

Aug. 7, 1951

C. H. EMERY
FASTENER EXTRACTOR

2,563,227

Filed Oct. 21, 1949

2 Sheets-Sheet 1

FIG. 1

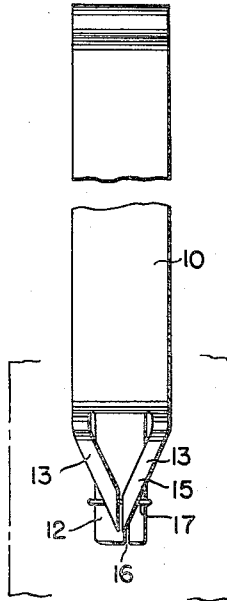


FIG. 2

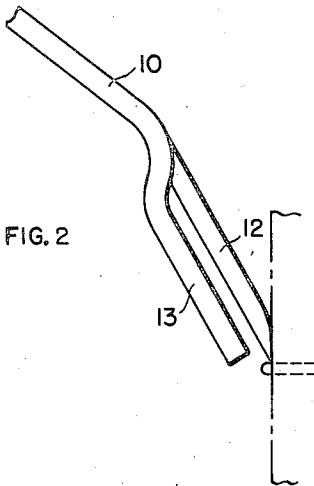


FIG. 3

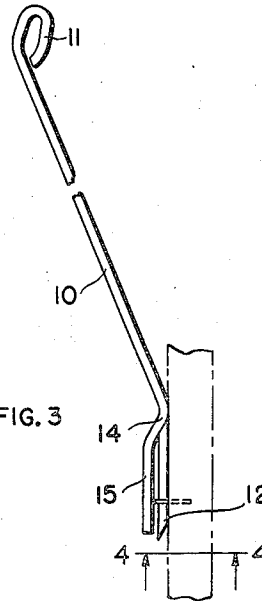


FIG. 4

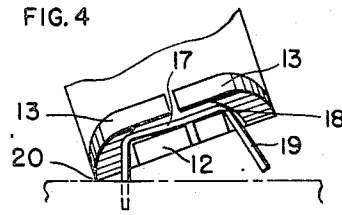
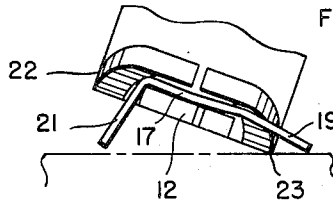


FIG. 5



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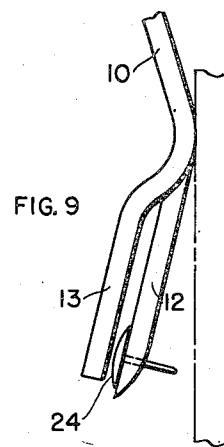
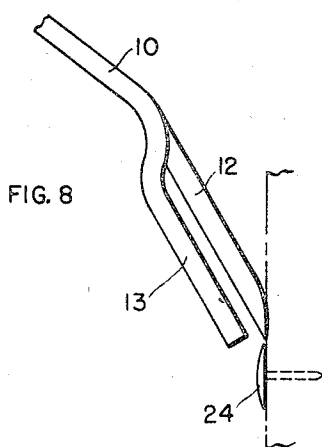
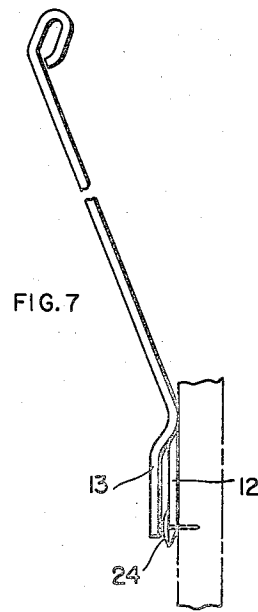
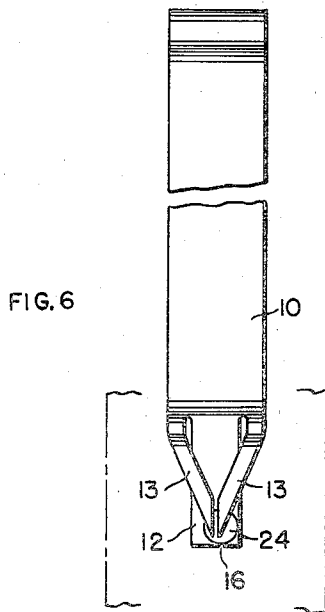
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2 Sheets-Sheet 2



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2,563,227

FASTENER EXTRACTOR

Charles H. Emery, Milwaukee, Wis.

