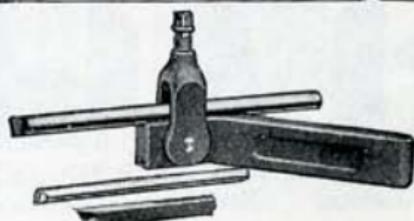
Size Lathe Inch	Size Shank Inch	Size Bar Inch	Cat. No.	Price Each	Extra Cutter
9 W*	$\frac{5}{16} \times \frac{3}{4}$	$\frac{1}{2} \times 8$	423	\$4.00	\$0.10
9	$\frac{5}{16} \times \frac{3}{4}$	$\frac{1}{2} \times 8$	429	4.00	.10
11	$\frac{3}{8} \times \frac{7}{8}$	$\frac{5}{8} \times 10\frac{1}{8}$	430	4.00	.10
13	$\frac{1}{2} \times 1\frac{1}{8}$	$\frac{3}{4} \times 12\frac{1}{8}$	431	4.75	.15
16	$\frac{5}{8} \times 1\frac{3}{8}$	$\frac{15}{16} \times 14\frac{1}{8}$	432	6.25	.25



Threading Tool Holder

Price includes threading tool, wrench and H.S. single point cutter (V, U.S.S., or Whitworth)

Size Lathe Inches	Size Shank Inches	Cat. No.	Price Each	Extra Cutter
9 W*	$\frac{3}{8} \times \frac{3}{4}$	845	\$2.50	\$1.50
9	$\frac{5}{16} \times \frac{3}{4}$	865	3.35	2.10
11	$\frac{3}{8} \times \frac{7}{8}$	866	3.35	2.10
13	$\frac{1}{2} \times 1\frac{1}{8}$	867	4.00	2.50
16	$\frac{5}{8} \times 1\frac{3}{8}$	868	5.10	3.30



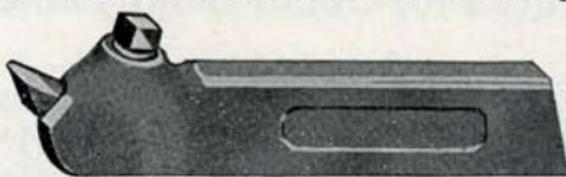
Style "C" Boring Tool

Price includes holder; wrench; 2 boring bars (one on 9" Workshop Lathe) and H. S. cutter.

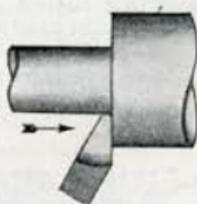
Size Lathe Inch	Size Shank Inch	Size Bars Inch	Cat. No.	Price Each	Extra Cutter
9 W*	$\frac{3}{8} \times \frac{3}{4}$	$\frac{1}{4}$	486	\$3.00	\$0.15
9, 11	$\frac{3}{8} \times \frac{3}{4}$	$\frac{1}{8}, \frac{1}{4}$	434	3.35	.15
13	$\frac{1}{2} \times 1\frac{1}{8}$	$\frac{5}{16}, \frac{1}{4}$	435	4.25	.25
16	$\frac{5}{8} \times 1\frac{1}{4}$	$\frac{1}{4}, \frac{3}{8}$	436	5.50	.40

*9 W indicates the 9-inch "Workshop" Lathe.

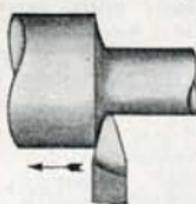
Application of Lathe Tools for Machining Metals



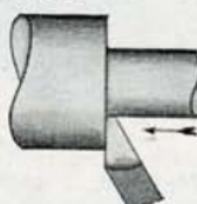
Straight Tool Holder with Ground Cutter Bit Inserted



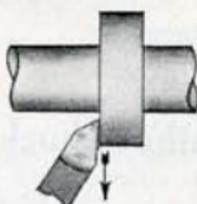
Application of Left Hand Turning Tool (A)



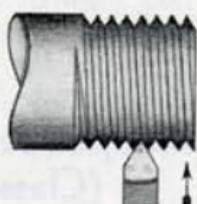
Application of Round Nose Turning Tool (B)



