

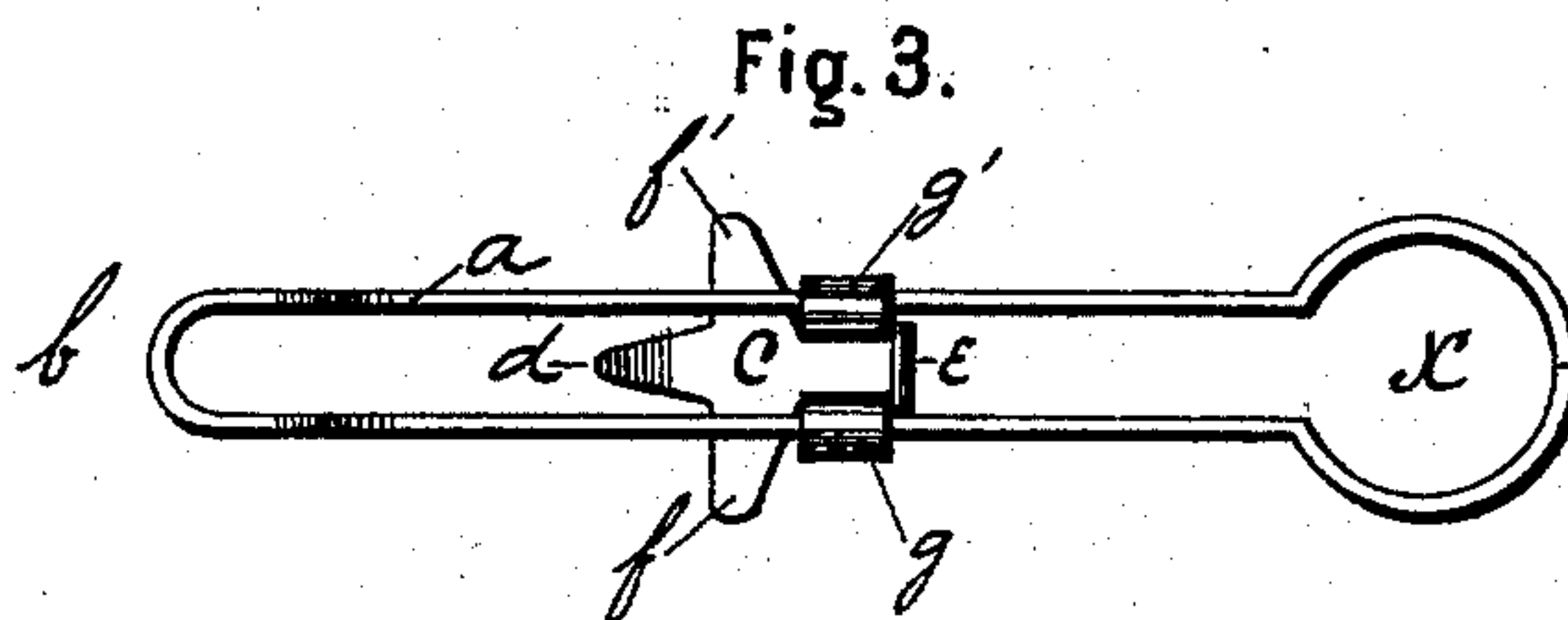
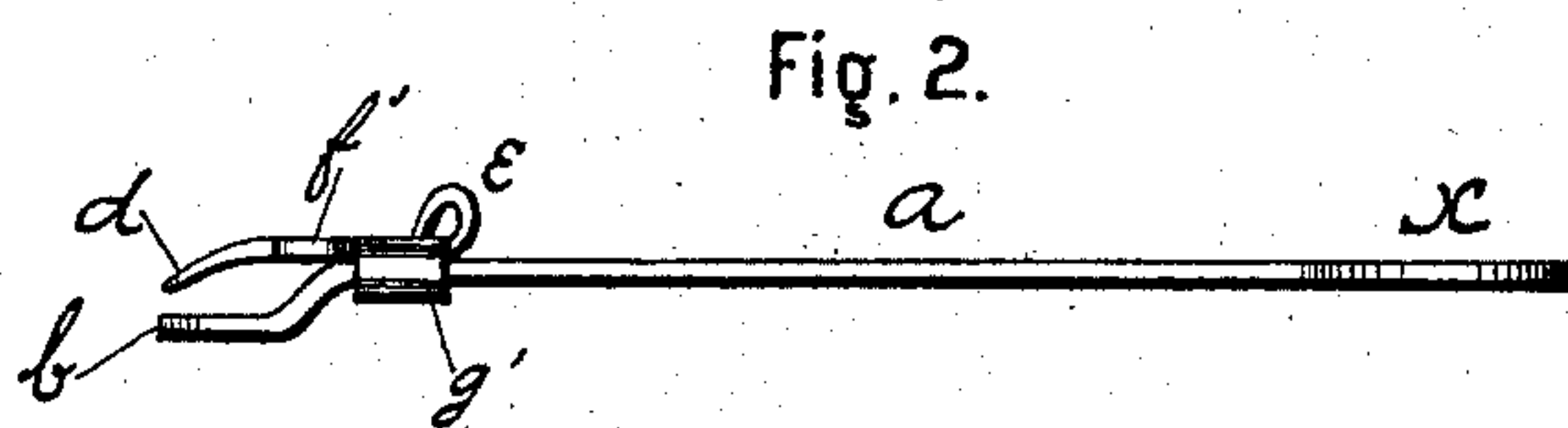
