Nov. 11, 1947. R. W. RAYBURN 2,430,532

PIN SETTING TOOL

Filed Feb. 20, 1945

Fig: 1.

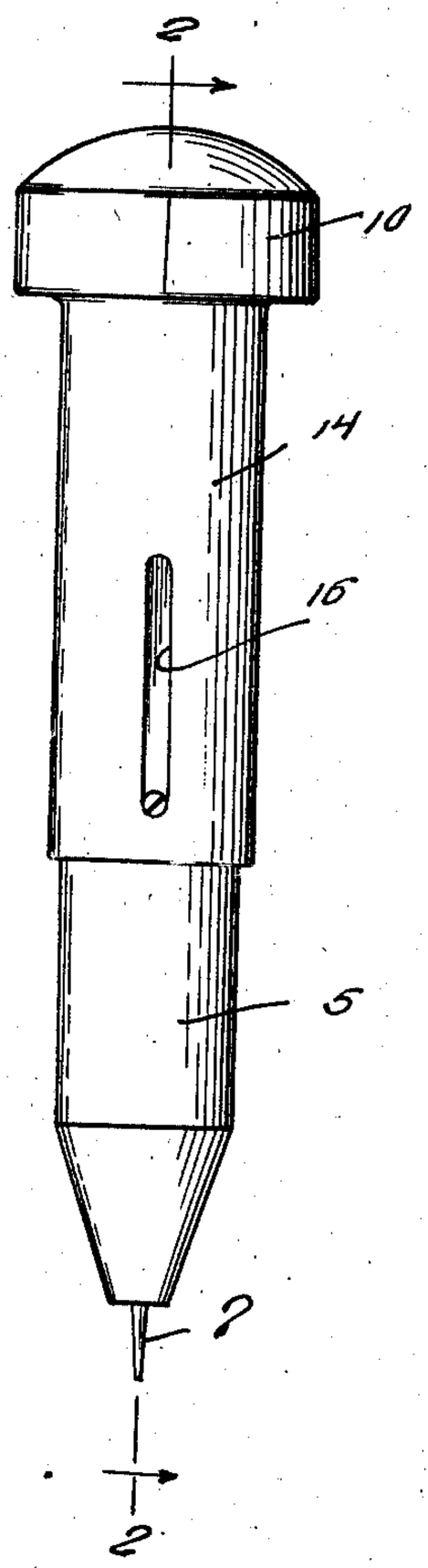


Fig: 2.

