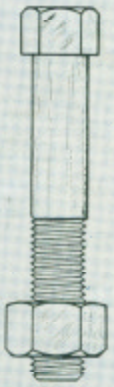
South Bend Machine Shop Course

For Apprentices and Students in Machine Shops

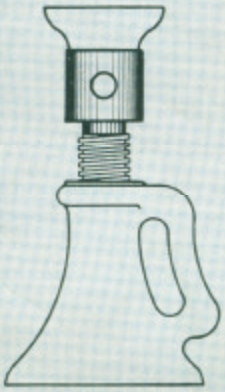
Students at work in a School Shop

Machinist's Hammer
Project No. 24

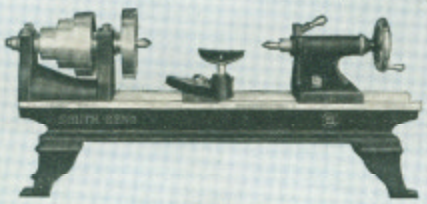


One-Inch Bolt and Nut
Project No. 13

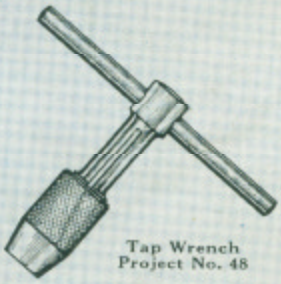
Bulletin No. 55



Jack Screw
Project No. 44



8-inch Bench Lathe
Project No. 68



Tap Wrench
Project No. 48

1928

South Bend Lathe Works
425 East Madison St., South Bend, Indiana

South Bend Machine Shop Course

The South Bend Machine Shop Course is based on production methods used in the building of machinery in industry. The Instruction Material is outlined and so arranged that the apprentice or student will become familiar with the best methods employed in present day machine shop practice.

3,000 Schools Using This Course

The South Bend Machine Shop Course has been very popular. More than 3000 Schools and nearly as many industrial plants and Railroad Shops use this Course. The Textbook used "How to Run a Lathe" enjoys nation wide reputation and is used by leading shop men everywhere.

30 Years' Experience to Develop Course

The Course affords a thorough training in machine shop practice for the apprentice and student. It represents, in addition to an investment of more than $25,000, the carefully selected contributions of leading engineers, manufacturers and mechanics, gathered over a period of thirty years.

Outline of the Machine Shop Course

52 Projects — Job Sheets — Blue Prints — Textbook

The South Bend Machine Shop Course consists of 52 practical Projects covering the fundamental operations in machine shop practice. Job Sheets and Blue Prints have been worked out for each Project. Textbook, "How to Run a Lathe" is used. Material such as Castings, Steel and Hardware parts are furnished at the prices shown in the tabulation on page 3.

Copies of Drawings and Job Sheets

Duplicate copies of Blue Prints and Job Sheets of Projects in the South Bend Machine Shop Course can be made by your Mechanical Drawing Department and Business Department, thus enabling the Shop Instructor to use them for lectures, imparting the information to the class instead of to the individual boy.

Wide Range of Machine Shop Work

The Course consists of 52 Projects all of which are practical, useful and have a market value. The Projects cover a wide range of Machine Work beginning with simple elementary jobs and gradually advancing so that the more advanced Projects require skill equal to that of the expert mechanic.

Drawings and Blue Prints for Projects

Drawings for this Course should be made of standard size sheets 12 x 18-in. Each part of the Project is shown in detail on the Blue Print—also an assembly drawing which is in conformity with modern Engineering and Machine Shop Practice. A sample Blue Print, in reduced form, is shown on page 4.

Job Sheets for Each Project

Job Sheets 8½ x 14-in. compiled in folio form accompany the Blue Prints of each Project. Job Sheets explain the work from start to finish following the methods used in modern Machine Shop Practice. A sample Job Sheet is illustrated and explained on page 5.

Textbook on Lathe Operation

The Textbook "How to Run a Lathe" describing the fundamental operations on Screw Cutting Lathes is used in conjunction with the Course and is referred to in the Job Sheets. This Book is further illustrated and described on page 14 of this Bulletin.

Rough Castings for Projects

When a School is not in position to get castings locally we can supply them at the prices shown in the tabulated list on page 3. Some Schools prefer to copy the drawings, develop their own patterns and then order Castings locally or from a nearby foundry.

Note: Some Projects require planer work such as the Lathe Bed of the 8-Inch Bench Lathe Project No. 68. If a School is not equipped to do this work we can do it for them charging only the actual expense incurred in doing the job.

Steel and Hardware Parts for Projects

There are some Projects that require Steel and Hardware parts. If it is not possible to purchase these parts in your community we can supply them at the prices listed on page 3. These prices do not include the cost of postage or express but are f. o. b. South Bend.

Material and Castings for Projects

Prices on the Instruction Material such as Blue Prints and Job Sheets include postage. The prices of Rough Castings, Steel and Hardware parts on page 3 are f. o. b. factory, packed and boxed ready for shipment. They can be sent by express or freight as the customer desires.

Prices of Machine Shop Projects

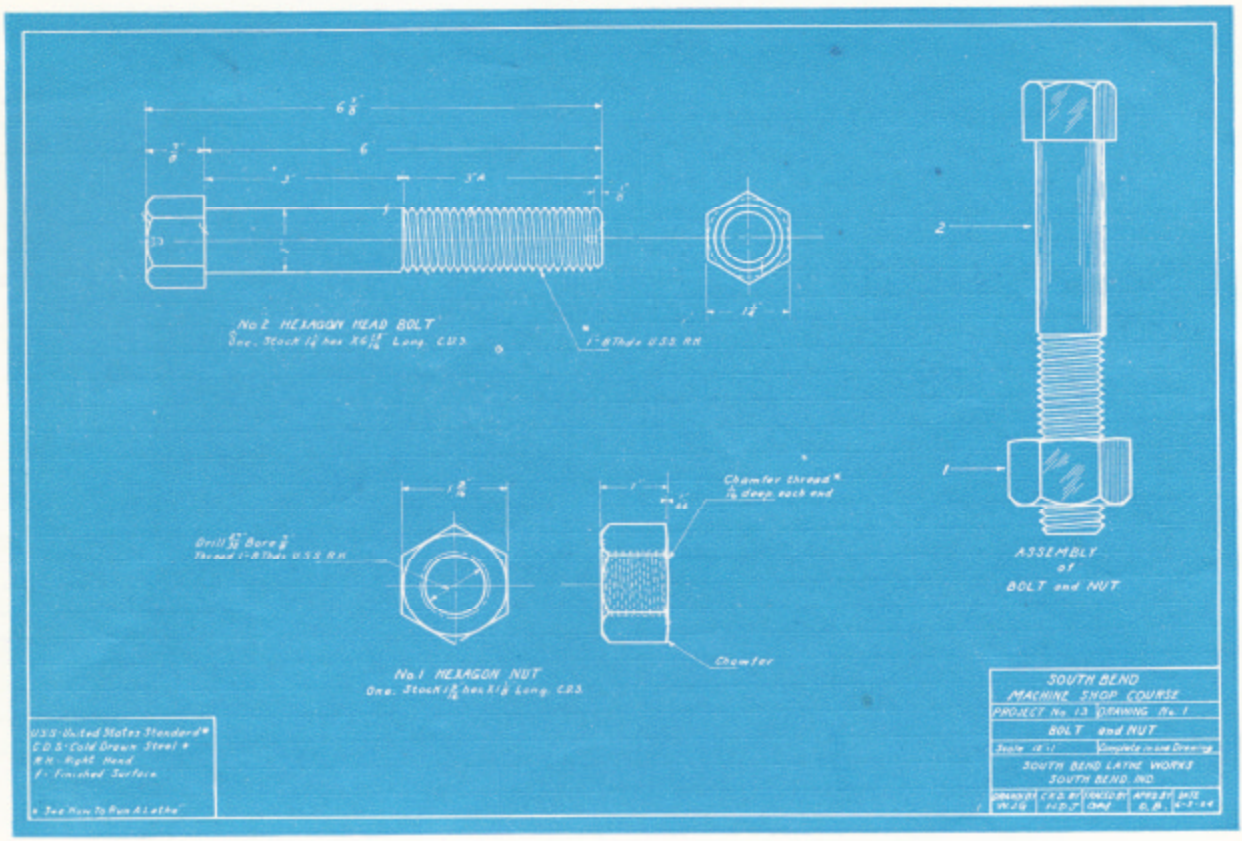
The prices of Blue Prints and Job Sheets required for Projects include postage. Rough Castings, Hardware and Steel Parts are quoted f. o. b. South Bend. If one or more Projects are desired in quantity, special prices will be quoted upon application, based on the type of Project and the number desired.

