



"Every User
Is a Booster"

"Oliver" No. 122

Automatic Feed

Facing Planer

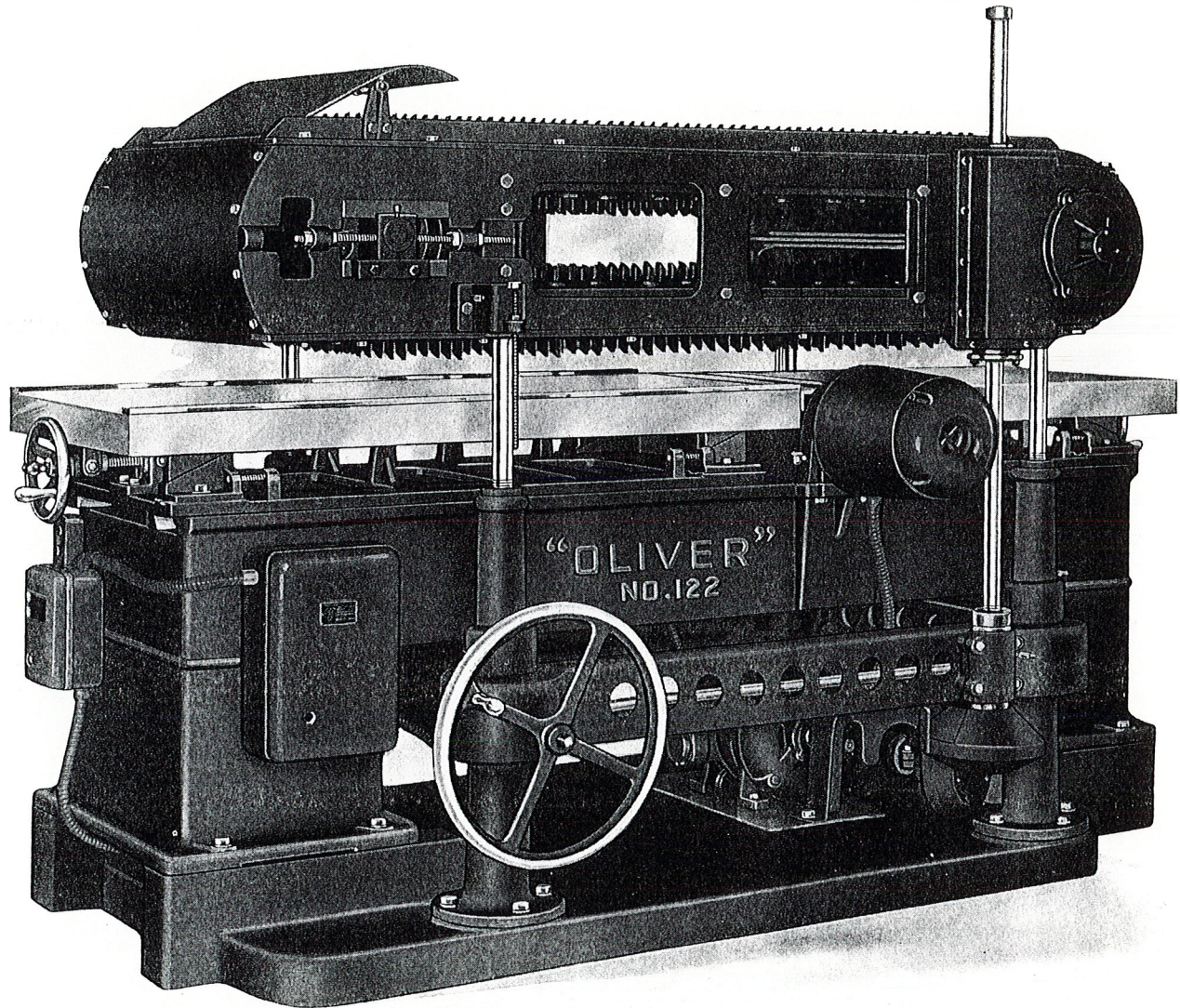


Illustration Shows the Right Side of the "Oliver" No. 122 Facing Planer. Note the Direct Mounting of the Cylinder Motor — Also Location of the Feed Drive Motor — Large Hand Wheel for Raising or Lowering of the Feed Mechanism — Large Tables with Hand Wheel Adjustments Conveniently Located. Tables Slide Horizontally, Simplifying Knife Set-Up.

Automatic Feed
Motor-on-Cylinder
Perfect Performance
Smart Production

Manufactured by

Oliver Machinery Co.

Grand Rapids, Michigan, U.S.A.

