

JEVIN[®]

PRECISION LATHES

For second operations, manufacturing, tool making, instrument work and watchmaking.

MICRO-DRILL PRESSES

For small hole drilling.

WATCHMAKER'S TOOLS



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LEVIN®

PRECISION LATHES

**for efficient and economical
manufacture of small parts
it is essential that the equipment used
be in keeping with the size of the work.**

LEVIN precision lathes are designed for the class of work which is too small to be handled in the usual engine lathe or toolmaker's lathe. Their speed of operation and comparatively low cost are such that no shop can afford to be without one. Thousands of LEVIN lathes are in daily use in such varied fields as instrument manufacturing, atomic research, paper making, meter repairing and food processing.

All LEVIN lathes are made with 1.97" (50mm) center height and with the same size of bed ways for maximum interchangeability of accessories. However, there are so many combinations of head stocks, tail stocks, beds and collet capacities that it would be confusing to list all the specifications in a single table. Therefore, following the general description of the various features, we are listing separately the particular specifications of each model together with its illustration.

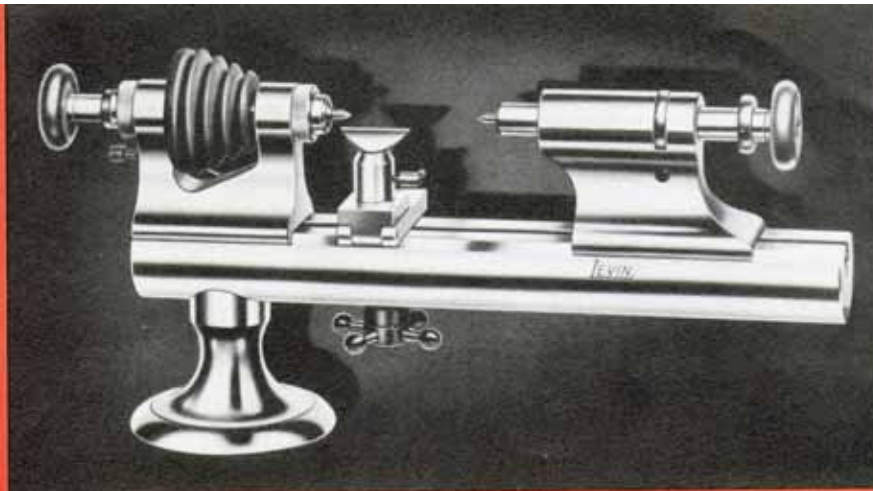
Collets, arbors, chucks and other accessories are made in two styles. Our D type collets have a 5/16" (8mm) capacity clear through and the WW type collets have a 3/16" (5mm) capacity clear through. When ordering lathes and accessories it is important to specify whether they are to be D type or WW type. For complete collet specifications see page 15.

All castings are made of Meehanite. On lathes with 12" beds they are finished with chromium plate for protection against rust. The 18" beds are finished with light gray machine paint and the ways are left bare.

Spindle bearings of head stocks are either double cone sleeve bearings or pre-loaded ball bearings. Spindles are hard from end to end. The collet seats are ground after assembly with each spindle running in its own bearings.

All tail stocks have spindles provided with draw bars which hold the same collets as the head stocks. The spindles are hard from end to end. Tail stocks are made with either plain push spindles or with a rack and pinion feed. An adjustable stop collar on the tail stock spindle regulates the length of travel. Spindle bearings in rack and pinion tail stocks are hardened and lapped.

Any model of lathe can be supplied without a tail stock. If, however, at some future time a tail stock will be required, it will be necessary to send the head stock and bed to the factory to insure proper alignment.



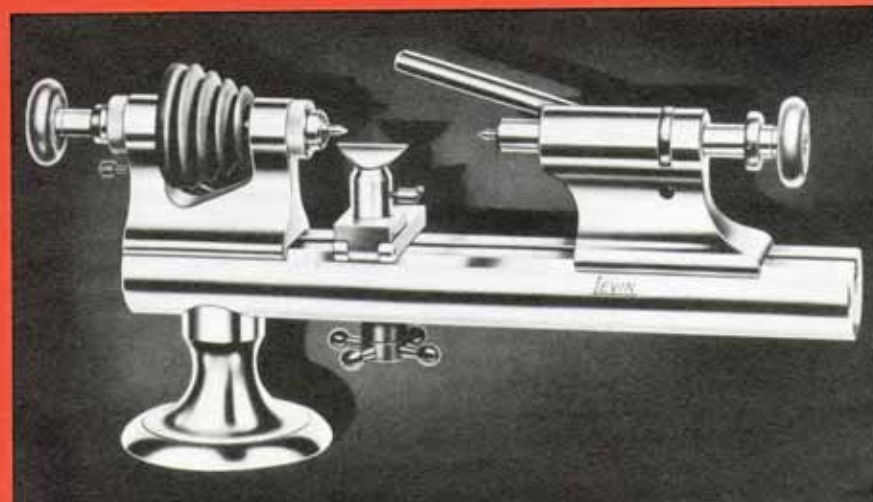
LATHE WITH PLAIN PUSH TAIL STOCK - 12" BED, 4" MAX. DISTANCE BETWEEN CENTERS

CODE	COLLET CAP.	COLLET STYLE	BEARINGS	STANDARD EQUIPMENT
BPCT	3/16" (5MM)	WW	BRONZE	TIP-OVER HANDLE, SET
HPCT	3/16" (5MM)	WW	HARD STEEL	2 TAPER COLLETS WITH
ABHM	5/16" (8MM)	Q	HARD STEEL	HARD CENTERS

CONE BEARING LATHES

CODE	COLLET CAP.	COLLET STYLE	BEARINGS	STANDARD EQUIPMENT
BLFT	3/16" (5MM)	WW	BRONZE	TIP-OVER HANDLE, SET
HLFT	3/16" (5MM)	WW	HARD STEEL	2 TAPER COLLETS WITH
ABHN	5/16" (8MM)	Q	HARD STEEL	HARD CENTERS

LATHE WITH RACK AND PINION TAIL STOCK - 12" BED, 4" MAX. DISTANCE BETWEEN CENTERS





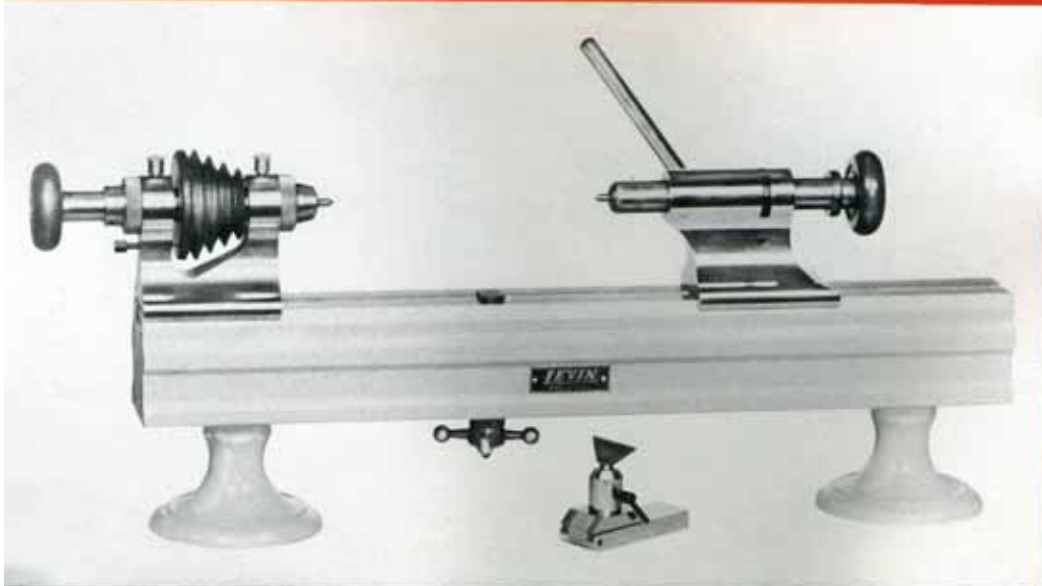
LATHE WITH PLAIN PUSH TAIL STOCK, 18" BED, 10" MAX. DISTANCE BETWEEN CENTERS

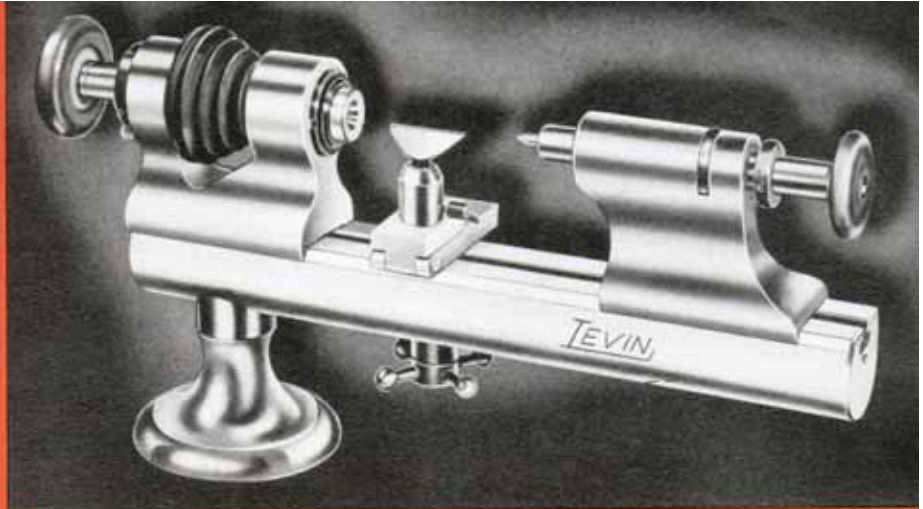
CODE	COLLET CAP.	COLLET STYLE	BEARINGS	STANDARD EQUIPMENT
ABEM	3-16" (5MM)	WW	BRONZE	TIP-OVER HAND REST,
ABEX	3-16" (5MM)	WW	HARD STEEL	2 TAPER COLLETS WITH
ABHR	5-16" (8MM)	D	HARD STEEL	HARD CENTERS

CONE BEARING LATHES (18" BED)

CODE	COLLET CAP.	COLLET STYLE	BEARINGS	STANDARD EQUIPMENT
ABEN	3-16" (5MM)	WW	BRONZE	TIP-OVER HAND REST,
ABEL	3-16" (5MM)	WW	HARD STEEL	2 TAPER COLLETS WITH
ABHI	5-16" (8MM)	D	HARD STEEL	HARD CENTERS

