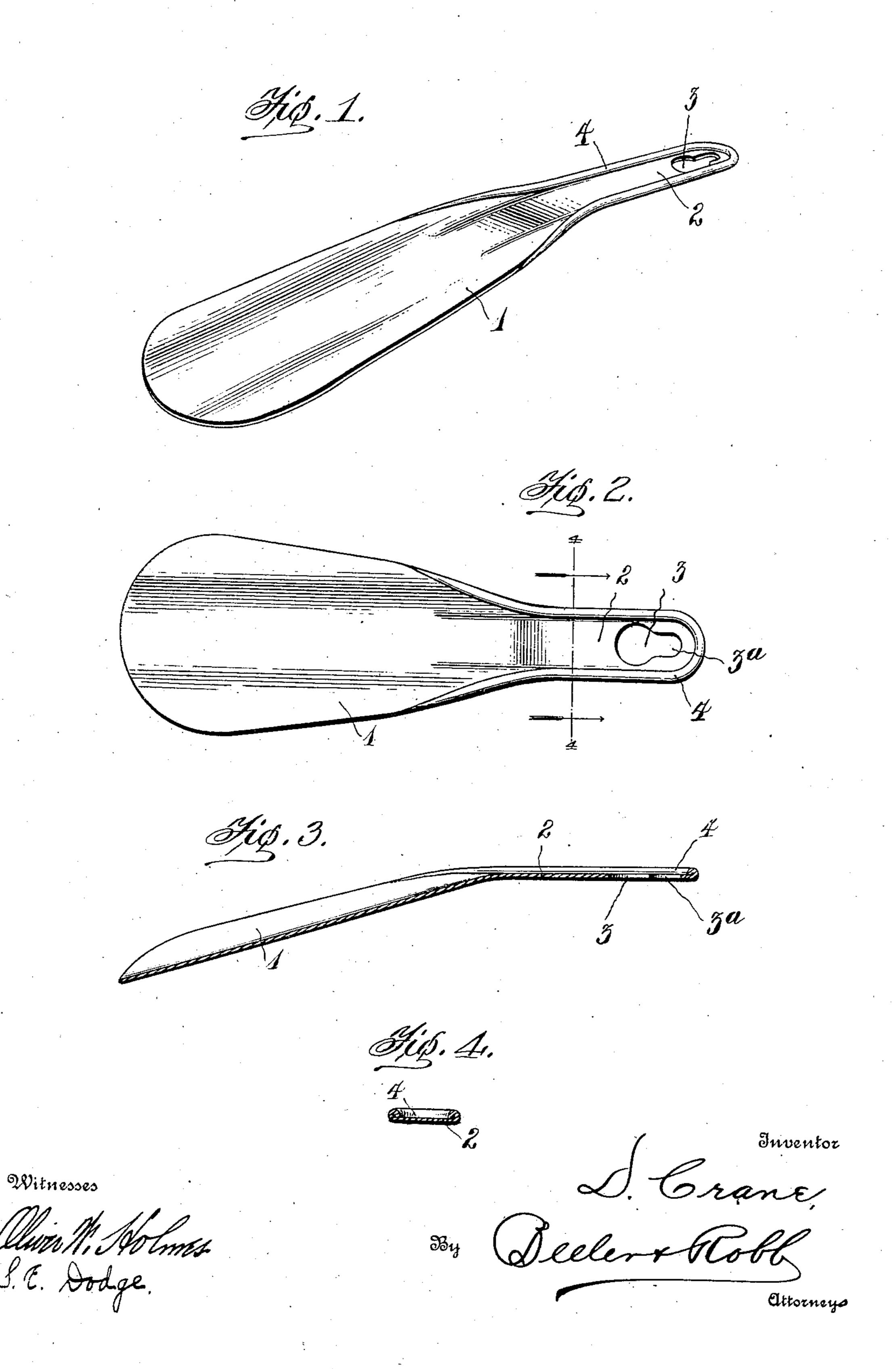
D. CRANE.
SHOE BUTTONER.
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UNITED STATES PATENT OFFICE.

DANIEL CRANE, OF ROCHESTER, NEW YORK.

SHOE-BUTTONER.

No. 894,190.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Daniel Crane, a citizen of the United States, residing at Kochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Shoe-Buttoners, of which the following is a specification.

This invention relates primarily to appliances for buttoning shoes, and for facilitating the operation of placing shoes upon the feet

of the wearer.

For a long time not only wearers of button shoes, but dealers in such shoes, have been looking for a simple device or appliance, 15 which will do the work of the ordinary button hook, but will not have the defects of this most commonly used device, from which serious disadvantages arise when it is employed for the purposes for which it is 20 made. In using button hooks, the pointed end of the hook frequently catches into the threads or wire fastenings securing the buttons to the shoe, interfering with the desired adjustment of the hook preliminary to forc-25 ing the button through the button hole. Often buttons are detached in the above way, and the leather of the shoe mutilated or otherwise injured. The foregoing is not only troublesome to shoe wearers, but the 30 injury to the shoe by the button hook, in the above way, and in the general use of the appliance by dealers, when trying on shoes, is sufficient to lessen the value of the stock of the latter considerably, thereby causing 35 financial loss.

Various devices have been invented, as substitutes for the button hook, but thus far such appliances have not been approved by the trade, or wearers of shoes, and may there40 fore be considered as not of a practical and desirable nature, or as useful as the hook, for the purposes for which they have been designed.