52 Practical Machine Shop Projects

Project Number	Name of Project	Projects Illustrated	No. of Blue Prints	No. of Job Sheets	Approx. Weight of Finished Projects	PRICES		
						Blue Prints and Job Sheets Postpaid	Rough Castings F. O. B. South Bend	Steel and Hardware F. O. B. South Bend
1	Nail Set	6	1	2	¼ lb.	$ .45		$ .15
2	Center Punch and Drift Punch	6	1	2	½ lb.	.45		.30
3	Plumb Bob	6	1	2	1 lb.	.45		.25
4	Steel Mandrel, or Arbor, for Lathe	6	1	3	2 lbs.	.55		.45
5	Tap Wrench, for ⅜-in., 7/16-in. and ½-in. Taps	6	1	2	3½ lbs.	.45		.45
6	60° Lathe Centers, Head and Tail	6	1	2	3½ lbs.	.45		1.50
7	Drill Chuck Arbor	6	1	2	2 lbs.	.45		.45
8	Drill Pad for Lathe	6	1	2	3 lbs.	.45	$ .75	
9	Crotch Center for Lathes	6	1	2	2½ lbs.	.45	.75	
10	Blacksmith's Drill Chuck	6	1	3	2½ lbs.	.55	.75	
11	Cup Center, for Wood Turning	6	1	4	1½ lbs.	.70		.55
12	Spur Center, for Wood Turning	6	1	3	1½ lbs.	.55		.55
13	1-in. Bolt and Nut	6	1	4	5 lbs.	.70		.60
14	Pipe Center and Shank	6	1	5	10 lbs.	.80	3.00	.90
15	Screwdriver, Steel	7	1	4	1 lb.	.70		.55
17	Tool Post for a Lathe	7	1	8	6 lbs.	1.15		1.15
18	"C" Clamp	7	1	6	2 lbs.	.90		.75
20	Machinist's Clamp	7	1	4	1½ lbs.	.70		.90
21	Bell Centering Punch	6	1	4	2 lbs.	.70	.75	.45
22	Center Punch, with Sliding Sleeve Hammer	7	1	5	2 lbs.	.80		.75
23	Clamp Lathe Dog	7	1	5	3 lbs.	.80		.75
26	Taper Mandrel with Expansion Sleeve	7	1	6	20 lbs.	.90		2.25
27	Cast-Iron Pulley	7	1	2	12 lbs.	.45	1.90	
27½	Thread Gauge	6	1	3	½ lb.	.70		.30
29	Boring Bars for the Lathe	7	1	3	8 lbs.	.55	.30	2.25
30	Milling Cutter Arbor for Milling in Lathe	7	1	5	5 lbs.	.80	.30	.90
31	Morse Taper Standard Test Plug	7	1	4	2 lbs.	.70		.40
32	Morse Taper Standard Test Socket	7	1	4	2 lbs.	.70		.55
36	Machinist's Surface Gauge	8	1	9	5 lbs.	1.30	.75	.40
38	Chuck Back for Lathe Chucks	8	1	2	10 lbs.	.45	1.50	
39	Small Bench Vise, 2¾-in. Jaws	8	1	9	18 lbs.	1.30		3.75
41	Mercury Plumb Bob	8	1	3	1 lb.	.55		.75
44	Jack Screw for Heavy Duty	8	1	2	21 lbs.	.45	3.75	1.50
46	Cabinetmaker's Vise	8	1	6	25 lbs.	.90	1.95	2.25
47	Adjustable Tap Wrench	8	1	4	1½ lbs.	.70		.75
54	Polishing Head for Bench	9	3	7	30 lbs.	1.35	3.00	1.50
55	6-Inch Improved Water Motor	11	3	6	12 lbs.	1.20	2.65	.75
56	Draw-in Chuck Attach. with Hand Wheel, for Lathe	8	1	4	10 lbs.	.70	.45	3.30
58	Arbor Press	11	3	5	115 lbs.	1.10	12.75	4.50
62	Hand Power Emery Grinder	11	6	10	22 lbs.	2.15	2.10	1.20
64	Lathe Set, Head Stock, Tail Stock, and Tool Rest for Wood Turning	10	5	10	58 lbs.	2.00	4.50	1.95
64½	Countershaft for Lathe Set	10	3	3	43 lbs.	1.00	8.10	1.20
65	10-Inch Bench Drill Press	9	6	15	88 lbs.	2.75	27.00*	
66	8-inch Emery Grinder	10	4	6	50 lbs.	1.35	11.90	3.00
66½	Floor Column, Pan and Waterpot for 8-in. Grinder	10	7	2	80 lbs.	1.20	13.35	.25
67	Countershaft for 8-Inch Emery Grinder	10	4	4	45 lbs.	1.15	6.90	.70
68	8-Inch Bench Lathe	9	11	17	120 lbs.	3.75	16.20	6.70
68½	Slide Rest for 8-Inch Bench Lathe	9	4	8	16 lbs.	1.60	1.05	2.10
69	Countershaft for 8-Inch Bench Lathe	9	3	4	43 lbs.	1.00	8.10	1.20
70	¼ H. P. Gasoline Engine, Vertical, Air Cooled	11	9	15	35 lbs.	3.20	12.00*	
71	¾ H. P. Gasoline Engine, Horizontal	11	6	9	20 lbs.	3.00	12.00	4.00
79	3½ H. P. Marine Gasoline Engine, 2-cycle, Water Cooled	11	7	18	145 lbs.	3.25	65.00*	

*Prices include both Castings and Steel Parts. Prices of Engines do not include ignition coils, spark plugs or mixing valves.

Blue Prints for Each Project in Machine Shop Course



Blue Print (Actual Size 12" x 18") for Project No. 13—1-Inch Bolt and Nut

Blue Prints Furnished Give Complete Working Details

The illustration above shows a reproduction of a typical Project Blue Print. One or more Blue Prints, as required, giving complete working details are furnished for each Project in the course. They are carefully drawn to scale and show each part of the Project in detail also an assembly drawing which is in conformity with modern engineering practice.

Blue Print for Project No. 13

The Blue Print for Project No. 13—1-In. Bolt and Nut presents the work in two parts. Part I the Hexagon Nut; Part II the Hexagon Head Bolt. Detailed drawings of each part are shown also an assembly drawing showing the completed Bolt and Nut. The Job Sheet for this Project is illustrated on page 5

Industrial Form of Blue Print and Job Sheet

The Blue Prints and Job Sheets furnished for use in the South Bend Machine Shop Course are standard in size as used in industry. The Blue Prints are 12-in. x 18-in. The Job Instruction Sheets are 8½-in. x 14-in.

Blue Prints are similar in every respect to the regular working drawings used in the large manufacturing plants and represent the best methods employed in modern shop practice.

For the Lecture Room

Lectures given by the Instructor from the Blue Prints and accompanying Job Sheets familiarize the students with the detailed work on each project. Correct procedure is then followed in the shop.

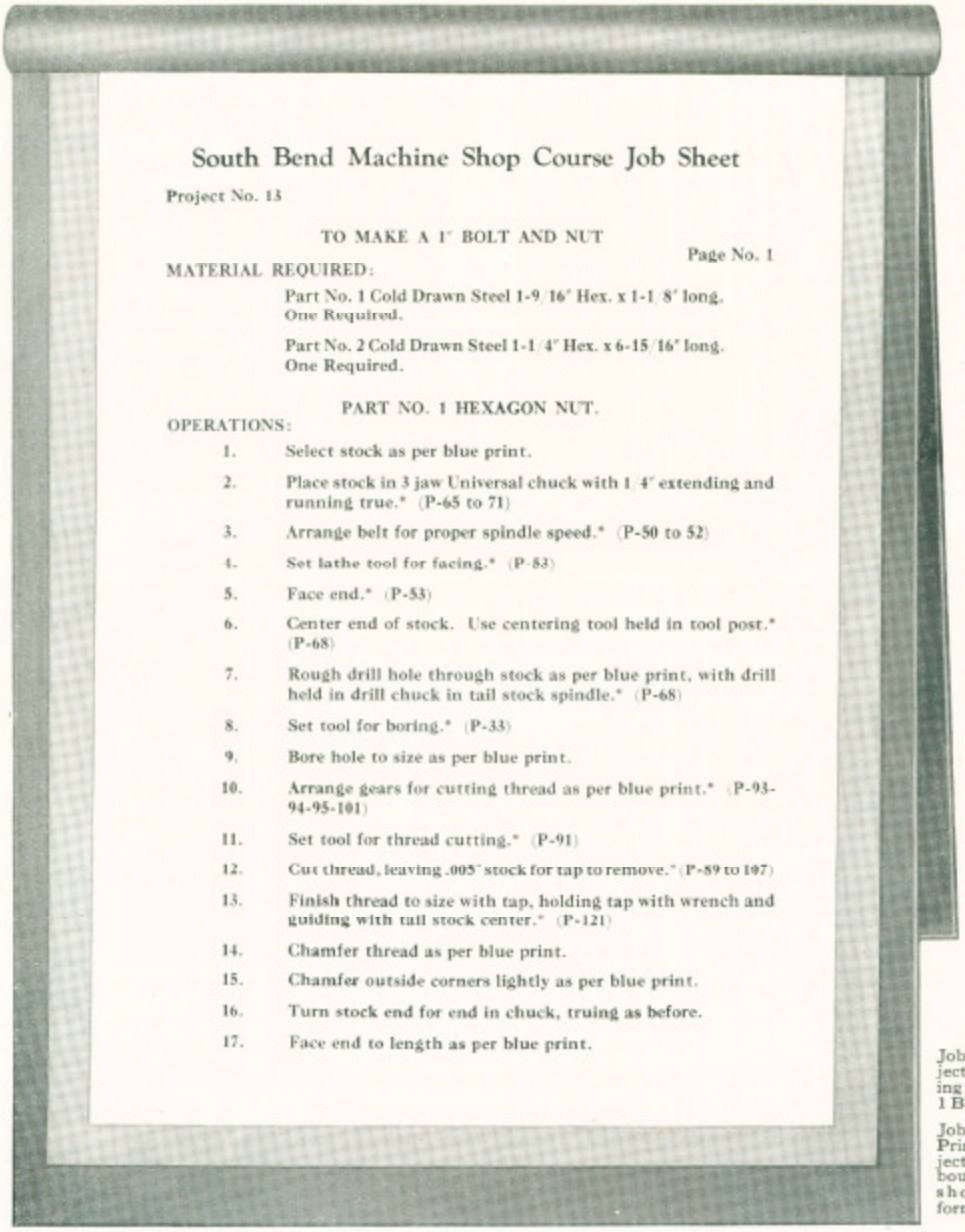
Copies of Blue Prints and Job Sheets

Any of the Blue Prints and Job Sheets used in the South Bend Machine Shop Course may be copied by your Business Department and Mechanical Drawing Department in order to provide copies for shop class use.

Prices of Job Sheets and Blue Prints

Job Sheets and Blue Prints for each Project are bound together complete in one folio, size 8½-in. x 14-in. The prices include postage. If one or more Projects are desired in quantity, special prices will be quoted upon application.

Job Sheets for Each Project in Machine Shop Course



South Bend Machine Shop Course Job Sheet

Project No. 13

TO MAKE A 1" BOLT AND NUT

Page No. 1

MATERIAL REQUIRED:

Part No. 1 Cold Drawn Steel 1-9/16" Hex. x 1-1/8" long. One Required.

Part No. 2 Cold Drawn Steel 1-1/4" Hex. x 6-15/16" long. One Required.

PART NO. 1 HEXAGON NUT.

OPERATIONS:

1. Select stock as per blue print.
2. Place stock in 3 jaw Universal chuck with 1/4" extending and running true.* (P-65 to 71)
3. Arrange belt for proper spindle speed.* (P-50 to 52)
4. Set lathe tool for facing.* (P-83)
5. Face end.* (P-53)
6. Center end of stock. Use centering tool held in tool post.* (P-68)
7. Rough drill hole through stock as per blue print, with drill held in drill chuck in tail stock spindle.* (P-68)
8. Set tool for boring.* (P-33)
9. Bore hole to size as per blue print.
10. Arrange gears for cutting thread as per blue print.* (P-93-94-95-101)
11. Set tool for thread cutting.* (P-91)
12. Cut thread, leaving .005" stock for tap to remove.* (P-89 to 107)
13. Finish thread to size with tap, holding tap with wrench and guiding with tail stock center.* (P-121)
14. Chamfer thread as per blue print.
15. Chamfer outside corners lightly as per blue print.
16. Turn stock end for end in chuck, truing as before.
17. Face end to length as per blue print.

Job Sheet for Project No. 13 consisting of 4 pages and 1 Blue Print.

Job Sheets and Blue Prints for each Project in Course are bound together as shown, in folio form, size 8½"x14"

Job Instruction Sheets Explain the Work

Job Sheets are furnished for each Project giving specific instructions covering the proper procedure for doing the work. The Job Sheets have been worked out with the thought of acquainting the boys with the best methods employed in actual shop practice in industrial plants. One or more Job Sheets depending on the number required for the Project are furnished and give complete working details.