LATHE WITH RACK AND PINION TAIL STOCK, 18" BED, 10" MAX. DISTANCE BETWEEN CENTERS





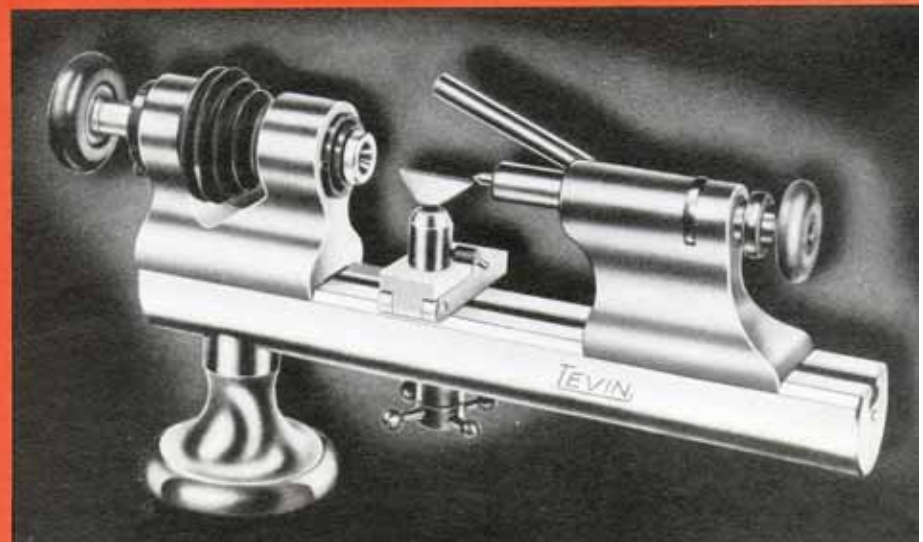
LATHE WITH PLAIN PUSH TAIL STOCK, 12" BED, 3 1/2" MAX. DISTANCE BETWEEN CENTERS

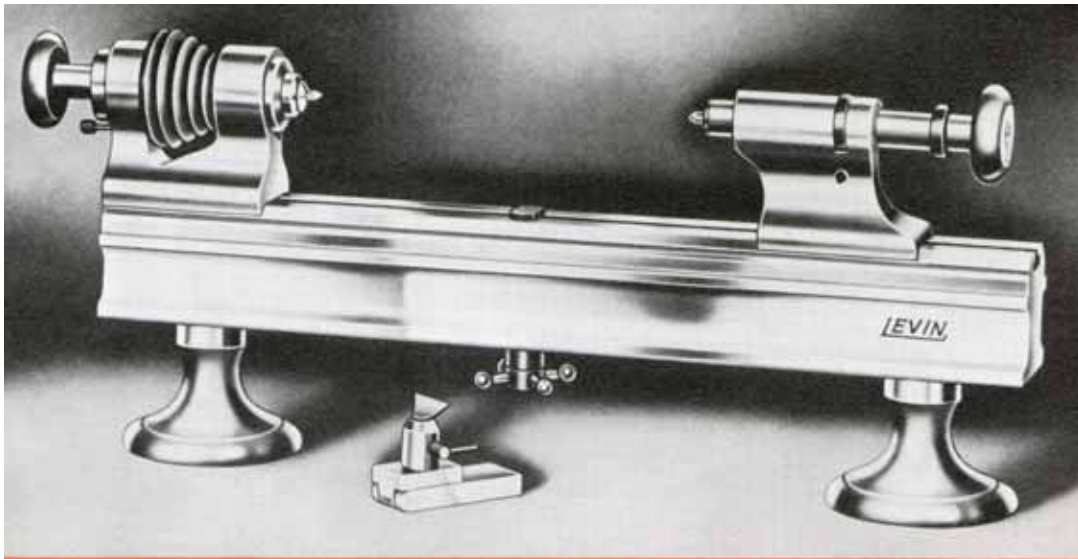
CODE	COLLET CAP.	COLLET STYLE	STANDARD EQUIPMENT
ABDQ	3/16" (3MM)	WW	TIP-OVER HAND REST, 2 TAPER COLLETS WITH HARD CENTERS
ABID	3/16" (3MM)	D	COLLETS WITH HARD CENTERS

BALL BEARING LATHES

CODE	COLLET CAP.	COLLET STYLE	STANDARD EQUIPMENT
ABBR	3/16" (3MM)	WW	TIP-OVER HAND REST, 2 TAPER COLLETS WITH HARD CENTERS
ABBT	3/16" (3MM)	D	COLLETS WITH HARD CENTERS

LATHE WITH RACK AND PINION TAIL STOCK, 12" BED, 3 1/2" MAX. DISTANCE BETWEEN CENTERS





LATHE WITH LEVIN PUSH-TAIL STOCK, 18" BED, 9 1/2" MAX. DISTANCE BETWEEN CENTERS.

CODE	COLLET CAP	COLLET STYLE	STANDARD EQUIPMENT
ABEO	3/16" (5MM)	W/W	TIP-OVER HAND REST 2 TAPER COLLETS WITH HARD CENTERS
ABIE	5/16" (8MM)	O	COLLETS WITH HARD CENTERS

BALL BEARING LATHES (18" BED)

CODE	COLLET CAP	COLLET STYLE	STANDARD EQUIPMENT
ABEP	3/16" (5MM)	W/W	TIP-OVER HAND REST 2 TAPER COLLETS WITH HARD CENTERS
ABEQ	5/16" (8MM)	O	COLLETS WITH HARD CENTERS

LATHE WITH RACK AND PINION TAIL STOCK, 18" BED, 9 1/2" MAX. DISTANCE BETWEEN CENTERS.





LATHE WITH COLLET CLOSER, CROSS SLIDE & POSITION TURRET
1 1/2" BEEF

TURRET LATHES

A small precision turret lathe for second operations and production of instrument parts. May be had for use with either D style collets (5-16" cap) or WW style collets (3-16" cap). A lever operated collet closer provides quick opening and closing.

The cross slide has a swivel slide at one end and a rigid adjustable tool block at the other. Adjustable stops are provided for both slides.

The turret is self-indexing and the turret slide has hardened steel ways. This makes it long wearing and extremely sensitive for fine work. The turret head has six holes which are 1/2" diameter.



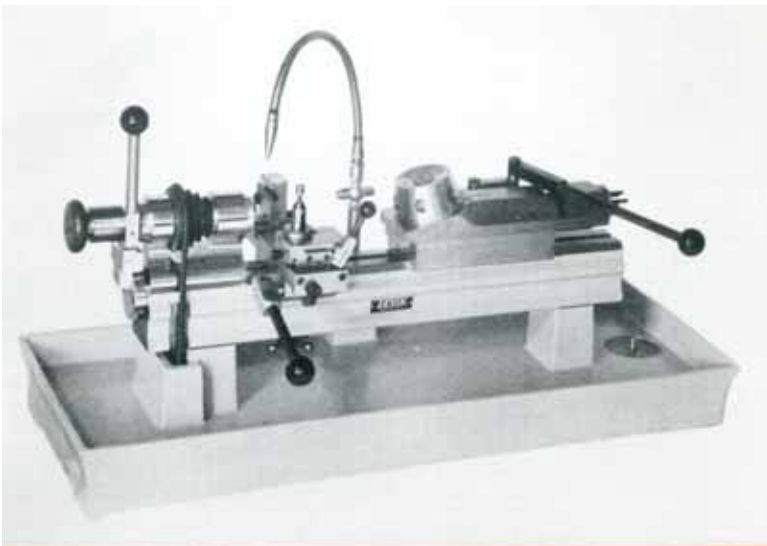
CODE	COLLET CAP	COLLET STYLE	BEARINGS	CROSS SLIDE TRAVEL	SWIVEL SLIDE TRAVEL	TURRET TRAVEL
ABHE	3-16" (3MM)	WW	PRI-LOADED BALL	2.75"	18.50"	1 1/2"
ABHF	5-16" (5MM)	D	PRI-LOADED BALL	2.75"	18.50"	1 1/2"
ABIL	5-16" (5MM)	D	HARD-STEEL CONE	2.50"	19.00"	1 1/2"

TURRET TOOLS



CODE	TOOL	CODE	TOOL
ABHA	COLLET HOLDER	ABHB	RELEASING DIE HOLDER
ABHC	FLOATING HOLDER	ABIF	RELEASING DIE HOLDER WITH WACOIN DIE ADAPTER
ABHO	DRILL CHECK (3/32" CAP)	ABHO	RELEASING TAP HOLDER
ABHF	BORING TOOL		
ABGZ	BOX TOOL		

Uses WW type collets



TURRET LATHE ABHF MOUNTED ON
CHIP TRAY ABJD

COOLANT SYSTEM and CHIP TRAY

CHIP TRAY CODE ABJD
COOLANT SYSTEM CODE ABJE

The chip tray and coolant system are designed for use with lathes having 18" beds. An opening through the base of the tray permits the passage of a belt for an underneath drive. Coolant inlet and drain connections are underneath. Overall dimensions 10" x 24".

Coolant system consists of a centrifugal type pump with a 1/10 HP motor. Tank holds four gallons. Price includes standard piping. When ordering specify current characteristics.

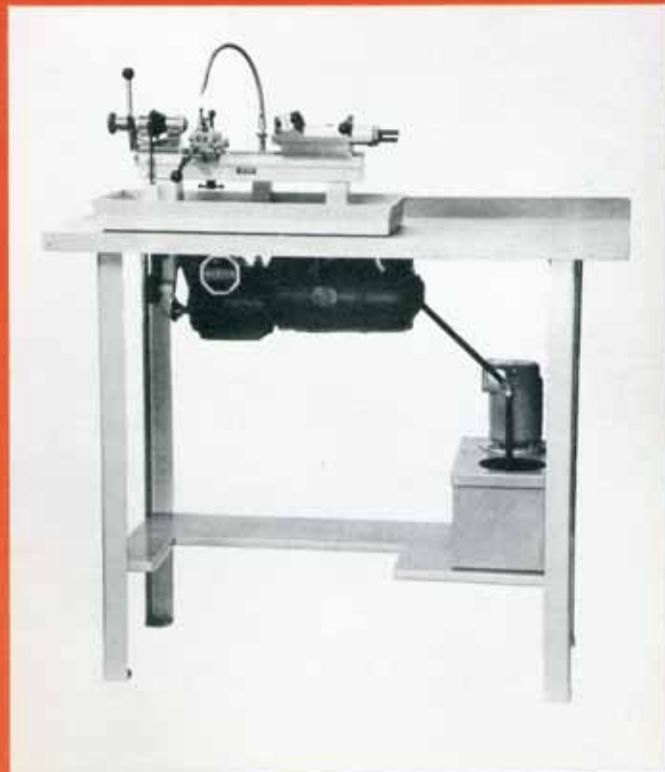
COMPLETE BENCH UNIT WITH VARIABLE SPEED DRIVE

CODE ABJF

For production work we offer the complete bench and drive illustrated here. The bench is of welded construction and has a 1 1/2 inch maple top. It is completely equipped for immediate use with LEVIN lathes having 18" beds. The variable speed drive is operated by a 1/2 HP motor and includes a magnetic brake. Spindle speed range obtainable with standard variable speed unit is 470 - 5000 RPM. Can also be supplied with larger driving pulley for spindle speeds from 840 - 10,000 RPM. Price includes chip tray ABJD, coolant system ABJE, all piping, wiring and electrical controls. Delivered ready for immediate use. When ordering specify current characteristics.

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BENCH UNIT WITH VARIABLE SPEED DRIVE
ABJF, SHOWN WITH TURRET LATHE ABHF.



MOTOR DRIVE UNIT

A complete unit for driving a lathe at proper speeds with full power at all speeds. The regular unit, when used with a LEVIN lathe, gives the following spindle speeds: 1500 - 950 - 600 - 350 RPM. Speed changes are made by shifting the belt on the cone pulleys of the head stock and countershaft. Countershafts supplied in two lengths for lathes with 12" or 18" beds.

The motor drive unit with dual speed range has a two step pulley on the motor and also on the countershaft. This model gives the following spindle speeds to a lathe: 3000 - 1900 - 1500 - 1200 - 950 - 700 - 600 - 350.

A 1/2 HP motor powers the drive unit which is completely wired and ready for instant use. It is far superior to using the ordinary universal motor with a foot rheostat, which has too little power at



MOTOR DRIVE UNIT ABDO

low speeds and too much speed at full power to be usable for certain types of work. The countershaft reversing switch and foot starting switch are included. Available only for 115 volt 50 or 60 cycle alternating current.

CODE	SPEEDS				BED LENGTH
ABDO	1500	950	600	350	12"
ABDB	3000	1900	1500	1200	18"
ABDE	3000	1900	1500	1200	18"
ABDF	3000	1900	1500	1200	18"
ABDG	3000	1900	1500	1200	18"
ABDH	3000	1900	1500	1200	18"
ABDI	3000	1900	1500	1200	18"
ABDJ	3000	1900	1500	1200	18"



BENCH for MOTOR DRIVE UNIT

CODE ABJC

An ideal arrangement for the instrument shop or watchmaker. By using the bench shown here with a LEVIN motor drive unit all the work of mounting the lathe is eliminated. The bench has 15 drawers and an apron slide. It is 40" x 20" x 38" high. Supplied with all mounting holes drilled. Weight of bench and motor drive approximately 160 lbs.

