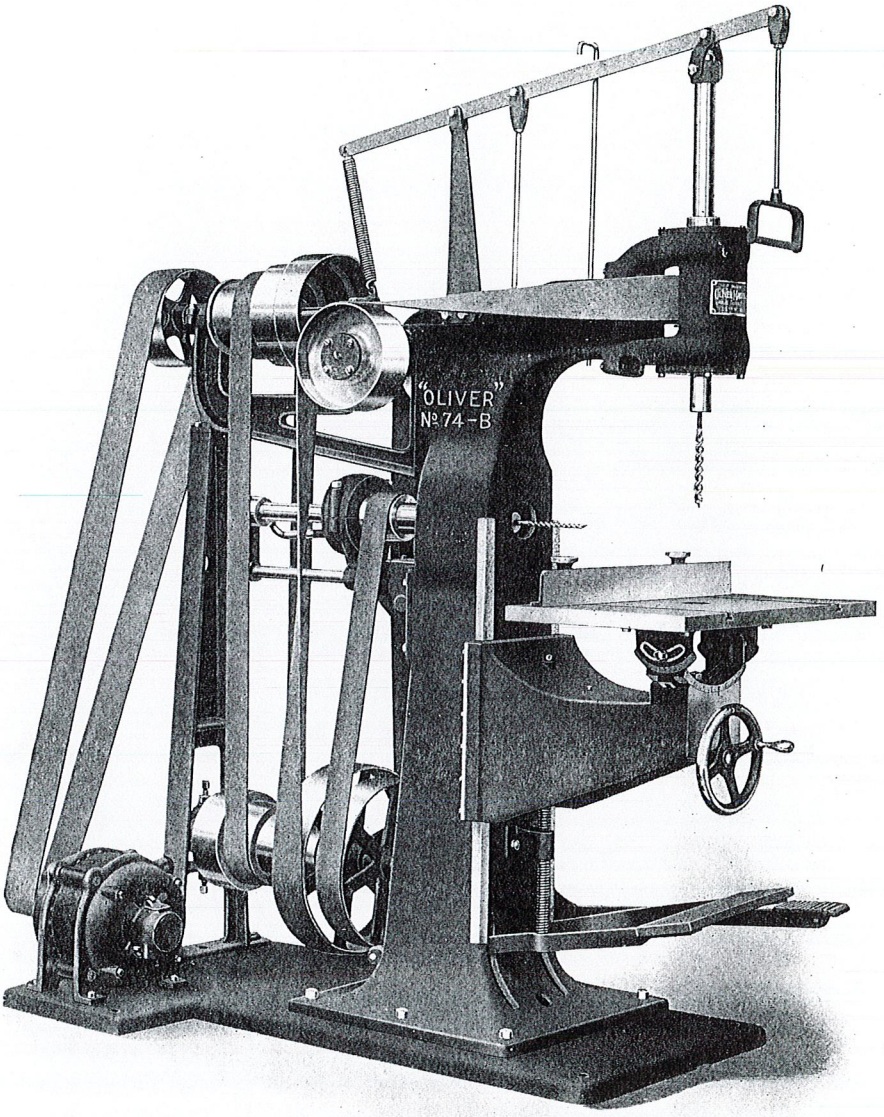
"OLIVER"
HIGH GRADE WOOD WORKING MACHINERY

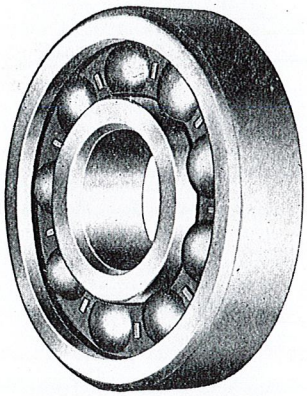
"QUALITY"

"Oliver"

No. 74 Universal Vertical and Horizontal Wood Boring Machine



No. 74-B Motor Driven Universal Vertical and Horizontal Borer.



