



**NO OBSOLESCENCE TOLERATED HERE**

# MONARCH

MODEL "EE"

## 10" TOOLMAKER'S LATHE

CODE WORD "SENPRE"

### Specifications

Swing over bed.....	12½"	
Swing over cross slide.....	7¼"	
Distance between centers.....	20"	
Hole through spindle.....	1⅜"	
Spindle bearings.....	Precision Ball Bearing	
Center Morse taper.....	No. 2	
Standard Camlock spindle nose.....	3"—D-1	
Leadscrew diameter and threads per inch.....	1"—8 thd.	
Range of threads.....	3 to 184	
Range of feeds thru endless belt.....	.0005" to .016"	
Number of thread changes.....	60	
Number of feed changes.....	50	
Tailstock spindle diameter.....	1¼"	
Tailstock spindle traverse.....	3½"	
Carriage bridge width.....	5"	
Carriage length.....	20½"	
Compound rest top slide travel.....	2"	
Size of lathe tool.....	⅜" x ⅞"	
Width of bed.....	10½"	
Depth of bed.....	10¼"	
Distance, spindle center to floor.....	43½"	
Steady rest opening.....	3"	
Net weight without accessories.....	2900 lbs.	
Shipping weight without accessories.....	3100 lbs.	
Max. collet cap., bar type.....	1"	
Max. collet cap., Cushman spindle nose type.....	1⅝"	
Max. collet cap., Sjogren handwheel type.....	1⅜"	
Overall length, 64". Width, 29". Height, 48½".		
Range of spindle speed, optional. No. 1 range will be furnished unless otherwise specified on the order.		
A. C. Supply	Open Belt	Back Gear
No. 1—25 to 2500 R.P.M.—4		to 400 R.P.M.
No. 2—30 to 3000 R.P.M.—5		to 500 R.P.M.
No. 3—35 to 3500 R.P.M.—5.5		to 550 R.P.M.
No. 4—40 to 4000 R.P.M.—6.5		to 650 R.P.M.
D. C. Supply	Open Belt	Back Gear
No. 5—480 to 2500 R.P.M.—80		to 420 R.P.M.
Actual threads cut—3, 3¼, 3⅝, 3½, 3¾, 4, 4½, 5, 5½, 5¾, 6, 6½, 6¾, 7, 7½, 8, 9, 10, 11, 11½, 12, 13, 13½, 14, 15, 16, 18, 20, 22, 23, 24, 26, 27, 28, 30, 32, 36, 40, 44, 46, 48, 52, 54, 56, 60, 64, 72, 80, 88, 92, 96, 104, 108, 112, 120, 144, 160, 176 and 184.		

STANDARD REGULAR EQUIPMENT INCLUDE—3 H. P. 100 to 1 variable speed electric drive with magnetic switch with start and stop push button station, built-in leadscrew reverse operated from headstock, built-in oil pan (reservoir type), cabinet base, large (T-slotted) face plate, small face plate, compound rest, steady rest, follow rest, precision dial type micrometer carriage stop, chasing dial, chasing stop, tool post, centers and wrenches.

#### THE MONARCH 10" PRECISION TOOLMAKER'S LATHE HAS:

All electric drive, providing 100 to 1 range of gearless, stepless spindle speeds—forward or reverse.

6 to 1 back gear, integral part of drive motor in cabinet base, operated from front of lathe, increasing spindle speed range and developing ample power for heavier turning at slow speeds.

Dynamic brake for stopping spindle. Complete stop from highest speed in two to three seconds.

Tachometer in headstock to indicate operating speed.

Hardened spindle with standard Camlock spindle nose, providing quick, accurate mounting of chucks, plates or fixtures.

Precision ball bearings supporting main spindle.

Totally enclosed gear box, providing wide thread and feed range.

Electric furnace hardened with ground or shaved gears.

Hardened gears with teeth ground or shaved in gear box and apron.

Totally enclosed hardened and ground end gearing operating in oil bath.

Hardened and ground leadscrew, crossfeed and compound screws.

Leadscrew reverse controlled from front of headstock.

Box type apron with hardened gears, shafts and studs. Feed in apron is thru worm and worm gear.

Anti-friction bearings used thruout.

Flame-hardened and ground bed ways and carriage "V"—65° acute angle for accurate alignment.

Eccentric clamping of tailstock to bed—with graduated and hardened tailstock spindle with tang slot.