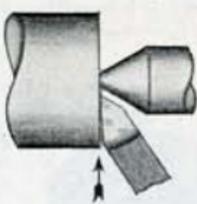
Application of Right Hand Turning Tool (C)



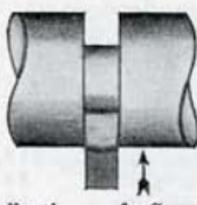
Application of Left Hand Side Tool (D)



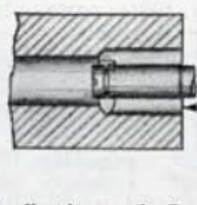
Application of Threading Tool (E)



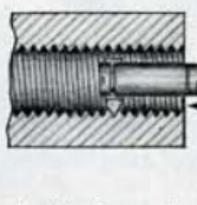
Application of Right Hand Side Tool (F)



Application of Square Nose Cutting Off Tool (G)



Application of Boring Tool (H)



Application of Inside Threading Tool (I)

NOTE: The letters in parenthesis refer to the Ground Cutter Bits shown on page 19.

Standard Lathe Dogs

Lathe dogs are made of heavy malleable iron, and are properly designed for strength and service. A square head alloy steel set screw is used.



Standard Dog

Prices of Light Pattern Lathe Dogs

Capacity of Dog	For 9" Workshop Lathes		For 9" and 11" Lathes	
	Cat. No.	Price	Cat. No.	Price
3/8-in.	1-WJ	\$0.40	1-MJ	\$0.45
1/2-in.	2-WJ	.45	2-MJ	.50
3/4-in.	4-WJ	.50	4-MJ	.60
1-in.	6-WJ	.60	6-MJ	.70
1 1/4-in.	8-WJ	.70	8-MJ	.80
1 1/2-in.	10-WJ	.80	10-MJ	.95

Heavy Type Lathe Dogs

Capacity of Dog	For 11" to 16" Swing Lathes	
	Cat. No.	Price
1 1/2-in.	2-M	\$.60
1-in.	6-M	.80
1 1/2-in.	10-M	1.05
1 3/4-in.	11-M	1.20
2-in.	12-M	1.35
3-in.	15-M	1.75

Extra Equipment for 9-inch "Workshop" Lathes



Center Rest



Follower Rest



Large Face Plate



Clamp Lathe Dog
Drop Forged Steel



Thread Cutting Stop

Center Rest. Cat. No. 125-W \$6.00
 Follower Rest. Cat. No. 34-W 4.00*
 Large Face Plate (7 3/8" dia.)
 No. 40-W 6.00
 Thread Cut'g Stop No. 67-W 2.00
 *Should be fitted to lathe at factory.

Capacity	Cat. No.	Price
1 1/4 in.	160	\$1.80
2 1/4 in.	161	2.40
2 3/4 in.	162	3.00
3 1/2 in.	163	4.25

Center Drill and Countersink

Diam. of Work	Diam. of Drill	Diam. of Body	Cat. No.	Price
3/16" to 5/16"	1/16 in.	13/64"	898-A	\$0.30
5/8" to 1"	3/32 in.	.302"	898-B	.35
1 1/4" to 2"	1/8 in.	.302"	898-C	.40
2 1/4" to 4"	3/16 in.	7/16"	898-D	.45



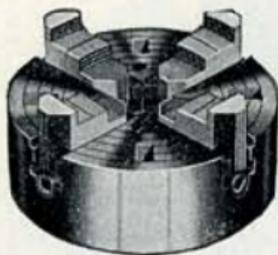
Made of carbon tool steel, hardened and ground.

Chucks for South Bend Lathes

4-Jaw Independent Lathe Chuck* (Class 400)

A Standard Weight Chuck

This precision chuck has four reversible independent solid jaws for chucking round or irregular work in a concentric or eccentric position. Face of chuck is ground and is graduated in inches. Prices include wrench and screws for fitting chuck-back. See fitting charges on page 23.



