

STANLEY ROUTER- SHAPER

Catalog



The First

ELECTRIC ROUTER and SHAPER

for

THE HOME WORKSHOP

Catalog  *No. 61*

Copyright, October, 1935

By THE STANLEY ELECTRIC TOOL DIVISION

THE STANLEY ELECTRIC TOOL DIVISION
THE STANLEY WORKS
NEW BRITAIN, CONN.

Printed in U. S. A.

Preface

FOR eighty years STANLEY has taken pride in furnishing skilled workmen with hand tools designed and built to satisfy.

STANLEY now makes available to the amateur woodworker self-contained, direct-driven electric routers and shapers. With this equipment, a man in his home shop, in attic or cellar, has at his disposal tools of the proper speed (18,000 R.P.M.) to permit his doing work comparable to the professional in finish and workmanship. These tools enable a man to do things he has never been able to do with hand tools and do them quickly and easily.

All parts are made to carefully maintained standards by workmen long accustomed to the precision work which is necessary on such high speed tools. Parts are interchangeable and may be added one at a time with assurance of proper fits.

This is more than a catalog, in that we will attempt to tell you briefly *What* a Router or Shaper is—*Why* they are essential to any wood craftsman—*How* a Router and Shaper will assist you to do professional work in your own workshop.

ALL STANLEY Electric Tools are guaranteed to be mechanically and electrically correct and to develop rated capacity in continuous use without overheating.

THE STANLEY ELECTRIC TOOL DIVISION
THE STANLEY WORKS
New Britain — Connecticut, U. S. A.

TABLE OF CONTENTS

Preface.....	3
Table of Contents.....	4
18,000 Revolutions Per Minute.....	5
Introduction to Routing and Shaping.....	6
Stanley Interchangeable Motor Unit.....	7
Hand Router No. 10.....	8, 9
Typical Operations—Bench Shaper Plate.....	9, 10
The Dovetail Fixture No. 60.....	11
Router Stand No. 20.....	12, 13
Typical Operations.....	14, 15
Mortising—Templet Work.....	14, 15
Router Equipment for a Drill Press.....	16, 17
Bench Shaper Insert Plate.....	18
Typical Operations.....	19
Shaper Stand No. 25.....	20, 21
Combined Unit—Description.....	22, 23
Bits and Cutters.....	24 to 28
How to Sharpen.....	29
No. 14 Drill.....	30
Parts List.....	31
Drill Press Vise.....	31

18,000 Revolutions Per Minute!

That's fast—but that's the speed you need to make delicate inlay cuts, smoothly shaped edges, accurate dovetail joints and other fine cuts that distinguish beautiful furniture—and *that's the speed* you get in a STANLEY Router-Shaper.

With the direct motor-driven STANLEY Power Unit developing *18,000 R. P. M.*, a two-flute router bit will shear wood fibres at the rate of 36,000 cuts per minute. Drill presses, which are primarily intended for metal drilling, are sometimes used for wood routing and shaping, but they have a speed of only 4,000 to 5,000 R. P. M. The difference between *18,000 R. P. M.* and 5,000 R. P. M. is the difference between smooth, beautifully finished cuts made with ease, and a two-fisted job of producing cuts that require sanding and hand finishing.

Let us use a homely illustration to get across the advantage of high speed: You can't drive a clean hole through a pane of glass with a baseball, but you can shoot a clean edged hole with a bullet. The inertia of the glass is sufficient to hold the pane still during the tiny interval in which the bullet zips through. It is not great enough to keep it still when the ball crashes it.

Similarly: *18,000 revolutions per minute* fairly *shoots* knife edges through wood fibres so fast that the inertia of the wood plays an important part in the resulting silky smoothness of the cut.

Words, however, won't convince you the way a demonstration will; go to your home workshop equipment dealer and make routing and shaping cuts with the STANLEY Router-Shaper. Prove to your own satisfaction the superiority of a *high speed, 18,000 R. P. M.* STANLEY Router-Shaper.

Routing and Shaping

The Router (pronounced rOUTer) and Shaper are two machines commonly used in woodworking shops for building, shaping and placing decorative effects and finishing touches on furniture and other projects made of wood.

Routing, routing out or shaping is the removing of material with a high speed revolving cutting tool of such shape as the nature of the operation requires. Routers are usually used for surface cuts with bits, while Shapers are usually used for edge cuts with cutters.

The finishing of almost any woodworking project involves the rounding of edges, beading, veining, molding or in general decorative cutting of the wood. Some of these operations are possible with hand tools but generally require special tools, great care and the expenditure of considerable time. Many of the desirable cuts, as drop-leaf table cut, are practically impossible with hand tools.

The STANLEY Router and Shaper is the first equipment designed and offered to the Home Workshop that makes these *decorative* cuts in wood quickly, easily and with such finish that sanding is seldom necessary.