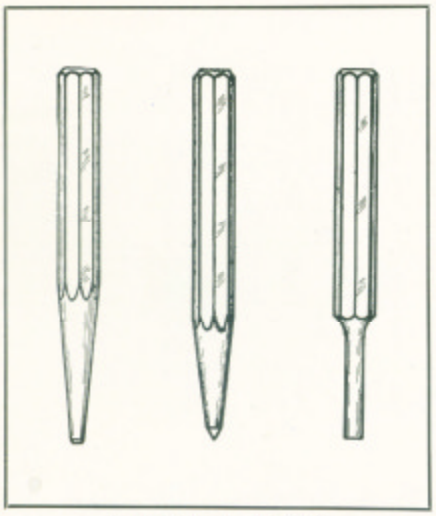
Job Sheet for Project No. 13

The Job Sheet for Project No. 13, 1-inch Bolt and Nut, consists of 4 pages and 1 Blue Print. The Project is handled in two parts. The first and second pages show the material required for producing both parts. The necessary operations for completing Part I, the Nut, follow in proper sequence. The operations for completing Part II, the Bolt, appear on pages 3 and 4.

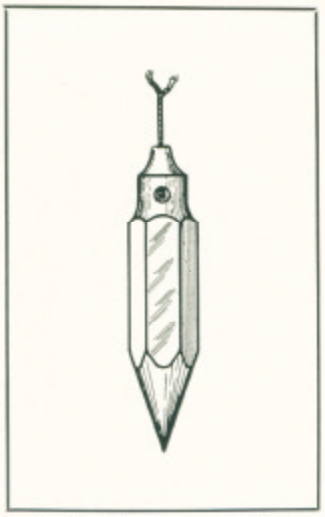
Job Sheets Explain How to Do The Work Step-by-Step

Job Instruction Sheets are made up to cover each Project listed in the South Bend Machine Shop Course. The Job Sheets are very thorough—each point has been worked out showing every operation step-by-step. They consist of Blue Prints and Instruction Sheets bound in folio form size 8½-in. x 14-in.

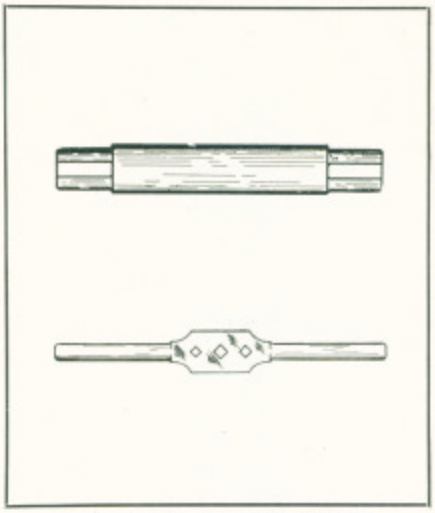
Illustrations of Practical Machine Shop Projects



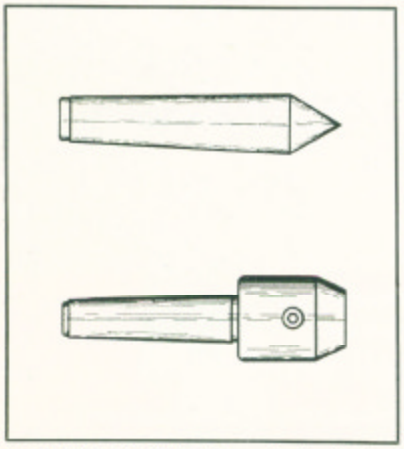
Project No. 1. Nail Set
Project No. 2. Center Punch and Drift Punch



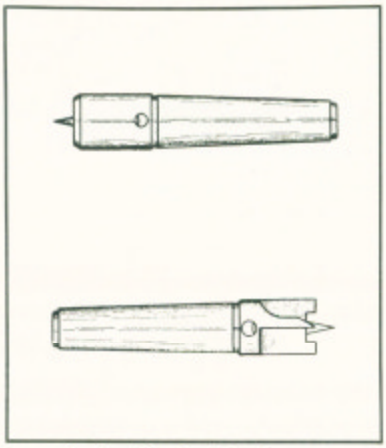
Project No. 3. Plumb Bob



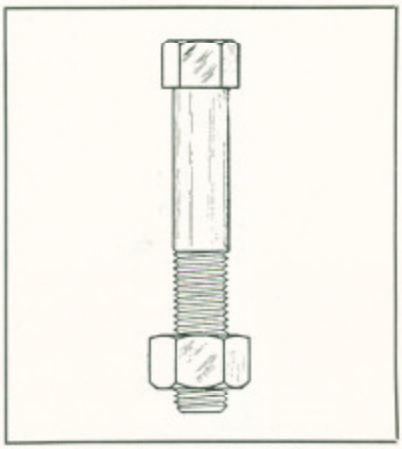
Project No. 4. Mandrel for Lathe
Project No. 5. Tap Wrench



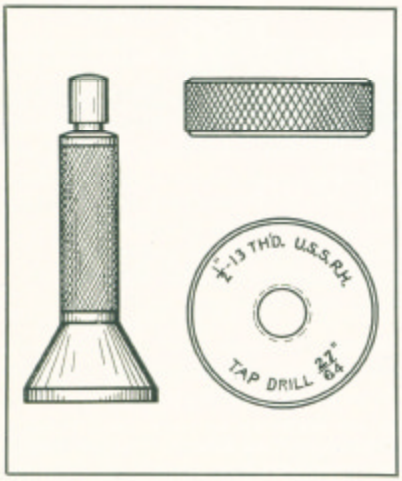
Project No. 6. Sixty Degree Lathe Center
Project No. 10. Blacksmith's Drill Chuck



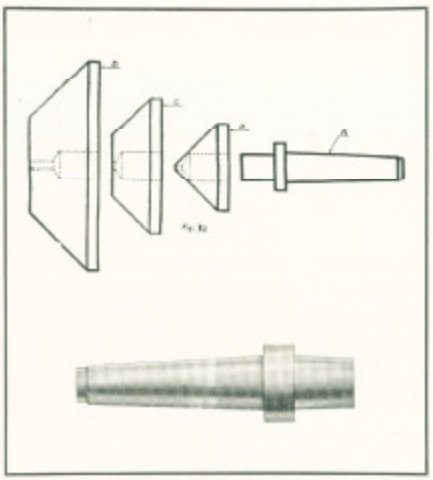
Project No. 11. Cup Center
Project No. 12. Spur Center



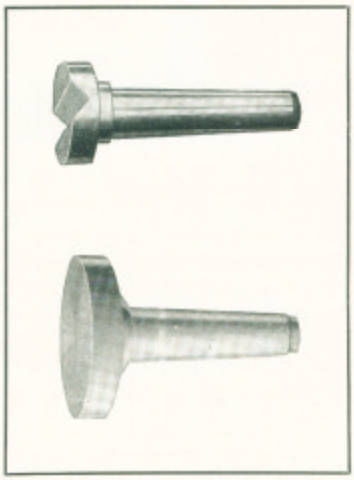
Project No. 13. One-Inch Bolt and Nut.



Project No. 21. Bell Centering Punch
Project No. 27½. Thread Gauge

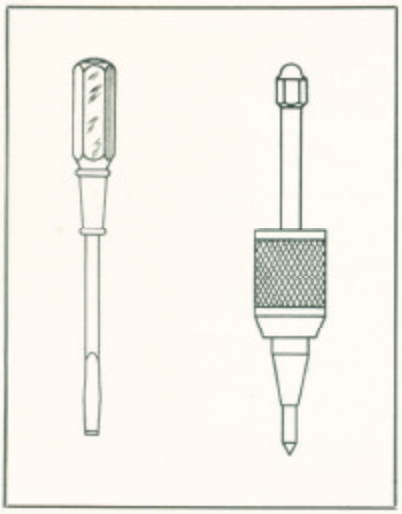


Project No. 14. Pipe Center and Shank
Project No. 7. Drill Chuck Arbor

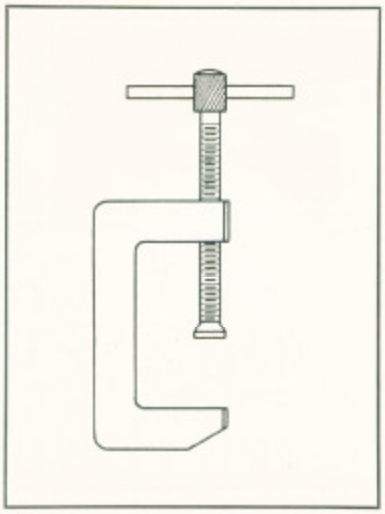


Project No. 9. Crotch Center for Lathe
Project No. 8. Drill Pad for Lathe

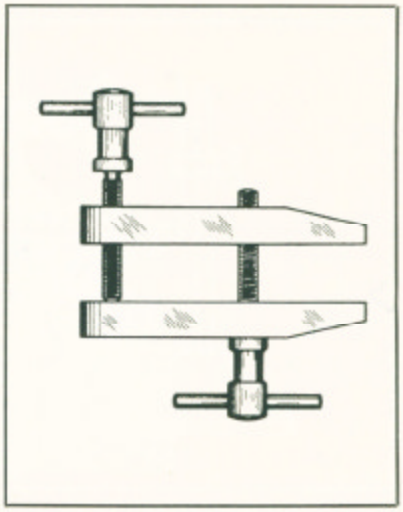
Illustrations of Practical Machine Shop Projects



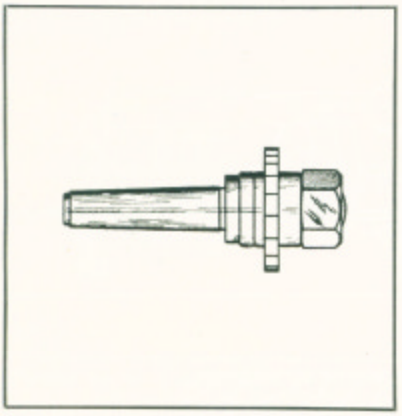
Project No. 15. Screwdriver, Steel
Project No. 22. Center Punch, with Sliding Sleeve Hammer