15 DRAWER BENCH ABJC
SHOWING HOW LATHE
AND MOTOR DRIVE UNIT
ARE MOUNTED



COUNTERSHAFT

A fully adjustable countershaft. Made in two lengths for lathes with 12" or 18" beds. Pulley shaft has two 4" pulleys and 4-step cone pulley. Also supplied with 2-step driving pulley having 3" and 4" diameters. Bearings are arranged for easy lubrication by turning a simple screw.

CODE	BED LENGTH	DRIVING PULLEY
C5C0	12"	4"
ABJG	18"	4"
ABJK	12"	3" AND 4"
ABJL	18"	3" AND 4"

IDLER PULLEY ATTACHMENT

CODE ABDU

This idler pulley attachment fastens to the cross-bar of the Levin countershaft or any other make having a 1/2" cross bar. It is completely adjustable, and provides the necessary power transmission for driving a grinding or milling attachment.



STEADY REST

For long work which cannot be held in a collet or chuck without extra support. The hardened jaws are adjustable for work of any diameter up to 1".

CODE	STYLE
ABIB	FITS 12" BEDS
ABIC	FITS 18" BEDS

IDLER PULLEY STAND

CODE 15PP

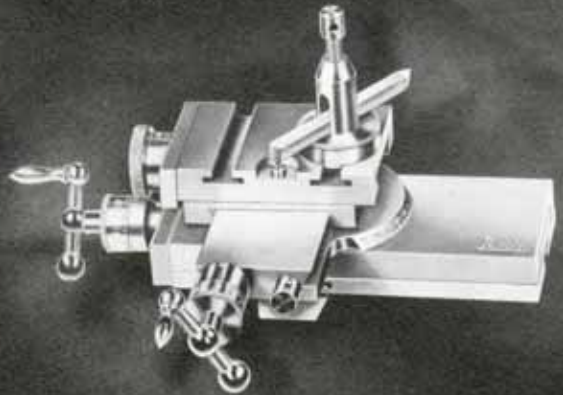
The idler pulley stand provides a means of driving a grinding or milling attachment from a countershaft. It is mounted on the bench top by a single screw. The cross arm clamps are easily adjusted to bring the pulleys into any desired position. When not in use the vertical column and cross arms may be removed.



COMPOUND SLIDE RESTS

All slides are made of Meehanite, accurately machined and fitted with adjustable pins to take up wear. Lead screws have ground threads and ball bearings. They have large, instantly adjustable friction dial. The swivel is graduated in degrees on a bevel surface.

A lever feed attachment is easily applied to the longitudinal slide. The lead screw assembly is removed to make room for the attachment. The tool post is made with an elevating screw to hold the tool bit parallel to the lathe bed.



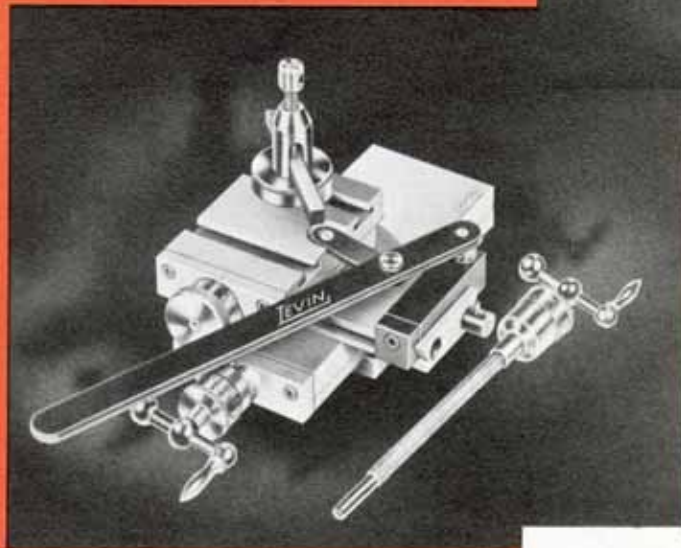
SLIDE REST WITH 3 SLIDES, CODE SRFO

DIMENSIONS

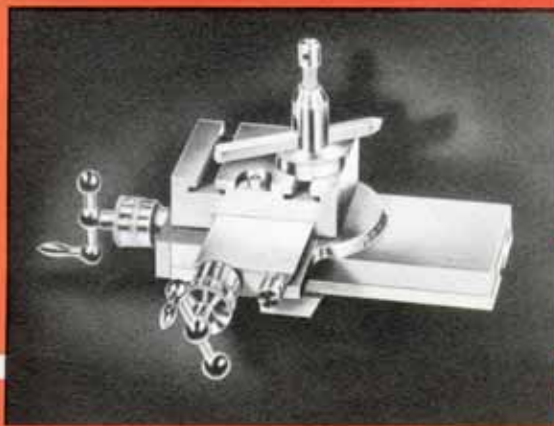
Width of Lower Slide 1 1/2
 Length of Lower Slide 1 1/2
 Travel of Lower Slide 1 1/2
 Radius of Swivel Dial 1 1/2
 Length of Longitudinal Slide 1 1/2
 Travel of Longitudinal Slide 1 1/2
 Diameter of Friction Dial 1 1/2
 Size of Tool Bits Used 1 1/2

CODE	STYLE
SRFO	3 SLIDES
SRFL	3 SLIDES WITH LEVER FEED ATTACHMENT
ARAD	2 SLIDES
ARCF	2 SLIDES WITH LEVER FEED ATTACHMENT

When ordering, specify whether inch or metric graduations are wanted.



SLIDE REST WITH 3 SLIDES AND LEVER FEED ATTACHMENT, CODE SRFL

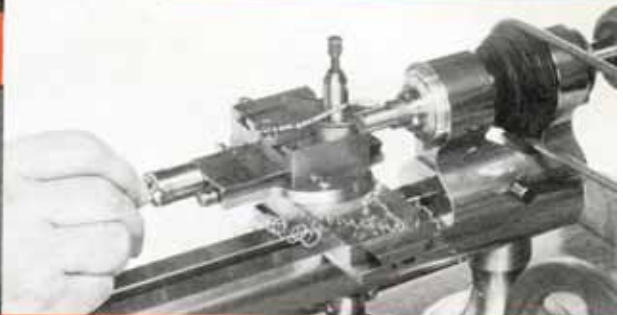


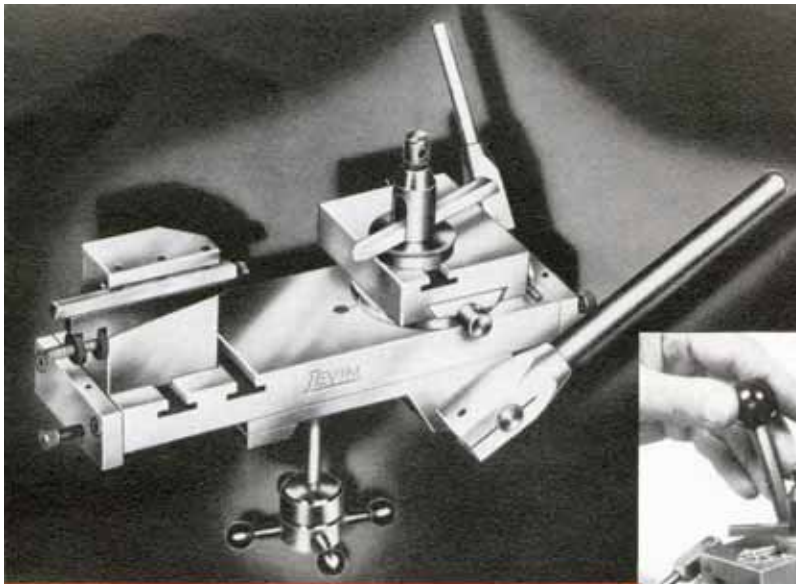
SLIDE REST WITH TWO SLIDES, CODE ARAD

SLIDE REST CUTTERS

CODE SRVC

A set of 6 high speed steel cutters ground ready for use. These cutters are 3/16" square and fit any slide rest.



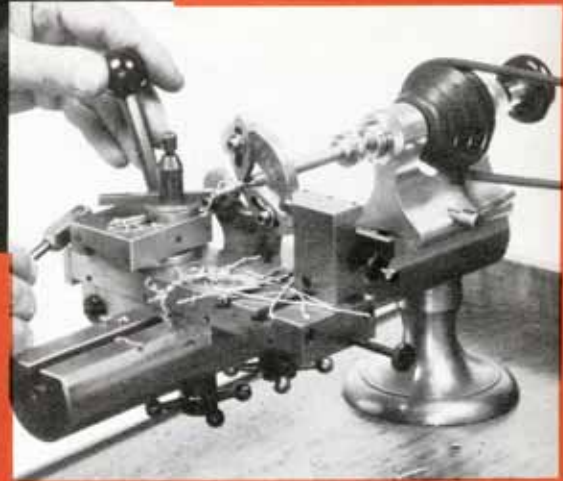


DOUBLE TOOL CROSS SLIDE

Where second operation work is required, the double tool cross slide is recommended. The front tool position is fitted with a rack and pinion operated slide which may be set at any angle. The rear tool block is extremely rigid to provide good support for an

inverted tool. It may be used to hold a cut-off tool close to the cutter. Adjustable stops are provided on both sides. The base is made with an adjustable guide so that the double tool cross slide may be used not only on any LEVIN lathe, but on any WW type lathe.

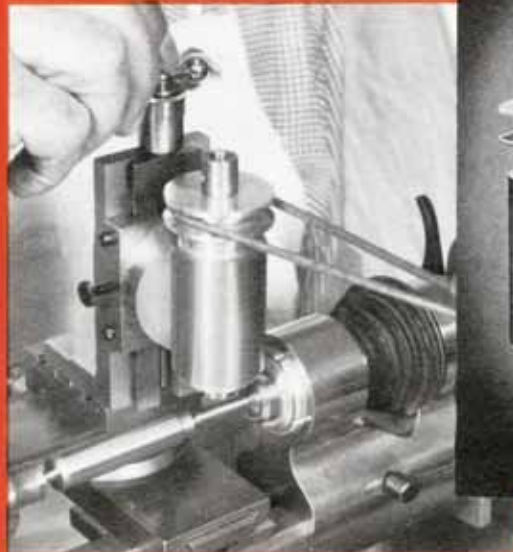
CODE	STYLE
ABHH	FITS LEVIN 14" BEDS
ABDA	FITS LEVIN 12" BEDS



The milling attachment shown here has a precision spindle mounted in pre-loaded ball bearings. Lubricant sufficient for the life of the bearings is sealed in and no oiling is necessary. The base is ribbed to provide maximum rigidity. The vertical slide has an adjustable gib to take up wear and a thumb screw to lock the slide in any desired position. The lead screw has ground threads and a large, instantly adjustable friction dial. The cutterhead is mounted on a swivel graduated in degrees.