This catalog illustrates and describes the following equipment for corner beading, dovetailing, inlaying, making dados, rabbeting, molding, veining, mortising, etc.

Router Overarm No. 15 for Drill Press

Hand Router No. 10

Router Stand No. 20

Bench Shaper Plate No. 40

Shaper Stand No. 25

Combination Router and Shaper Stand No. 30

Dovetail Fixture No. 60

Straight and Circular Gauges, Circular Guides

Bits, Cutters, Chucks and Other Accessories

YOU WILL NEED only one power unit for Routing, Shaping, etc., with these STANLEY Tools, as the motor unit can be used in any of the machines.

You will never

High Speed Motor Unit

INSURES FINISHED CUTS

STANLEY equipment is so designed that one power unit is used for either routing or shaping. This power unit is a specially designed $\frac{3}{8}$ H. P. Universal Motor with the proper speed for woodworking (18,000 R.P.M.) which insures a fine finish without sanding. Can be used on either A. C. or D. C. current. Either the router chuck or shaper spindle can be mounted directly on the armature shaft eliminating gears, belts and pulleys. Motor is mounted on heavy duty ball bearings in a special drawn steel housing.

The speed of the bit or cutters in routing or shaping determines the finish of the cut. Woodworking factories demand motors capable of developing high speed in order to obtain fine finished cuts. The speed of this power unit is the same high speed which is furnished to large wood-working plants throughout the country and the fine finish on cuts will be surprising to anyone who has attempted to work on wood with drill press speeds.

Engineering development, skill and genius have made the equipment possible. With these tools you do not need to be a professional to turn out beautiful woodwork with a fine finish.

See this equipment at your dealers.

You cannot appreciate the quality of the STANLEY Router Shaper line until you have seen it in operation.



Motor Unit with Router Chuck

Motor Unit No. 11 \$26.50
Router Chuck No. 12 1.25

Motor Unit with Shaper Spindle



know how easy

Hand Router No. 10

You have always wanted to decorate furniture with delicate inlays, beading, rabbet and carving cuts. . . You can now do this work easily and quickly.

\$32.55

110 Volt

Shipping Weight, 8½ lbs.

No. 42 Straight and Circular Gauge \$1.65 Extra

Complete \$34.20



Hand Router No. 10 is furnished with interchangeable electric power unit, router base, chuck, wrenches, a No. 208 ¼-inch high speed bit, and Stanley Router Shaper Instruction Book.

With this machine you can make beading, fluting, and veining cuts, mortise, do carving and hundreds of other operations. Also used with dovetail fixture to make dovetail joints. (See page 11.)

Depth of cut is easily regulated by raising or lowering the power unit in the Hand Router Base. Simple screw clamp locks power unit in place.

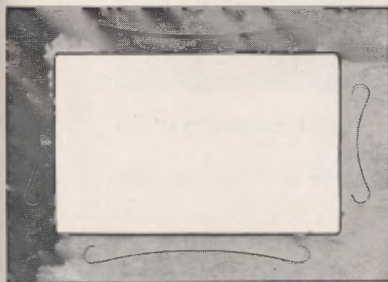
it is to

It is as simple to operate a Hand Router as it is to take a morning shave.

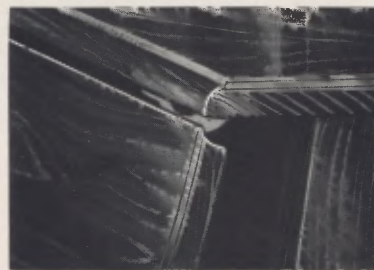
To make any of the cuts illustrated on this page, place the proper bit in the chuck and tighten firmly. Then adjust power unit in Router Base for depth of cut desired. Simply hold unit steady against the guide surfaces. No effort is required to use this Hand Router.

With the Hand Router Unit the number of different operations that can be performed is only limited by the imagination of the user. The effects that can be produced are practically limitless.

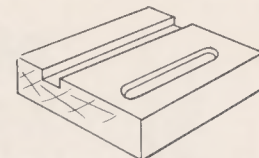
Illustration on opposite page shows unit set up to make a groove cut. Note: Bead cut on corner.



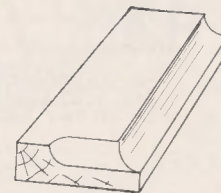
A picture frame in which copper is used as an inlay. First a veining cut was made, the wire inserted and glued, then filed off even with the surface and the frame finished.



Drop-leaf table cuts, ordinarily most difficult for the home craftsman, are easy to make with the STANLEY Router. Molding cuts as on edge of table are also easily made.



