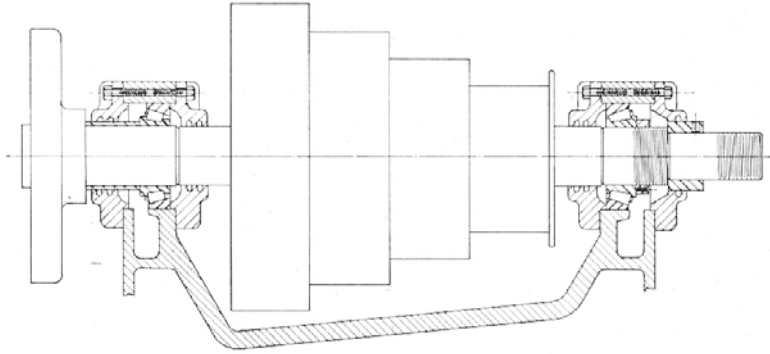


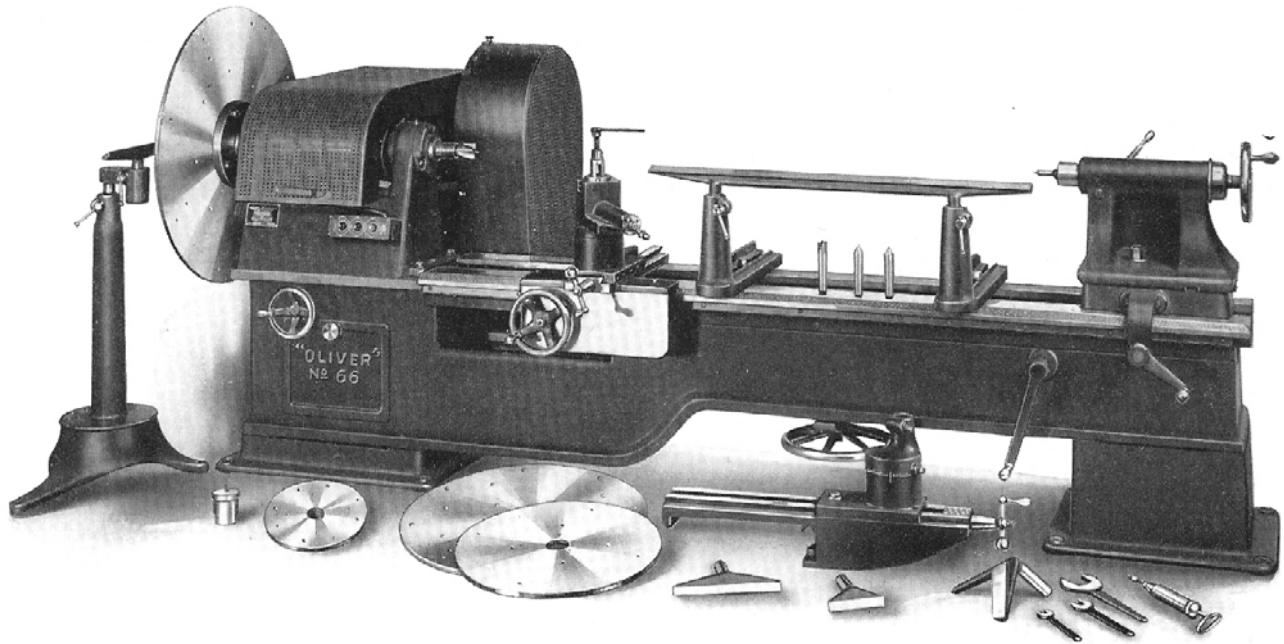


*"Every User
is a Booster"*

"Oliver" No. 66 Pattern Makers' Heavy Gap Lathe "A Superb Wood Lathe"



Cross Section through Headstock Bearings showing extra heavy frictionless taper roller bearings with automatic lubrication



"Oliver" No. 66 Improved Gap Lathe, 30 and 48 Inch Swing

We are constantly looking toward the future — striving for higher accomplishments with a thorough knowledge of the ultimate needs of the industry and with confidence in our ability to execute them.

**ABSOLUTE ACCURACY
EXTREME RIGIDITY
MANY IMPROVEMENTS**

Manufactured by

Oliver Machinery Company

Grand Rapids, Mich., U.S.A.

BRANCH SALES OFFICES:

New York, Cleveland, Detroit, Indianapolis, Chicago, St. Louis,
Minneapolis, Denver, Salt Lake City, Seattle, Portland,
San Francisco, Los Angeles.