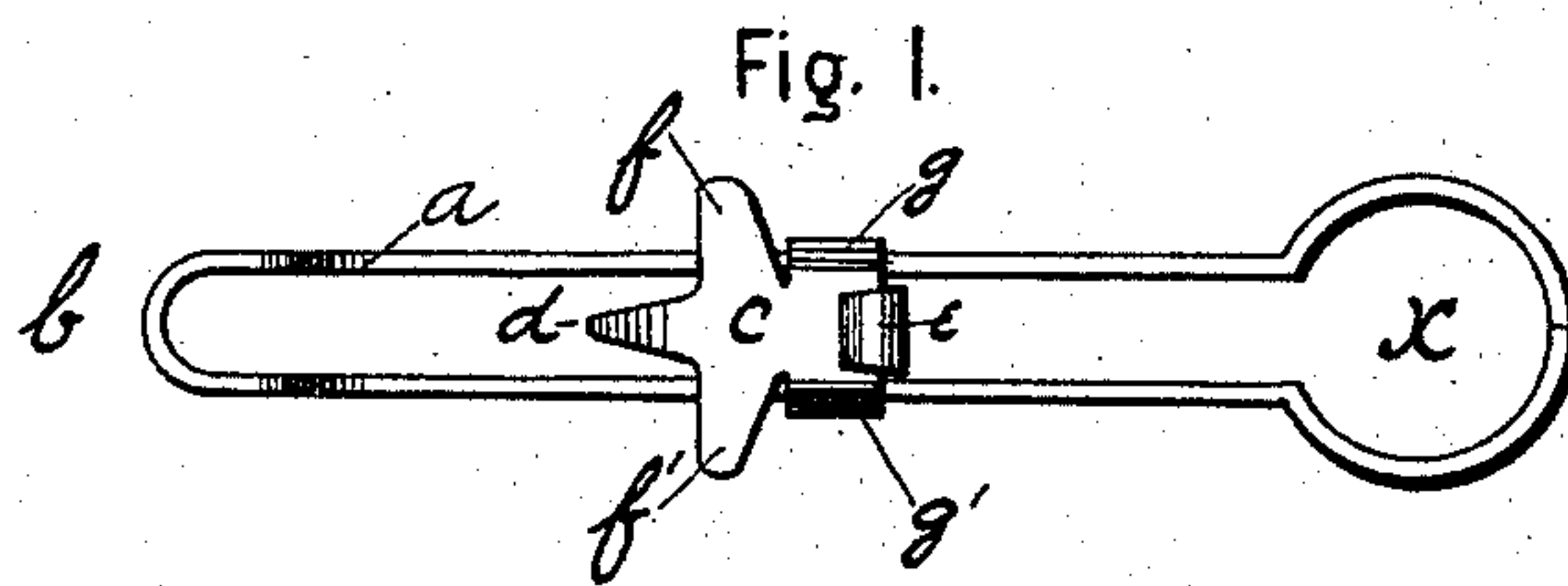
(No Model.)

