Sept. 25, 1945. L. P. JARRELL 2,385,519

TOOL HOLDER FOR METAL PLANERS

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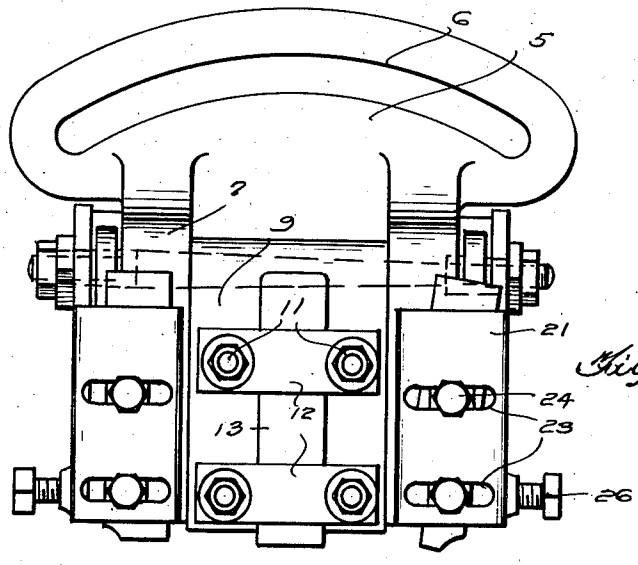


Fig. 1.

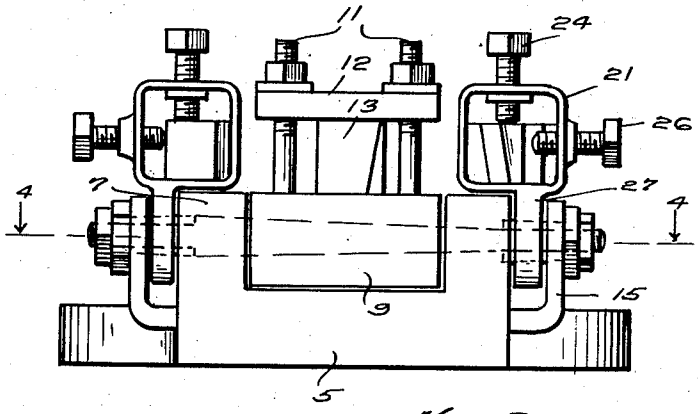


Fig. 2.

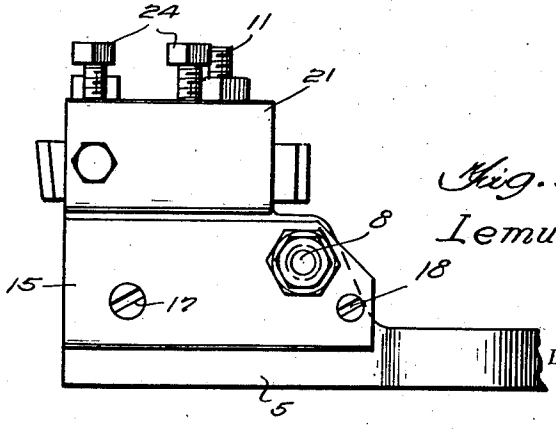


Fig. 3.

Inventor

Lemuel Pierce Jarrell,

By Clarence A. O'Brien and Harvey B. Jacobson.

Attorneys

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TOOL HOLDER FOR METAL PLANERS