MILLING ATTACHMENT

CODE MA00



DIMENSIONS

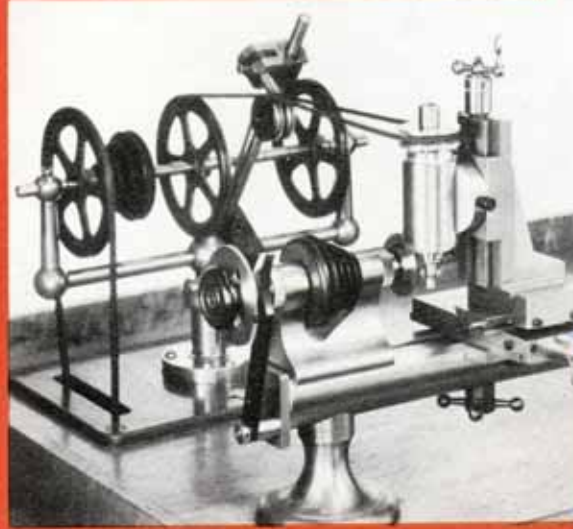
Width of Vertical Slide	1 1/2"
Height of Vertical Slide	4"
Vertical Travel	1 1/2"
Diameter of Friction Dial	1 1/2"
Collets Used	WW Style
Standard Accessories —	Cutter Arbor, MACA, Grinding Wheel Arbor, DWAD and Clamping Bolt.

This milling attachment is made only for WW type collets and arbors. It is easily set up for many different operations involving milling, drilling, grinding, etc.

INDEX LATCH and INDEX PLATES

INDEX LATCH CODE ILCO
INDEX PLATES CODE ILSP

The arm of the index latch has a hardened finger which fits into the notches of the index plate. The set of index plates includes the following divisions: 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72,

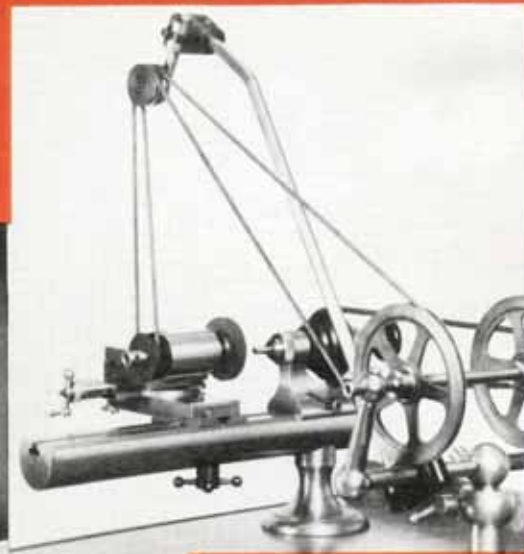
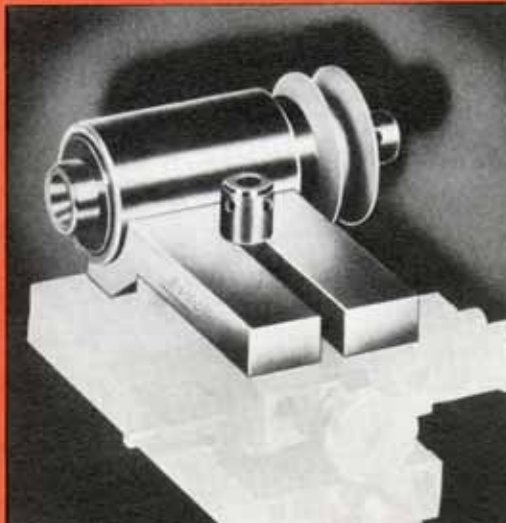


73, 74, 75, 76, 77, 78, 79, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100. When ordering index plates be sure to specify the model of the lathe on which they are to be used or give the serial number of the lathe.

GRINDING ATTACHMENT

CODE ABDF

This attachment fastens to the top of the compound slide rest. The hardened and ground spindle has precision pre-loaded ball



bearings. It is designed to take WW style collets and arbors. The grinder may also be used for a variety of milling and drilling operations.

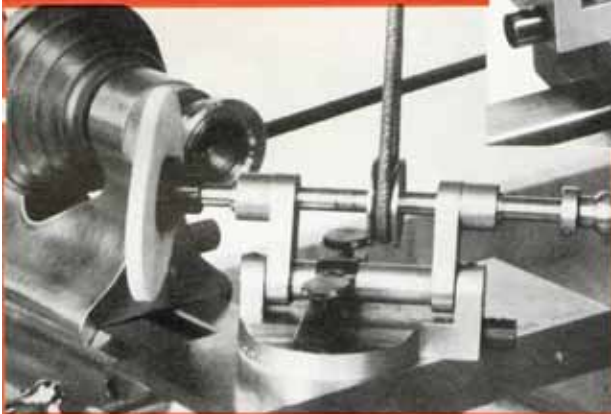
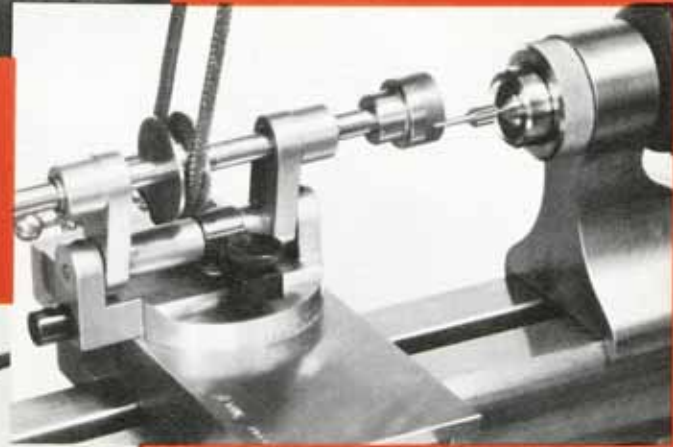


PIVOT POLISHER and GRINDER

CODE TG00

The slide of the pivot polisher and grinder is the same as used in the compound slide rest. The swivel head is graduated in degrees and is locked in place by an eccentric. The yoke carrying the spindle can be rocked in a limited arc by means of the adjustable finger piece. This is particularly useful in grinding or polishing the square shoulders of pivots. By loosening one screw, the height of the spindle

may be adjusted. Both the spindle and bearings are hard and are lapped to a precise fit. The working end of the spindle has a 4 taper. When ordering specify whether inch or metric graduations are wanted.

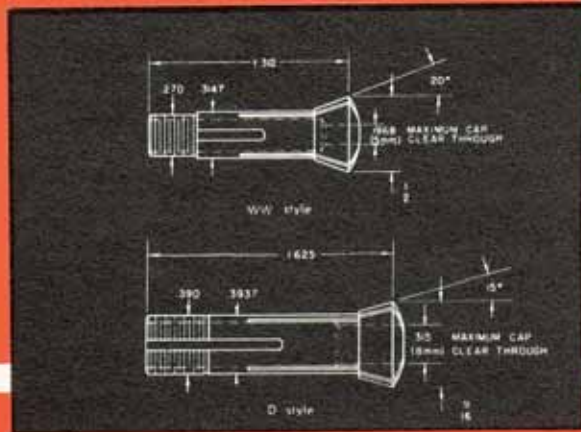


ACCESSORIES FOR PIVOT POLISHER and GRINDER

CODE	DESCRIPTION	CODE	DESCRIPTION
ABAF	LAP STRAIGHT BRASS	ABAK	LAP 24° INCL. ANGLE STEEL
ABAG	LAP STRAIGHT STEEL	ABAL	LAP TRUING ARBOR, STYLE W/W
ABAH	LAP 12° INCL. ANGLE BRASS	ABAM	LAP TRUING ARBOR, STYLE D
ABAI	LAP 12° INCL. ANGLE STEEL	ABAT	GRINDING WHEEL MOUNT
ABAJ	LAP 24° INCL. ANGLE BRASS	TGTR	PAPER REAMER FOR LAPS

COLLETS

LEVIN collets are made of the finest tool steel and carefully heat treated. Special threading equipment is used to produce smooth and accurately formed threads. Collets are supplied in metric sizes or fractional sizes. Metric sizes are furnished in even tenths of a millimeter except in the very smallest sizes from .1mm to 1.0mm, which are available in increments of .05mm. Thus number 15, for example, on a metric collet would mean 15 tenths of a millimeter or 1.5mm. By using a set of metric collets one is always certain to



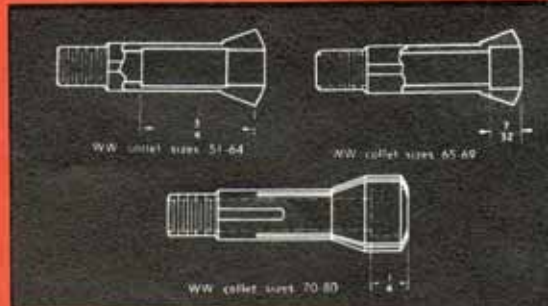
have the proper collet for any size stock as the sizes are only about .004" apart. All sets of collets are supplied in a 90 hole wood box with a transparent cover.

Jewelers' type precision lathes are generally made to use standard collets and accessories. LEVIN arbors, collets and other attachments may be used interchangeably on any standard lathe listed here:

WW Style Collets fit Lathes listed below	
Bergeon	Roerless
Boley	Pennant
Clement	Rivett (new model)
Derbyshire (small)	Swartchild
Eaton	Victor
Lorch	Webster
Marshall	Whitcomb
Paulich	Wolf-Jahn

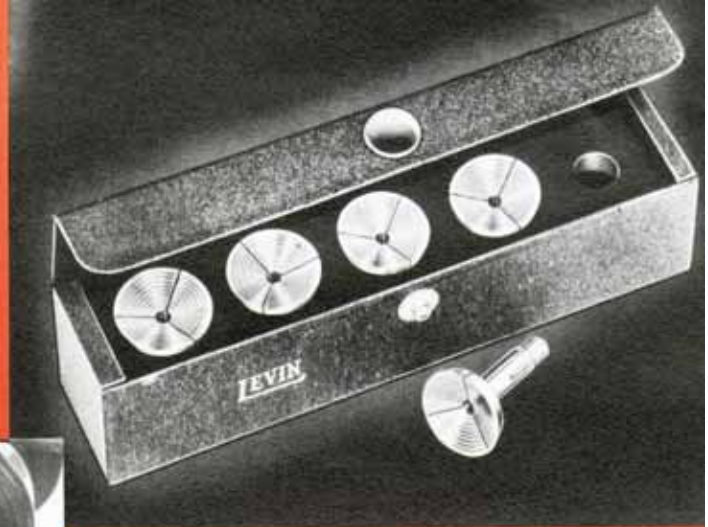
D Style Collets fit Lathes listed below	
Clement	Elect
Large	Magnus

WW type collets in sizes larger than 5.0mm (No. 50) are stepped as shown in the drawings below.



STEP COLLETS

Thin discs, wheels, etc. can be held best in a step collet. Each collet in the set of five has nine different recesses. Step collets are made in the large series (1" dia.) and the midjet series (1 1/2" dia.). Complete dimensions of the steps are given in the accompanying table.