BALL BEARINGS of the highest grade are used throughout for the bearings of this machine

Less Friction
More Power

Oliver Machinery Co.

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

BRANCH OFFICES:

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

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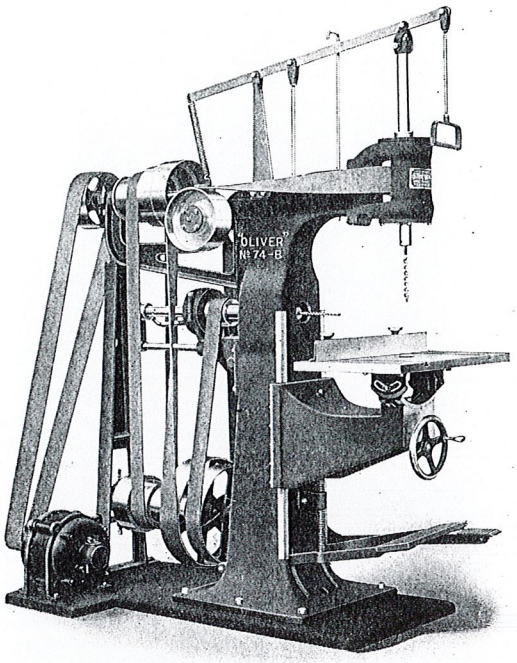
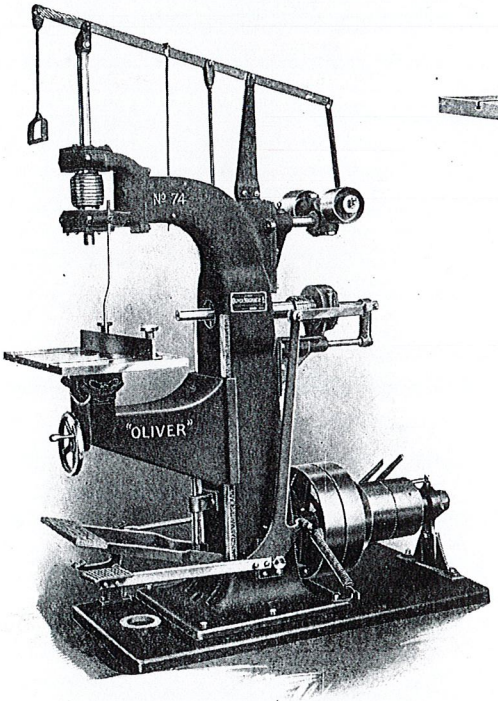
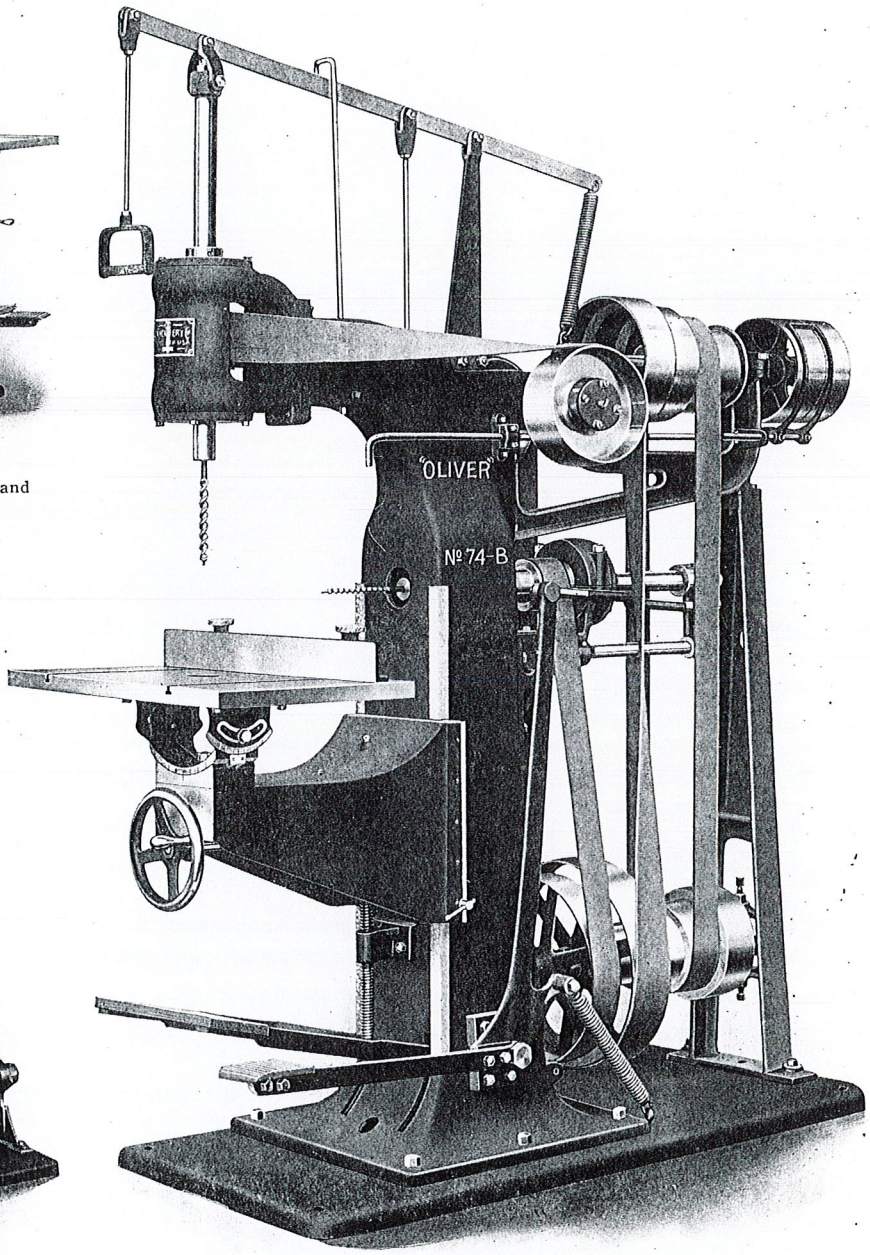