BRANCH SALES OFFICES:

New York, St. Louis, Minneapolis, Los Angeles, San Francisco,
Chicago, Denver, Salt Lake City, Seattle, Manchester, Eng.

Introduction

This is an automatic feeding Jointer capable of taking almost any thickness of lumber and planing one side perfectly smooth and straight, removing the irregularities or out-of-wind tendencies of the board. This operation (called facing) is a most important one; in fact, the ultimate product is contingent upon the accuracy, speed and workmanship of the machine used for this purpose. The "Oliver" No. 122 Facing Planer is correctly designed, powerful, easily operated and most efficient; representing a combination of advanced methods and correct principles of mechanical perfection. It is not necessary to employ the highest skilled labor to operate this machine as the simplicity of all working parts makes it comparatively easy to thoroughly understand the mechanism as well as to successfully operate it. In addition to turning out a high class product this machine speeds up production as well as returns real money on the initial investment.

Design

The automatic feed mechanism is a separate and distinct unit, being entirely independent of the planer unit. The main or foundation base is made of an exceptionally heavy semi-steel casting having raised blocks at each end to firmly support the two bases, on which the balance of the planer rests. Four powerful vertical adjustment screws support this feeder unit which is raised or lowered by means of a large hand wheel. The feed motor drives a train of gears, vertical shaft and worm gear that revolves the automatic feeding unit. Some of the distinct advantages of this machine are — the positive

automatic continuous cushion finger feed unit with quick acting hand wheel vertical adjustment — extra long tables easily adjusted—ample speed of cutter head—very compact and absolutely dependable.

Feeder Base

The feeder base is a heavy semi-steel cored casting. Each end of the oblong base acts as a firm foundation for the two bases of the planer to rest on. Symmetrically spaced and bolted at four corners are the feeder adjustment screw support castings. The base is generously proportioned, perfectly rigid and solid.

Planer Base

Two rugged box shaped cored semi-steel castings 21" x 27" are bolted to the main base and rigidly supports the slide frame, tables and head. These bases are so designed as to be free from distortion regardless of the load being supported.

Bed

Is composed of a large rectangular heavy semi-steel casting with wide reinforcing cross members. The bed is 23"x8' 0". The top has a machined dovetailed gibbed way to allow horizontal adjustment of the slide frame. The head motor support bracket is rigidly supported on one side; the opposite side acting in a similar capacity for the other end of the cutting head.

Slide Frame

There are two of these, one supporting each table. They are cast of semi-steel with dovetailed gibbed ways in which the tables are moved away from the head when sharpening the knives. Two hand knobs on each side of

these frames hold the slide securely in place when the tables are returned to the correct clearance on each side of the head. Bolted to the four corners of each slide frame are shoes with sloping machined surfaces on which the table is raised or lowered. Each shoe has an adjustment stud and a bolt locking device to assist in leveling the table.

Tables

These are made in several different widths, the top and sides being polished. The in-feed table is 64" long cast of semi-steel with heavy boxed shaped reinforcing ribs on the under surface. The outfeed table is 39" long and of similar construction. At the outer end of each table is a hand wheel and adjusting screw with a locking device whereby the table is instantly raised or lowered to the desired height. Dovetailed ways in the slide frame allow the tables to be moved away from the head when changing or sharpening the knives.