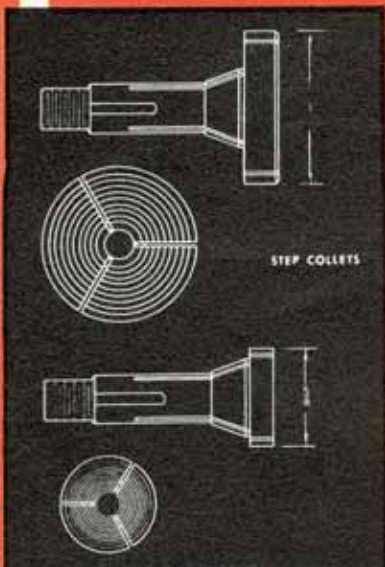


SET OF 5 STEP COLLETS

CODE	STYLE	NUMBER OF COLLETS IN SET
SCLS	WW LARGE	5
ABAD	D LARGE	5
SCSS	WW MIDGET	5

SIZES OF STEPS IN SINGLE STEP COLLETS

CODE	STYLE	COLLET NUMBER	STEP NO.									DEPTH OF STEPS	
			1	2	3	4	5	6	7	8	9		
SCLS	WW Large	1	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000	2.125	2.250
		2	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000	2.125	2.250	2.375
		3	1.250	1.375	1.500	1.625	1.750	1.875	2.000	2.125	2.250	2.375	2.500
		4	1.375	1.500	1.625	1.750	1.875	2.000	2.125	2.250	2.375	2.500	2.625
		5	1.500	1.625	1.750	1.875	2.000	2.125	2.250	2.375	2.500	2.625	2.750
ABAD	D Large	1	1.375	1.500	1.625	1.750	1.875	2.000	2.125	2.250	2.375	2.500	2.625
		2	1.500	1.625	1.750	1.875	2.000	2.125	2.250	2.375	2.500	2.625	2.750
		3	1.625	1.750	1.875	2.000	2.125	2.250	2.375	2.500	2.625	2.750	2.875
		4	1.750	1.875	2.000	2.125	2.250	2.375	2.500	2.625	2.750	2.875	3.000
		5	1.875	2.000	2.125	2.250	2.375	2.500	2.625	2.750	2.875	3.000	3.125
SCSS	WW Midget	1	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875
		2	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000
		3	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000	2.125
		4	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000	2.125	2.250
		5	1.125	1.250	1.375	1.500	1.625	1.750	1.875	2.000	2.125	2.250	2.375





STEP COLLET OR
POT CHUCK BLANKS

BLANK COLLETS

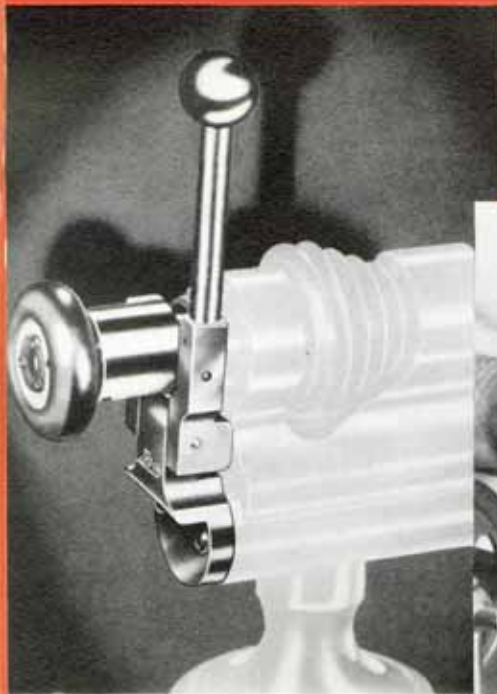
CODE	STYLE	A DIAMETER	B THICKNESS	FACE
ABFJ	WW	5/8	7/32"	solid
ABFK	D	5/8	7/32"	solid
ABFL	WW	1	5/16"	solid
ABSG	WW	1	5/16"	slotted
ABSH	D	1	5/16"	solid
ABFM	D	1 1/8	5/16"	slotted
ABFN	WW	1 1/8	5/16"	solid
ABFU	WW	1 1/8	5/16"	slotted
ABFO	D	1 1/8	5/16"	solid
ABFV	O	1 1/8	5/16"	slotted
ABFP	WW	1 1/2	9/32"	solid
ABFW	WW	1 1/2	9/32"	slotted
ABFO	O	1 1/2	9/32"	solid
ABFX	O	1 1/2	9/32"	slotted



Useful for making special work holding fixtures or pot chucks. These blanks are supplied either with solid face or slotted. Slotted blanks have a 5/32" hole. When turning a slotted blank a 5/32" diameter rod is held in the hole to keep the collet from collapsing.

COLLET CLOSER

A collet closer is particularly desirable for production work when handling time must be kept at a minimum. This attachment may be quickly applied to any LEVIN lathe except cone bearing lathes for WW type collets. All working parts are hardened and ground. The operating lever is conveniently placed so that only a slight movement is required to open or close a collet. Adjustment for gripping power is quickly made.

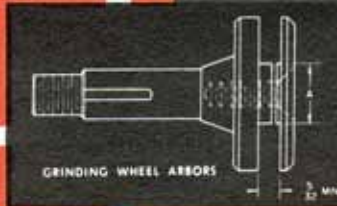


DRILL CHUCK ARBORS



ARBORS FOR JACOBS CHUCKS

CODE	STYLE	CHUCK NO.
ABGG	WW	D
ABGH	D	D
ABGI	WW	1A
ABGJ	D	

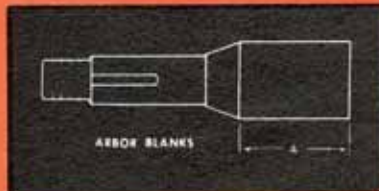


GRINDING WHEEL ARBORS

GRINDING WHEEL ARBORS

CODE	STYLE	DIAMETER
GWAD	WW	1/2"
GWMX	D	1/2"
CGAD	WW	1/2"
ABBF	D	1/2"

ARBOR BLANKS

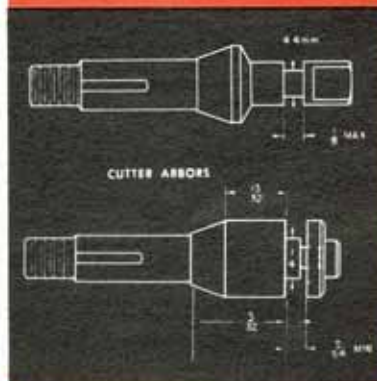


ARBOR BLANKS

For making special arbors, work holding fixtures, etc.

CODE	STYLE	DIAMETER	A LENGTH
ABGX	WW	1/2"	122"
ABGL	D	9/16"	112"
ABGM	WW	1/2"	111/16"
ABGN	D	9/16"	11/16"
ABFF	WW	1/2"	111/16"
ABFG	D	9/16"	2 1/2"

CUTTER ARBORS



CUTTER ARBORS

CODE	STYLE	DIAMETER
MACA	WW	1/2"
ABGD	WW	1/2"

These arbors are used in the milling attachment MACA and grinding attachment ABDT. They are made in WW style only.

TAPER CENTERS



TAPER CENTERS

For supporting work for taper centers. The removable centers are hardened and ground in the collet to insure concentricity.

CODE	STYLE
WCTC	WW
ABDT	D

A useful arbor for holding circular saws, cutters, grinding wheels, etc.



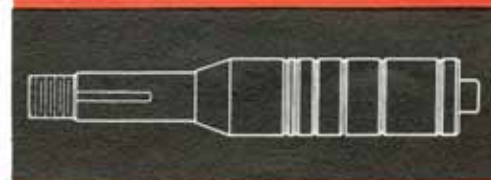
VEE CENTERS



VEE CENTERS

For drilling cross holes in round parts. These vee centers are hardened and ground for precise centering.

CODE	STYLE
ABDQ	WW
ABDW	D



CODE	STYLE	DIAMETER	COLLARS
CCAD	WW	1/2"	1 1/2", 1 3/4", 2 1/4", 3 1/4", 4 1/4", 5 1/4"
ABAY	D	1/2"	



BEZEL CHUCK



Max. External Cap. 2-23/32"
Max. Internal Cap. 1-23/32"

CODE	STYLE
ABFD	WW
ABFE	D

Used for holding thin discs, rings, etc. The jaws are made for inside and outside work. They are screw operated and are moved by turning the knurled ring on the chuck.

DRILL PAD



A 1 1/2" diameter drill pad used in the tail stock of a lathe to support work while drilling with the head stock.

CODE	TYPE
ABFR	WW
ABFL	D

DRIVING PLATE

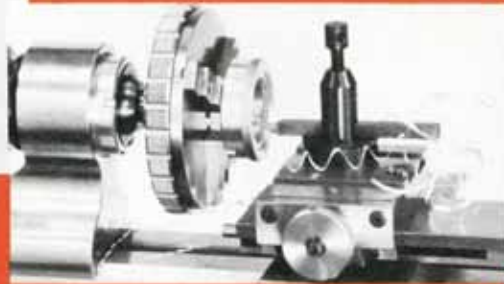


The driving plate is 1 1/2" in diameter and adapted to receive the driving pin of a dog.

CODE	TYPE
ABFI	WW
ABFK	D



3 JAW CHUCK



Max. External Cap. 2-23/32"
Max. Internal Cap. 1-23/32"

CODE	STYLE
ABEK	WW
ABET	D

A screw operated universal chuck with reversible jaws. Useful for holding work which is too large for collets. The jaws are moved by turning the knurled ring on the chuck.

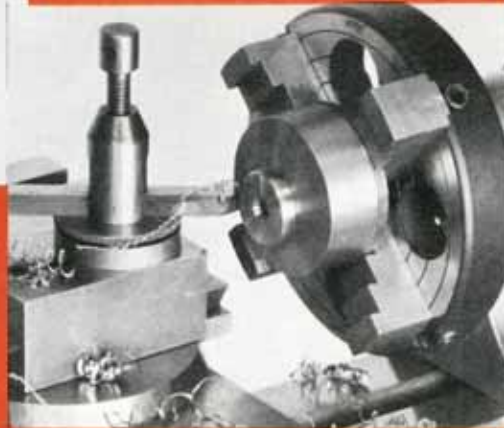
DOG CODE ABEH



An adjustable dog for driving work between centers.



4 JAW CHUCK



Max. External Cap. 2-23/32"
Max. Internal Cap. 2-23/32"

CODE	STYLE
ABHY	WW
ABHZ	D

A 4 jaw independent chuck with reversible jaws. Light in weight and with minimum thickness.

BORING HEAD



Ideal for precise turning and reaming. Bore at 1/16" intervals and has 1/4" hole. Total travel of tool is 1 1/2".

CODE	TYPE
ABDC	WW
ABDD	D

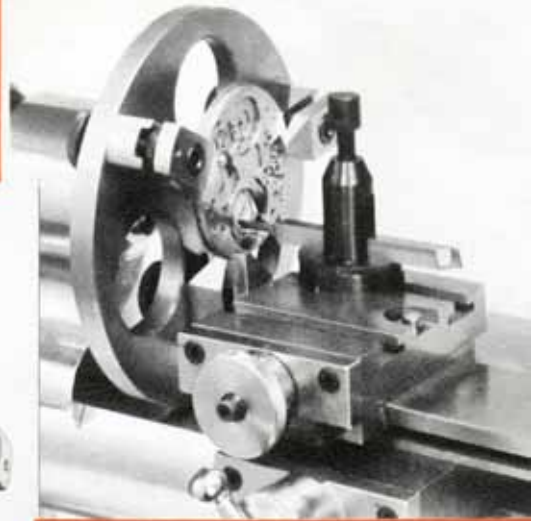
FACE PLATES



PUMP-CENTER FACE PLATE

This face plate is made with independently adjustable jaws and a pump center for locating work. Large deep holes aid in setting up work.

CODE	STYLE
ABEE	WW
ABEF	D



TAPPED-HOLE FACE PLATE

A face plate $3\frac{1}{2}$ " in diameter with 6-32 tapped holes. A useful accessory for precision work where accurate mounting is required.

CODE	STYLE
ABHU	WW
ABHV	D



DRILL CHUCKS



A mounted drill chuck which may be used in the head stock or tail stock of any LEONIX lathe.

CODE	STYLE	CHUCK NO.	CAP.
WCDC	WW	0	1.122"
ABAZ	D		
WCDD	WW	1A	0.74"
ABDL	D		

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CEMENT BRASSES

For holding work with cement or wax. Made of brass, integral with shank and easily refaced as required.

CODE	STYLE	A DIAMETER
HBDB	WW	1.17
ABAP	D	1.17
HBEB	WW	1.25
ABAQ	D	1.25
HBFB	WW	1.37
ABAR	D	1.37
HBGB	WW	1.50
ABAS	D	1.50





UTILITY SET

The Utility Set shown here includes 2 high speed steel gravers (hand turning tools), a graver holder, grinding wheel 2 1/2" x 1/8" fine India oil-stone wheel 2" x 1/4" wheel dressing stick, 2 grinding wheel arbors, sutter arbor, 2 high speed circular saws 1" x .014" and 1" x .032" collet holder and saw table.