With the above in view, the main object of my invention has been to produce a shoe buttoner which will not possess any disadvantageous features such as have been described with reference to similar appliances in use, and which is extremely simple, substantial, and cheap in structure.

| Position until the larger end of the key-hole slot 3 is arranged at one side of the button to be operated, whereupon the device is turned so that the button is received by the opening 3 at said larger end. The device is then given a slight longitudinal movement whereby the fastening threads or wire fastener of the button movement and after the substantial.

A further object of my invention has been to so form the buttoning appliance as to provide a handle therefor, the shape of which admits of use of same as a shoe-horn for facilitating the introduction of the feet into low shoes.

For a full understanding of my invention, including the exact construction and operation thereof, reference is to be had to the following description, and to the accom- 60 panying drawings, in which:

Figure 1 is a perspective view of a device embodying my invention; Fig. 2 is a top plan view; Fig. 3 is a vertical longitudinal

section; and Fig. 4 is a transverse section 65 taken about on the line 4—4 of Fig. 2.

Similar reference characters refer to similar parts throughout the following description and on the several views of the drawings.

In the drawings the numeral 1 designates 70 the body of my device, the same constituting a handle for the shoe buttoner comprising my invention. The handle 1 is reduced, or tapers, toward one end thereof, the reduced end portion being designated at 2 and being 75 provided near its outer extremity with a key-hole slot 3, the smaller end of said slot being outermost, as shown at 3a. The handle 1 extends at an angle to its reduced end portion 2, said handle being curved trans- 80 versely for a purpose to be hereinafter described. The reduced end 2 of the appliance is substantially flat in cross section, the edge portions of said end, however, being rolled to provide a smooth, round edge or bead 4 ex- 85 tending throughout the length of the reduced end 2 and part way along the handle 1 aforesaid. At the outer terminal of the end 2 of the device, the round edge or bead curves to conform with the shape of the terminal, in a 90 manner readily apparent.

Above has been described the specific structure of my appliance, and its operation will now be set forth. In buttoning shoes, the handle 1 is grasped and the reduced end 2 95 thereof is passed through the button opening of the shoe flap, the handle being so held that the end 2 is in a substantially perpendicular position until the larger end of the key-hole slot 3 is arranged at one side of the button to 100 so that the button is received by the opening 3 at said larger end. The device is then given a slight longitudinal movement whereby the fastening threads or wire fastener of 105 the button move into the smaller end of the slot 3, after which the device may be actuated so as to draw the button through the buttonhole, in an obvious way. In the operation of drawing the button through the button-hole 110 it will be seen that the latter is not likely to be injured or mutilated at its edges by the

appliance, because of the provision of the round edge or bead 4 formed upon the smaller end 2 of the buttoner. To release the buttoner from the button drawn through 5 the button-hole, it is only necessary to reverse the operation described above. By reason of the provision of the peculiar form of slot or opening 3 not only is likelihood of accidental disengagement of the buttoner 10 from the button eliminated, but the attaching means for the button cannot be damaged. Furthermore, the slot 3, by reason of the manner of engaging the appliance with the button, is adapted to receive a larger button even 15 than the larger end of said slot 3, such button passing through the slot in an edgewise manner, so to speak.

The shape of the handle 1 is peculiar as before described, in order that the same may be 20 employed in the capacity of the ordinary shoe-horn, the small end 2 being grasped by the hand when the appliance is employed for

the last mentioned purpose.

The formation of the edge portions of the 25 end 2 of the appliance is advantageous for three different reasons. When the invention is used for buttoning shoes the rounded or beaded edge 4 prevents likelihood of tearing or otherwise injuring the shoe. In the use of 30 my appliance as a shoe horn the end 2 is grasped and the hand is not likely to be cut or injured should the device slip, when force is exerted in operating the same to facilitate the placing of the foot in the shoe. Again, 35 the bead or edge 4 performs an important function, considering the appliance as a whole in that, the central portion of the body of the device is reinforced or strengthened materially by the rolling of the edge bead 4. 40 This reinforcement of the body of the device is essential because my appliance is constructed wholly of thin sheet metal, which is subjected to considerable strain, for a light structure of the size employed preferably for 45 the purposes of the invention.

Looking at my appliance from the standpoint of simplicity and cheapness of structure,

it is apparent that the same may be manufactured from sheet metal, using a minimum amount of material, and the article may be 50 stamped and formed at a single operation. The cost of production of appliances constructed in accordance with my invention, in view of the foregoing, will be seen to be nominal.

Having thus described the invention, what

is claimed as new, is:

1. As a new article of manufacture, a shoe buttoner comprising a single piece of sheet metal one end of which is comparatively wide 60 to provide a handle and the other end of which is reduced or tapered so as to pass through a button-hole, the tapered end of the buttoner being provided at its outer extremity with a slot, and the longitudinal and outer 65 edge portions of the reduced end of the buttoner being rolled to form a bead or rounded edge extending some distance along the opposite edges of the handle portion of the device.

2. As a new article of manufacture, a shoe buttoner comprising a single piece of sheet metal formed with one end thereof comparatively wide and curved in cross section so as to constitute a handle, the other end of the 75 buttoner being reduced or tapered to provide a buttoning element at the outer extremty of which is provided a button receiving keyhole slot, the small end of said slot being oueermost, and the longitudinal and extrem- 80 edge portions of the buttoning element being rolled to provide a beaded or rounded edge for the appliance at its smaller end and the said beaded edges of the buttoning element extending some distance along the handle 85 portion aforesaid, the handle extending at an angle to the smaller end portion thereof.

In testimony whereof I affix my signature

in presence of two witnesses.

DANIEL CRANE.

Witnesses:

W. C. KOHLMETZ, R. E. Westbury.