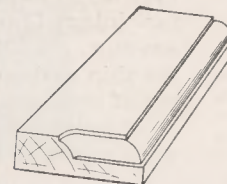
Groove or Dado



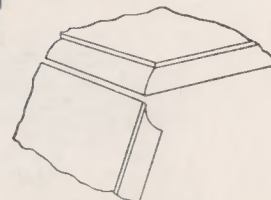
Cove



Veining

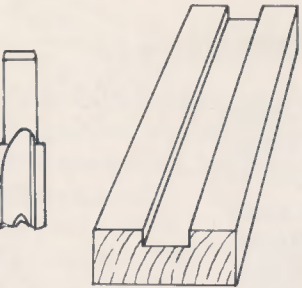


Corner Bead



Drop-leaf Table Joint

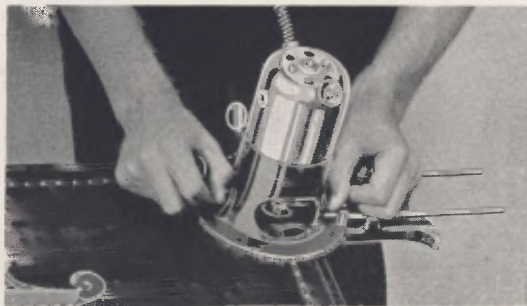
do work equal



Dado, rabbet and carving cuts are all made with the No. 10 unit in exactly the same way that they are done in the furniture factory. This illustration shows type of bit used for dado, rabbet, mortise or inlay cuts. Full width of cutter is cleaned out in one pass of tool; wider cuts are made by resetting the straight and circular gauge to take additional cuts. Depth of cut is easily regulated by raising or lowering the power unit in the Hand Router Base.

Inlaying

One of the most effective ways to decorate a wooden project is by inlaying, which is accomplished by inserting different designs. There are available border inlays and medallions made of many different colored woods, which may be purchased ready for inlay for a small amount. These inlays are thin and only require a shallow routing cut to permit proper matching of outlines.

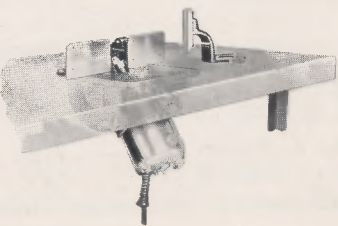


Templet guides Nos. 48-49 are used for inlaying work and for templet work with the Hand Router.

Turn Your Hand Router into a Bench Shaper

Having the Hand Router, purchase shaper insert plate No. 40, then, using motor unit from hand router in shaper plate, you have a first-class bench shaper.

See full story on page 18



to any professional

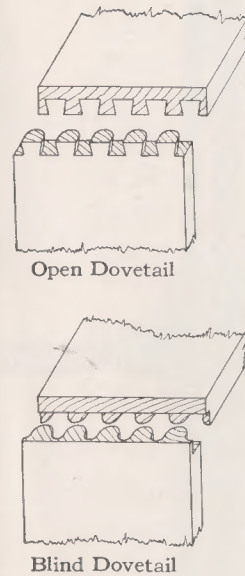
Dovetail Fixture No. 60

With the Dovetail Fixture No. 60 and Hand Router No. 10 you can make perfect dovetail joints. This type of joint is the mark of a skilled workman.

\$20.65

Shipping Weight, 16 lbs.

Add for Dovetail Bit No. 1012	\$2.00
Add for Templet Tip No. 49	.25
Add for Hand Router No. 10	32.55
Complete as illustrated	\$34.80
	\$55.45



Open Dovetail

Blind Dovetail



Illustration shows Hand Router making a joint with dovetail fixture

In cutting an open dovetail as illustrated (commonly used in drawer construction) both pieces are cut at the same time, assuring accuracy. A dovetail piece six inches wide can be cut in thirty seconds.

Either blind or open dovetails can be made in any wood from $\frac{3}{8}$ " to $\frac{7}{8}$ " in thickness.

Templet Guide No. 49 and Dovetail Bit No. 1012 are needed in addition to this fixture to adapt Hand Router to cutting dovetails. The fixture is made of electroplated cold rolled steel and comes completely assembled ready to attach to your workbench by the use of two wood screws.

