No. 652,093. Patented June 19, 1900.

C. O. DIENER.

NAIL EXTRACTOR.

(Application filed Feb. 12, 1900.)

(No Model.)

Fig. 1.

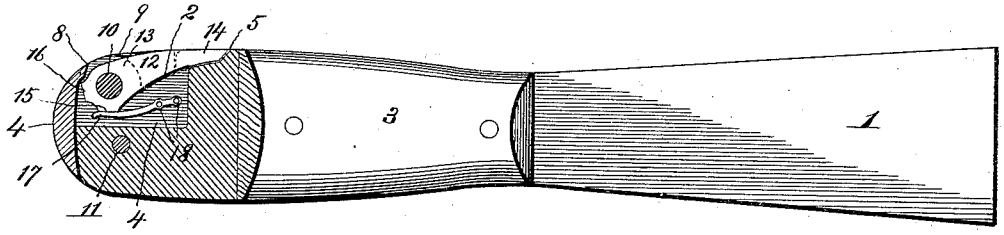


Fig. 3.

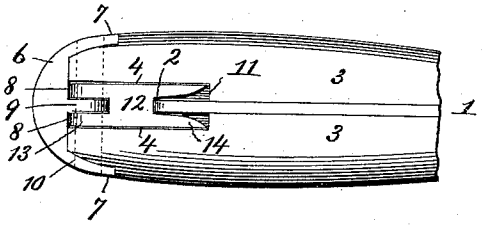
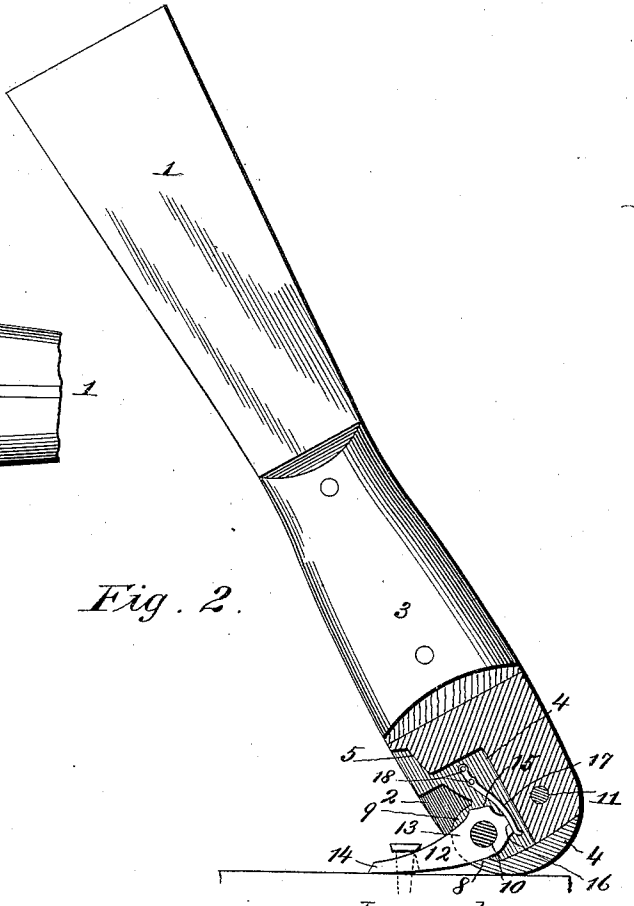


Fig. 2.



Witnesses

H. C. Rodgers.

J. W. Poling

Inventor:

Carl O. Diener.

Fischer & Thorpe Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CARL O. DIENER, OF KANSAS CITY, MISSOURI.

NAIL-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 652,093, dated June 19, 1900.

Application filed February 12, 1900. Serial No. 4,909. (No model.)

To all whom it may concern:

Be it known that I, CARL O. DIENER, of Kansas City, Jackson county, State of Missouri, have invented a new and useful Improvement in Tools, of which the following is a specification.

My invention relates to a tool embodying a notched handle and a tack-puller pivoted in said notch and adapted to project therefrom or to be folded snugly therein.