Introduction

At the time we first introduced this "Oliver" No. 66 Pattern Maker's Lathe to the woodworking profession it was instantly acclaimed and spoken of as the last word in wood lathes. However, since then we have succeeded in adding numerous improvements and refinements, making it more rigid, easier to operate, additional adjustments, smoother running and more desirable in every way. We increased rigidity by designing heavier castings—a larger spindle adds a greater variety of work—the carriage has been improved—the tail stock is of a later type. This "Oliver" Lathe will make your equipment complete.

Capacity

Stock can be turned 6 feet 6 inches between centers with the gap closed, or 8 feet 6 inches between centers with the gap open. Will swing 30 inches over the ways and 26 inches over the carriage and 24 inches long with a 48-inch diameter in the gap. At the outer end of the spindle stock up to 7 feet diameter will clear the floor. Extra lengths of bed or larger swing diameter can be adapted to this lathe at additional cost. Our engineering department will be pleased to discuss and advise any special problems should our customers require this service.

Main Bed

A one piece, box shaped, reinforced, semi-steel casting exceptionally heavy and rigid is supported at each end by rugged semi-steel columns with flaring bases affording ample floor support, maintains perfect alignment and substantially supports the component units of the machine.

Sliding Bed

This bed is cast of semi-steel heavily ribbed and slides

on a grooved track machined on the top of the main bed. The entire bed can be moved horizontally by means of a hand crank that turns a pinion which meshes with a rack bolted to the front of the bed. This closes the gap and the carriage can be operated up to the head stock in the usual way. When the gap is open the sliding bed increases the capacity between the centers two feet.

Head Stock

The frame is cast of semi-steel, supports two taper roller bearings on which the four speed step cone pulley rotates on a shaft. This head stock swivels five degrees to simplify angle turning. Opposite the spindle end provision is made for attaching face plates used for turning large diameter stock. The spindle is $2\frac{7}{8}$ inches in the middle and $2\frac{1}{4}$ -inch diameter at the nose, 35 inches long and rotates 86 to 1820 r.p.m. with a two-speed (600 and 1200 r.p.m.) motor.

Tail Stock

Moves and locks on the sliding bed and is cast of semi-steel, heavily ribbed of the open side design with "set over" adjustment and is bored for a No. 4 Morse Taper. The spindle is 3 inches in diameter and 14 inches long. The simple reversing of the hand wheel loosens the tail centers.

Apron

Made of semi-steel machined and is securely bolted to the carriage, both being moved when feeding by means of a hand wheel which turns a pinion meshing with a rack attached to the side of the sliding bed.

Carriage

Rests on V shaped grooves machined on the top of the sliding bed. This carriage has a cross slide with adjustable

gibbed ways and a long traverse. These ways act as a track for the swivel or compound rest, the top of which is dovetailed with an adjustment for correct sliding fit of the tool holder that is moved in horizontal directions by means of a hand lever.

Carriage Graduations

The old method of "fit and try" has been discarded; graduations are now stamped on top of the bed at the front and back, also on the ways for the carriage cross slide. These enable the operator to turn to definite lengths or depths and a glance at the etching will illustrate their usefulness.

Auxiliary Cross Slide

This attachment is secured to the inside end of the sliding table and is of sufficient size to operate upon the full capacity of 48 inches in diameter that may be swung in the gap. It is easily removed, when desired, and carries the compound swivel rest attached to the main carriage. The hand tool rest socket may be substituted for the compound swivel, as illustrated.

Compound Swivel Rest

This rest is graduated in degrees at the base and supports the regulation tool post. It is easily detached and a socket substituted for carrying the hand tool rest. A clamping device holds the tool rest securely in position after adjustment.

Motor Drive Countershaft

Countershaft frames carry the four step cone pulley supported at each end by taper roller bearings rotating in a bath of oil. Adjustment for the end thrust is made by means of two lock nuts at the end of the countershaft farthest away from the machine. A heavy semi-steel bracket with adjust-

FACTS

WORTH MENTIONING

ROLLER BEARINGS
 SMOOTH RUNNING
 EASILY OPERATED
 ALWAYS
 DEPENDABLE

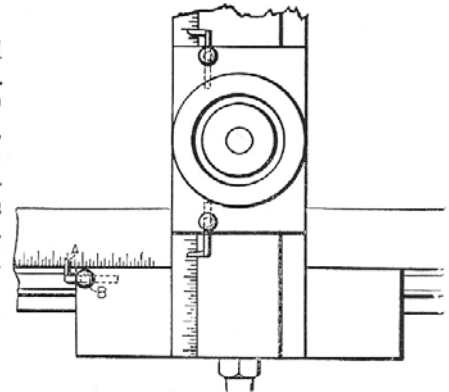
able gibbed ways for the countershaft frame to slide on is securely bolted to the bed. A hand wheel located at the front of the bed moves the countershaft unit horizontally thereby adjusting the correct tension of the driving belt.