No. 74-B Motor Driven Universal Vertical and Horizontal Wood Boring Machine.
Four Speed Countershaft Motor Drive.



No. 74-A Universal Vertical and Horizontal Wood Boring Machine.
Single Speed Countershaft Belt Drive.



No. 74-B Universal Vertical and Horizontal Wood Boring Machine.
Four Speed Countershaft Belt Drive.

Adaptation The demand for a heavier and more universal boring machine has been met by this most extraordinary borer. It responds very effectively not only to all kinds of boring machine work, but also to drill holes in metals or to do the work of a router, shaper, buzz planer or sanding machine. Both vertical and horizontal spindles are very heavy mounted in ball bearings and can be fitted to carry a three-jawed chuck, an innumerable variety of bits, fly cutters, special cutters, little pattern makers, etc. The machine is built right, works right and we recommend it as a great money maker for shops having a variety of heavy boring work.

Capacity Both spindles will bore holes 3" diameter and under. Vertical spindle will bore 12" deep to center of 36". Horizontal spindle will bore 7" deep at a height of 16" from top of table.

Types The No. 74-A machine has only a single speed self-contained countershaft and is intended for shops who do not require a variety of speeds. The No. 74-B has a four-speed self-contained countershaft. Either type may be furnished motor driven.

Column This is a large, heavy, hollow casting bolted to a sole plate 28" x 60"; height over all 7' 9".