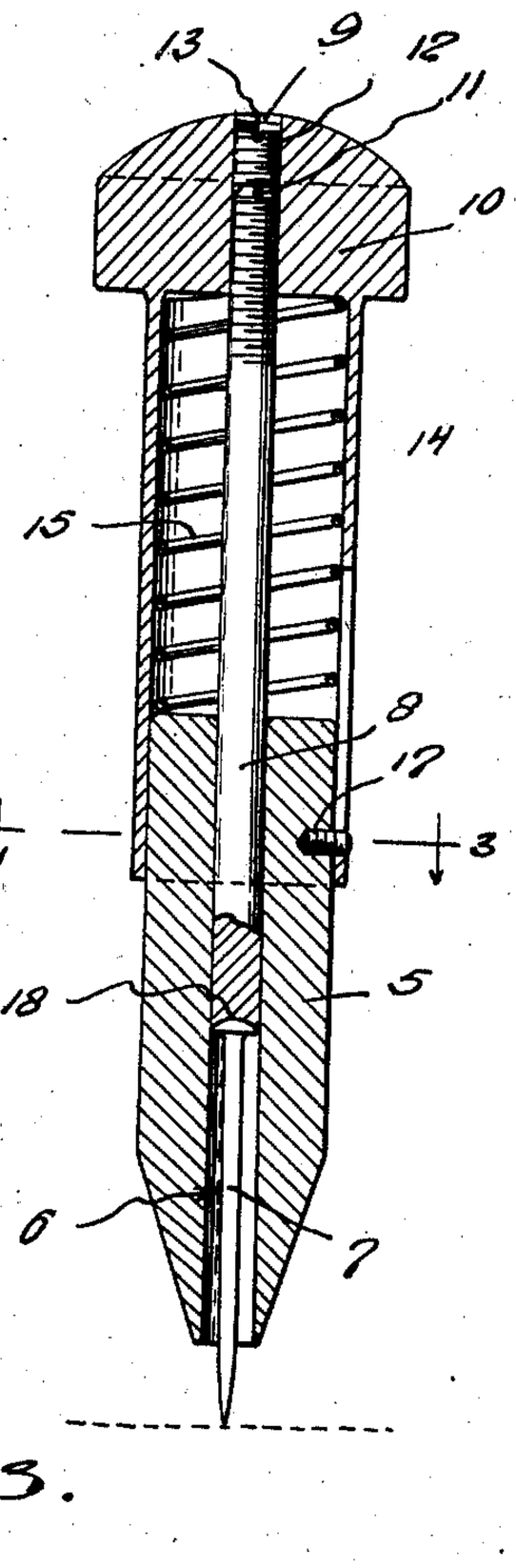
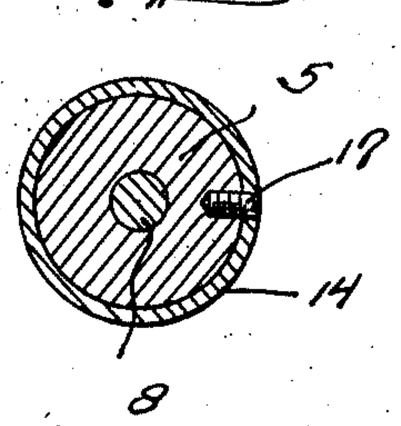


Fig: 3.



INVENTOR.
Ralph W. Rayburn,
BY
McMorrow & Berman

Patented Nov. 11, 1947

2,430,532

UNITED STATES PATENT OFFICE

2,430,532

PIN SETTING TOOL

Ralph W. Rayburn, Los Angeles, Calif.

Application February 20, 1945, Serial No. 578,838

2 Claims. (Cl. 1—47)

1

The present invention relates to new and useful improvements in pin setting tools by means of which pins may be easily and quickly driven into soft wood or similar material and has for its primary object to provide a hand tool of this character which may be conveniently carried in the pocket of a person.

The invention is designed primarily for use by pattern makers, model makers and other persons using soft wood for constructing various articles and in which parts thereof are secured together by means of pins, brads or other pointed fasteners and it is an object of the present invention to provide a tool of this character by means of which the pin or brads may be easily and quickly driven into the work without the use of hammers or other impact tools.

A further object of the invention is to provide a pin setting tool of this character embodying guide means for the pin to prevent bending thereof while the same is being forced into the work.

A still further important object of the invention is to provide means for adjusting the stroke of the tool.

Another object of the invention is to provide a tool of this character of simple and practical construction, which is neat and attractive in appearance, strong and durable, 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 drawing forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view.

Figure 2 is a longitudinal sectional view taken substantially on the line 2—2 of Figure 1, and

Figure 3 is a transverse sectional view taken substantially on the line 3—3 of Figure 2.

Referring now to the drawing in detail wherein for the purpose of illustration I have disclosed a preferred embodiment of the invention, the numeral 5 designates a cylindrical guide having a bore 6 extending longitudinally therein and adapted for receiving a pin, brad or the like 7 in the lower end thereof.

In the upper end of the bore 6 is slidably mounted a plunger 8 which is threaded at its upper end for threaded engagement in a threaded opening 9 of a head 10. The upper end of the plunger 8 is formed with a kerf 11 adapted for receiving a screw driver or similar tool for threadedly adjusting the plunger in the head. A

2

threaded plug 12 is also threaded in the opening 9 for jamming against the upper end of the plunger to secure the latter in its adjusted position. The plug 12 is also formed with a kerf 13 for manipulation by a screw driver or similar tool.