The collet holder is a hard steel square block with a nut to draw in a collet. When used with the saw table it offers a fast method of slotting screw heads, milling squares and numerous other operations. Individual components of the set may be purchased separately. They are listed below.



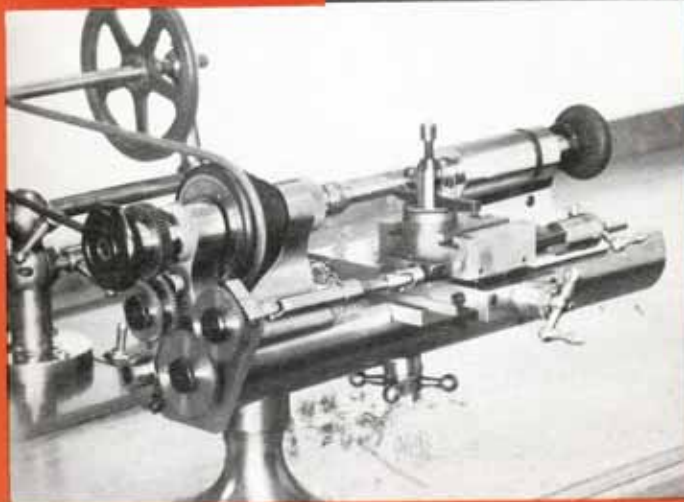
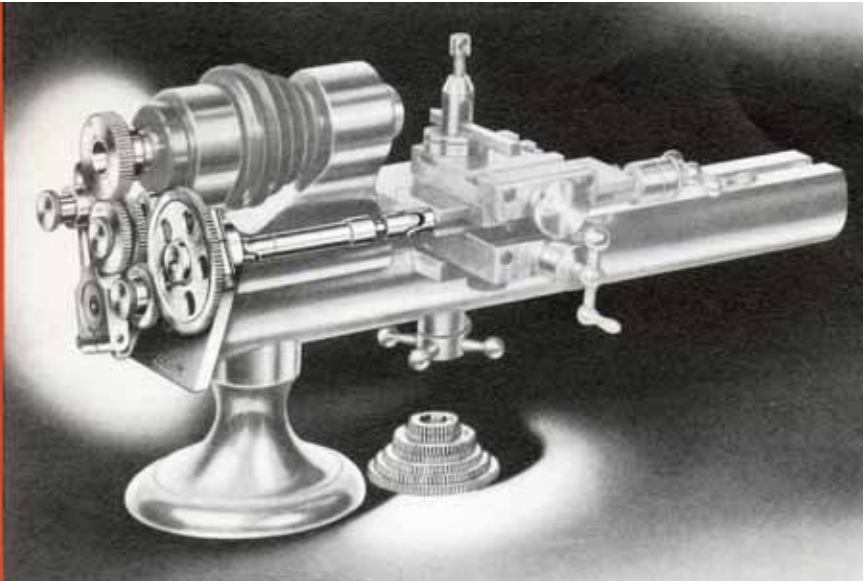
UTILITY SET COMPLETE

CODE	STYLE
UFCS	WW
ABBC	D

CODE		STYLE
UFST	COLLET HOLDER & SAW TABLE	WW
ABBC		D
CCA0	LUTTER ARBOR—1"	WW
ABAY		D
GWAD	GRINDING WHEEL ARBOR—1"	WW
GWMX		D
GWWD	GRINDING WHEEL—ALUM. OXIDE	
GWIS	GRINDING WHEEL—INDIA GILSTONE	
GWDS	WHEEL TRUING STICK	
CSHS	CIRCULAR SAW	
	1" x .014" x 12"	
	1" x .032" x 12"	
HSPG	HIGH SPEED STEEL GRAVER	
CGGH	GRAVER HOLDER	



SCREW CUTTING ATTACHMENT



By means of the screw cutting attachment shown here, one can make threaded parts, special taps, etc. Furnished with spindle gear and 11 additional change gears enabling one to cut a wide variety of screw threads, either straight or tapered. May be ordered with translating gears for conversion from inch to metric threads or vice versa.

When ordering, specify the model of lathe on which attachment is to be used or supply serial number of lathe.

CODE	STYLE
ARDP	
ABHG	WITH TRANSLATING GEAR

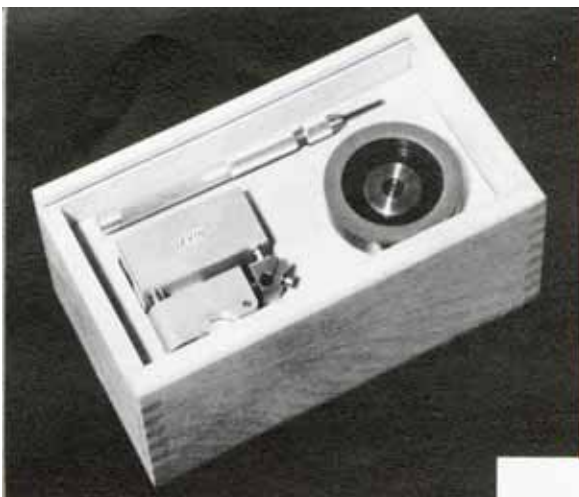
GEAR TABLE FOR THREAD CUTTING

GEARS USED WITH INCH SLIDE REST

Threads Per Inch	Gear on Slide Rest Screw	A - Change Gear	B - Change Gear	Spindle Gear
20	36	45	40	60
22	36	45	44	60
24	48	72	32	60
28	60	60	30	60
30	36	48	35	60
32	45	60	32	60
36	36	45	40	60
40	60	40	30	60
42	36	48	35	60
44	44	40	30	60
48	36	48	35	60
50	36	45	40	60
56	60	40	30	60
60	36	45	40	60
64	36	45	44	60
72	36	45	44	60
80	60	40	30	60
96	36	45	44	60
100	60	40	30	60
120	36	45	44	60
160	36	45	44	60

GEARS USED WITH METRIC SLIDE REST

Threads Per Centimeter	Gear on Slide Rest Screw	Change Gears A	Change Gears B	Spindle Gear
10	60	any		60
11	44	48	72	60
12	48	40	60	60
14	84	any		60
15	60	45	72	60
16	96	any		60
18	60	40	72	60
20	60	48	96	60
21	84	48	72	60
24	72	48	96	60
28	72	36	84	60
30	72	40	100	60
32	72	36	96	60

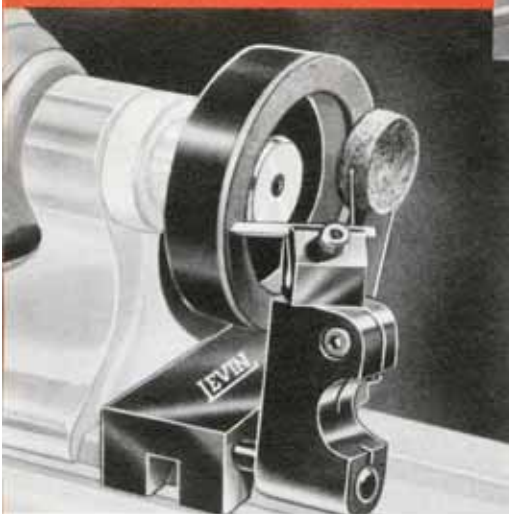
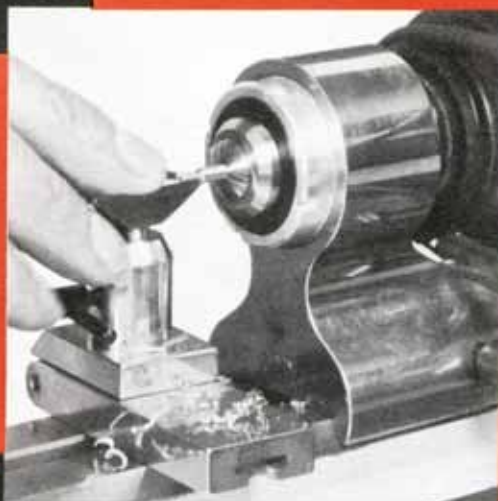


CARBIDE GRAVER SET

Successful use of carbide graters depends upon the facilities for sharpening them. The LEVIN graver sharpener is designed for fast and convenient sharpening of standard graters 1/16" square. The holder can be turned to any desired angle and can be instantly removed for inspection of the graver point being ground without losing the grinding position. The felt pad saturated with kerosene keeps the face of the diamond wheel moist and improves the finish. Individual components of the carbide graver set may be purchased separately.

CODE		STYLE
CGSN	CARBIDE GRAVER	WW
ABBR	1/16" DIAMETER	D
CGAD	GRINDING WHEEL	D
ABBF	ARBOR	WW
CGST	SHARPENING TOOL	
CGGH	GRAVER HOLDER	
CGCT	CARBIDE GRAVER	
CGWD	DIAMOND WHEEL	

CARBIDE GRAVER SHARPENING TOOL



HIGH SPEED STEEL GRAVER

For use with the top-over hand rest, LEVIN high speed steel graters are 1/16" square.



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and 2 1/2" long. Useful for any type of hand turning.

DIAMOND LAPS

The sharpening of very small drills and other tools requiring an extremely smooth edge is easily done on a lap with diamond compound. These laps are supplied either in cast iron for most work or boxwood for polishing. They are 1-1/16" in diameter and are used on 7/8" grinding wheel arbors.



CODE	MATERIAL	ARBOR STYLE
ABEA	BOXWOOD	UNMOUNTED
ABEB	CAST IRON	
ABD1	BOXWOOD	WW
ABD2		D
CGDL	CAST IRON	WW
ABAT		D

DIAMOND LAPPING COMPOUND CODE DPLC

Ready mixed diamond lapping compound for use on diamond laps. Supplied in grades 1 to 7.

MICRO-DRILL PRESS

FOR VERY SMALL HOLES

CODE ABEL

SPINDLE

The spindle is fitted with precision pre-loaded ball bearings and is made to hold Levin WW style collets. A draw bar is provided. The absence of a sliding quill and splines eliminates several sources of drag and insures a spindle sensitive enough for the smallest drills made.

TABLE

Size of table is $3\frac{3}{4}$ " x 4". Maximum table travel is 1.12". Rotational play in the table is eliminated by having it keyed near the edge. The rack and pinion feed is sensitive enough for the operator to feel the smallest drill cutting. An adjustable stop on the rack limits the stroke. The greatest distance between the table and the end of the spindle is 4".

MOTOR

The drill press is driven by a 1/12 HP 1725 RPM motor giving four spindle speeds, 1725, 2600, 3000 and 4700 RPM.



COLLETS

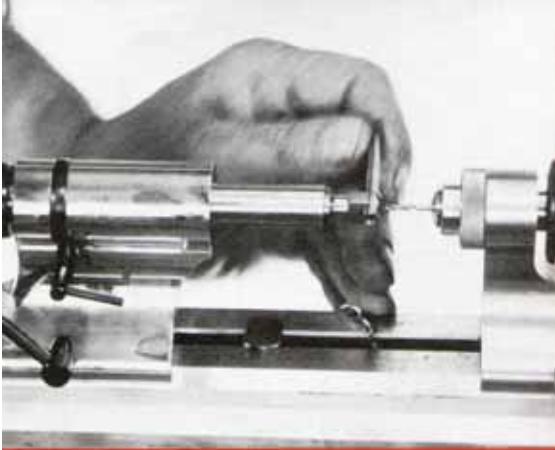
For details of collets see pages 15 and 16. The spindle of the drill press fits WW collets only.