Filed Feb. 15, 1945 2 Sheets-Sheet 2

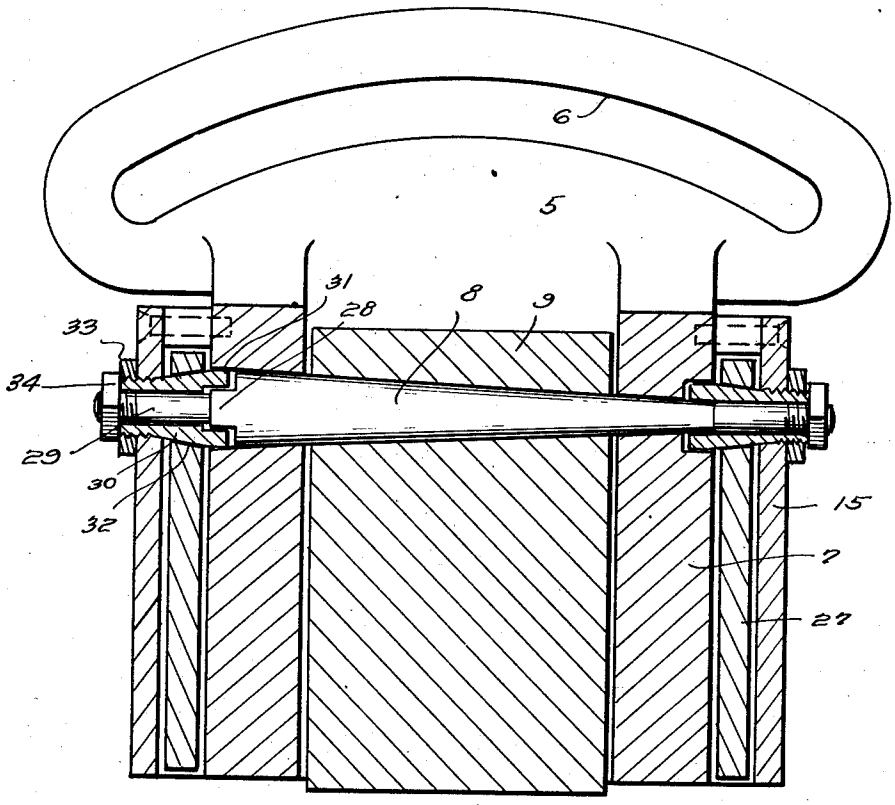


Fig. 4.

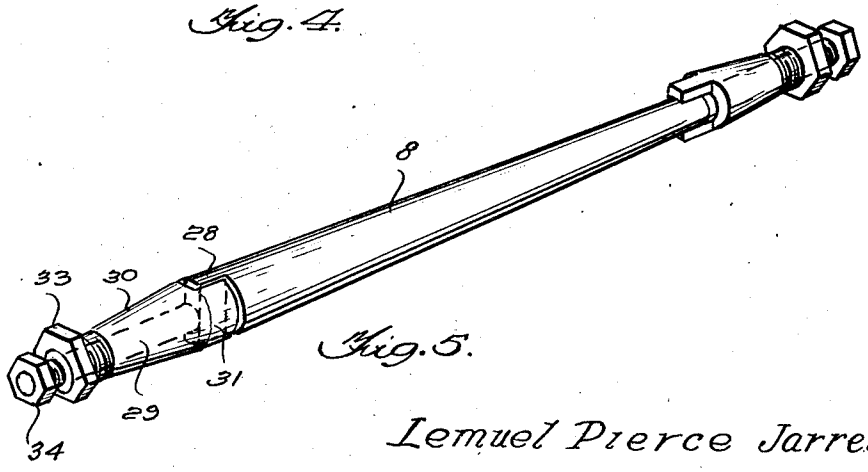


Fig. 5.

Inventor

Lemuel Pierce Jarrell,

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

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UNITED STATES PATENT OFFICE

2,385,519

TOOLHOLDER FOR METAL PLANERS

Lemuel Pierce Jarrell, Huntington Park, Calif.

Application February 15, 1945, Serial No. 577,995

2 Claims. (Cl. 90—52)

The present invention relates to new and useful improvements in tool holders for metal planers and constitutes an improvement in my prior U. S. Letters Patent No. 2,347,323, dated April 25, 1944.

An important object of the present invention is to provide a plurality of tool or cutter holders adapted for movement independently of each other into and out of cutting position and providing a hinge pin for the tool holders or posts adapted for tightening or loosening each of the holders or posts separately.