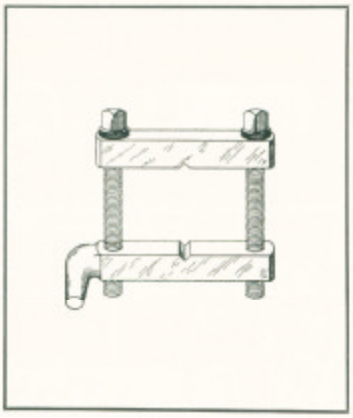
Project No. 18. "C" Clamp



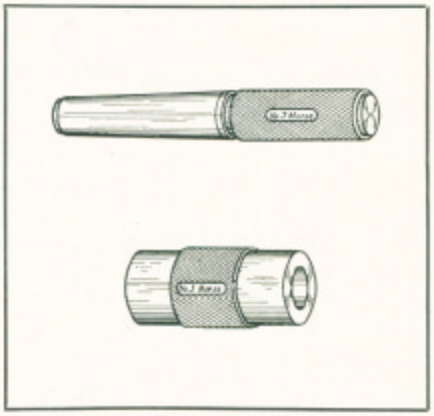
Project No. 20. Machinist's Clamp



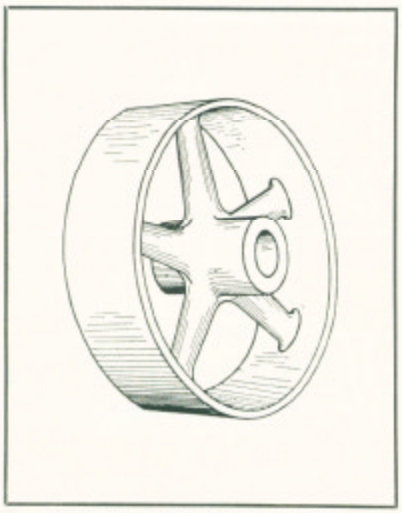
Project No. 30. Milling Cutter Arbor for Milling in Lathe



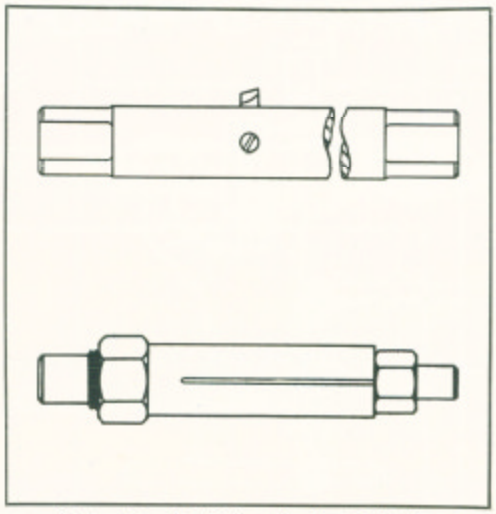
Project No. 23. Clamp Lathe Dog



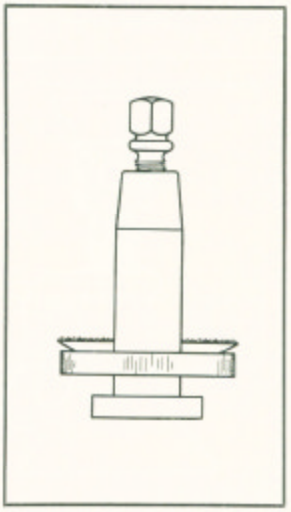
Project No. 31. Morse Taper Standard Test Plug
Project No. 32. Morse Taper Standard Test Socket



Project No. 27. Cast-Iron Pulley

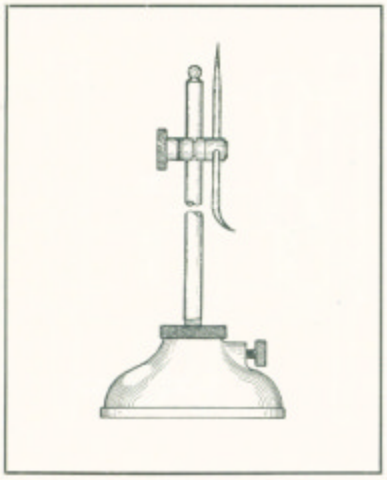


Project No. 29. Boring Bar for the Lathe
Project No. 26. Taper Mandrel with Expansion Sleeve

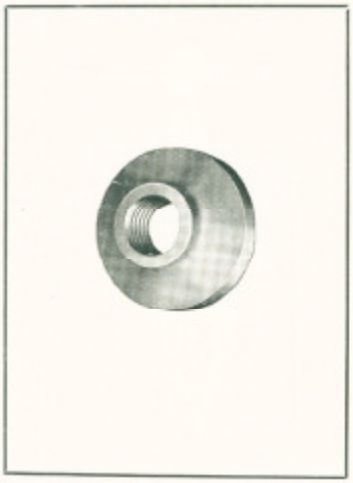


Project No. 17. Tool Post for a Lathe

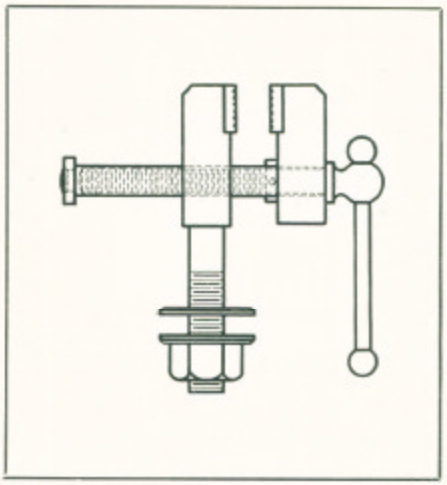
Illustrations of Practical Machine Shop Projects



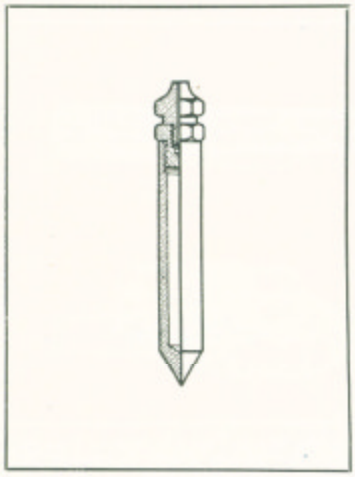
Project No. 36.
Machinist's Surface Gauge



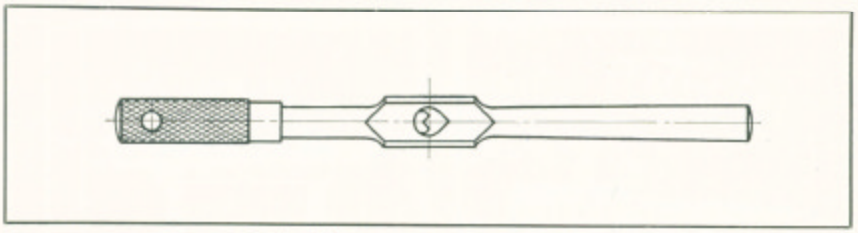
Project No. 38. Chuck Back for Lathe Chucks



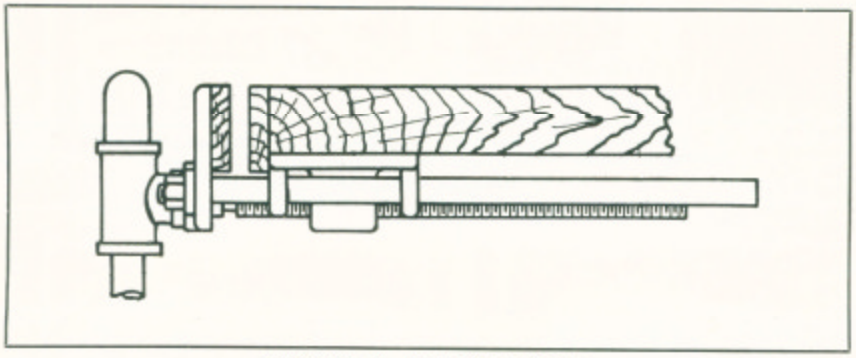
Project No. 39. Small Bench Vise, 2¾-in. Jaw