25

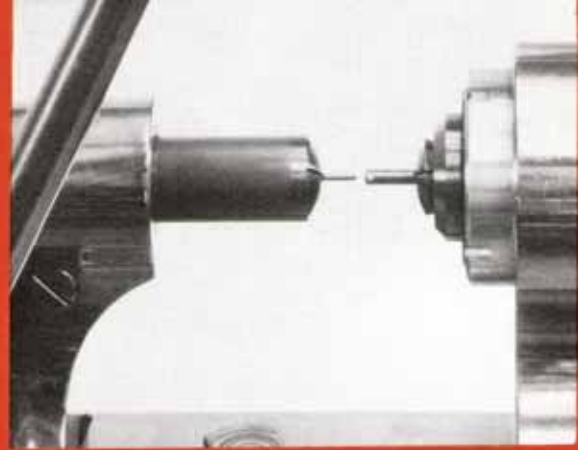
DRILL CHUCK

While adjustable drill chucks are not recommended for very small drills they may however be used when extreme accuracy is not required. Drill chuck WCDC listed on page 21 is preferred for use in the drill press.

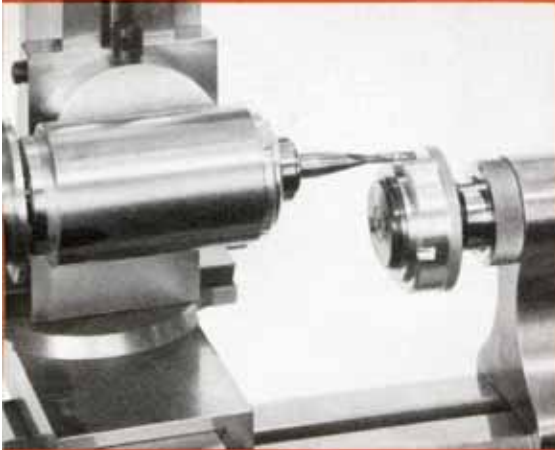




Drilling Cross Hole With Vee Center
Lathe ABES, vee center ABDO



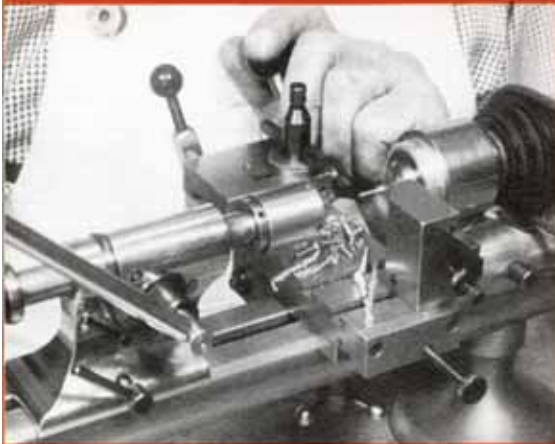
Drilling .006" Hole In Lathe
Lathe ABBR



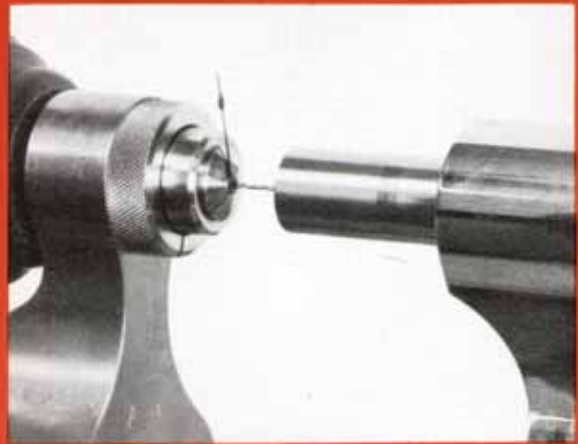
Milling Notches In Ring
Lathe HLFT, slide rest ABAD, milling attachment MAOD



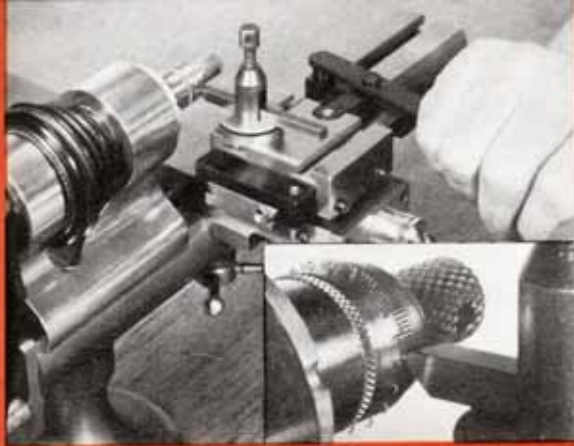
Turning Pivot On Piece Held In Special Fixture
Lathe ABBT, slide rest ABAD



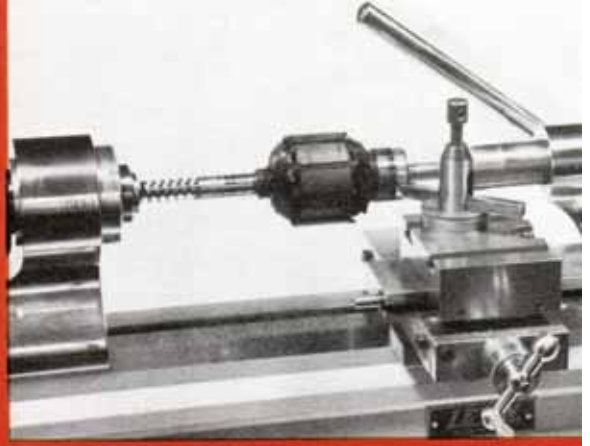
Making Small Screws
Lathe ABBR, double tool cross slide ABDA



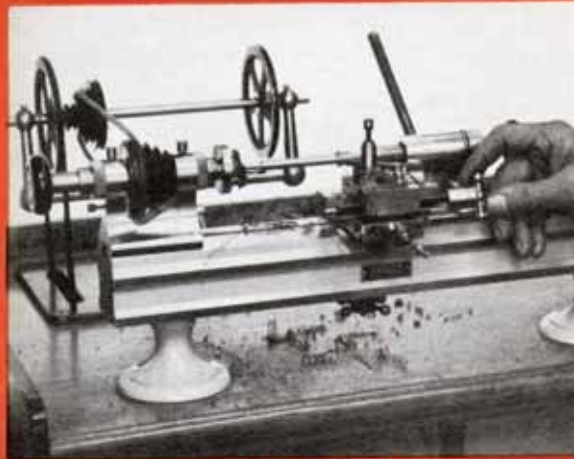
Drilling Hole In Indicator Hand
Lathe HLFT, hand chuck ABDR



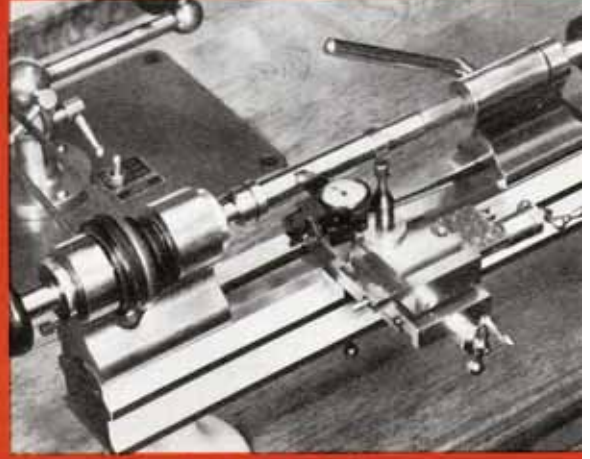
Cutting Index Marks in A Dial
 Lathe ABBT, index latch ILCO, slide rest ABCP



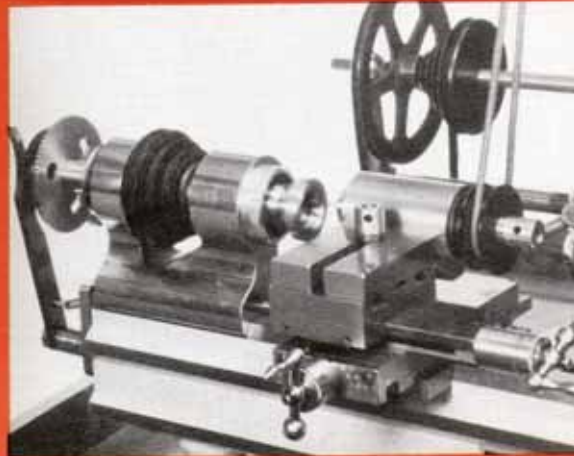
Turning Commutator of Motor
 Lathe ABEO, slide rest ABAD



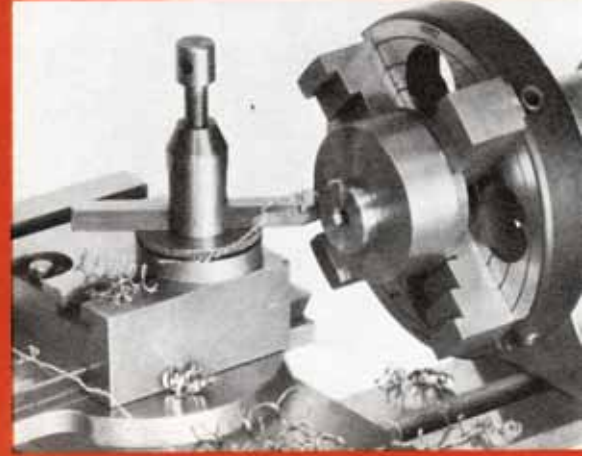
Turning Shaft On Centers
 Lathe ABNR, slide rest ABAD, driving plate ABEK,
 dog ABEM



Checking Spindle For Runout
 Lathe ABEO, slide rest ABAD



Drilling Equally Spaced Holes in A Ring
 Lathe ABEO, index latch ILCO, slide rest ABAD,
 grinding attachment ABDI



Turning Work Held in Four Jaw Chuck
 Lathe HLET, slide rest ABAD, four jaw chuck ABHY

MISCELLANEOUS WATCHMAKERS TOOLS



BALANCE CHUCKS*

Only the Levin balance chuck offers all the features required by the modern watchmaker. It is designed to hold a complete balance, allowing the pivot to project through a true hole in the convex disc. Each disc is drilled in its own chuck to make it as true as possible. Two sizes are made, one for pocket

watch balances and the other for small baguette balances.