Motor

An adjustable motor rated 5 h.p., 500 to 1500 r.p.m., D.C. or 2 speed 600 and 1200 r.p.m. A.C., is recommended, but a constant speed 1200 r.p.m. motor may be used giving less range of speeds. This motor is supported by an adjustable bracket that is hinged to the base and drives the countershaft which is also supported by an adjustable bracket attached to the bed above the motor. This is undoubtedly an ideal arrangement and enables the operator to choose from a great variety of speeds.

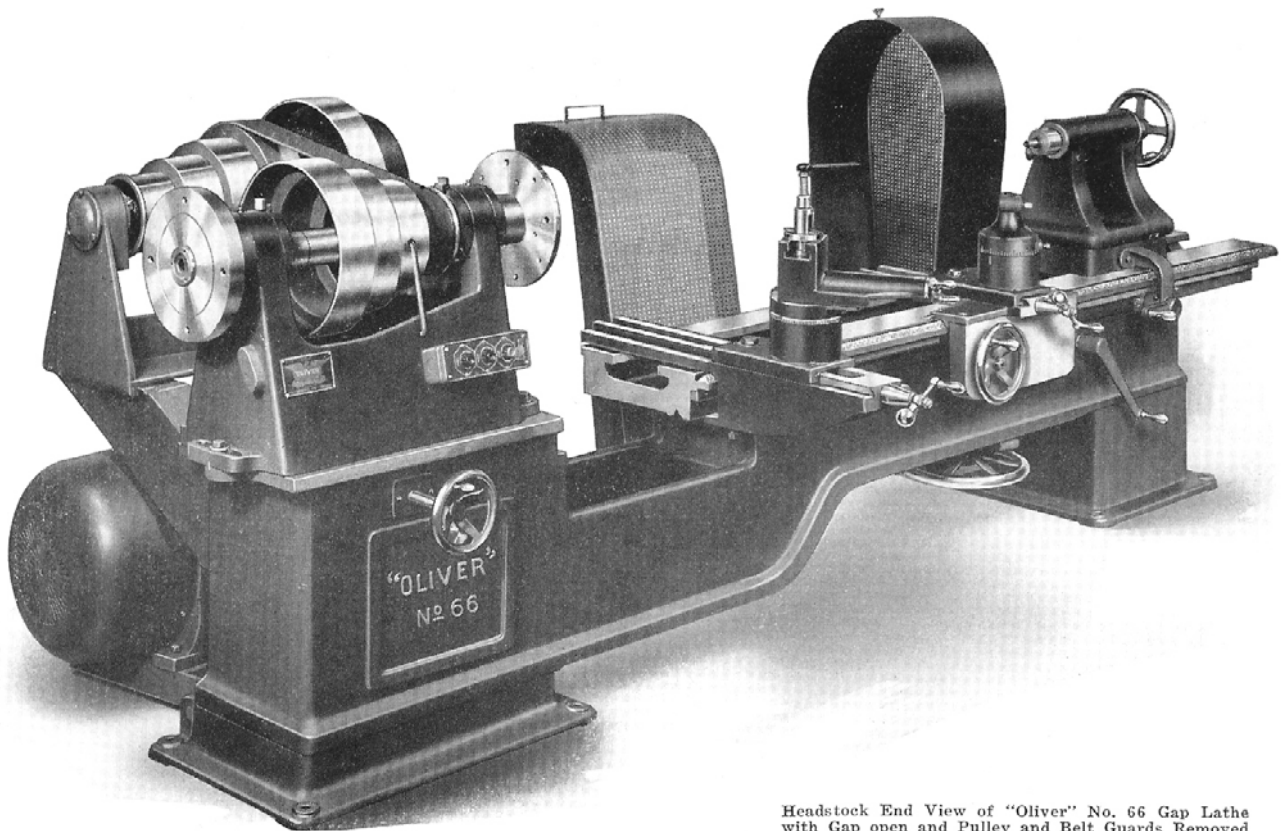
Accessories

One each spur center 1 1/4-inch and 2 inches in diameter, one cup center 3/4-inch, two conical centers, one each face plates, 12, 24, 30 and 38 inches



Showing graduations on the tool carriage and bed as aids in exact turning

in diameter, one each tool rests 6, 12, 18 and 48 inches long, two rest holders, one right angle rest 6 inches long, one portable floor stand with off-set rest holder. The floor stand has a three point bearing and rests firmly on the floor.