Automatic lubrication of headstock spindle bearings, reverse gears, gear box, carriage, compound rest and apron.

Three point bearing on floor, insuring accurate alignment.

Large diameter cross feed and compound micrometer dials graduated in thousandths, reading in diameter, not in radius.

Chromium plated handles and handwheels.

Bench precision accuracy with flexibility and ease in handling from operator sitting or standing position.

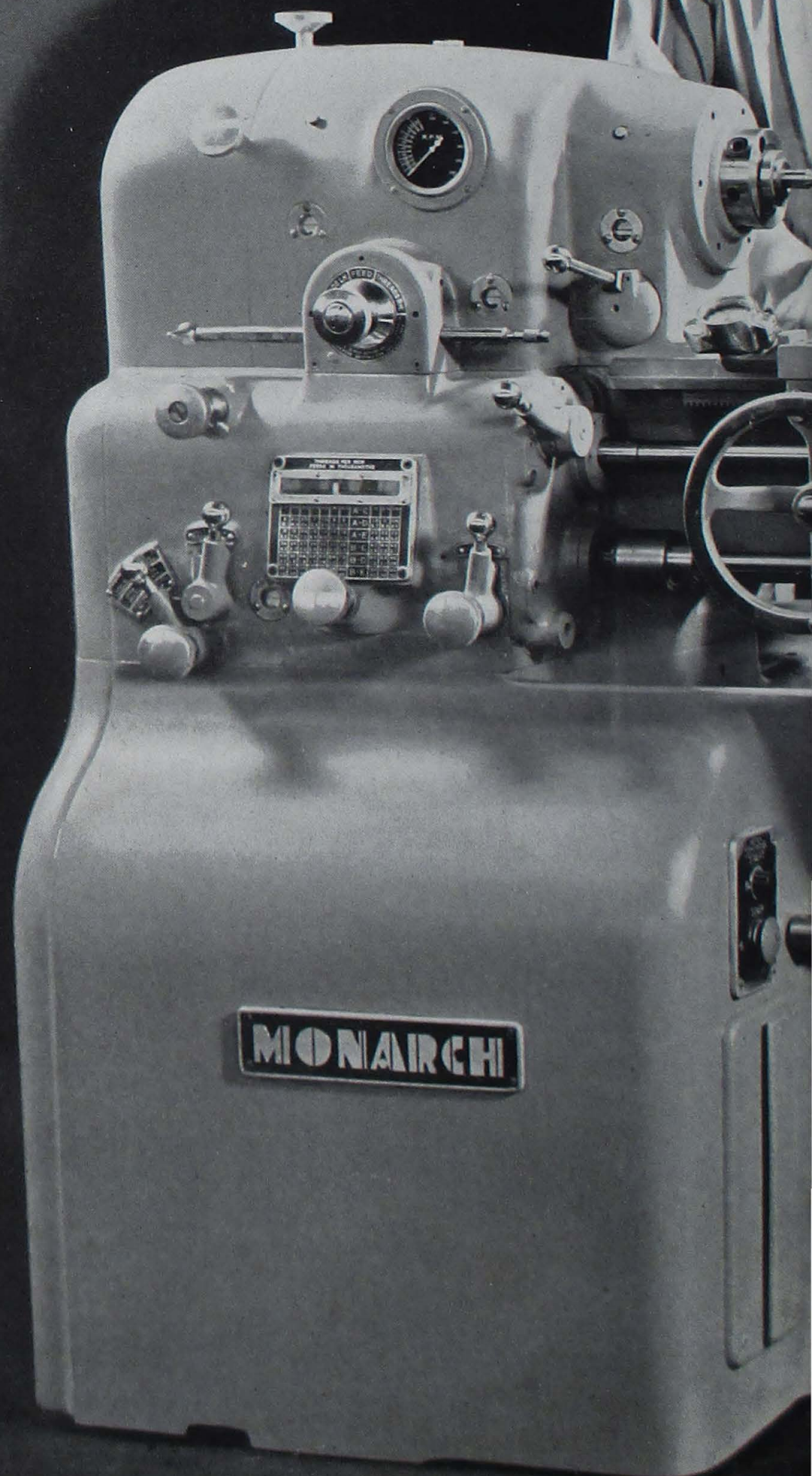
**THE MONARCH MACHINE TOOL COMPANY, SIDNEY, OHIO**