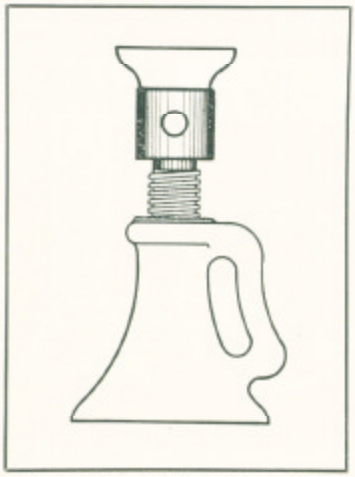
Project No. 41. Mercury Plumb Bob



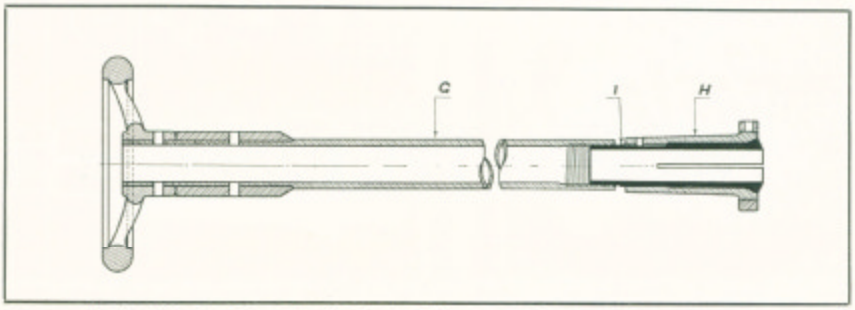
Project No. 47. Adjustable Tap Wrench



Project No. 46. Cabinetmaker's Vise

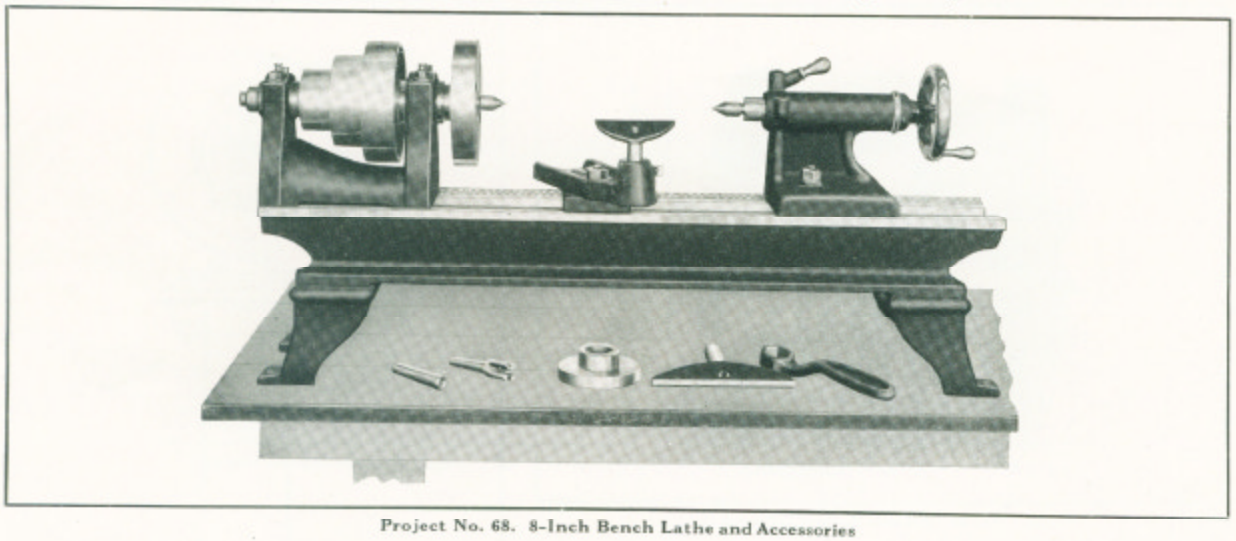


Project No. 44. Jack Screw, for Heavy Duty

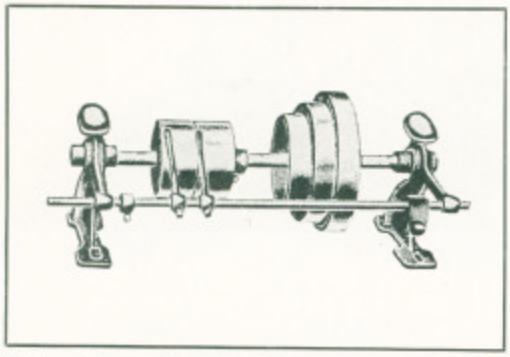


Project No. 56. Draw-in Chuck Attachment with Hand Wheel, for Lathe

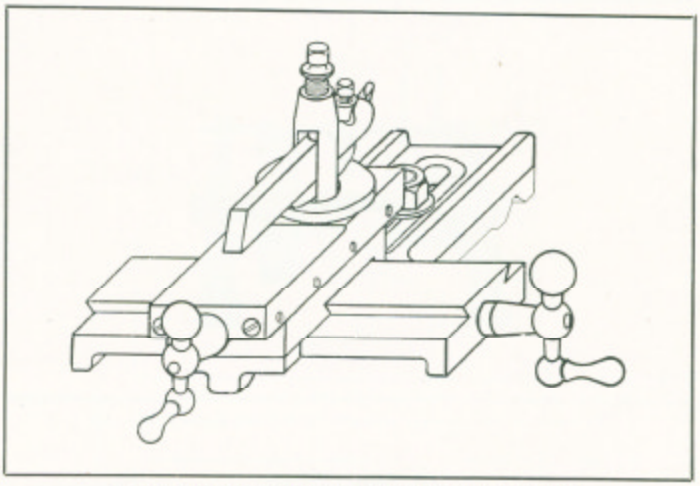
Illustrations of Practical Machine Shop Projects



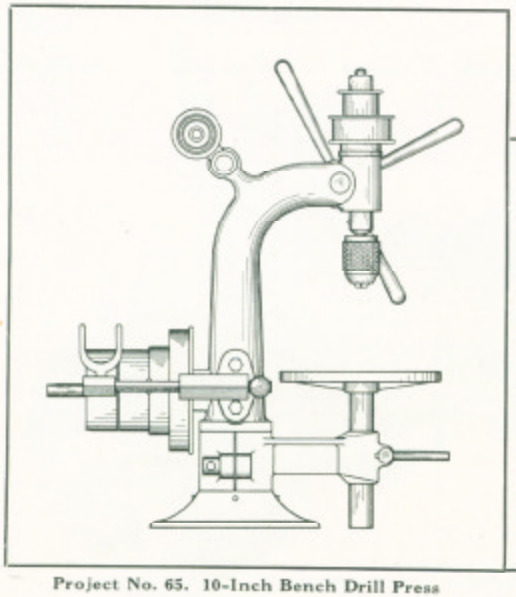
Project No. 68. 8-Inch Bench Lathe and Accessories



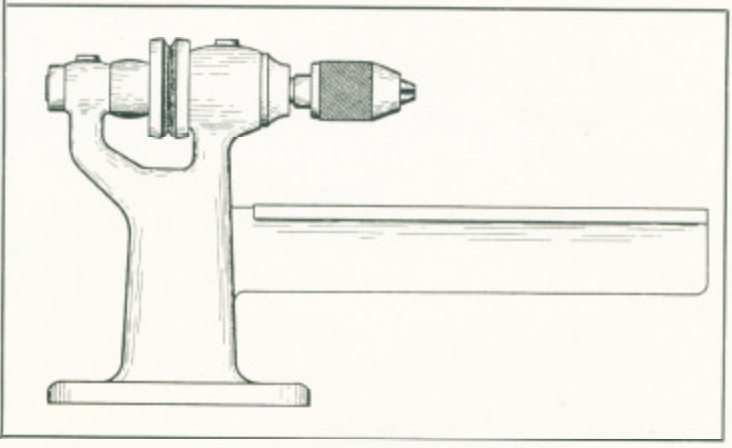
Project No. 69. Countershaft for 8-In. Bench Lathe



Project No. 68½. Slide Rest for 8-In. Bench Lathe

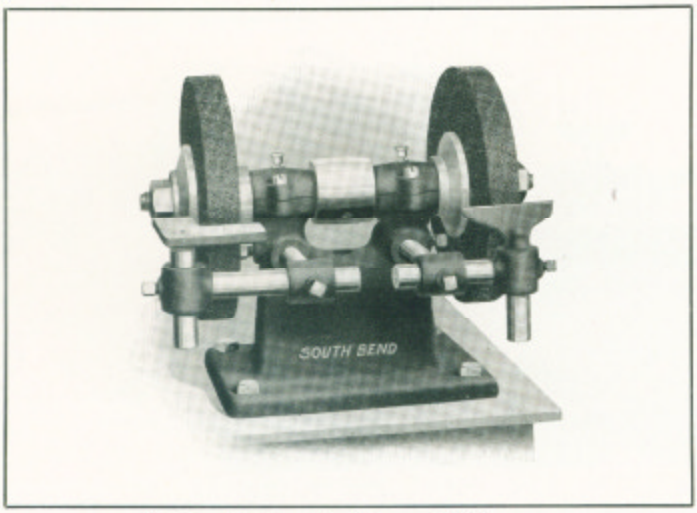


Project No. 65. 10-Inch Bench Drill Press

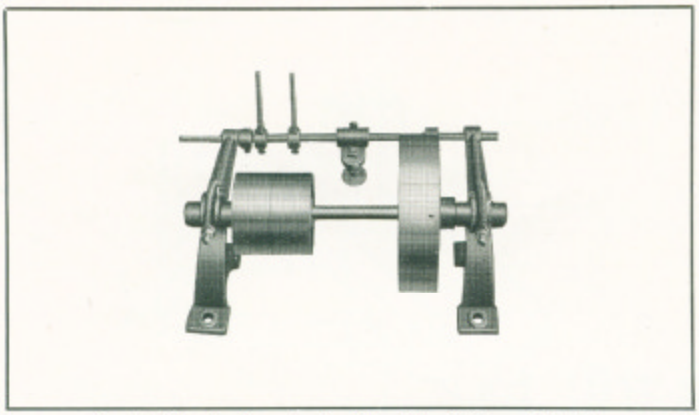


Project No. 54. Polishing Head, for Bench

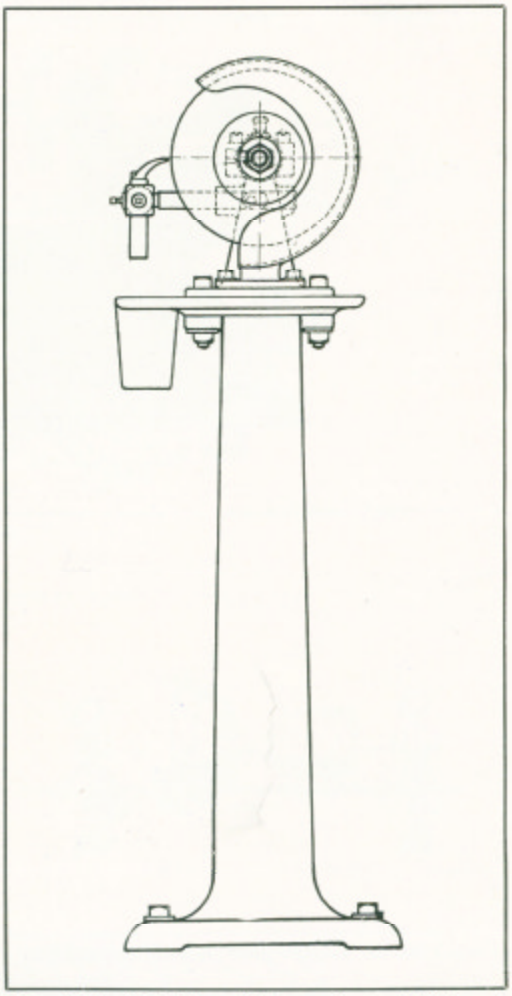
Illustrations of Practical Machine Shop Projects



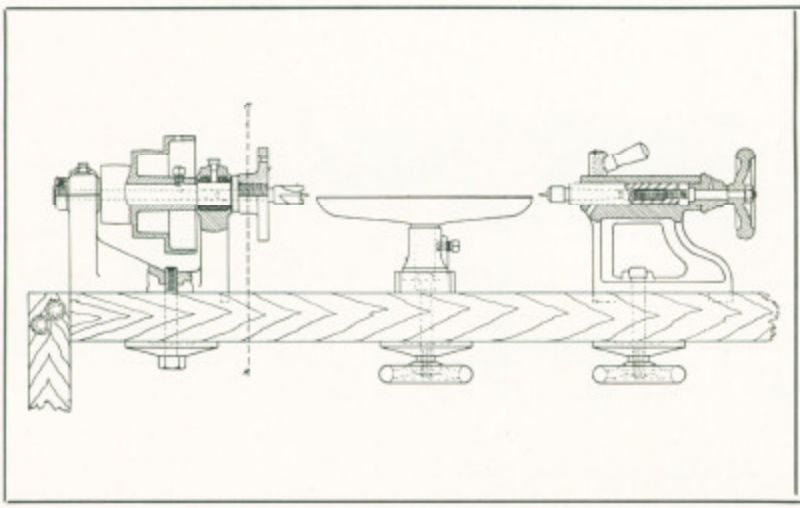
Project No. 66. 8-Inch Emery Grinder



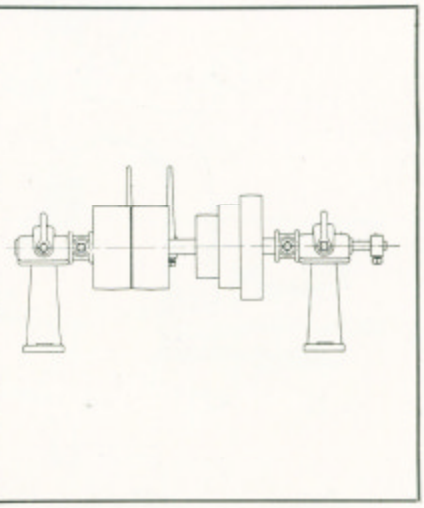
Project No. 67. Countershaft for 8-Inch Emery Grinder



