C. G. WRIGHT.

STAPLE EXTRACTOR.

APPLICATION FILED NOV. 3, 1919.

1,359,777. Patented Nov. 23, 1920.

Fig. 1.

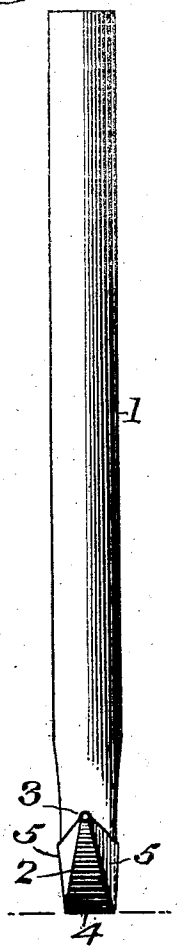


Fig. 3.

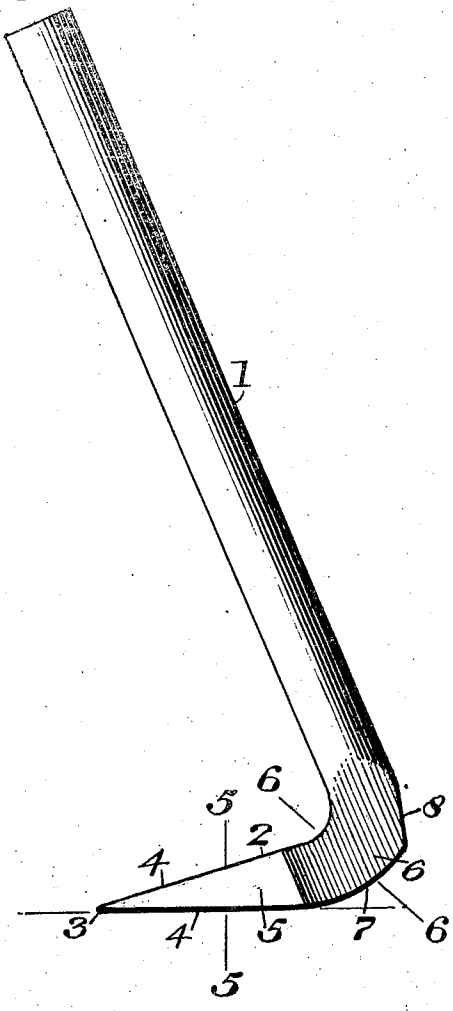


Fig. 2.

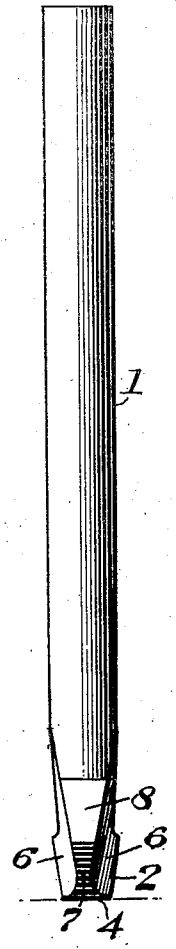


Fig. 5.

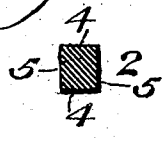


Fig. 4.

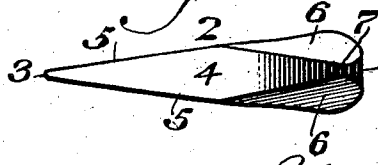
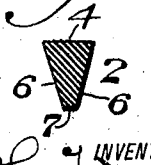


Fig. 6.



INVENTOR:
Charles G. Wright.
BY
Diedersheim + Fairbanks.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES G. WRIGHT, OF AMBLER, PENNSYLVANIA.

STAPLE-EXTRACTOR.

1,359,777. Specification of Letters Patent. Patented Nov. 23, 1920.

Application filed November 3, 1919. Serial No. 335,411.

To all whom it may concern:

Be it known that I, CHARLES G. WRIGHT, a citizen of the United States, residing at Ambler, in the county of Montgomery, State of Pennsylvania, have invented a new and useful Staple-Extractor, of which the following is a specification.

