

J. K. BIGELOW.
STAPLE DRIVER AND EXTRACTOR.
APPLICATION FILED JAN. 27, 1909.

985.135.

Patented Feb. 28, 1911.

FIG. 1

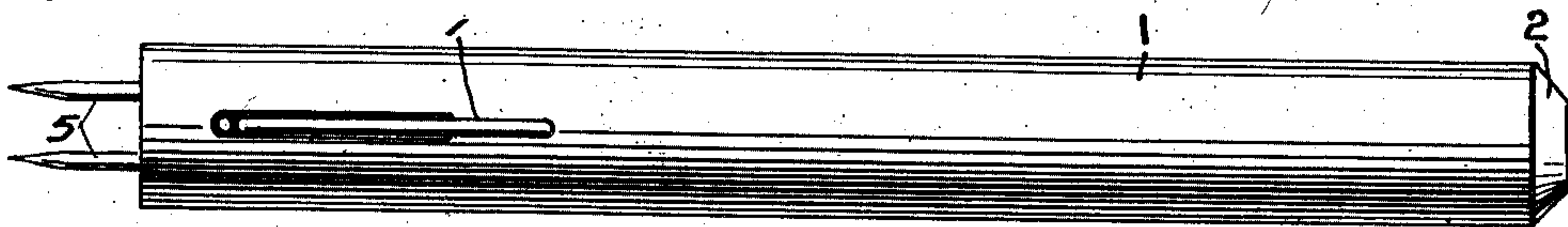


FIG. 2