Project No. 66½. Floor Column, Pan and Waterpot for 8-Inch Grinder

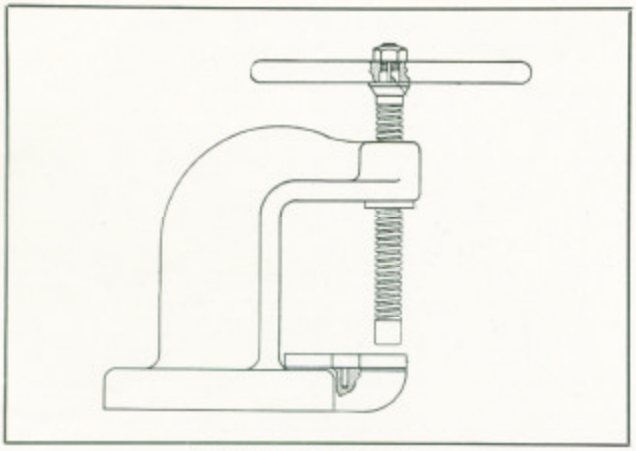


Project No. 64. Lathe Set, Head Stock, Tail Stock, and Tool Rest, for Wood Turning

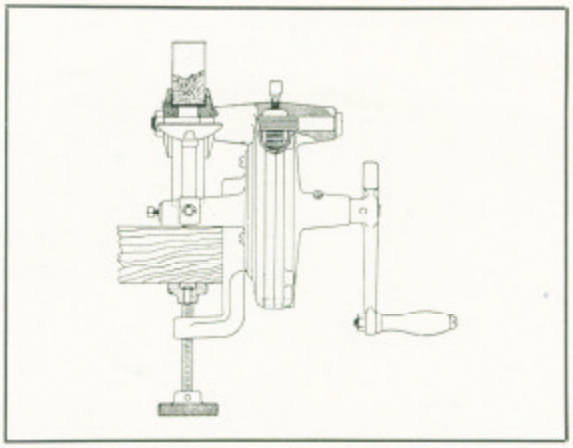


Project No. 64½. Countershaft for Lathe Set

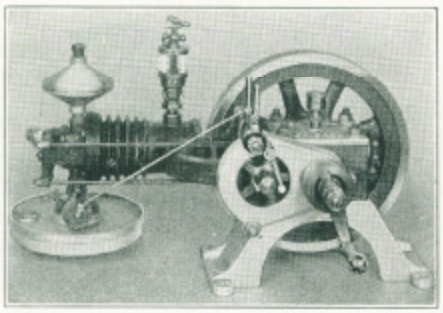
Illustrations of Practical Machine Shop Projects



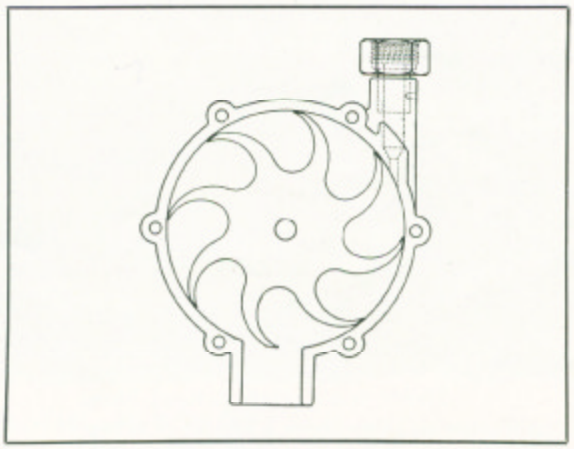
Project No. 58. Arbor Press



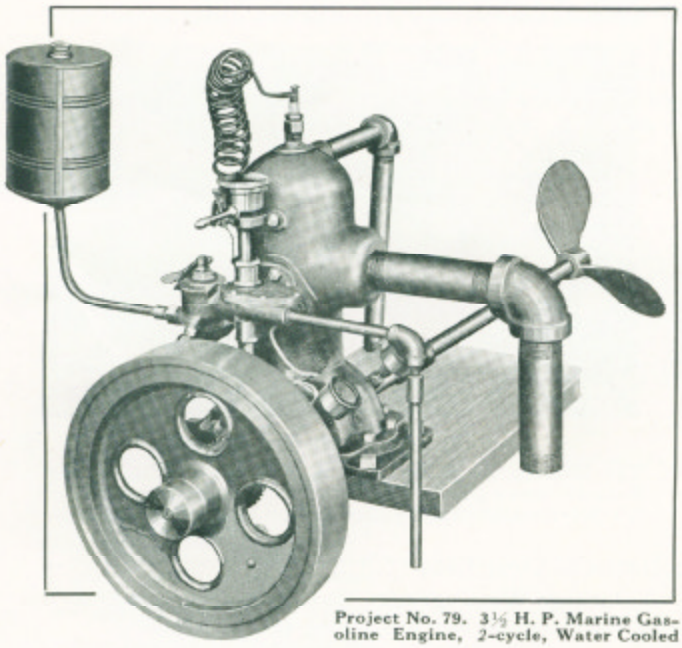
Project No. 62. Hand Power Emery Grinder



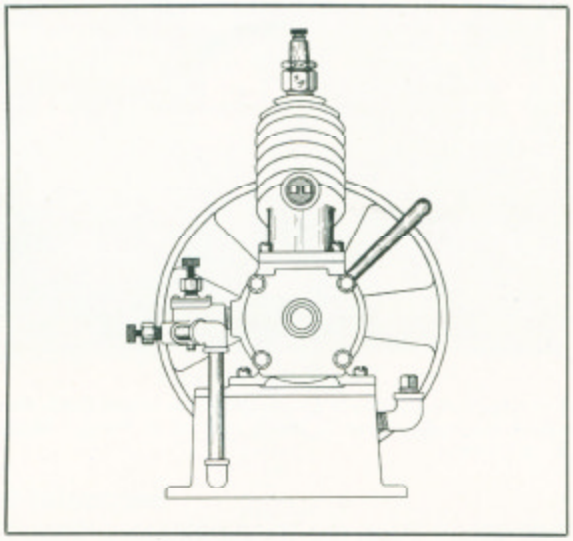
Project No. 71. ¼ H. P. Gasoline Engine. Horizontal



Project No. 55. 6-Inch Improved Water Motor

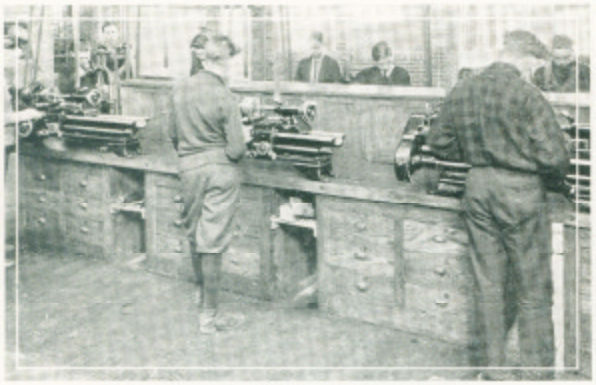


Project No. 79. 3½ H. P. Marine Gasoline Engine, 2-cycle, Water Cooled



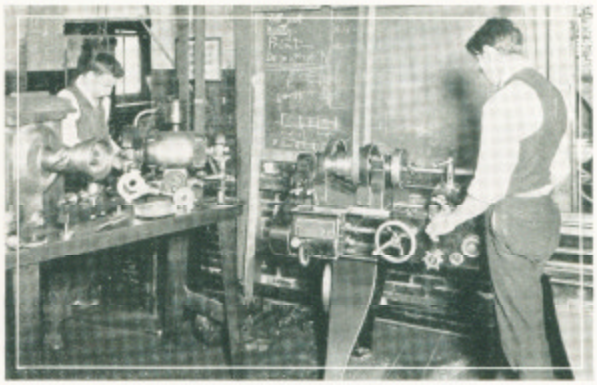
Project No. 70. ¼ H. P. Gasoline Engine, Vertical, Air Cooled

Typical Machine Shop Views



The Junior High School Shop

A number of boys operating Bench Lathes in a Junior High School Shop—their first experience in actual Machine Shop Practice.

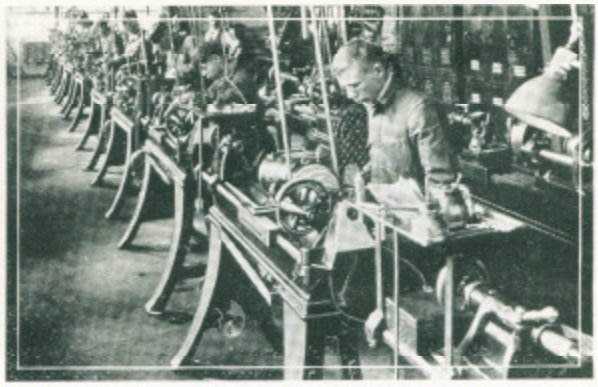


The General Shop

The General Shop handles a wide variety of Machine work both large and small and affords the young mechanic a good opportunity for general Machine Shop Practice.

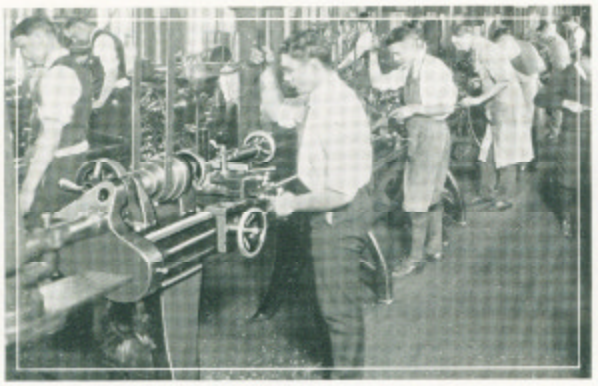
The Senior High School Shop

The illustration above shows a number of advanced students in a Senior High School Shop doing Machine Work.



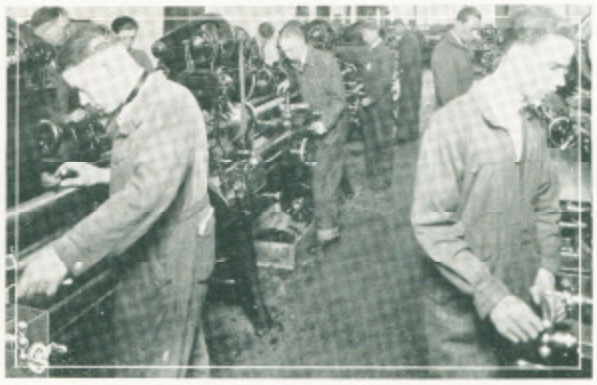
Night School Shop

The Night School Shop is popular with the Industrial day worker and laborer. It enables him to study and improve himself in the various classes of machine work during his spare time.



The Trade School

The illustration above is a common scene in the Trade School where the young man is being trained in correct Machine Shop Practice.