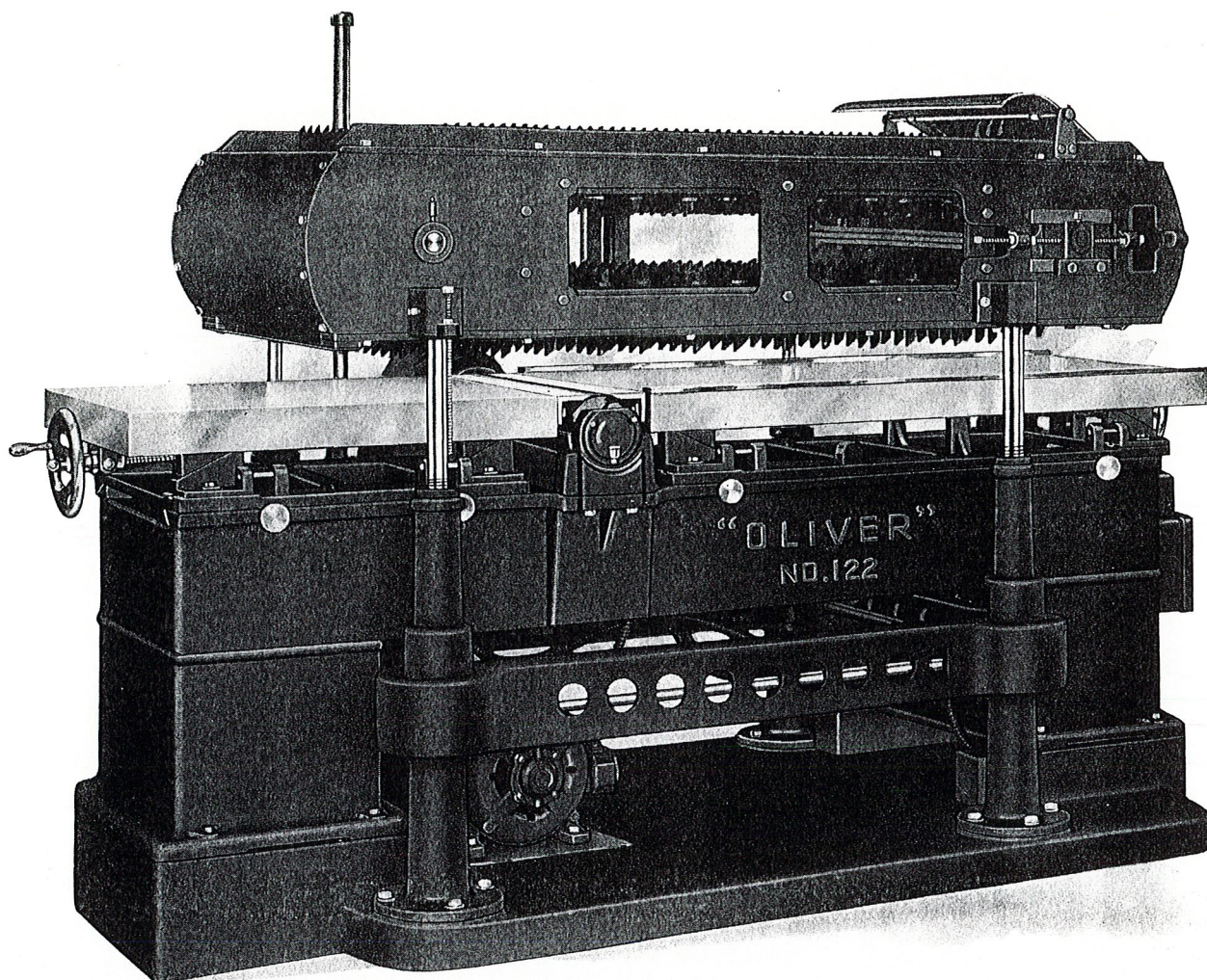
Cylinder

A driving motor is directly attached to one end of the head which rotates on ball bearings. This construction makes a straight line drive the best known method of delivering power. Only high grade steel is used in the building of the head which is 5 $\frac{3}{4}$ " diameter, carries four knives and extends the full width of the tables. The head motor is 3600 r.p.m., 2 or 3 phase, 60 cycle, 220 or 440 volts, ball bearing, and only requires occasional lubrication.

Feeder Mechanism

The purpose of the feeder is to automatically guide the stock over the table with sufficient pressure to allow the

OLIVER MACHINERY COMPANY  GRAND RAPIDS, MICHIGAN, U.S.A.
NO. 122 'OLIVER' FACING PLANNER



Left Side of the "Oliver" No. 122 Facing Planer. Note the Substantial Four-point Support of the Feed Works—Automatic Feed that is Positively Safe—Powerful, Staunch and Rugged Construction Throughout—Carefully Assembled and Tested.

knives to plane a smooth surface on the stock. It does perfect surfacing of all stock at a speed of 40 to 60 lineal feet per minute with practically no spoilage, reduces knife wear as well as numerous sharpening and setting due to its regularity of feed. It is entirely separate from the planer yet becomes an integral part when in operation. Four conical shaped semi-steel posts connected by bridge construction are bolted to the main base that acts as a firm foundation for the top unit of the feeder to rest on. A large hand wheel raises or lowers the feeder unit which only re-

quires adjusting when planing different thicknesses of lumber. A 5 h.p. 1200 r.p.m., 2 or 3 phase, 60 cycle, 220 or 440 volt motor drives a train of gears which rotates a vertical shaft. This shaft drives a worm and worm gear which is completely enclosed and immersed in oil. This worm gear is attached to one end of the drive shaft, which moves the endless mechanism containing the feeder fingers in the same direction the stock is fed to the machine. Individual spiral springs exert just the right tension on each finger; it only being necessary to shove the stock far enough on the table

for the fingers to come in contact with the lumber. If the stock is warped considerably and the wind is not entirely removed in one pass it may be fed again over the knives until all the irregularities are removed. These fingers are set staggered to enable the operator to feed stock as narrow as $\frac{5}{8}$ " and in lengths of 5", thereby saving stock which would otherwise be wasted. One end of the feeder unit has a device for tightening or loosening the tension on the endless feeder mechanism. At additional cost a motor for raising or lowering the feed mechanism can be attached to

the frame, making it fully automatic.