A further object of the invention is to provide a device of this character of simple and practical construction, which is efficient and reliable in operation, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which—

Figure 1 is a top plan view.

Figure 2 is a front elevational view.

Figure 3 is a side elevational view.

Figure 4 is a sectional view taken substantially on a line 4—4 of Figure 2, and

Figure 5 is a perspective view of the hinge or pivot pin for the tool posts or holders.

Referring now to the drawings in detail wherein for the purpose of illustration I have disclosed a preferred embodiment of the invention, the numeral 5 designates the clapper box having the arcuate slot 6 in the rear edge thereof adapted for attaching to a support on the planer.

The surface of the clapper box is formed with the spaced parallel cheeks 7 through which is inserted the hinge or pivot pin 8 for pivotally mounting the inner end of the tool box 9 thereto.

A plurality of studs 11 are arranged in pairs adjacent the side edges thereof and on the front and rear pairs of studs are mounted the cross plates 12 for clamping the tool 13 to the tool block by means of the nuts 14 threaded on the studs.

At each side edge of the clapper box 5 is a bracket 15 having an angular flange 16 formed thereon recessed in the side of the clapper box to support the lower edge of the bracket, the front and rear ends of the bracket being secured to the adjacent cheek by screws 17 and 18. Between each of the brackets 15 and the adjacent cheeks 7 are the side tool posts 21 which are of tubular construction to receive the cutters 22, the upper surface of the tool posts having slots 23 formed therein for receiving head bolts 24 threaded through a backing plate 25 positioned in the tool posts, the ends of the bolts engaging the cutter to secure the same in position. A set screw 26 also is threaded through the side of the tool posts for engaging the side of the cutter to likewise secure the cutter in adjusted position.

Projecting from the lower surface of the tool posts 21 is a flange 27 freely positioned between the brackets 15 and the adjacent cheeks 7, the rear end of this flange being pivoted on the pin 8.

The tool posts 21 at the opposite sides of the clapper box are of identical construction and accordingly a detailed description of one will suffice for both.

In order that each of the tool posts may be independently loosened and tightened the pin 8 at its intermediate portion is of tapering construction as shown more clearly in Figures 4 and 5 of the drawings and adapted for engagement in complementary shaped openings in the cheeks 7 and the tool block 9.

The pin 8 adjacent each end is formed with a flattened reduced portion 28 outwardly of which is a reduced stem 29 threaded at its outer end. A tapering sleeve 30 is freely mounted on the stem 29 and is formed at its inner end with a bifurcation 31 adapted for receiving the flattened reduced portion 28 to secure the sleeves at each end of the pin against relative rotation on the pin. The sleeves 30 at each end of the pin are of tapering construction and received in complementary shaped openings 32 in the flanges 27.

The outer ends of the sleeves 30 are threaded for receiving locking nuts 33 and nuts 34 are also threaded on the ends of the stems 29 at each end of the pin 8.

Accordingly each of the sleeves 30 may be slidably adjusted on the stems 29 to bind in the openings 32 of the flanges of the tool posts 21 to tighten or release the respective posts for independent pivotal movement on the pin 8.

It is believed that the details of construction and manner of use of the device will be readily understood from the foregoing without further detailed explanation.

Having thus described the invention, what I claim is:

1. A tool holder of the class described comprising a clapper box, a plurality of tool posts, and a hinge pin providing a pivotal mounting for said posts and embodying tapering sleeves slidably mounted on the pin and frictionally received in

openings in the posts to secure the posts against pivotal movement.

2. A hinge pin for the tool posts of a tool holder of a type including a clapper box, said pin comprising a tapering portion adapted for wedging engagement in an opening of the clapper box, tapering sleeves slidably mounted on the ends of the pin, cooperating means between the pin and sleeves to secure the same against relative rotation, said sleeves being adapted for wedging engagement in openings of the posts, and nuts threaded on the outer ends of the sleeves and pin to secure the pin and sleeves against transverse movement in the tool holder.

LEMUEL PIERCE JARRELL.