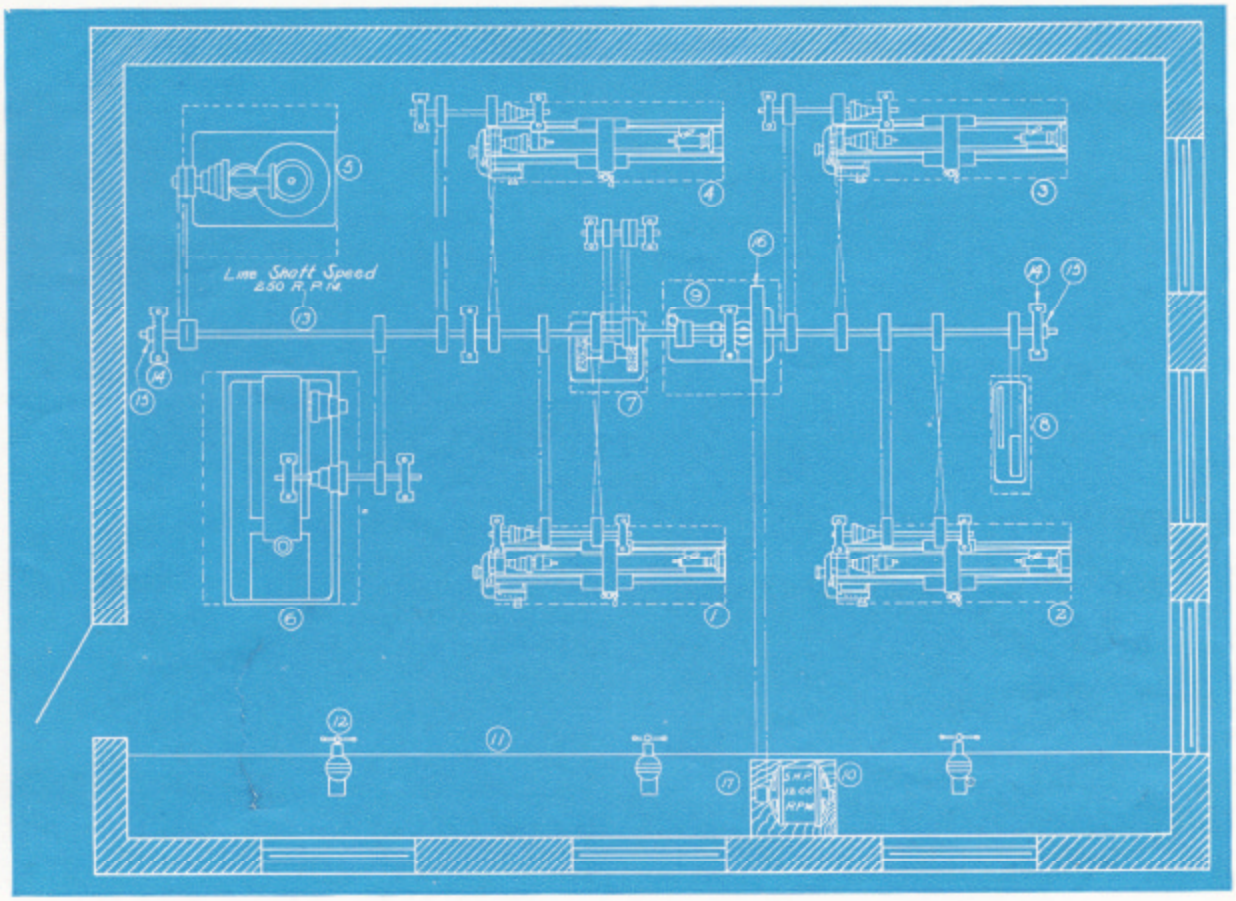
The College Engineering Shop

The Machine Shop Department of a College Engineering School is shown above. The Lathe plays an important part in the development of the young College Mechanical Engineer.

Successful Mechanical Geniuses

Henry Ford, the Wright Brothers, Thos. Edison, George Westinghouse, Dodge Brothers and many others acquired their fundamental training on the small Screw Cutting Lathe.

Planning the School Machine Shop



Special Layout for Shop—One of 150 Stock Layouts Made For School Shops

Engineering Service

The Supervisor or Instructor who is planning a new school machine shop and who cannot take the time to familiarize himself with all the details should write to us. We have had more than 20 years' experience in installing and equipping industrial and school shops. The benefit of all our experience is at your service. There is no charge whatever.

Plans, Estimates and Detailed Information on Shop Equipment

Supply us with the information indicated below and we will be able to furnish you with plans, estimates and detailed information on equipment for your new shop.

(1) Number of boys to be taken care of in each period, and the number of periods per day.
(2) Dimensions of the room, width, height and length. State whether shop is located on ground floor. Give the number of windows and doors and the location of same.
(3) The amount of money available for equipment.

What South Bend Engineering Service Covers

The Engineering Service that we offer covers:

(1) Blue Printed Plans drawn to scale showing a Floor Layout indicating the position of the machinery and equipment.
(2) Elevation Views, etc.
(3) A List of Tools and Equipment required together with an estimate of the entire cost.
(4) Technical Information giving:
  (a) The diameter and location of line shafting.
  (b) Position and drop of hangers.
  (c) Speed and size of shaft and pulleys.
  (d) The number of feet of belting, etc.

Floor Plan Layout for Your New Shop

We have layed out 150 different School Shops. The Blue Prints of these layouts are free to the Supervisor or Instructor who contemplates equipping or enlarging the School Shop. Send us a drawing of the floor plan of the building indicating the number and position of windows and doors. If we have a print similar we will forward it, if not we will make a print to suit your conditions. Do not hesitate to ask any questions concerning the shop, or equipment, etc. This service is free.

Size of Lathe for the School Shop

We are pleased to furnish information to Instructors on the size of Lathes best adapted for school shops in the various classes of work. The following Lathes are recommended for the various types of shops:

Junior High School	9-In. Junior, 9-In. Quick Change Gear, and 11-In. Quick Change Gear Lathes, either Bench or Floor Leg Type.
Senior High School	11-In., 13-In., and 15-In. Quick Change Gear Lathes.
Trade School	13-In. and 15-In. Quick Change Gear Lathes.
General Shop	13-In., 15-In. and 16-In. Quick Change Gear Lathes.
Night School Shop	13-In., 15-In. and 16-In. Quick Change Gear Lathes.
College Engineering Shop	13-In., 15-In. and 16-In. Quick Change Gear Lathes.

Write For These Free Booklets—Use Coupon Below

New General Catalog

The Catalog gives complete and up-to-date information and prices on the entire line of South Bend New Model Screw Cutting Engine Lathes, attachments and tools. All Type Lathes and Drives together with practical and modern equipments are illustrated by the use of 189 cuts in this 72-page Catalog.

Mechanic's Hand Book No. 44-B

150 Shop Kinks make this 32-page booklet interesting to mechanics, especially apprentices. Nearly 200 half-tone illustrations are used to tell the story. This booklet contains the latest methods of modern shop practice in industry.

"How to Run a Lathe"

More than 300 practical illustrations explain the fundamental principles of the operation and care of the Lathe. "How to Run a Lathe" is authoritative and serves as a textbook in many schools. It contains 144 pages showing practical methods of modern lathe practice.

Auto Mechanic's Hand Book No. 33-B

Hand Book No. 33-B contains 150 illustrations showing the application of various tools, machines and Lathes on practical jobs that come to the Electrical Shop, Service Station and Garage. An interesting book for the Mechanic and Apprentice.

Auto Mechanic's Service Book No. 66

For the Auto Machinist and Apprentice

Price 25c Postpaid. Sample copy free to Instructors

Service Book No. 66 describes the modern methods of machining all parts of the automobile motor in the Auto Service Station, Garage and Electrical Shop. This book contains more than 120 half-tones and drawings illustrating and describing the practical methods of machining the following jobs:

Finishing Pistons
Truing Commutators
Testing Armatures
Refacing Valves
Testing Valves
Making Bushings
Machining Fly Wheels
Testing Axles and Drive Shafts
Testing Crankshafts
Reboring Cylinders
Regrinding Cylinders
Boring Connecting Rods
Truing Brake Drums
Grinding Reamers
Cutting Screw Threads
Making Radio Parts
Hundreds of other Jobs

This Service Book is recommended by the automobile manufacturers for use in their Service Stations throughout the world, to guide the auto mechanic in servicing the motor with accuracy, precision and speed at the lowest cost, which after all is the real meaning of "Service."

South Bend Lathe Works
425 Madison Street
South Bend, Indiana

B-55

Date..... 192.....

Gentlemen: We are interested in New Model South Bend Screw Cutting Lathes and Equipment for our School Shops. Kindly send further information and the booklets checked below.

Number of Boys Enrolled in our Shops

Machine Shop..... Auto Repair Shop.....

Check Booklet or Booklets Wanted

- ☐ New General Catalog No. 88
- ☐ Shop Mechanic's Hand Book No. 44-B
- ☐ Auto Mechanic's Hand Book No. 33-B
- ☐ How to Run a Lathe
- ☐ Auto Mechanic's Service Book No. 66—Price 25c Postpaid

Name.....

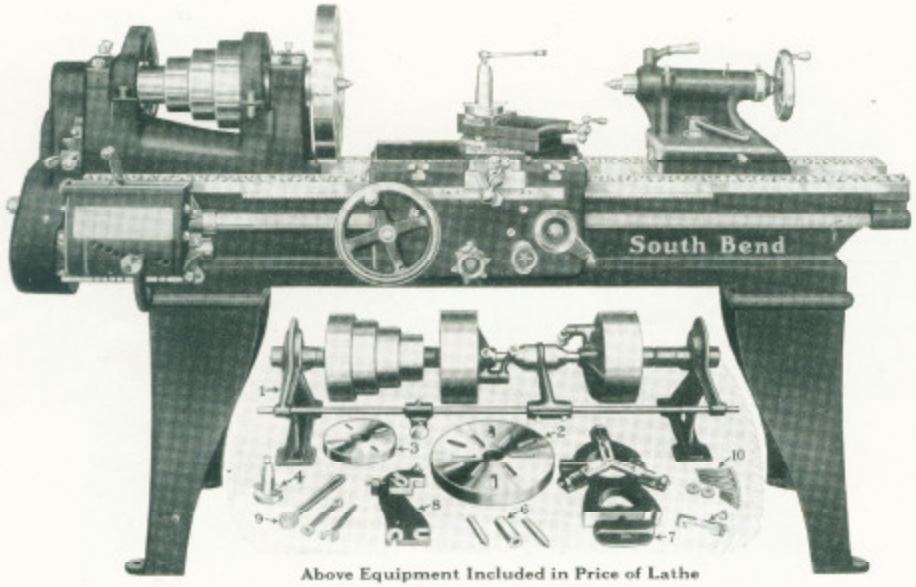
Official Position.....

School..... City.....

County..... State.....

