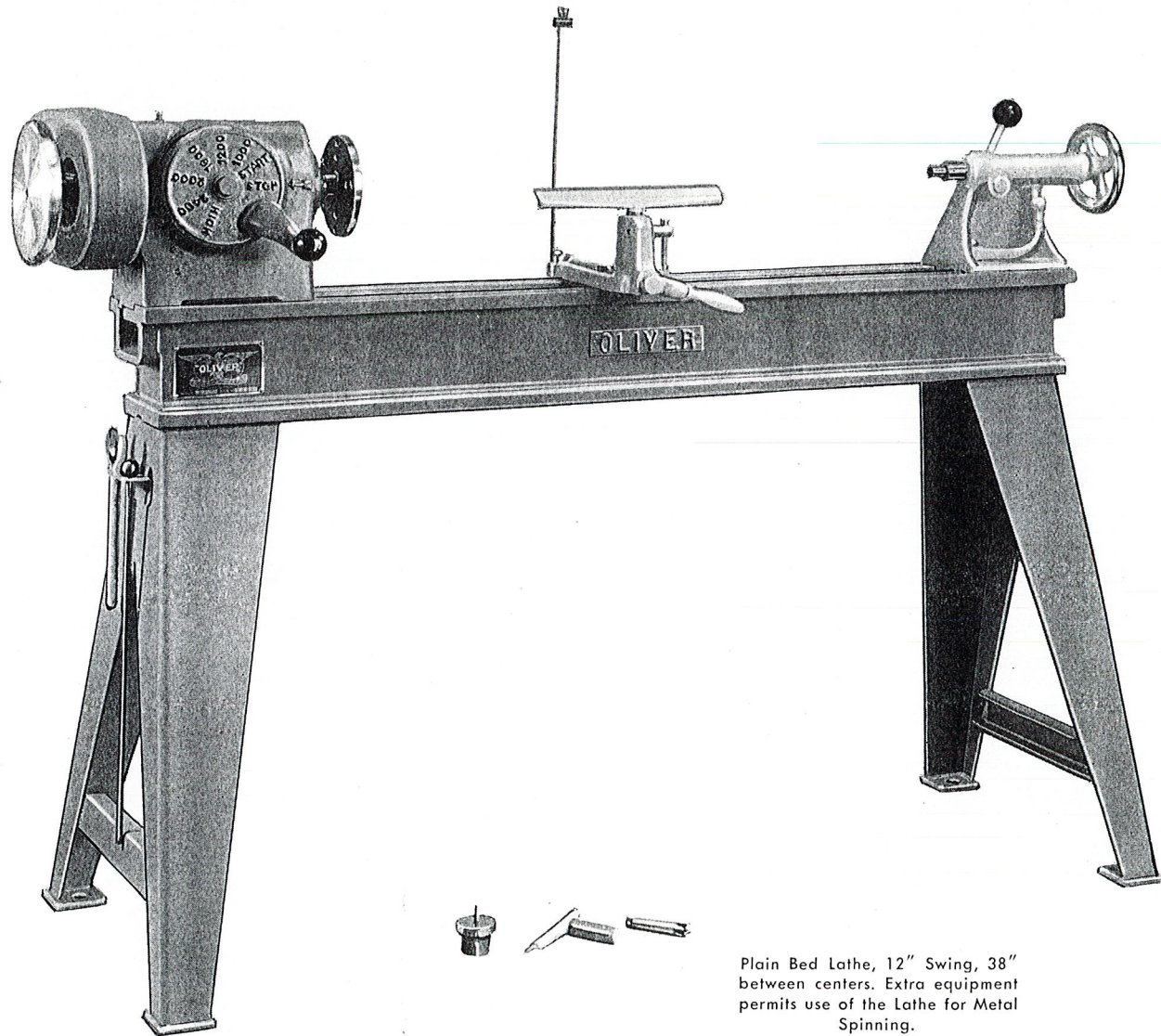


OLIVER

No. 159

12-inch Wood Lathe



Plain Bed Lathe, 12" Swing, 38" between centers. Extra equipment permits use of the Lathe for Metal Spinning.

V-Belt Adjustable Speed Headstock



OLIVER MACHINERY COMPANY, GRAND RAPIDS 2, MICHIGAN, U.S.A.

This Lathe has new headstock . . . beds up to 8 feet long

Headstock

The headstock is of the double ended self-contained unit type, consisting of a headblock with ball bearing spindle driven by a suitable ball bearing motor, operating through a "V" belt on adjustable cone sheaves giving any speed, 800 to 2750 r.p.m. The headstock casting has a broad base with tongue fitting to the bed, rigidly clamped. Bearings are of the very best, deep groove, frictionless ball bearing type, with provision to resist end thrust from either direction. Positive spindle lock facilitates removal of face plates from both front and rear ends.