BRANCH OFFICES AND SELLING AGENCIES IN ALL INDUSTRIAL CENTERS THROUGHOUT THE WORLD



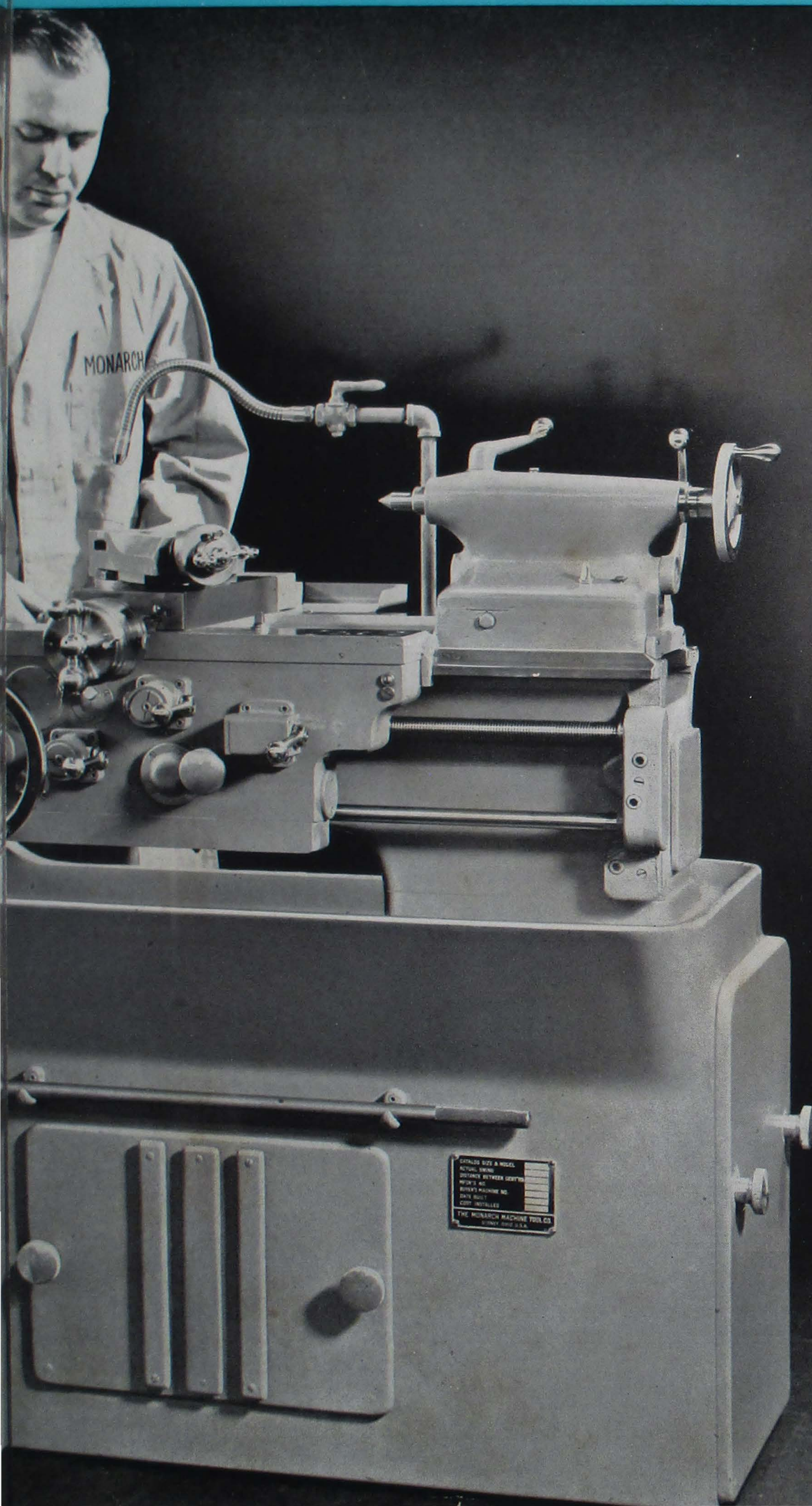