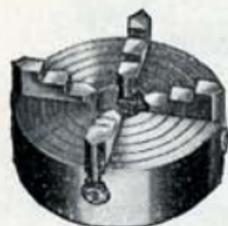
Cat. No. 4404.	4 1/2" Chuck.	6" capacity,	Ship. Wt. 11 lbs...	\$27.00
Cat. No. 4406.	6" Chuck.	7 1/2" capacity,	Ship. Wt. 21 lbs...	32.00
Cat. No. 4408.	8" Chuck.	9 1/2" capacity,	Ship. Wt. 35 lbs...	37.00
Cat. No. 4409.	9" Chuck.	11 1/2" capacity,	Ship. Wt. 42 lbs...	40.00
Cat. No. 4410.	10" Chuck.	12 1/2" capacity,	Ship. Wt. 51 lbs...	47.00

*Tested to run true to within .001" when fitted at factory.

4-Jaw Independent Lathe Chuck* (Class 800)

A Light Weight Chuck

A well built chuck, practical for light machining. Has four reversible independent jaws for chucking round or irregular work in a concentric or eccentric position. Prices include wrench and screws for fitting chuck-back, but not chuck-back or fitting of chuck to lathe. See fitting charges on page 23.



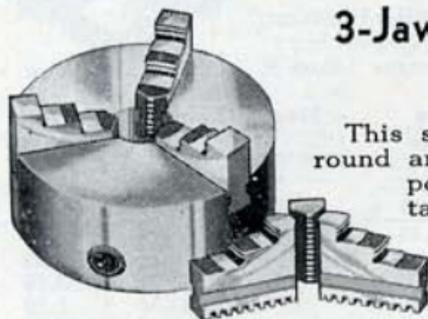
Cat. No. 4804.	4" Chuck.	5" capacity,	Ship. Wt. 4 lbs....	\$13.10
Cat. No. 4805.	5" Chuck.	6" capacity,	Ship. Wt. 4 3/4 lbs....	14.00
Cat. No. 4806.	6" Chuck.	7 1/4" capacity,	Ship. Wt. 6 5/8 lbs....	15.25

*Tested to run true to within .003" when fitted at factory.

3-Jaw Universal Lathe Chuck† (Class 400)

A Standard Weight Chuck

This self-centering precision chuck holds round and hexagonal work in a concentric position. The jaws are moved simultaneously by a scroll. Two sets of jaws are furnished: One set grips work on the outside, the other holds work internally. Prices include wrench and screws for fitting chuck-back. See fitting charges on page 23.

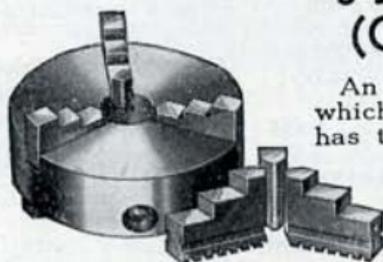


Cat. No. 3404.	4" Chuck.	4 1/4" capacity,	Ship. Wt. 7 1/2 lbs...	\$33.00
Cat. No. 3405.	5" Chuck.	5" capacity,	Ship. Wt. 11 lbs...	36.00
Cat. No. 3406.	6" Chuck.	6 1/8" capacity,	Ship. Wt. 20 lbs...	41.00
Cat. No. 3407.	7 1/2" Chuck.	7 1/2" capacity,	Ship. Wt. 32 lbs...	48.00
Cat. No. 3409.	9" Chuck.	9" capacity,	Ship. Wt. 45 lbs...	57.00

†Tested to run true to within .003" when fitted at factory.

3-Jaw Universal Lathe Chuck† (Class 800) A Light Weight Chuck

An excellent, well built, self-centering chuck which is practical for light machining. Chuck has two sets of jaws: One set for gripping work on the outside, the other set for holding work internally. Prices include wrench and screws for fitting chuck-back, but do not include chuck-back or fitting of chuck to lathe. See fitting charges on page 23.



Cat. No. 3804.	4" Chuck.	4 1/4" capacity,	Ship. Wt. 6 lbs.....	\$15.25
Cat. No. 3805.	5" Chuck.	5" capacity,	Ship. Wt. 6 3/4 lbs.....	17.00
Cat. No. 3806.	6" Chuck.	6 1/4" capacity,	Ship. Wt. 14 lbs.....	21.10

†Tested to run true to within .003" when fitted at factory.

Chucks for South Bend Lathes

Fitting Chucks to Lathes

A chuck-back is needed to fit 4-Jaw Independent Chucks and 3-Jaw Universal Chucks to the Lathe. Chuck-back is bored, threaded and mounted on lathe spindle nose. Then it is faced and turned to fit recess in back of chuck and bolted in place as shown at right.



