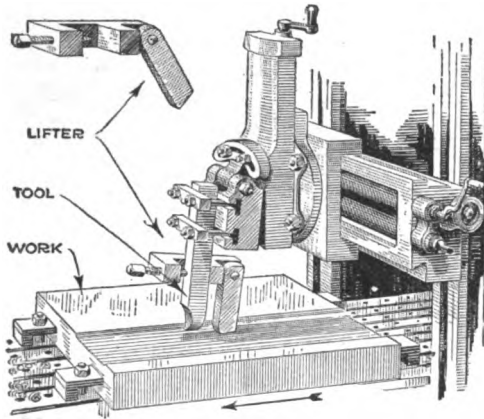


Planer-Tool Lifter

When a machinist is working at piece rates on duplicate production work, every little trick to preserve the cutting edge



A Lifter for Planer Tools That Prevents the Tool from Rubbing on the Work on the Backstroke, Thus Preserving the Cutting Edge of the Tool

of his tools helps to put money in his pocket. As everyone knows who is familiar with planer tools, the rubbing of the cutting edge on the return stroke soon makes resharpening necessary, and many operators lift their tools on the backstroke by hand, just to eliminate this dulling action.

While there are many devices for the automatic elevation of the tool above the surface of the work, the one shown in the drawing is among the simplest and most effective, as it is easily made and quickly clamped to any cutting tool. The body is made from a piece of flat steel; it is fitted with a latch, which has a form somewhat similar to that of the cutting tool and is held to the body by a bolt or rivet. By rounding off the top corner, this latch will drag behind the tool on the forward or cutting stroke, but will fall in a vertical position on the return stroke. When the lifter has been adjusted to the proper height, it will cause the tool to rise on the return stroke, as shown.

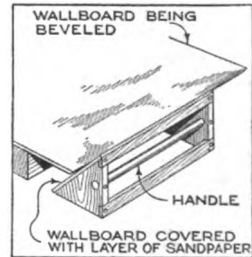
Making Good Brazed Joints

A method which adds strength to a brazed joint, in either tubular or plate work, consists in drilling one of the parts with a series of holes, at the point where the braze is to be made. Ordinarily the practice is to apply the spelter and flux to the pieces and then heat until the spelter flows and runs into the joint. Lack of heat, or dirt in the joint, will cause an

imperfect union, that cannot be detected from the outside. Drilling the holes, as suggested, and applying the spelter to this portion of the joint, causes the melted brass to enter between the surfaces where it is desired. The size of the holes depends, of course, upon the size of the job, but ordinarily holes not larger than $\frac{1}{4}$ in. should be used; these can be filled with spelter and finished to present a smooth job. This method has been satisfactorily used in brazing automobile-axle housings.

Beveling Edges of Wallboard

In working with wallboard, it is sometimes desirable to bevel the edges to form a neat joint; this can be done without sawing, which generally leaves ragged edges, by means of a simple device that uses sandpaper for forming the bevel.

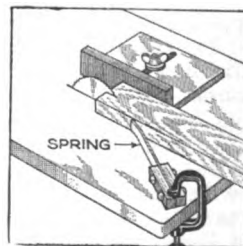


A piece of wood, about 6 in. square, is cut diagonally to make two 45° triangles, and these are fastened together by two braces, as shown, a handle also being provided. A

piece of wallboard is nailed to the hypotenuses of the triangles, and the sandpaper is fastened to this with thumbtacks. In use, the sanding device is moved back and forth across the edge of the panel, and, by raising or lowering the panel, the whole surface of the sandpaper can be used.—Karl L. Martin, Cleveland, Ohio.

Spring Circular-Saw Guide

When the circular saw is used to split narrow stock, the simple spring holder shown in the drawing will enable the



operator to do his work faster and without danger of having a finger cut off. Such a holder is made by bolting a piece of $\frac{1}{8}$ by $\frac{5}{8}$ -in. spring steel between blocks of hardwood. The length of the spring will vary with different saw tables, but 12 in. is about the average.

A piece of stock is set against the saw guide, and the spring holder is clamped in