# MONARCH

## MODEL "EE" 1

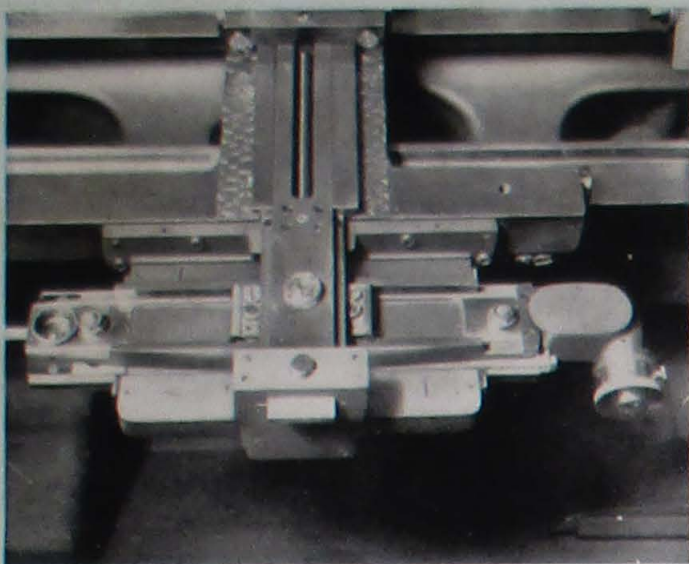




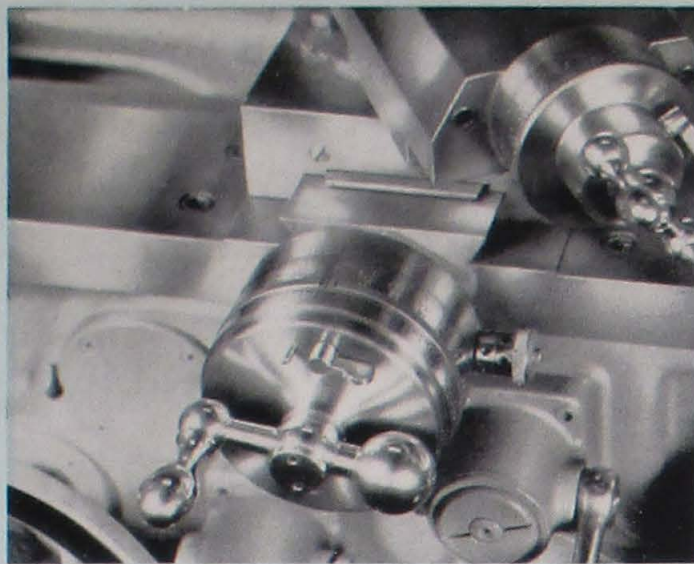
# " SENSITIVE PRECISION TOOLMAKER'S LATHE