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1 Claim. (Cl. 254—28)

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The invention relates to fastener extractors and more particularly to staple and thumb tack pullers.

One object of the invention is to provide a puller of the type above described in which a wedge blade is associated with a top binder means which permit rocking of the staple, so that it may be readily pulled out, the blade being so constructed and arranged that it will handle several different sizes of staples.

A further object of the invention is to provide a staple puller made from a single piece of metal formed to provide a wedge blade and a pair of top binder jaws cooperating with said blade to wedge portions of the staple between them and the blade, the base of the jaws providing fulcrum points to assist in prying the staple loose from its anchorage.

The invention further consists in the several features hereinafter set forth and more particularly defined by claim at the conclusion hereof.

In the drawings:

Fig. 1 is a front elevation view of a puller device embodying the invention showing its wedge blade inserted under the staple, parts being broken away;

Fig. 2 is a side elevation view showing the puller about to have its wedge unseated under the top of the staple, parts being broken away;

Fig. 3 is a side elevation view of the puller as shown in Fig. 1, parts being broken away;

Fig. 4 is an end elevation view looking in the direction of the arrows shown in Fig. 3 showing one leg of the staple removed, parts being broken away;

Fig. 5 is a view similar to Fig. 4 showing the other leg of the staple removed, parts being broken away;

Fig. 6 is a view similar to Fig. 1 showing the application of the puller to a thumb tack;

Fig. 7 is a side elevation view of the device shown in Fig. 6;

Fig. 8 is a view similar to Fig. 3 showing the start of removing a thumb tack;

Fig. 9 shows the device with the thumb tack removed.

Referring to the drawings, the puller embodying the invention comprises a bar of flat steel or other suitable metal formed to provide a handle 10 whose back end 11 may be turned over and a front end portion bevelled to provide a wedge blade 12 which is bent up at an acute angle from the plane of the handle and further formed to provide a pair of top binder jaws 13, each jaw

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being bent up at 14 at an angle to the handle and to the blade 12 and then extending forwardly at 15 substantially parallel to the plane of the blade 12, the said jaws also being bent inwardly or converging inwardly toward each other to provide a top binder surface above the blade 12. It is to be noted that the jaws 13 are separated from the blade portion 12 by sawing or slitting the front end of the bar stock before bending the blade and the jaws to the desired shape.

To accommodate different sizes of staples the blade 12 is slotted at 16 to one side of its center whereby three different sizes of staples can be readily handled, two sizes being taken care of by the unequal spacing of the slot 16 relative to the width of the blade and the other size by the whole width of the blade; however, staples whose leg spread is considerably wider than the width of the blade may be handled by this tool since it is capable of pulling out one leg of the staple at a time.

In use the blade 12 is positioned as shown in Fig. 2, and then worked in under the bridge or top 17 of the staple as shown in Figs. 1 and 2 with the bridge lying under the binder jaws 13, and then the handle is depressed to lift the staple out of its anchorage, but if it will not come readily, then it is canted first to one side and then the other as shown in Figs. 4 and 5 to withdraw the legs from the material into which they have been driven. In canting the puller the corner 18 between the bridge 17 and the staple leg 19 being withdrawn wedges or is clinched between the blade 12 and the lower inner edge of one of the binder jaws 13 as shown in Fig. 4 while the part 20 at the edge of the base of the other jaw acts as a fulcruming point about which to swing or cant the tool to remove the leg 19 and that this same action takes place in removing the other leg 21 of the staple as shown in Fig. 5, the wedging or binding of the corner 22 between the blade and the other jaw then taking place while the tool fulcrums about the part 23 at the base of the opposite jaw.

The tool may also be used for the placement and removal of thumb tacks. In removing a thumb tack 24 as shown in Figs. 6 to 9 its action is generally similar to the usual tack puller, the wedge blade 12 being inserted under the head of the tack 24, so that the slot 16 aligns with the shank of the tack. However, the top binder jaws 13 projecting as they do over the head of the tack act to retain the tack in the pulling end of the tool until it is extracted, and for placement of thumb tacks these binder jaws form a

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back stop for the head of the tack, so that it may be pressed down into the material to be fastened to the desired anchoring surface.

I desire it to be understood that this invention is not to be limited to any particular form or arrangement of parts except in so far as such limitations are included in the claim. 5

What I claim as my invention is:

A tool of the character described, comprising a wedge blade having a slot offset to one side of the center of said blade to accommodate staples of different sizes, and binder means above the blade between which and the blade an exposed portion of the staple is wedged during the removal of the staple. 10

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

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