Headstock End View of "Oliver" No. 66 Gap Lathe with Gap open and Pulley and Belt Guards Removed

SPECIFICATIONS

CAPACITY:

Swing, regular.....30 inches x 6 feet 6 inches
 Swing, bed extended.....30 inches x 8 feet 6 inches
 Swing in Gap.....48 x 24 inches

Cone, four steps, dia.....14½, 12, 9½, 7 inches
 Width of belt.....3 inches

HEADSTOCK:

Spindle.....dia., 2¼-in. at the nose; length, 35-in.
 Size of Morse Taper.....No. 4
 Bearings.....Taper Roller
 Cone, four steps, dia.....14½, 12, 9½, 7 inches
 Width of belt.....3 inches

BED:

Swing, regular.....30 inches x 6 feet 6 inches
 Swing in gap.....48 x 24 inches
 Length.....8 feet 8¾ inches
 Width inside of carriage way.....15¼ inches
 Depth.....14½ inches
 Height from floor.....26½ inches

SPEEDS:

Dependent on motor used.
 Approximate.....86 to 1800 r.p.m.

CARRIAGE:

Swing over carriage.....26 inches
 Traverse of cross feed.....13 inches
 Traverse of Compound Feed.....7 inches
 Travel of carriage on standard bed.....6 feet 6 inches
 Length of slot in tool rest.....2½ inches
 Width of slot in tool rest.....¾ inch

MOTOR:

5 h.p., two speed 600 and 1200 r.p.m. Totally enclosed fan cooled. 7½ h.p. can be furnished.

EQUIPMENT:

Single shank rests (3).....6, 12, 18 inches
 Double shank rest.....48 inches
 Rest Holders.....2
 Spur centers (2).....1¼, 2 inches
 Cup Center (1).....¾ inch
 Conical centers.....2
 Face plate, front (1).....12 inches
 Face plates, rear (3).....24, 30, 38 inches
 Screw Chuck (1).....3½ inches
 Right Angle Rest (1).....6 inches
 Floor stand with offset rest holder.....1
 Hand tool rest socket for use on carriage.....1

TAILSTOCK:

Diameter of spindle.....3 inches
 Length of spindle.....16 inches
 Size of Morse Taper.....No. 4
 Adjusting screw, No. of threads 1 inch 4 R. H. square.

MOTOR DRIVE COUNTERSHAFT:

Overall Length.....33 inches
 Bearings.....Taper Roller

CODE, WEIGHT, ETC.

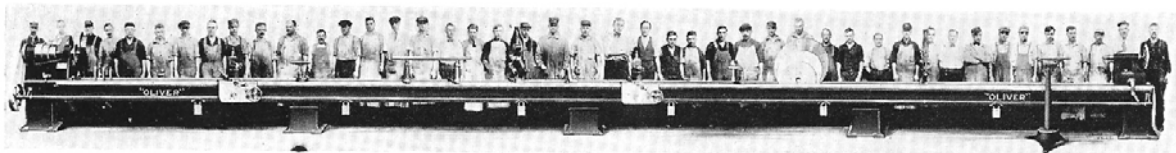
CODE	MACHINE DESCRIPTION	WEIGHT IN CRATED	POUNDS BOXED	CUBIC FEET
Drake	No. 66-AC—Improved Pattern Makers’ Gap Lathe, to swing 48 inches diameter by 24 inches long in gap and 30 inches diameter by 8 feet 6 inches long between centers—headstock with taper roller bearings, including motor bracket and countershaft mechanism attached to rear of headstock, belts and belt guards, but not including motor or control.....	6000	6700	200

EXTRAS

Drako Extra Length Bed, main portion and upper section.

OTHER "OLIVER" PATTERN MAKERS' LATHES

Oliver Machinery Company manufactures the largest line of Pattern Makers’ Wood Turning Lathes, ranging from the smallest of 12-inch swing over the bed up to some very large exceptional lathes that have been made to turn up to about 60 feet long between centers, and also up to about 18 feet in diameter running in a pit. We can meet any kind of requirements on pattern makers, wood turning lathes, and invite special correspondence.



Showing the "Oliver" No. 18-A Special Lathe for which "Oliver" designed and built a 62-Foot Bed for the United States Government.