Vertical Spindle Regularly bored to take ½" straight shanks, but when so ordered may be threaded to receive a three-jawed chuck. Spindle is 1⅞" diameter, slides in a sleeve formed by the driving pulley which has extended ends. These ends are fitted to very large and substantial ball bearings. Vertical travel 12". Pulley 5" x 4½". No. 74-A has single speed of 3,000 R. P. M.; No. 74-B has four speeds, 968 to 3,450 R. P. M.

Horizontal Spindle Takes ½" straight shank, but may be arranged differently when so ordered. Slides in a sleeve formed by the pulley which is fitted with ball bearings of ample size. Is sustained by a bracket fastened to the column. Has 7" travel at a maximum height of 16" from top of table. A foot treadle moves it forward and a coiled spring returns it to its normal position. Pulley 4½" x 4". No. 74-A has single speed of 3,000 R. P. M.; No. 74-B has four speeds, 968 to 3,450 R. P. M.

Table Is 18" x 30", with a vertical adjustment of 17" obtained by hand wheel and screw. Table tilts up to 40 degrees to or from the column and 30 degrees to right or left. Rockers are accurately machined and graduated to show degree of tilt. Table has two slots to receive the fence which can be easily removed when not desired.

Idler Pulleys These are finished all over and have ball bearings of large size. Those on No. 74-A machines are independently adjustable to suit various sizes of motor pulleys.

Motor Drives With the No. 74-A machine either a 900 R. P. M. constant speed or a suitable adjustable speed motor is mounted on the sole plate in place of the countershaft. With the No. 74-B machine either an 1,800 R. P. M. constant speed or a suitable adjustable speed motor is mounted on an extension of the sole plate and belted to upper drive shaft.

Countershaft Self-contained; tight and loose pulleys for No. 74-A, 10" x 5", 830 R. P. M.; for No. 74-B, 12" x 5", 345 R. P. M.

Horse Power 3 to 5 H. P., is required, as work demands.

Equipment Five bits 6" twist, one each ¼", ⅜", ½", ⅝" and ¾" are regularly supplied.

Floor Space 70" x 38" for No. 74-A; 73" x 38" for No. 74-B.

CODE, WEIGHT, ETC.

Code	No.	Description	Domestic Weight	Foreign Weight	Measure Cubic Feet
Exile	74-A	Single Speed Belt Driven Machine	2000	2300	101
Exilg	74-B	Four Speed Belt Driven Machine	2000	2600	101

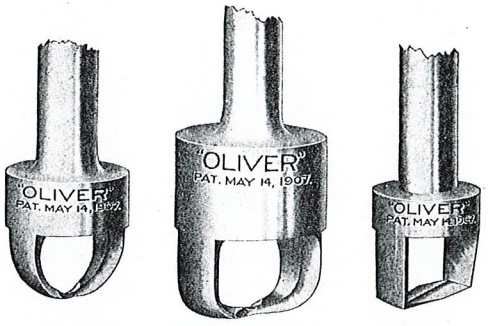
EXTRAS

Exist	Boring Bits, 6" twist, state size desired.
Exotic	Two endless leather belts, for driving the two spindles only.
Exotif	Endless leather belt for driving countershaft on No. 74-B.
Exotik	Endless leather belt from motor to upper drive shaft of No. 74-B.
Exov	Wire Mesh Guards for belts and pulleys of No. 74-A.
Exovic	Wire Mesh Guards for belts and pulleys of No. 74-B.
Expel	Little Giant Chuck to take shanks 0" to ½" diameter.

"Oliver" Little Pattern Makers

Cutters — These are useful cutters for the purpose of working out small core boxes, making fillets and routing. They may be best used on a Boring or Profiling Machine, though they can be used in a lathe or any tool that has a spindle fitted to receive them.

Adaptation — The philosophy of these cutters is that the broad, circular band of the cutter, just above the knife edge, forms a rub-collar and any irregular shape or pattern bandsawed as required (say, ½" to ⅞" thick) and tacked temporarily to top of work, allows the work to be pushed or pulled by hand under the cutter with the collar pressed against the pattern, if cutter is sunk into the work beyond the pattern the path just cut acts as a guide for cutter. A very simple, quick and effective way of working out core boxes, slots, etc.