Variation of Speed

Speed change to get any speed from 800 to 2750 r.p.m. is accomplished by merely shifting the speed control lever at the front side of the headstock to the position desired. Turning this lever operates a cam inside the headstock which shifts the inner half of the spindle sheave allowing the "V" belt to position itself automatically, due to the spring

pressure of the outer half of the motor sheave, until a new relation of contact surface is established between the driven and the driving sheaves, causing the spindle to operate at the speed desired. Simple, yet very effective.

"V" Belt

The "V" belt running from the motor sheave to the spindle sheave of the headstock is especially designed for effectiveness and for long life. It is totally enclosed and fully automatic in its adjustments to give the speed desired.

Motor

The motor is mounted directly back of the headblock; $\frac{3}{4}$ h.p., 1800 r.p.m., to suit your electric current. Motor starts only at the low spindle speed, assuring safety.

Electrical Control

The switch for operating the motor is mounted inside the headstock, has overload protec-

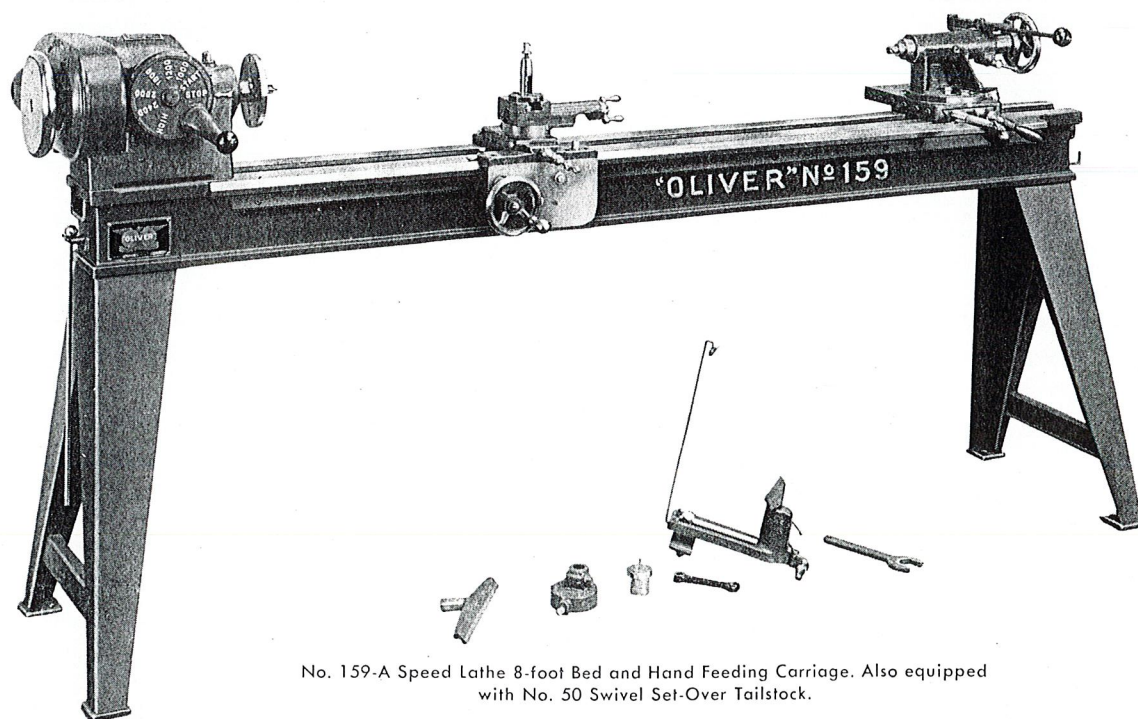
tion, and is operated by the control handle, so that when the control handle is moved to the stop position, the lathe stops, and when moved to the start position it starts, and after starting, any speed may be had by merely turning the lever to the speed desired.

Spindle

Made of extra hard steel, finished, and ground true, has a hole through its entire length and is fitted with No. 2 Morse taper at front end for receiving centers. Spindle nose $1\frac{1}{8}$ " diameter. Has threads on front and rear ends for face plates, and with plunger lock to hold spindle while putting on or removing face plates.

Rear End Turning

All of these lathes are regularly arranged for rear end turning by making the headstock spindle double ended and mounting on the rear end our 8" patented combined rear end hand wheel and face plate. Max-

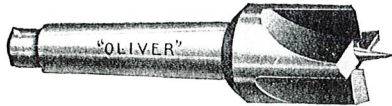


No. 159-A Speed Lathe 8-foot Bed and Hand Feeding Carriage. Also equipped with No. 50 Swivel Set-Over Tailstock.