woodworker

STANLEY

STANLEY

Router Stand No. 20

Router Stand No. 20

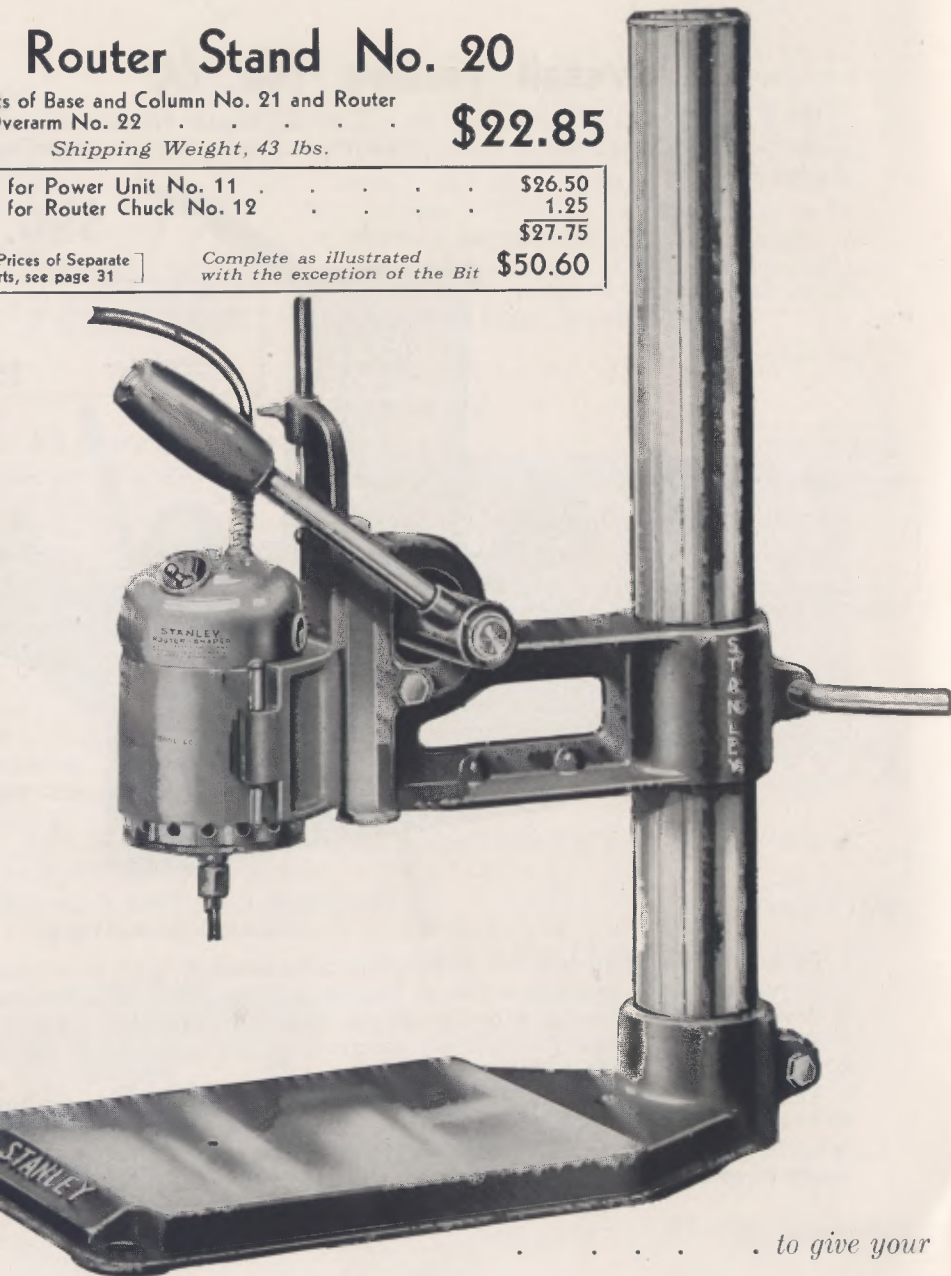
Prices of Base and Column No. 21 and Router
Overarm No. 22

\$22.85

Shipping Weight, 43 lbs.

for Power Unit No. 11	\$26.50
for Router Chuck No. 12	1.25
	\$27.75

Prices of Separate Parts, see page 31] Complete as illustrated with the exception of the Bit **\$50.60**



to give your

Stand No. 20 plus the Hand Router Power Unit makes an extremely useful Bench Router.

With this equipment, cutting mortises or tenons is fast, easy work as is flat turning, templet work and finishing pieces of rough stock to dimensions.

The Bench Router has many advantages over the Hand Router; *First*, all cutting is in full view of the operator at all times; *second*, it is often easier to move the work than the cutting tool; *third*, the motor unit is solidly held in the Router Stand, giving a welcome sense of rigidity; *fourth*, the Router Stand has built into it an easily controlled vertical movement, operated through the lever by the right hand and locked in position or released by a twist of the wrist.

Description of Router Stand

BASE: A sturdy 15½" x 8½" base made of superior cast-iron. Base is drilled and reamed for a templet pin—extremely useful in duplicating designs or in templet work. Machined working surface, 9½" x 7⅝".

COLUMN: Extra heavy steel tubing (2¼" x 24") accurately ground and nicked.

OVERARM: An accurately machined gray iron casting, power unit securely clamped by quick-acting swing clamp. Conveniently located lever arm for raising, lowering or locking power unit in position. Built-in depth gauge. Large diameter clamp locks over arm to column—easily tightened or loosened.

woodworking projects