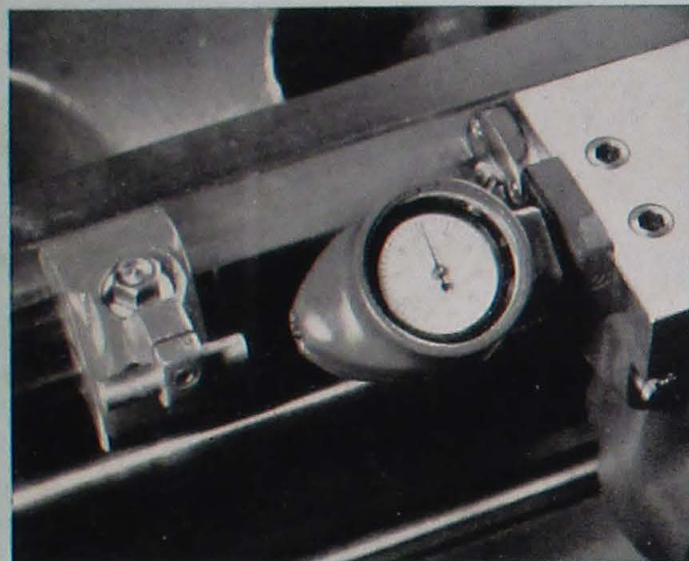




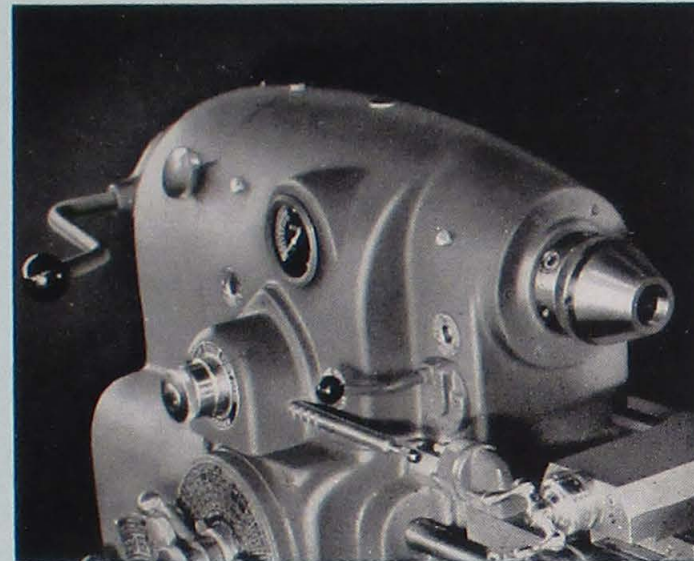
Anti-Friction Bearing Taper Attachment—Permits 6" length turning at one setting and fifteen degree included angle. Turns extremely accurate and smooth.



Micro-Gauging Diameter Dials—Graduated in both thousandths (not radius) and inches of diameter for boring or turning.



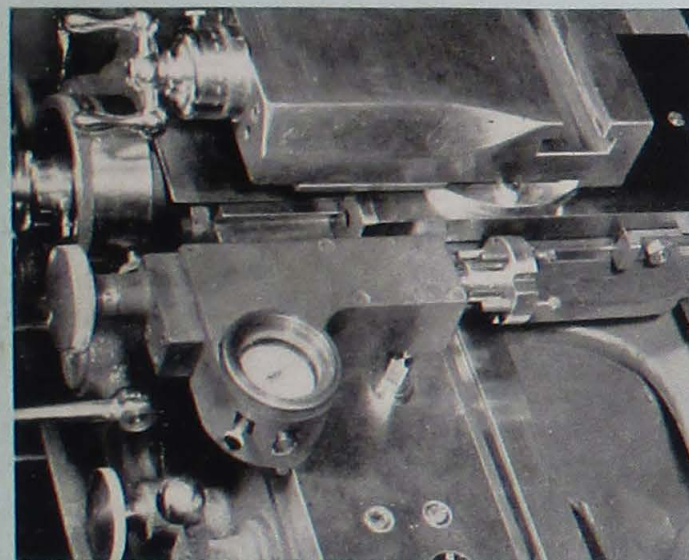
Micrometer Carriage Stop—A precision type indicator stop that mounts directly to the left carriage wing. Dial indicator is graduated in thousandths.



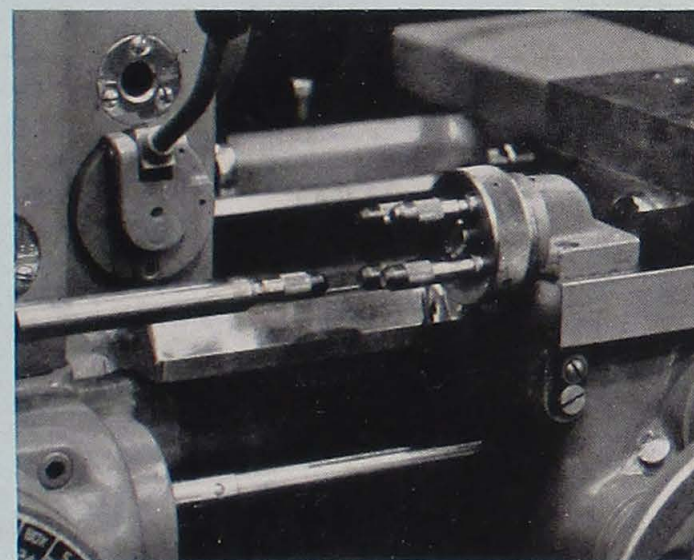
Lever Operated Collet Attachment—Has collet capacity of 1" and is a great time saver for many operations.



Drawbar Collet Attachment—Collets up to 1" are accurately centralized by the spindle nose mounted adaptor.