T. R. BETZEL.

BUTTON HOOK.

No. 413,334.

Patented Oct. 22, 1889.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THEODORE R. BETZEL, OF NEW YORK, N. Y.

## BUTTON-HOOK.

SPECIFICATION forming part of Letters Patent No. 413,334, dated October 22, 1889.

Application filed February 16, 1889. Serial No. 300,153. (No model.)

*To all whom it may concern:*

Be it known that I, THEODORE R. BETZEL, a citizen of the United States, residing in New York, in the county and State of New York, have invented certain new and useful improvements in Button-Hooks, of which the following is a specification.

My invention relates to improvements in button-hooks in which a wire shaped into a loop operates in conjunction with a piece of metal or wire so arranged as to slide to and fro on the shank of the hook formed by the wire; and the objects of my improvements are, first, to relieve the button-hole of some of the strain brought to bear upon its end when an ordinary button-hook is used; second, to afford facilities to bring the button-hole into closer proximity to the corresponding button, and, third, to get full control of the button before the button-hook is made to describe the customary circle, by means of which the button is forced into the button-hole, all of which tends to preserve the shape of the button-hole and prevents tearing of material around the button and button-hole.

The invention is especially adapted to gloves.

I attain these objects in the following manner, reference being had to the accompanying drawings.

Figure 1 is a top view of the button-hook complete. Fig. 2 is a side view, and Fig. 3 a bottom view.

Similar letters refer to similar parts.

A piece of wire is bent into a loop, the end of the loop forming the hook *b*. The sides form the shank *a* to the hook, and the other end is closed in the form of a ring *x*. The hook *b* is deflected downward, Fig. 2, sufficiently to allow the top of any button that may be hooked to remain beneath the tongue *d* of slide *c*, as shown in Fig. 2, (the slide *c* having been moved forward on shank *a* to hook *b*.) The slide *c* consists of a piece of metal or wire bent into such a shape that it will slide to and fro on the shank *a*. On the end of the slide *c* which points to the end *x* of the shank *a* a piece of the material of which the slide is made, *e*, Figs. 1 and 2, is curved

up so as to afford a purchase when it is desired to move the slide to and fro on the shank *a*. On the other end of slide *c*, which points toward the hook *b*, there are two flanges *f f'* and a tongue *d*. The flanges *f f'* are set at right angles with the shank *a* and ride on top of the shank *a*. The tongue *d* on the slide *c* projects out from the flanges *f f'* toward the hook *b* and runs parallel with the wires forming the shank *a*. The point of the tongue *d* is sufficiently deflected downward to bring it below the top of the wires forming the shank *a*, so that when the button-hook is inserted into a button-hole and the hook *b* (with the deflection of said hook downward) is placed over the corresponding button and pressure is brought to bear onto the slide *c* from end *x* of the shank *a* toward the hook *b*, the tongue *d* on the slide *c* will enter the button-hole and project on the other side. The flanges *f f'* on the slide *c*, projecting beyond the sides of the shank *a* at right angles, will catch the button-hole on the sides, and as the slide *c* moves toward the hook *b* the side on which the button-hole is of the article to be buttoned will be brought together in a direct line with the side on which the button is fastened, thus distributing the strain on the end of the button-hole toward the sides thereof, doing away with a great deal of the side strain to which button-holes are subjected by the use of the button-hook at present in vogue, and bringing the button-hole into close proximity to the corresponding button. On moving the slide *c* forward on the shank *a* toward the hook *b* the tongue *d*, which projects through the button-hole, will ride onto the top of the button held by the deflected hook *b*, and place the button, as it were, into a clutch between the hook *b* and the tongue *d*.

The very frequent occurrence of the button catching in a fold on the side of the button-hole and tearing the material when the ordinary button-hook is made to describe the customary circle is by the above device entirely done away with, the tongue *d* making it impossible for the button to catch in a fold.

I claim as my invention—



1. In a button-hook, the combination of the shank *a*, having a hook or loop *v*, and the slide *c*, substantially as described.

2. In a button-hook, the combination of the shank *a*, having the hook *b* deflected from the line of the shank, and the slide *c*, having the tongue *d* also deflected, as shown, and the flanges *f f'*, substantially as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name this 15th day of February, A. D. 1889.

THEODORE R. BETZEL.

Witnesses:

DANL. W. EDGECOMB,  
CAROLINE E. DAVIDSON.