Semi-Machined Chuck-Back



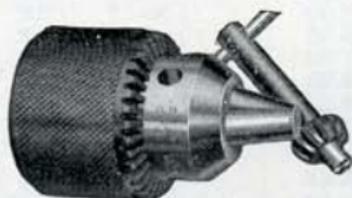
Chuck with Chuck-Back Attached.

Prices for Fitting Lathe Chucks to Lathe

	W'kshop	9 in.	11 in.	13 in.	16 in.
Semi-machined Chuck-Back.....	\$2.50	\$4.00	\$4.25	\$4.50	\$5.00
Fitting Chuck-Back to Chuck and Lathe....	1.50	2.50	3.00	3.50	4.00
Total for Chuck-Back Fitted to Chuck and to Lathe.....	\$4.00	\$6.50	\$7.25	\$8.00	\$9.00

Practical Sizes of Chucks for South Bend Lathes

Size of Lathe	W'kshop	9 in.	11 in.	13 in.	16 in.
4-Jaw Independent.....	6 in.	6 in.	6 in.	8 in.	10 in.
3-Jaw Universal.....	5 in.	5 in.	5 in.	6 in.	9 in.
Drill Chuck.....	1/2 in.	1/2 in.	1/2 in.	3/4 in.	1 in.

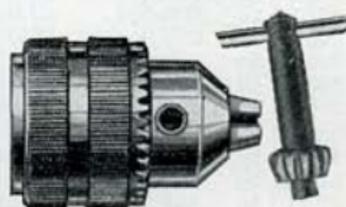


3-Jaw Drill Chuck*
Standard Weight

A powerful, accurate chuck for general drilling work. Has tempered steel jaws. Price includes pinion key, but not arbor.

No.	Capacity	Weight	Price
1200	0 to 3/8 in.	1 lb.	\$ 4.25
1201	0 to 1/2 in.	1 3/4 lbs.	6.75
1202	3/16 to 3/4 in.	2 3/4 lbs.	9.00
1203	3/8 to 1 in.	6 3/4 lbs.	15.00

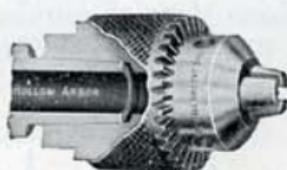
*Tested to run true to within .003" when fitted at factory.



3-Jaw Drill Chuck*
Medium Weight

This chuck is powerful, and accurate. Not as heavy in design as chuck at left. Price includes pinion key, but not arbor.

No.	Capacity	Weight	Price
219	0 to 3/8 in.	7/8 lb.	\$ 3.85
220	0 to 1/2 in.	1 1/2 lbs.	5.25
327	1/8 to 3/4 in.	2 3/4 lbs.	7.50
328	3/8 to 1 in.	5 1/4 lbs.	10.00



Hollow Spindle Chuck †

An ideal chuck for holding small rods, bars and all kinds of engine valves. Price includes pinion key and hollow arbor.

- No. 354-A, 1/8" to 5/8" cap. hollow drill chuck with hollow arbor for 13", and 16" lathes.....\$10.50
- No. 354-B, 3/16" to 3/4" cap. hollow drill chuck with hollow arbor for 13", and 16" lathes.....\$14.25

†Tested to run true within .002" when fitted at factory.



Headstock Spindle Chuck †

Screws on spindle nose. Has hollow spindle for holding small rods, bars and engine valves.

Size Lathe	1/8" to 5/8" Cap.		3/16" to 3/4" Cap.	
	No.	Price	No.	Price
9" W*	907-B	\$3.00	.....	.....
9"	907-A	9.00	925-A	\$11.25
11"	.....	.....	925-B	11.25
13"	.....	.....	925-C	11.25



Arbors are used for fitting drill chucks to the lathe. When ordering arbor only, state size and make of drill chuck, diameter and depth of arbor socket and size of lathe.

Arbors for Drill Chucks

Size Lathe	Morse Taper	Cat. No.	Price
Workshop	2	709	\$1.00
9, 11"	2	709	1.00
13"	3	713	1.50
16"	3	716	1.50

South Bend Easy Payment Plan

For the Purchase of Lathes, Attachments and Tools

Any South Bend Lathe, with or without attachments and tools, can be purchased on easy payment terms by making a small down payment with the order and paying the balance monthly. Lathe is shipped immediately on receipt of down payment. All accounts are carried by the South Bend Lathe Works and not by a finance company. The plan applies to the U. S. A. only.