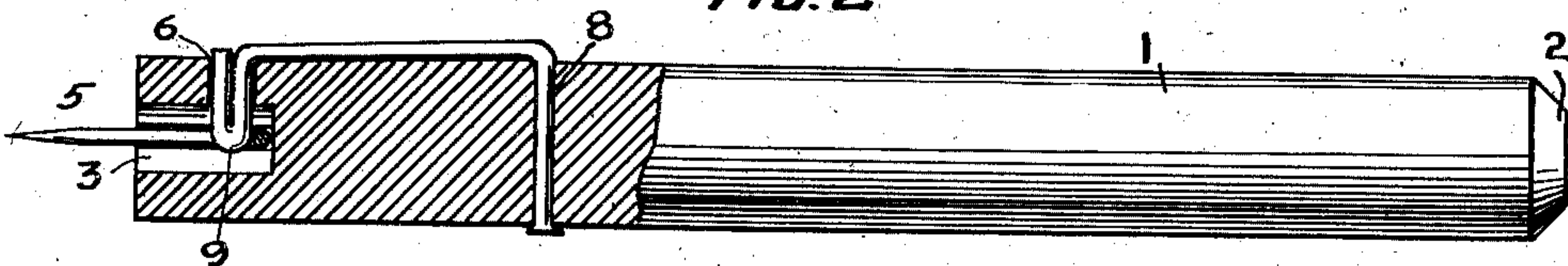


FIG. 3

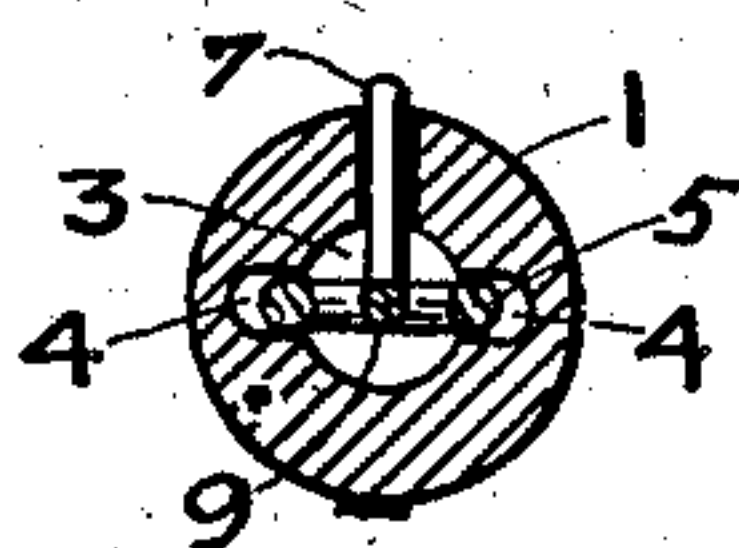


FIG. 4

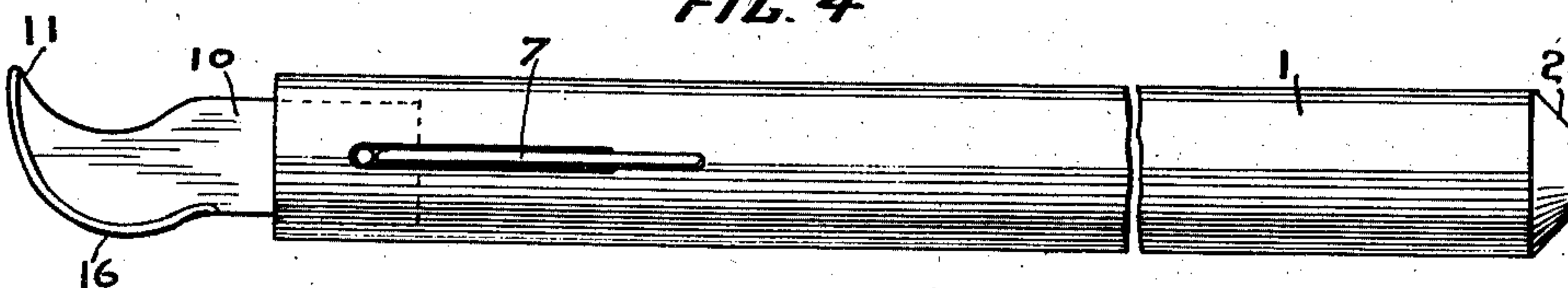


FIG. 5

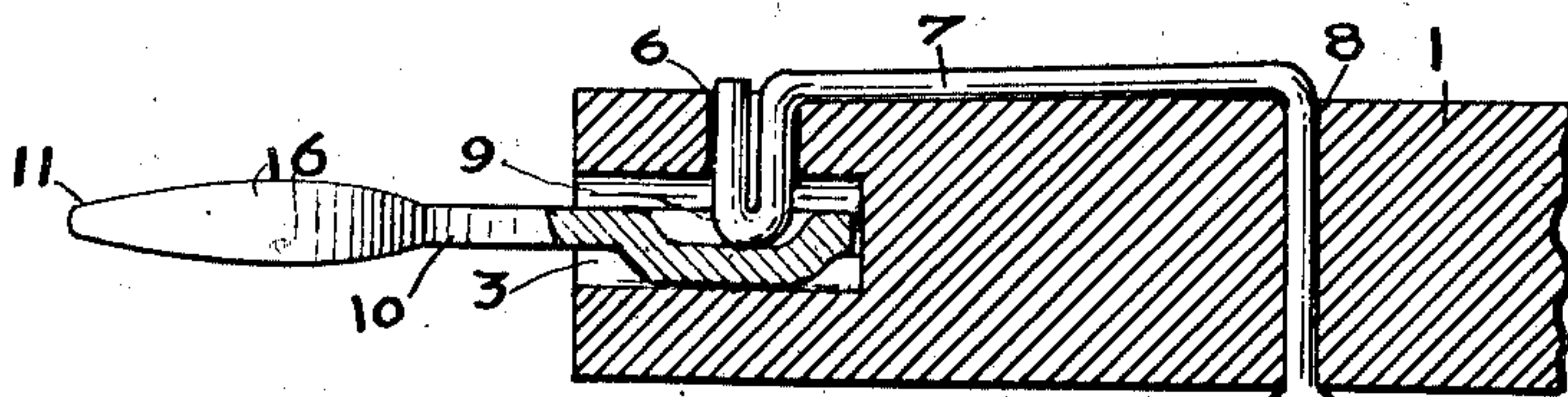


FIG. 6