New Model South Bend Screw Cutting Precision Lathes

Quick Change Gear and Standard Change Gear Types



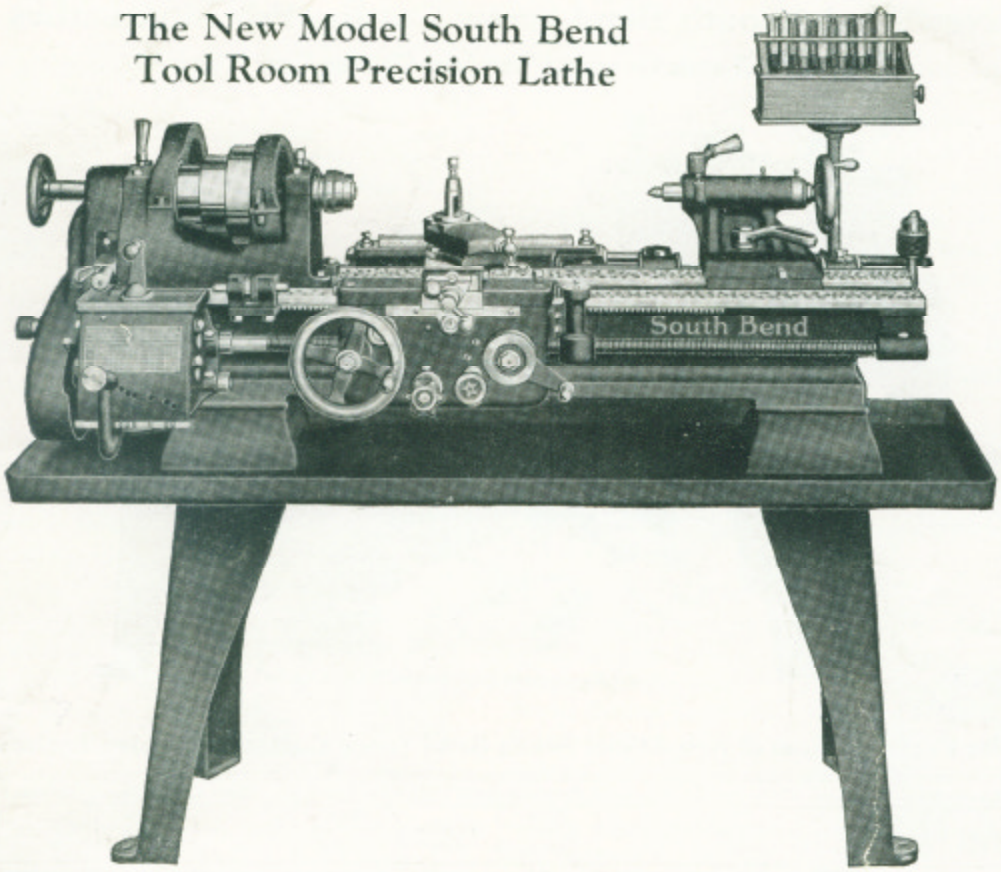
Above Equipment Included in Price of Lathe

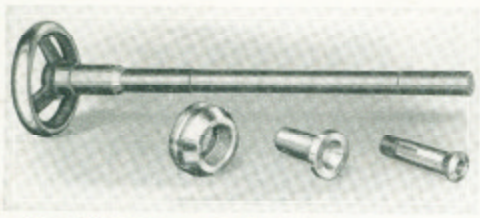
Net Factory Prices of New Model South Bend Screw Cutting Precision Lathes

Lathe Specifications					Overhead Countershaft Drive Lathes				Silent Chain Motor Driven Lathes			
Swing Over Bed	Length of Bed	Distance Between Centers	Hole in Spindle	Horse Power	Catalog No.	Price Quick Change	Catalog No.	Price Standard Change	Catalog No.	Price Quick Change	Catalog No.	Price Standard Change
9-Inch New Model South Bend Junior Bench Lathes												
9¼ in.	2½ ft.	11 in.	⅝ in.	¼ H.P.	9-inch swing Junior		22-XC	$150.00	For Description and		322-XC	$262.00†
9¼ in.	3 ft.	18 in.	⅝ in.	¼ H.P.	Lathe with Floor		22-YC	155.00	Prices of Motor Driven		322-YC	267.00†
9¼ in.	3½ ft.	23 in.	⅝ in.	¼ H.P.	Legs instead of		22-ZC	160.00	Jr. Bench Lathes write		322-ZC	272.00†
9¼ in.	4 ft.	29 in.	⅝ in.	¼ H.P.	Bench Legs $10.00		22-AC	165.00	for Booklet No. 22-K		322-AC	277.00†
9¼ in.	4½ ft.	36 in.	⅝ in.	¼ H.P.	extra		22-RC	170.00			322-RC	282.00†
9-inch New Model South Bend Screw Cutting Lathes												
9¼ in.	2½ ft.	11 in.	⅝ in.	¼ H.P.	82-X	$265.00	31-X	$230.00	382-X	$366.00	331-X	$331.00
9¼ in.	3 ft.	18 in.	⅝ in.	¼ H.P.	82-Y	270.00	31-Y	235.00	382-Y	371.00	331-Y	336.00
9¼ in.	3½ ft.	23 in.	⅝ in.	¼ H.P.	82-Z	275.00	31-Z	240.00	382-Z	376.00	331-Z	341.00
9¼ in.	4 ft.	29 in.	⅝ in.	¼ H.P.	82-A	280.00	31-A	245.00	382-A	381.00	331-A	346.00
9¼ in.	4½ ft.	36 in.	⅝ in.	¼ H.P.	82-R	285.00	31-R	250.00	382-R	386.00	331-R	351.00
11-inch New Model South Bend Screw Cutting Lathes												
11¼ in.	3 ft.	12 in.	⅞ in.	½ H.P.	84-Y	325.00	33-Y	290.00	384-Y	445.00	333-Y	410.00
11¼ in.	3½ ft.	18 in.	⅞ in.	½ H.P.	84-Z	330.00	33-Z	295.00	384-Z	450.00	333-Z	415.00
11¼ in.	4 ft.	24 in.	⅞ in.	½ H.P.	84-A	335.00	33-A	300.00	384-A	455.00	333-A	420.00
11¼ in.	5 ft.	36 in.	⅞ in.	½ H.P.	84-B	345.00	33-B	310.00	384-B	465.00	333-B	430.00
11¼ in.	5½ ft.	42 in.	⅞ in.	½ H.P.	84-S	350.00	33-S	315.00	384-S	470.00	333-S	435.00
13-inch New Model South Bend Screw Cutting Lathes												
13¼ in.	4 ft.	16 in.	1 in.	¾ H.P.	86-A	390.00	35-A	340.00	386-A	525.00	335-A	475.00
13¼ in.	5 ft.	28 in.	1 in.	¾ H.P.	86-B	402.00	35-B	352.00	386-B	537.00	335-B	487.00
13¼ in.	6 ft.	40 in.	1 in.	¾ H.P.	86-C	414.00	35-C	364.00	386-C	549.00	335-C	499.00
13¼ in.	7 ft.	52 in.	1 in.	¾ H.P.	86-D	426.00	35-D	376.00	386-D	561.00	335-D	511.00
13¼ in.	8 ft.	64 in.	1 in.	¾ H.P.	86-E	438.00	35-E	388.00	386-E	573.00	335-E	523.00
15-inch New Model South Bend Screw Cutting Lathes												
15¼ in.	5 ft.	24½ in.	1⅛ in.	1 H.P.	88-B	475.00	39-B	415.00	388-B	628.00	339-B	568.00
15¼ in.	6 ft.	36½ in.	1⅛ in.	1 H.P.	88-C	490.00	39-C	430.00	388-C	643.00	339-C	583.00
15¼ in.	7 ft.	48½ in.	1⅛ in.	1 H.P.	88-D	505.00	39-D	445.00	388-D	658.00	339-D	598.00
15¼ in.	8 ft.	60½ in.	1⅛ in.	1 H.P.	88-E	520.00	39-E	460.00	388-E	673.00	339-E	613.00
15¼ in.	10 ft.	84½ in.	1⅛ in.	1 H.P.	88-G	550.00	39-G	490.00	388-G	703.00	339-G	643.00
16-inch New Model South Bend Screw Cutting Lathes												
16¼ in.	6 ft.	34 in.	1⅛ in.	1 H.P.	92-C	540.00	41-C	480.00	392-C	695.00	341-C	635.00
16¼ in.	7 ft.	46 in.	1⅛ in.	1 H.P.	92-D	555.00	41-D	495.00	392-D	710.00	341-D	650.00
16¼ in.	8 ft.	58 in.	1⅛ in.	1 H.P.	92-E	570.00	41-E	510.00	392-E	725.00	341-E	665.00
16¼ in.	10 ft.	82 in.	1⅛ in.	1 H.P.	92-G	600.00	41-G	540.00	392-G	755.00	341-G	695.00
16¼ in.	12 ft.	106 in.	1⅛ in.	1 H.P.	92-H	645.00	41-H	585.00	392-H	800.00	341-H	740.00

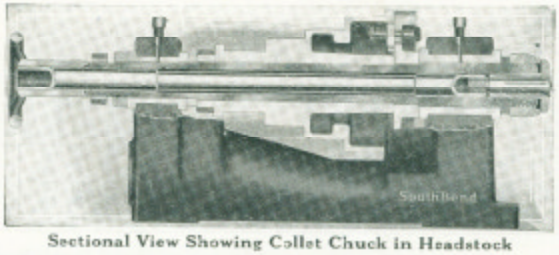
†Prices include Junior Lathes with Floor Legs. Bench Legs furnished for 9-In., 11-In. and 13-In. Lathes at $10.00 Less.

The New Model South Bend Tool Room Precision Lathe

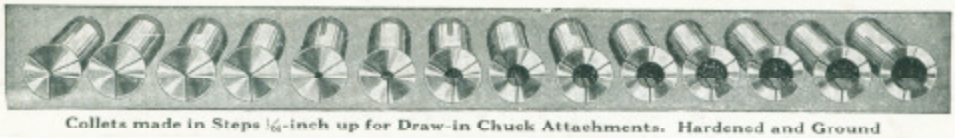




Hand Wheel Draw-in Collet Chuck Equipment



Sectional View Showing Collet Chuck in Headstock



Collets made in Steps ¼-inch up for Draw-in Chuck Attachments. Hardened and Ground

New Model South Bend Tool Room Lathes can be furnished in four sizes:

11-in. Lathe with 3-ft. and 3½-ft. bed.

13-inch Lathe with 5-ft., and 6-ft. bed.

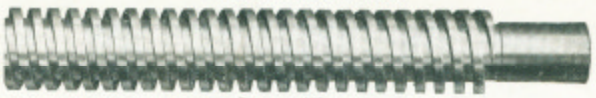
15-inch Lathe with 5-ft., and 6-ft. bed.

16-inch Lathe with 6-ft., and 8-ft. bed.

Any of the above sizes furnished in Countershaft or Motor Drive.

Acme Double Screw Thread

U. S. Standard Thread



Square Thread