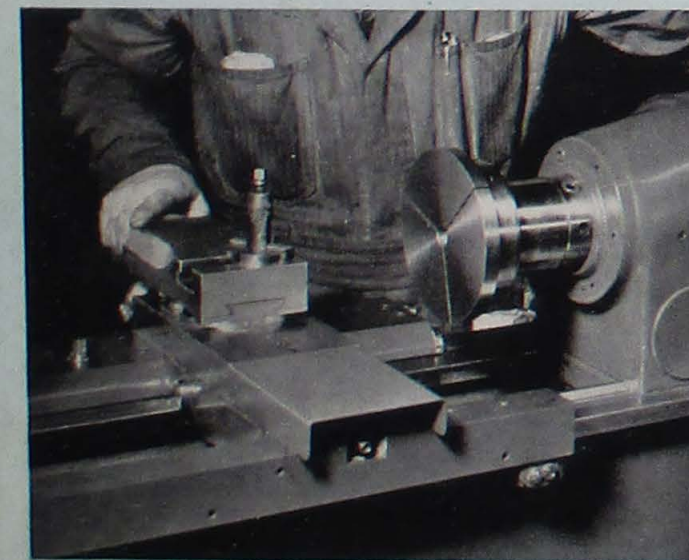
Dial Type Diameter Stop—Equipped with dial indicator and four positions controlled by knurled knob. Is effectively used for turning and boring operations.



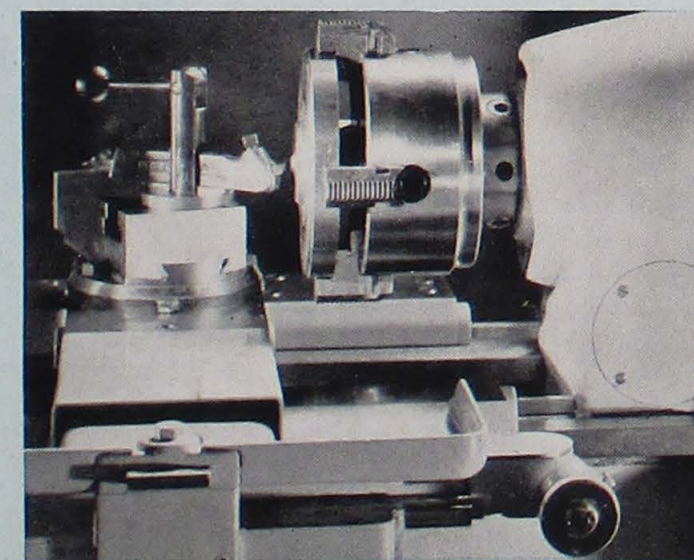
Multiple Positive Length Stop—this four position stop has micrometer heads for fine adjustment and mounts on the left hand wing of the carriage.



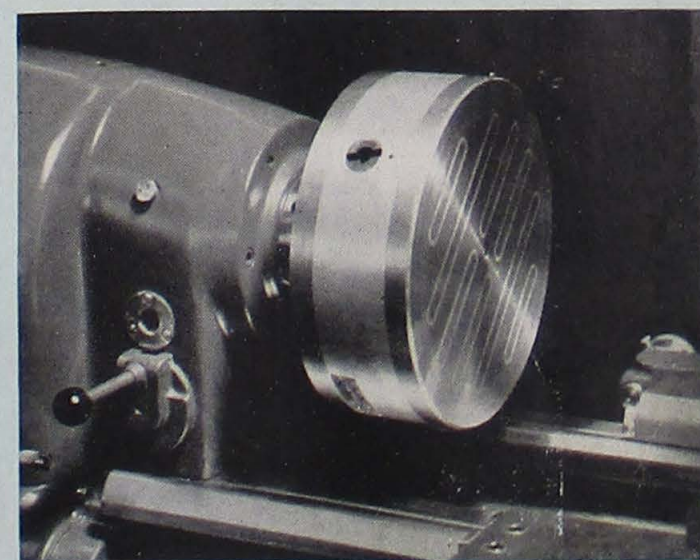
Sjogren Handwheel Collet Chuck—Fits directly to the Cam-Lock spindle nose and has collet capacity of 1 3/8" maximum.



Step Chucks—Both external or internal and can be furnished from 3" to 6" capacity.



Chucks—Both 4-jaw and 3-jaw chucks mount directly to the Cam-Lock spindle without adaptors.



Permanent Magnetic Chucks—These chucks are of the permanent type and mount directly on the spindle nose.

## EXTRA EQUIPMENT

On this page are shown some of the large number of extra attachments or accessories that we can furnish with the 10" Toolmaker's lathe, many of which greatly increase the speed and accuracy of production on this machine.