You can determine the down payment of your order and the amount of monthly payments by referring to the schedule below. Locate the total amount of your order in column (1). On the same line you will find the amount of down payment, payment each month, amount for financing balance, and number of months to pay.

SCHEDULE OF EASY PAYMENT TERMS

If Total Price of Your Order Amounts to	Amount of Down Payment	Payment Each Month	Amount for Financing Balance	Approx. No. of Months to Pay*
\$ 70.00 to \$ 80.00	\$ 19.00	\$ 6.50	\$ 6.00	10
80.01 to 90.00	21.00	7.00	6.50	10
90.01 to 100.00	24.00	7.00	7.00	11
100.01 to 110.00	28.00	7.00	7.50	12
110.01 to 120.00	29.00	8.00	7.50	12
120.01 to 130.00	30.00	8.50	8.00	12
130.01 to 140.00	31.00	9.00	8.50	12
140.01 to 150.00	32.00	10.00	9.00	12
150.01 to 175.00	35.00	11.50	10.00	12
175.01 to 200.00	40.00	13.00	11.50	12
200.01 to 225.00	45.00	15.50	13.00	12
225.01 to 250.00	50.00	17.00	14.50	12
250.01 to 275.00	55.00	18.50	16.00	12
275.01 to 300.00	60.00	19.50	17.50	12
300.01 to 325.00	65.00	22.00	19.00	12
325.01 to 350.00	70.00	24.00	20.50	12
350.01 to 375.00	75.00	25.00	23.50	13
375.01 to 400.00	80.00	26.00	25.00	13
400.01 to 450.00	90.00	26.00	29.00	14
450.01 to 500.00	100.00	29.00	32.50	14
500.01 to 550.00	107.50	30.50	38.00	15
550.01 to 600.00	115.00	33.50	41.00	15

*In some cases there will be one more month depending on the amount of the total order.

No Down Payment—36 Months to Pay

5% Interest Per Year

You may purchase any size or type South Bend Lathe, other machinery, attachments and shop tools under our special extended payment plan. No down payment is required, and up to 36 months is allowed in which to pay for the equipment. The first payment becomes due 30 days from date of purchase of equipment, balance payable in small monthly payments over a period of 36 months. Interest rates only 5% a year. For further information and details call at our store or write.

How to Run a Lathe

A Copy Free with Each South Bend Lathe

"How to Run a Lathe", a valuable instruction book, contains 160 pages, size 5 1/4" x 8". This book thoroughly covers the fundamental operations of the modern lathe and contains over 300 illustrations on the erection, installation and operation of the lathe. Correct and modern methods for handling over 400 machine operations on the lathe are fully described and illustrated.

More than a million and a half copies of "How to Run a Lathe" are in use throughout the world, printed in English, Spanish, Portuguese and Chinese.

Price of book with paper binding, 25c. Coin or stamps of any country accepted.

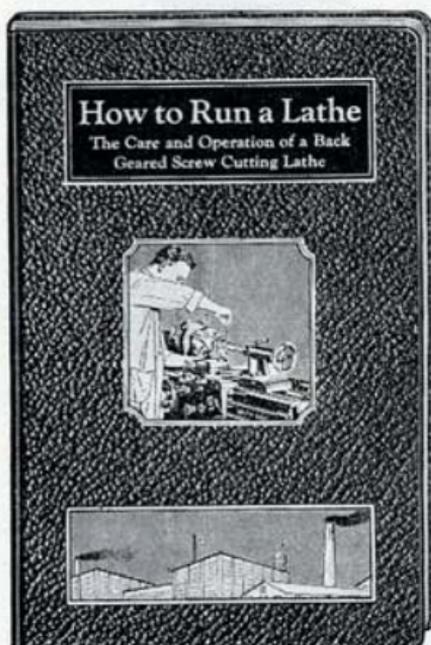


Fig. 21. 32nd Edition.