A barrel 14 is formed on the under side of the head 10 for telescoping over the guide 5 and a coil spring 15 is positioned in the barrel between the head 10 and the inner end of the guide 5 to yieldably move the head and guide away from each other and thus to raise the head and barrel.

The barrel 14 is formed with a vertically extending slot 16 in which a stop pin 17 is freely positioned, the pin being carried by the guide 5 to limit separating movement of the head relative to the guide.

The lower end of the plunger 8 is formed with a recess 18 adapted to conformably receive the head of the pin or other fastener 7.

In the operation of the device the pin 7 is placed in the lower end of the guide 5 and the outer end of the pin is then placed in the desired position for driving into the work, such as soft wood or the like. A downward force exerted on the head 10 by the hand of a person will then force the pin 7 into the work.

The spring 15 will separate the head from the guide 5 when the guide is released from the work and will also serve to retract the plunger 8 in the bore 6 for receiving another pin to be set in the work.

In view of the foregoing description, taken in conjunction with the accompanying drawing, it is believed that a clear understanding of the construction, operation and advantages of the tool of this character will be quite apparent to those skilled in the art. A more detailed description thereof is accordingly deemed unnecessary.

It is to be understood, however, that even though I have herein shown and described the preferred embodiment of my invention that the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having thus described the invention, what I claim is:

1. A tool of the class described comprising an elongated cylindrical guide having an axial bore extending longitudinally therethrough from end to end thereof and provided to receive in its outer end portion a pin or other pointed-like fastening device, an elongated plunger rod mounted for longitudinal reciprocatory movement within said bore, a barrel telescoping and working longitu-

dinally slidable over said guide, a closure head provided with an axial screw-threaded bore on and closing the outer end of said barrel, spring means interposed between the inner end of said guide and said closure head for yieldably urging the head outwardly with respect to said guide, the outer end portion of said plunger rod being screw-threaded, the screw-threaded portion of said plunger rod projecting into the axial screw-threaded bore of said closure head and being in threaded engagement therewith, and a screw-threaded plug element insertible into the outer end of the screw-threaded bore of said closure head and releasably tightened against the outer end of said plunger rod whereby the plunger rod is normally held in place but the same is adjustable longitudinally so as to vary its effective working stroke.

2. A tool of the class described comprising an elongated cylindrical guide having an axial bore extending longitudinally therethrough from end to end thereof and provided to receive in its outer end portion a pin or other pointed-like fastening device, an elongated plunger rod mounted for longitudinal reciprocatory movement within said bore, a barrel telescoping and working longitudinally slidable over said guide, said barrel being provided with a vertically extending slot, a transversely disposed pin carried by said guide and extending into said slot for limiting the longitudinal slidable movement of said barrel relative to said guide, a closure head provided with an axial screw-threaded bore on and closing the

outer end of said barrel, spring means interposed between the inner end of said guide and said closure head for yieldably urging the head outwardly with respect to said guide, the outer end portion of said plunger rod being screw-threaded, the screw-threaded portion of said plunger rod projecting into the axial screw-threaded bore of said closure head and being in threaded engagement therewith, and a screw-threaded plug element insertible into the outer end of the screw-threaded bore of said closure head and releasably tightened against the outer end of said plunger rod whereby the plunger rod is normally held in place but the same is adjustable longitudinally so as to vary its effective working stroke.

RALPH W. RAYBURN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
541,038	Clark	June 11, 1895
791,548	Fischer	June 6, 1905
1,141,073	Parks	May 25, 1915
1,237,360	Martin	Aug. 21, 1917
608,555	Hazel	Aug. 2, 1898
1,155,724	Harnly	Oct. 5, 1915

FOREIGN PATENTS

Number	Country	Date
9,714	Great Britain	Apr. 23, 1909