My object is to produce a tool of this character of simple, strong, durable, and cheap construction.

To this end the invention consists in certain novel and peculiar features of construction and combinations of parts, as will be hereinafter described and claimed, and in order that the invention may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a side view of a tool having its handle partly in section to disclose the tack-puller seated inoperatively therein. Fig. 2 is a similar view showing the tack-puller occupying its operative position, with the butt-end of the handle utilized as a fulcrum for the tack-puller. Fig. 3 is an edge view of the tool to show more clearly the construction and position of the tack-puller and means for securing it in place.

Referring to the drawings in detail, 1 designates a blade of any preferred form, and 2 a notch in the shank or handle end thereof.

The handle of the tool comprises two pieces 3 3, of wood or equivalent material, riveted to opposite sides of the blade-shank and provided with notches 4 4, registering with each other and the notch in the blade-shank, and said notches 4 4 are prolonged at their inner ends to form the shallow offset notches 5.

6 designates a metallic cap forming the rounded butt-end of the handle and provided at opposite sides with the segmental ears 7, fitting snugly in the handle-pieces 3. The cap 6 is also provided at one edge between said ears with a shoulder 8 and with a lug 9, arranged about centrally between ears 7 and projecting into the recess of the handle and forming one wall of the notch 2 in the rear end of the blade-shank.

10 designates a rivet extending through the ears 7, the lug 9, and the interposed handle-pieces 3 and also bridging the handle-recess formed by the registering notches 4. To assist rivet 10 in holding the cap and handle pieces reliably in position, a second rivet 11 is employed, which extends through ears 7 and the handle-pieces at one side of the recess in the latter.

The tack-puller comprises the body portion 12, of form and size to fit snugly in notch 2, the bifurcated rear end 13, seated astride the lug 9 and mounted pivotally on rivet 10, and the bifurcated front end or claw 14, the latter being adapted to lie snugly within the shallow prolongations 5 of the handle-notches 4. One arm of the bifurcated end 13 is formed with the bearing-faces 15 16 extending substantially at right angles to each other and adapted to be engaged, accordingly as the tack-puller is opened or closed, respectively, by the spring 17, seated in the handle-recess and riveted, as at 18, to the blade-shank.

When the tack-puller is not in use, it is folded in the recess of the handle, as shown in Figs. 1 and 3, and is held reliably in such position by the spring 17 pressing against the bearing-surface 15. (See Fig. 1.)

When the tool is to be used for pulling tacks, the tack-puller is thrown outward to the position shown in Fig. 2 against the shoulder 8, and as it assumes such position the spring 17, pressing against the bearing-surface 16, prevents it from accidentally closing again. The claw being now engaged under the head of the tack, the cap 4, forming the butt-end of the tool, is utilized as a fulcrum for pulling the tack, as will be readily understood by reference to Fig. 2.

From the above description it will be apparent that I have produced a tool embodying the features of advantage enumerated as desirable in the statement of invention, and it is to be understood that changes in the form, proportion, detail construction, or arrangement of the parts which do not involve a departure from the spirit and scope of the appended claims I reserve the right to make.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a tool, a notched shank, handle-pieces secured to opposite sides of the shank and provided with notches registering with each

other and the shank-notch, a cap at the butt-end of the handle-pieces and shank, and a tack-puller pivoted to the cap within the handle-piece notches, and provided with a body portion adapted to be seated in the notch of the shank, substantially as described.

2. In a tool, a notched shank, handle-pieces secured to the opposite sides of the shank and provided with notches registering with each other and the shank-notch, a cap at the butt-end of the handle and provided with a lug projecting into the recess formed by the registering handle-piece notches and forming one wall of the shank-notch, and provided with a shoulder 8, a tack-puller composed of a body portion adapted to be seated in the shank-notch, a bifurcated end embracing and pivoted to the lug of the cap and a bifurcated claw adapted to embrace opposite sides of the shank and be seated in said handle-piece notches, and means to hold the tack-puller in its open or closed position, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

CARL O. DIENER.

Witnesses:
H. C. RODGERS,
G. Y. THORPE.