My invention consists of a tool adapted to extract a staple in a convenient, easily operated and powerful manner, the construction of the same being hereinafter set forth and the novel features thereof pointed out in the claim that follows the specification.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific details shown and described, as long as they are within the spirit or scope of the claim.

Figures 1 and 2 represent elevations of opposite sides of a staple extractor embodying my invention.

Fig. 3 represents a side elevation of the extractor at a right angle to Figs. 1 and 2 in inclined position preparatory to engagement with a staple.

Fig. 4 represents a bottom plan view thereof.

Fig. 5 represents a transverse section of the foot of the extractor on line 5—5 Fig. 3.

Fig. 6 represents a transverse section thereof on line 6—6 Fig. 3.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings.

1 designates a shank forming the handle of the tool, and 2 designates a foot which extends at an angle from the shank at the lower end of the latter.

The foot extends tapering from the shank to its terminal forming the single point 3, and has all of its sides flat as at 4—4, 5—5, the corners of the foot thus being angular.

The sides of the foot adjacent to the place of junction with the shank are tapered or sloped inwardly in down direction as at 6, forming the heel 7 of the tool of reduced width and with angular corners on its bottom, the under surface of said bottom being curved from front to rear.

What may be termed the back of the foot has thereon the flat surface 8 which is somewhat in a right line from the point 3 of the foot so as to receive the impact of a hammer or the like to drive the said point under the crown of the staple.

The operation is as follows:—

The tool is placed at an inclination on the post, board, etc. in which a staple is secured adjacent to the crown of the latter and the point 3 directed to the underside of said crown, the underside 4 of the foot resting solidly on said post.

The flat face 8 of the back of the foot is then subjected to the blows of a hammer or other implement whereby the point 3 is driven under the crown of the staple and the upper face 4 of the foot works the crown of the staple gradually upward so as to start the extracting of the staple, the foot owing to its angular corners being prevented from slipping on said crown. Then the shank is operated in the present instance, to the right, whereby the heel 7 owing to its curvature turns on the post, and elevates the foot in front and so exerts greater strain on the crown of the staple and raises it to great extent causing the legs of the latter to be extracted from the post, the leverage of the shank and foot with the assistance of the other features of the foot causing the extraction of the staple in a convenient, easily-operated and powerful manner.

As the foot rests on the wood in which the staple is contained, the tool may be levered on the wood by the curved heel to raise the foot and consequently lift the staple, the narrow under face of the heel is adapted to bite into the wood so as to take firm hold thereof while the foot presses upwardly against the underside of the crown of the staple between the tops of the legs thereof, thus starting the staple and finally raising it. In cases where the staple legs are rusted in the wood and so held with greater tightness the tool may be rocked laterally on its narrow heel and the slopes on the sides of the foot and so the staple may be worked out from side to side of the wood. These slopes leave the top of the angle where the foot joins the shank of the full material of the tool thereat thus preserving the strength of the tool at said angle where the same is needed owing to the great strain occasioned there in working the tool in the various directions up and down and to the right and left, avoiding twisting of the foot on the shank, and vice versa.

The heel of the foot being narrow causes the heel to bite the post, and by its angles at

its lower corners to take firm hold thereof preventing side slipping of the heel on said post.

The flat surface of the back of the foot is positioned in relation to the point of the latter as to indicate the proper place where the blows of a hammer are to be made so that said point is properly directed to the place of application under the crown of the staple.

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

As an improved article of manufacture, a staple extractor, the same being constructed of a shank and a foot, the latter of angular form in cross section tapering from said shank to a single point, said foot having on its underside at the rear thereof a curved heel, a hammering surface at the top of the rear of the latter, and slopes on its sides extending from the place of junction with said shank to said heel, reducing the width of said heel and preserving the full width of the material of the tool at the top of the angle of the shank and foot.

CHARLES G. WRIGHT.

Witnesses:
I. K. B. HANSELL,
GRACE A. WALTON.