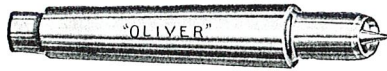
OLIVER

NO. 159 12-INCH WOOD LATHE

12" SPEED LATHE EQUIPMENT



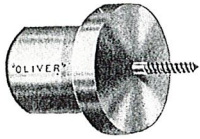
No. 2—Spur Center
Sizes $\frac{1}{2}$ " , $\frac{3}{4}$ " std., 1" , $1\frac{1}{4}$ " , $1\frac{1}{2}$ " , 2"



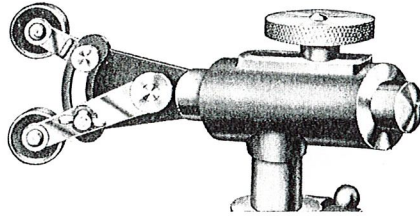
No. 2—Cup Center
Sizes $\frac{1}{2}$ " , $\frac{3}{4}$ " , std., 1" , $1\frac{1}{4}$ " , $1\frac{1}{2}$ "



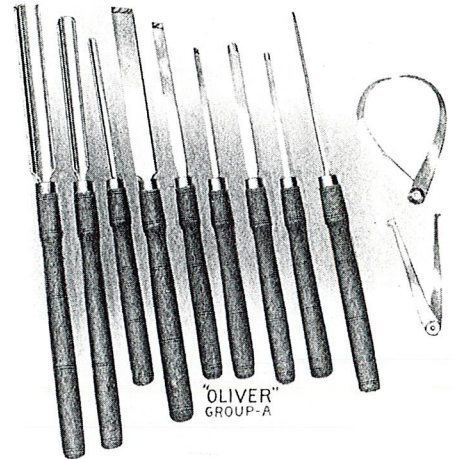
No. 2— $\frac{3}{4}$ " Cone Center



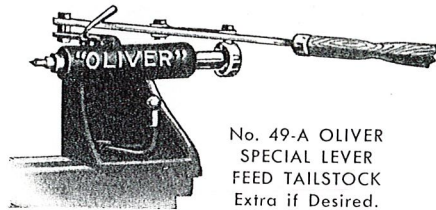
$2\frac{1}{4}$ " Screw Chuck.
3" also available.



No. 206-A—Adjustable Back Rest
with 1" diameter shank.

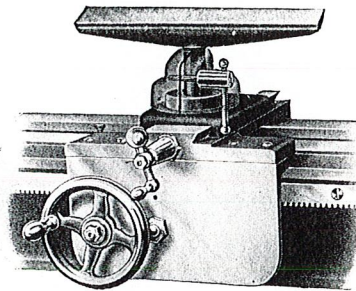


Group "A" Woodturning Tools, recommended
for educational institutions.

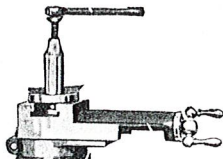


No. 49-A OLIVER
SPECIAL LEVER
FEED TAILSTOCK
Extra if Desired.

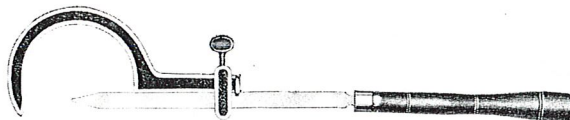
The quick feed lever part may be securely clamped in any position, making lathe available for regular turning.



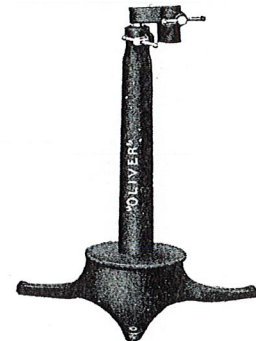
Hand Feeding Carriage with Compound
Swivel Rest and Hand Tool Rest Socket.



Compound Swivel Slide and Tool Post
Easily Removed from Carriage.



No. 26 Sizing Tool 4" Capacity.
Complete with $\frac{1}{2}$ " parting tool.



No. 256 A—Floor Stand.

imum diameter face plate that can be used on rear of No. 159 is 8".

The Bed

This is a cored casting $6\frac{1}{4}$ " deep, $6\frac{3}{8}$ " wide, and regularly 48" long. Beds up to 8' long can be furnished. The inside edges are machined and act as ways for the alignment of the headstock and tailstock. When furnished with a tool carriage, the ways for same are cast on the front of the bed. Two brackets are fastened on the back to sup-

port an accessory shelf. Bed is 36" from floor to top.

Legs

Lathe is furnished with steel floor legs, making top of bed 36" from floor, or with short bench legs, as may be desired.

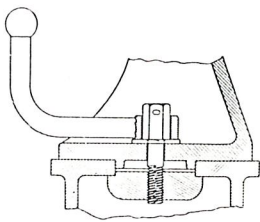
Tailstock

This is of the open side design, 7" long, 6" wide. It is secured to the bed by a positive lever clamp. Spindle is machine ground steel $1\frac{1}{4}$ " diameter, 8"

long, bored for No. 2 Morse Taper and is held in position by lever clamp. Tail center is removed by backing of screw. On lathes with carriage, the tailstock is furnished with a set-over device for taper work. Spindle has traverse of 4".