Users in Philadelphia and Vicinity

More than 3,000 South Bend Lathes are used in Philadelphia and within a radius of one hundred miles. A few of the prominent users of South Bend Lathes in this territory are listed below.

Government and Municipal

Licon Airways
Central Airport
Burlington County Hgwy. Shop
Eastern State Penitentiary
Mt. Sinai Hospital
Navy Yard
U. S. Marine Corp.
U. S. Mint
City of Philadelphia

Laboratories

Aircraft Control Co.
Automatic Temperature Control Co.
Joseph Hofmann
Victor X-Ray Corp.
White Research Laboratory
Television Laboratory, Ltd.
Sun Oil Co. Laboratory

Electrical and Radio

RCA Manufacturing Co.
Radio Condenser Co.
Westinghouse Elec. & Mfg. Co.
Leeds & Northrup Co.
Atwater-Kent Mfg. Co.
Cleverly Electric Works
General Electric Co.
International Resistance Co.
Proctor & Schwartz Co.
Phileo Radio Co.
Western Electric Co.

Automotive

Buick Motor Co.
Auto Gear & Parts Co.
Le Bear Motor Co.
Quaker City Motor Parts Co.
E. P. Rotzell Co.
Static Motors
Swain-Hickman Co.
United Motor Service, Inc.
The White Co.
Firestone Tire & Rubber Co.
Morris Auto Parts Co.
Gaul, Derr & Shearer Co.
Wilkening Manufacturing Co
Ost & Ost Auto Products
A. S. Roberts Mach. & Grinding Co.

Public Utilities

Public Serv. Co-Ordinated Trspt.
Delaware County Electric Co.
The Aronimink Transport Co.
The Bell Tel. Co. of Penna.
Phila Gas Works
Phila. Sub. Gas & Elec. Co.
Eastern Shore Gas & Elec. Co

Oil Industry

Sun Oil Co.
Sinclair Refining Co.
Crew Levick Co.
Gulf Refining Co.
Atlantic Refining Co.

Buildings

Fidelity Building Corp.
Packard Building

Philadelphia Newspapers

Philadelphia Inquirer
Public Ledger

Schools

Board of Educ. (Audubon)
Board of Educ. (Bridgeton)
N. J. Manual Training School
Board of Educ. (Glassboro)
Board of Educ. (Trenton)
State Normal School
N. J. School for Deaf
State Teachers College
Board of Educ. (Chester)
Board of Educ. (Eddystone)
Board of Educ. (Cheltenham Township, Elkins Park)
Board of Educ. (Norristown)
Board of Educ. (Philadelphia)
Board of Educ. (Phoenixville)
Board of Educ. (Pottstown)
Haverford College
University of Pennsylvania
Mechanical and Electrical School (Philadelphia)
Temple University
The Hill School (Pottstown)
Board of Educ. (Springfield Twn.)
Board of Educ. (Haverford Twn.)
Board of Educ. (Radnor)
Board of Educ. (Ridley Twn.)
Board of Educ. (Claymont)
Board of Educ. (Sharon Hill)
Board of Educ. (Wilmington)
Swarthmore College
Franklin Institute
Villanova College

General

United States Pipe & Fdry. Co.
American Cigar Co.
American Dredging Co.
Continental Can Co.
New York Shipbuilding Corp.
E. I. Dupont de Nemours Co.
Kimble Glass Co.
Luzerne Rubber Co.
Keasbey & Mattison Co.
Taylor & Co.
Adam Scheidt Brewing Co.
Wildman Manufacturing Co.
Geo. W. Watt Woolen Co.
Continental Diamond Fibre Co.
Sun Shipbuilding & Drydock Co.
Baldwin Locomotive Works
Eddington Metal Specialty Co.
Victor Plush Mills
Congoleum-Nairn Co.
Viscose Co.
Synthane Corp.
Chas. Lennig Co.
Abbots Alderney Dairies
Allen Sherman Hoff Co.
Consolidated Cigar Corp.
Globe Ticket Co.
Monarch Manufacturing Works
Vick Chemical Co.
Chromotone Corp.
Pennsylvania Shipping Co.
The Great A. & P. Tea Co.
Doehler Die Casting Co.
Pusey & Jones Corp.

W. B. Rapp, Machinery

132 No. Third St.

Phone: Market 4345

Philadelphia, Pa.



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