CODE	DESCRIPTION
BCCS	SET OF 2 BALANCE CHUCKS
BCLS	LARGE BALANCE CHUCK
BSSS	SMALL BALANCE CHUCK

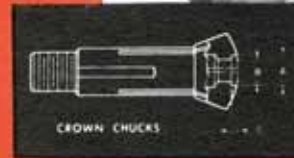
*MADE IN WW STYLE ONLY

SET OF 13 CROWN CHUCKS*

CODE WSCS

For holding watch crowns. These chucks are made of brass so as not to damage the knurling on a crown and the recesses are made shallow to leave the pipe of a crown accessible for turning. Each chuck is marked with the diameter of the recess. Supplied in a wood box. Individual crown chucks are listed in the following table. *MADE IN WW STYLE ONLY

CODE	SIZE	A RECESS DIAMETER	B HOLE DIAMETER	C RECESS DEPTH
ARGO	40	4.0mm	1.57"	0.31
	42	4.2mm	1.65"	0.35
	44	4.4mm	1.73"	0.37
	46	4.6mm	1.81"	0.35
	48	4.8mm	1.89"	0.40
	50	5.0mm	1.97"	0.40
	52	5.2mm	2.05"	0.40
	54	5.4mm	2.13"	0.40
	56	5.6mm	2.21"	0.42
	58	5.8mm	2.29"	0.45
	60	6.0mm	2.36"	0.45
	62	6.2mm	2.44"	0.47
	64	6.4mm	2.52"	0.45

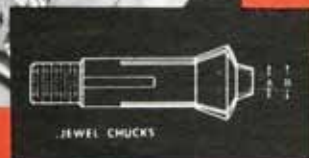


CROWN CHUCKS

SET OF 17 JEWEL CHUCKS*

CODE ABDE

A set of specially designed chucks to hold jewel bearings which are mounted in bushings. Each chuck is provided with a plug to keep it from collapsing when re-stepping is done. Supplied in attractive wood box. Individual jewel chucks are listed in the following table. *MADE IN WW STYLE ONLY



JEWEL CHUCKS

CODE	SIZE	A RECESS DIAMETER	B HOLE DIAMETER	RECESS DEPTH
ARGO	14	1.4mm	0.55	1.3mm
	15	1.5mm	0.59	1.2mm
	16	1.6mm	0.63	1.3mm
	17	1.7mm	0.67	1.4mm
	18	1.8mm	0.71	1.5mm
	19	1.9mm	0.75	1.6mm
	20	2.0mm	0.79	1.7mm
	21	2.1mm	0.83	1.8mm
	22	2.2mm	0.87	1.9mm
	23	2.3mm	0.91	1.9mm
	24	2.4mm	0.95	2.0mm
	25	2.5mm	0.98	2.1mm
	26	2.6mm	1.02	2.2mm
	27	2.7mm	1.06	2.3mm
	28	2.8mm	1.10	2.4mm
	29	2.9mm	1.14	2.5mm
	30	3.0mm	1.18	2.6mm

Used to hold a hand when turning the socket hub or altering the hole in the socket. These chucks are made with a shallow recess for the socket and a slot to clear the projecting portion of the hand. Each shank is marked with the diameter of the recess. Supplied in a wood box. Individual chucks are listed in the following table.

SINGLE HAND CHUCKS*

CODE	SIZE	A RECESS DIAMETER	D HOLE DIAMETER	RECESS DEPTH
ABOP	12	1.2 mm	0.47	6 mm
	12.5	1.25 mm	0.5	6 mm
	15	1.5 mm	0.54	7.2 mm
	15.5	1.55 mm	0.55	7.2 mm
	18	1.8 mm	0.71	7.5 mm
	19.5	1.95 mm	0.77	14.5 mm
	21	2.1 mm	0.83	18 mm
	22.1	2.25 mm	0.88	18.5 mm
	24	2.4 mm	0.93	21 mm
	25.3	2.55 mm	1.00	22.5 mm
	27	2.7 mm	1.06	24 mm
	28.5	2.85 mm	1.12	25 mm
	30	3.0 mm	1.18	27 mm

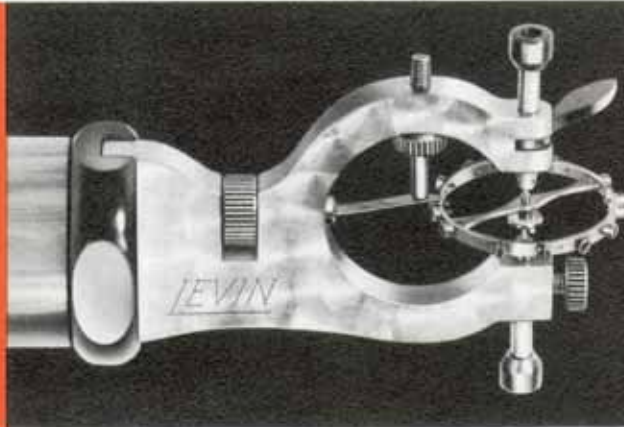
*MADE IN JAW STEEL ONLY

SET OF 13 HAND CHUCKS

CODE ABDR



HAND CHUCKS



BRACELET BALANCE TRUING CALIPER

CODE BTCB

Recognized everywhere as the finest truing caliper made. Will accommodate balances up to pocket size and can be safely placed on bench while balance is in it without fear of damage. All adjustments can be made with one hand.

HAIRSPRING TRUING CALIPER

CODE ABDS

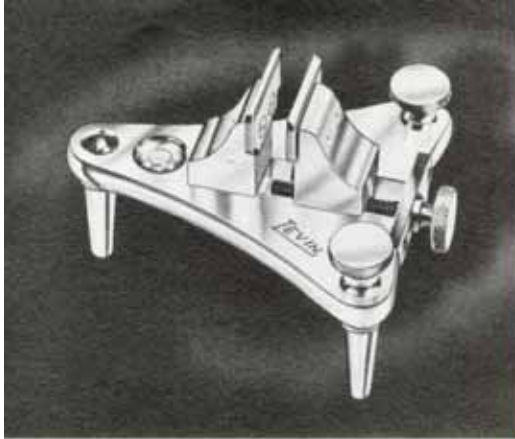
Complete visibility clear around the collet, also plenty of room for manipulation of the inner coil of the spring with the tweezers. Balance wheel is free to spin if desired or can be put under a slight friction by the spring of the trigger. The pivot point holes are shaped to accommodate balance wheels ranging in size from the smallest baguette to a railroad watch size.



2-IN-1 BALANCE TRUING CALIPER

CODE TCTI

A parallel opening caliper with the original Levin universal index which can be quickly adjusted to any size balance. The thin end of the caliper has small pivot holes for bracelet balances.



RUBY JAW POISING TOOL

CODE PTRJ

Watchmakers who want the finest will appreciate this poising tool. The ruby jaws, permanently bonded to the metal plates, are a full three quarters of an inch long. They are precisely ground and polished to produce just the right edge for poising the smallest balances. A beautifully finished tool in nickel silver and provided with a neatly fitted spirit level.

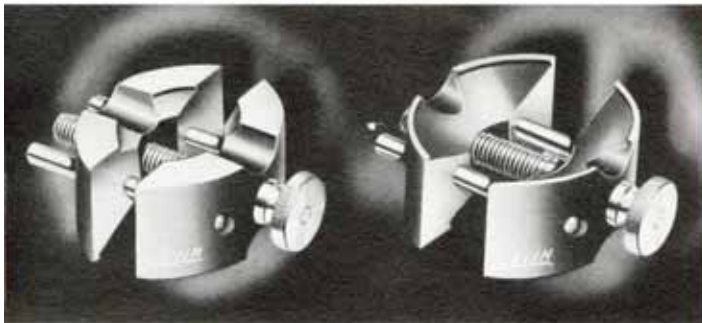
SET OF 3 MAIN SPRING WINDERS

CODE ABCX

Exceptionally well made Adjustable Main Spring Winders. Set of three sizes. Will handle complete range of wrist watch barrels, down to the smallest baguette size.

INDIVIDUAL SIZES

CODE	SIZE
ABGR	SMALL
ABGL	MEDIUM
ABGT	LARGE



2-IN-1 MOVEMENT HOLDER

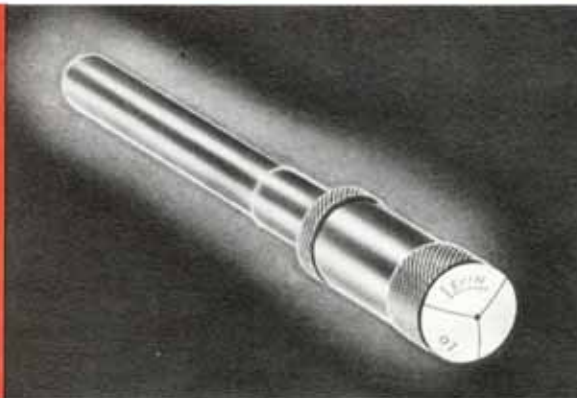
CODE MHTS

A well made watch movement holder for holding any size from a small baguette to a pocket watch. It will accommodate watches with curved plates and there is plenty of clearance for any style of winding stem.

COLLET HOLDING PIN VISE*

CODE PVLC

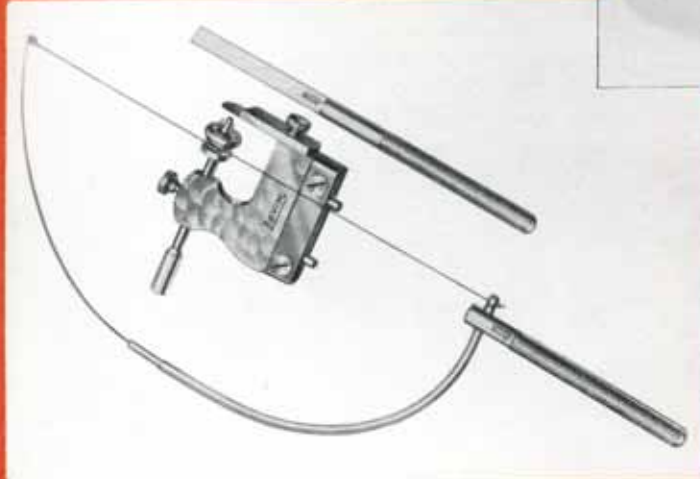
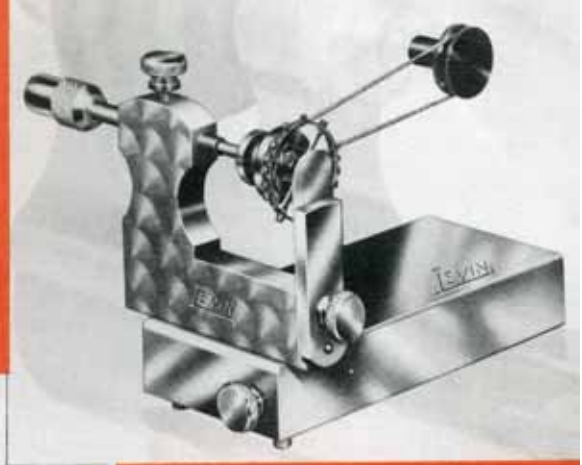
By using this chuck holding pin vise one is assured of a great variety of sizes. It holds the WW type collets and thus one can use it for as many sizes of material as he has collets.



PIVOT STRAIGHTENER and POLISHER

The original Levin pivot straightener and polisher with the instantly adjustable pulley and pivot plate. The pulley is made with an ingenious friction arrangement so that one needs only to slide it to the desired position and it stays there. The pivot plate has three different sizes of holes and is easily moved from one position to the other. A simple thumb screw clamps it securely. A hardened steel plate next to the pivot plate serves as a guide for a burnisher.

Many watchmakers prefer to use the pivot straightener with a fiddle bow. A bench plate, furnished with each tool, is screwed to the front of the bench to mount the tool in the most convenient position. For use on the lathe, an adapter plate and driving pulley are supplied. The pulley is held on the lathe bed by the regular T-bolt in the same manner as a T-rest.



Either the bench plate or adapter and driving pulley may be purchased separately, if desired. For use with the pivot straightener and polisher we also make a hard steel burnisher and a fiddle bow. The fiddle bow is made with one edge sharp for square shoulders and the other edge slightly rounded for use on conical balance pivots.

PIVOT STRAIGHTENER AND POLISHER	CODE
WITH BENCH PLATE, LATHE ADAPTER AND PULLEY	PSOC
WITH BENCH PLATE ONLY	PSOO
FIDDLE BOW	PSFB
PIVOT BURNISHER	PSBB

STAKING TOOL



CODE	STAKING TOOL
STIM	100 PUNCH SET
ABBE	50 PUNCH SET

Levin staking tool has been universally recognized for its high quality. The frame is made of Meehanite with a stainless steel column. The arm contains a simple on and off friction device which cannot get out of order. The die plate is made of the finest tool steel 3/16" thick and lapped to a polish. Punches may be inverted so they can be used as stamps. The inclined block in the case contains 120 holes for punches, allowing room for additions to the regular set.

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PRACTICAL BENCH WORK

For Horologists



CODE PBFW

Levin & Samuel Levin's new revised eighth edition of Practical Benchwork for Horologists includes 361 pages, 475 illustrations and contains more than a quarter century of actual watchmaking experience.

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