FIG. 7

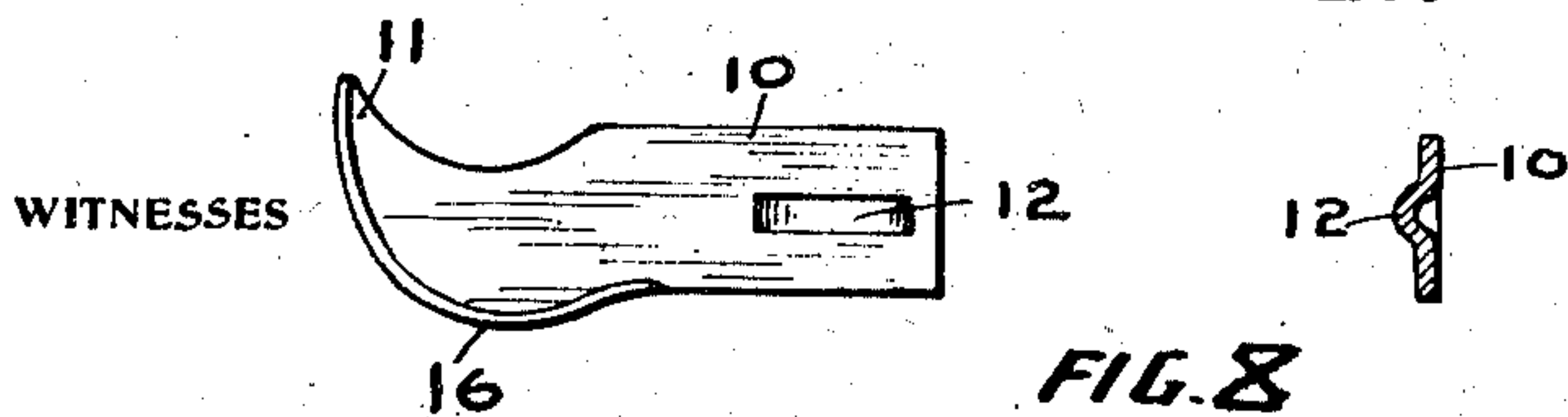
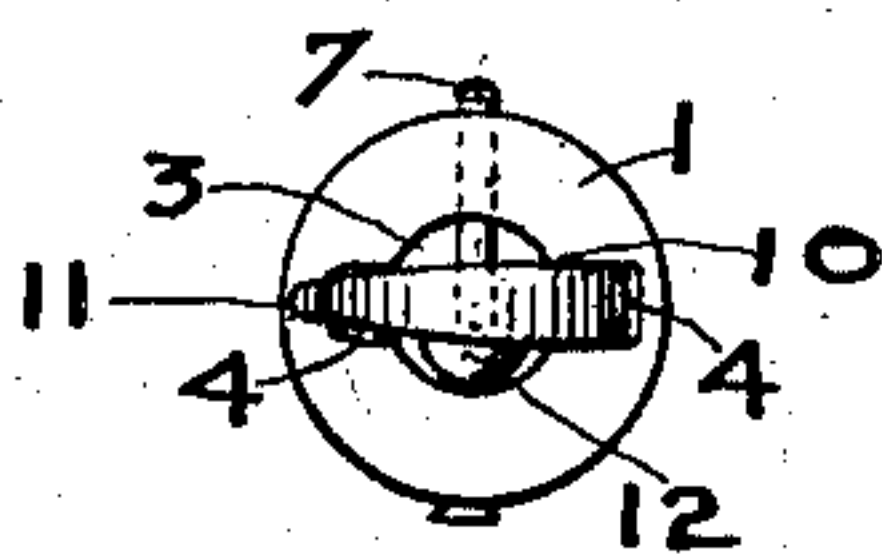


FIG. 8



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UNITED STATES PATENT OFFICE.