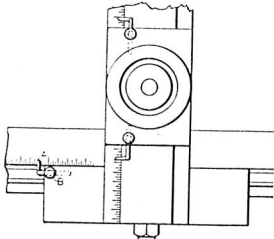
Tool Carriage

Hand feed tool carriage with cross feed and compound swivel rest may be furnished with this lathe. The apron has a bearing of 10" on the bed and a travel of 37" on a bed 60" long. Mini-



Method of Locking Tailstock to the Bed.

mum length bed arranged for carriage is 5' long. It is freely operated in either direction by



Carriage and Bed Aid in Exact Turning.

means of a cut steel rack and pinion actuated by a hand wheel. Traverse of cross feed, 5 1/2".

Compound Swivel Tool Rest

The compound rest carries the slotted tool post and has a traverse of 3 1/2". Its socket base is graduated and swivels on the cross slide. This mechanism enables the operator to remove the compound rest and substitute a socket which receives the hand tool rest so that hand turning may be done without having to remove the carriage. Tool post slot, 2" long, 19/32" wide.

Carriage Graduation

On lathes having tool carriage the top of the bed and the guide of the cross slide are graduated

by sixteenths and the end of the carriage as well as the ends of the cross slide are provided with little pointers that may be adjusted to any work. This enables the operator to turn work to a definite length or depth without having to "fit and try" as formerly.

Capacity

Will swing 12" diameter over the bed or 9 1/2" over the carriage and will turn 26" long between centers on 48" bed or 38" long on 60" bed.

Equipment

Consists of one 3/4" spur center, one 3/4" cup center, one screw chuck 2 1/4", one face plate 6", one each 6" and 12" hand tool rest, one complete rear end handwheel and face plate, blueprint holder, and knock-out rod.

Hand Tool Rest and Rest Holder

The tool rest is provided with a straight edge for guiding turning tools. The holder has an eccentric clamp operated by convenient handle.

SPECIFICATIONS

CAPACITY

- 12" over bed
- 9 1/2" over carriage
- 26" between centers with 4' bed
- 33" between centers with 5 1/2' bed
- 38" between centers with 5' bed
- 50" between centers with 6' bed
- 62" between centers with 7' bed
- 74" between centers with 8' bed

MOTOR and DRIVE

- 3/4 H.P., 1800 R.P.M.
- Spindle speeds 800 to 2750 R.P.M.

HEADSTOCK SPINDLE

- No. 2 Morse taper bore
- 1 1/4" diameter
- Threaded on both ends
- 5/8" hole entire length

TAILSTOCK

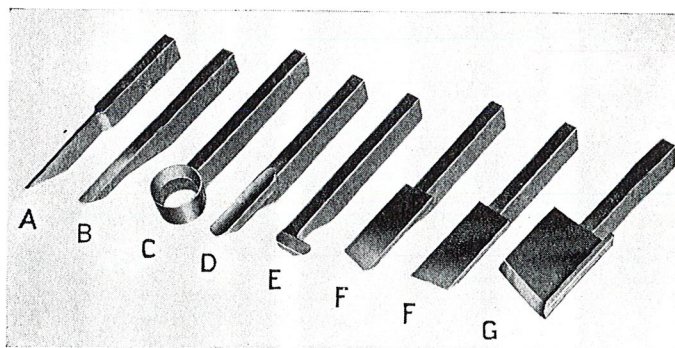
- Plain open side type 7" long 6" wide
- No. 2 Morse taper
- Spindle travel 4"

REGULAR EQUIPMENT

- 1—3/4" spur center
- 1—3/4" cup center
- 1—2 1/4" screw chuck
- 1—6" inside face plate
- 1 ea. 6" and 12" hand tool rest
- 1—tool rest holder
- 1—8" combined rear end handwheel and faceplate
- 1—Blueprint holder
- 1—knock-out rod
- 1—Faceplate wrench

FLOOR SPACE

- 4' bed, 24" x 55 1/2".



Group D Tool Post Tools for use in Tool Post of Carriage of Wood Lathes. Shanks 1/2" by 1"

CODE	MACHINE DESCRIPTION	CODE, WEIGHT, ETC.		CUBIC FEET
		WEIGHT IN POUNDS CRATED	WEIGHT IN POUNDS BOXED	
Enfal	No. 159-A—Adjustable "V" Belt Motor Driven Speed Lathe, with 4' plain bed and floor legs.....	550	725	30
Endram	Hand Feeding Carriage with compound rest and rack for 5' bed or longer lathes, including setover tailstock.....



OLIVER MACHINERY COMPANY
Grand Rapids 2, Michigan, U.S.A.

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