No. 211 No. 210 No. 212

Shapes and Sizes — They are made in a variety of shapes and sizes and perform a large amount of the old hand work in about one-quarter of the time, and do it more correctly.

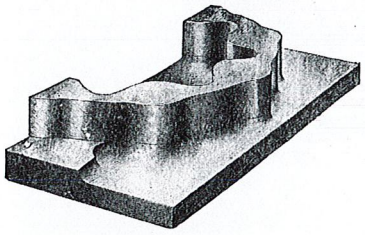
Fillet Cutter — These cut the fillet into the pattern, and thus avoid using leather or other fillet that must be glued in and which often comes loose after being in the sand. They can be used where it is necessary to cut a recess and level it or in leveling a spotting cut around any shape leaving a fillet in the corner.

Core Box Cutter — These are made to cut a half round in straight, angle or curved lines; work out small boxes for taps, dies or other small tools, corrugated work, etc.

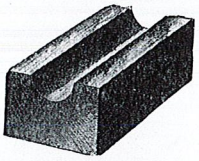
Routing Cutter — These are for routing flat grooves, either straight or curved. Will groove stair stringers, shelving, etc.

By using a set of these in the shop, one saves the time of one pattern-maker, saves buying destructible fillet; saves money in finishing by hand; saves time in making a pattern. They will not spoil the work, but on the contrary will improve its quality.

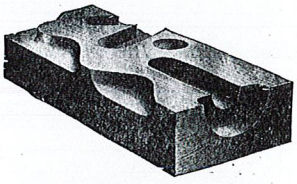
SPECIMENS OF WORK



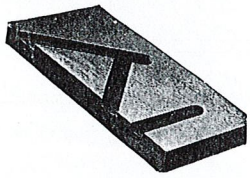
No. 1. The fillet and recess done by ½-inch fillet cutter.



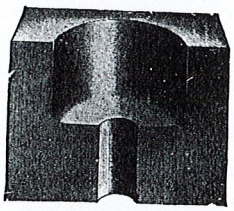
No. 2. Core Box done with 1-inch cutter.



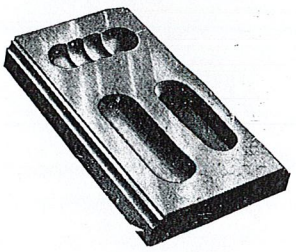
No. 3. This shows works of the three styles of cutters.



No. 4. Section of stair stringer grooved by ⅞-inch routing cutter.



No. 5. Sample of work done with fillet cutter and 1-inch core box cutter. The large recess is 3½-inch in diameter.



No. 6. Showing round and flat bottom mortises made with core and routing cutters, respectively.

Order by number—give exact diameter and length of shank. State name of machine in which will be used.

Code Fabub — NO. 210 FILLET CUTTERS

Nos.	210A	210B	210C	210D	210E	210F	210G	210H	210J	210K	210L
Radius	⅛"	¼"	⅜"	½"	⅝"	¾"	1"	1¼"	1½"	1¾"	2"

Fabuf — NO. 211 CORE BOX CUTTERS

Nos.	211A	211B	211C	211D	211E	211F	211G	211H	211J	211K	211L	211M	211N	211P
Diam.	¼"	⅜"	½"	⅝"	¾"	1"	1¼"	1½"	1¾"	2"	2¼"	2½"	2¾"	3"

Fabuk — NO. 212 ROUTING CUTTERS

Nos.	212A	212B	212C	212D	212E	212F	212G	212H	212J	212K
Size	½"	⅝"	¾"	⅞"	1"	1⅛"	1¼"	1½"	1¾"	2"

Give us your requirements for special size and shape cutters and we will be pleased to submit prices.