JOHN K. BIGELOW, OF OAKLAND, CALIFORNIA, ASSIGNOR OF ONE-HALF TO WALTER E. DRAPER, OF OAKLAND, CALIFORNIA.

STAPLE DRIVER AND EXTRACTOR.

985,135.

Specification of Letters Patent.

Patented Feb. 28, 1911.

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To all whom it may concern:

Be it known that I, JOHN K. BIGELOW, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Staple Drivers and Extractors, of which the following is a specification.

The object of the present invention is to provide a convenient instrument for driving staples, especially those used in wire fencing, for extracting the staples, and for stretching wire.

In the accompanying drawing, Figure 1 is a side view of the staple driver; Fig. 2 is a side view taken at right angles from Fig. 1, partly in section; Fig. 3 is a cross section; Fig. 4 is a broken side view showing the device used as an extractor; Fig. 5 is an enlarged longitudinal section the handle being partly broken away; Fig. 6 is a side view of the extractor hook; Fig. 7 is a transverse section of the same; Fig. 8 is an end view of the device shown in Fig. 4.

Referring to the drawing, my improved instrument comprises a cylindrical steel bar 1, one end of which has preferably a beveled edge 2. The other end is formed with a central recess 3, having two diametrically opposite extensions or enlargements 4, adapted to receive the sides of a staple, shown at 5. In the side of the bar, at its recessed end, in a plane at right angles to the plane through said extensions, is formed an elongated aperture 6, through which extends a free end of a wire spring 7, which spring extends longitudinally on the side of the bar, and is secured to said bar by its terminal portion being bent at right angles, passed through a hole 8 in the bar and swaged down on the other side of the bar. The free end of the spring is bent back upon itself so as to form a rounded nose 9, the function of which is to extend inward to a position behind, or outside of, the central or cross portion of the staple when in position, as shown in Fig. 2, and thereby retain the same in the bar or driver 1.

In use the staple is inserted in the recess

3 in the driver, so that the middle portion of the staple presses outward the bent end of the spring and then passes the same, said bent end then springing back into place and retaining the staple in position. The staple thus held in the end of the driver is applied to the fence post where it is desired to insert the same, and, the driver being pressed toward the post so as to hold the staple in position, a blow is given with a hammer upon the end of the driver, which has the effect of driving the staple into the wood. The driver is then withdrawn from the staple, the force of the spring 7 being very small and insufficient to offer any considerable resistance to the withdrawal of the driver.

My improved instrument can also be used as a staple extractor. For this purpose I provide the device shown in detail in Fig. 4, said device consisting of a plate 10 formed at one end into a hook or point 11 and at the other end having a longitudinal recess 12, made by stamping or pressing the metal laterally when forming the extractor, so that the outer face of the metal, opposite to said groove, extends beyond the corresponding face of the main portion of the extractor. This groove is adapted to receive the nose 9 of the spring 7 in the bar so that said spring retains the extractor in position in the body of the instrument. The use of the extractor is obvious. The pointed end of the same is inserted beneath the staple, and the extractor and the bar secured thereto are then used as a lever to withdraw the staple. The plate 10 is preferably formed with a widened rear edge as shown at 16, which prevents the same sinking deeply into soft wood.

I claim:—

A holder for a staple or staple extractor comprising a bar formed at one end to receive the blow of a hammer and having in the other end a recess elongated in cross section, said end having an aperture extending from the side of the bar into said recess in a direction transverse to the direction of elongation of said recess, and a spring

formed of round wire secured at one end to
said bar, and at the other end extending at
right angles and then doubled back on itself,
the doubled part of the wire extending
5 through said aperture into said recess to a
depth not less than the middle of the recess,
substantially as described.

In testimony whereof I have hereunto set
my hand in the presence of two subscribing
witnesses.

JOHN K. BIGELOW.

Witnesses:

F. M. WRIGHT,
D. B. RICHARDS.