Electrical Control

The feed and head motors are individually controlled by push buttons and a magnetic switch with overload and undervoltage protection. All wiring is enclosed in conduit and interlocked, so that if either motor stops, both motors will stop, and in starting, the cutter head must start before the feed motor starts.

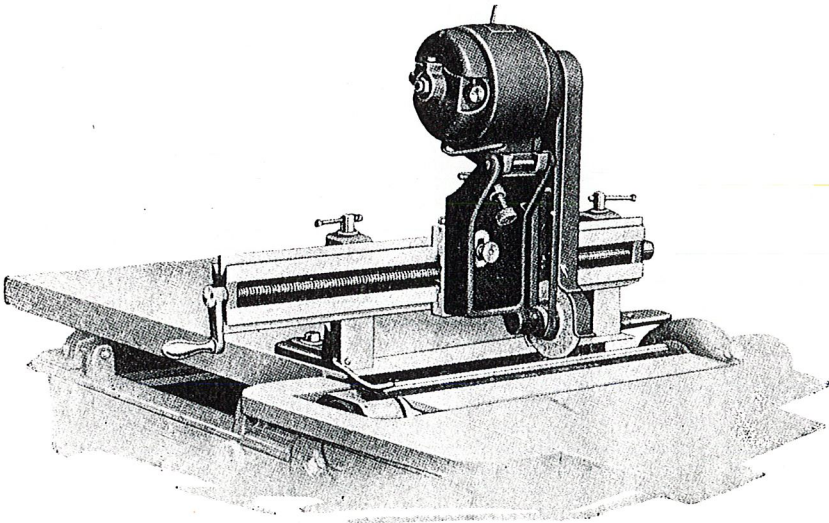
Floor Space

This machine set up, ready for operation, requires a floor space of 56" x 118", and is 6' 7" in height.

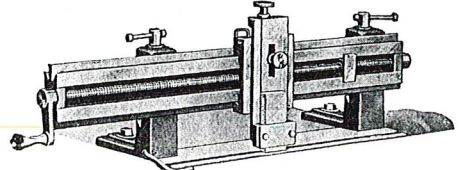
Specifications

Dimensions:
 Overall56" x 9' 10"
 Height.....6' 7"
 Feeder Base50" x 8' 8"
 Planer Base21" x 27"
 Table:
 Widths24" or 30"
 Infeed Size.....64" long

Outfeed Size (43" on 30" size)39" long
 Vertical movement1"
 Horizontal movement — on ways.
 Cylinder:
 Number of Knives.....4
 Cylinder Diameter5 3/4"
 Length24" or 30"
 Motor, h. p.....7 1/2 and 10
 Motor, r.p.m.....3600
 Feed Works:
 Size33" x 86"
 Speed.....40' to 60' per minute
 Motor, h.p.5
 Motor, r.p.m.1200
 Vertical Movement14"
 Support Shafts, diameter.....1 1/2"
 Hand Wheel, diameter.....20"



"Oliver" Motor Knife Grinding Attachment in use on any "Oliver" Facing Planer.



Knife Jointing Attachment in Use.

Note: The "Oliver" Knife Setting, Jointing and motor Knife Grinding Attachments may be used on any "Oliver" Surfacer, Jointer or Facing Planer. It is sold as an extra attachment when desired.

CODE, WEIGHT, ETC.

CODE	MACHINE DESCRIPTION	WEIGHT IN POUNDS		CUBIC FEET
		CRATED	BOXED	
Dirac	No. 122-D 24" Facing Planer, power feed, motor driven, facing stock 24" wide, infeed and outfeed table, ball bearing cylinder 5 3/4" diameter, 7 1/2 h.p. Cylinder Motor. Automatic feed complete with Push Button Remote Control with safety devices.....	8000	10000	300
Diraf	No. 122-D 30" Facing Planer same as above except to joint stock 30" wide and the cylinder motor is 10 h.p.....	9000	11000	360

EXTRAS

Dirak	Power hoisting of feed mechanism with 3/4 h.p., 1200 r.p.m., 2 or 3 Phase, 60 Cycle, 220 or 440 Volt motor mounted in a self-contained manner	100	100
Diram	Motor Knife Grinder Head with ball bearing grinding wheel, belt guard, motor and cord, grinding bar, two brackets and jointing attachment....	200	200