

(No Model.)

2 Sheets—Sheet 1.

E. NOELLE.
BUTTON FASTENING MACHINE.

No. 429,052.

Patented May 27, 1890.

Fig. 1.

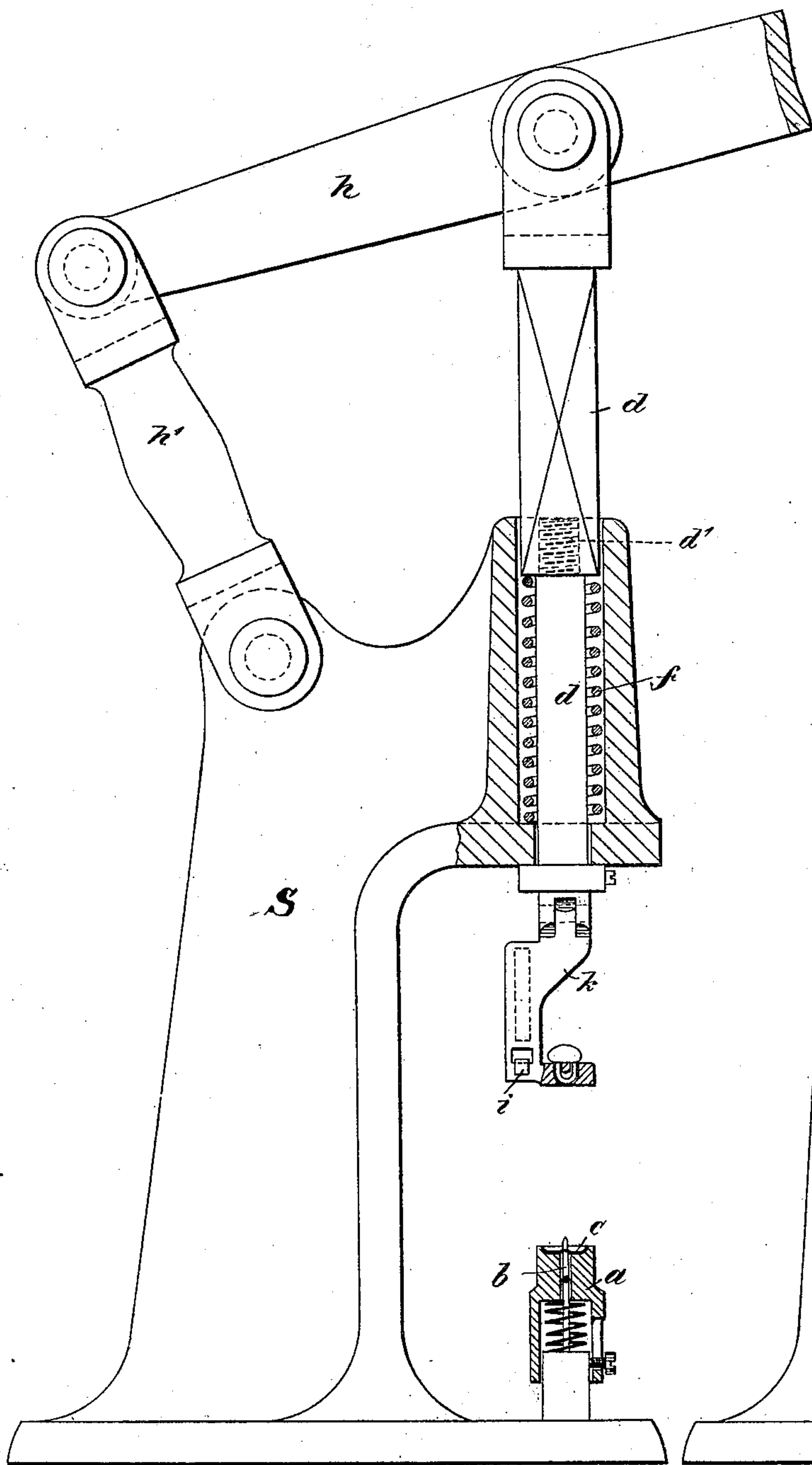
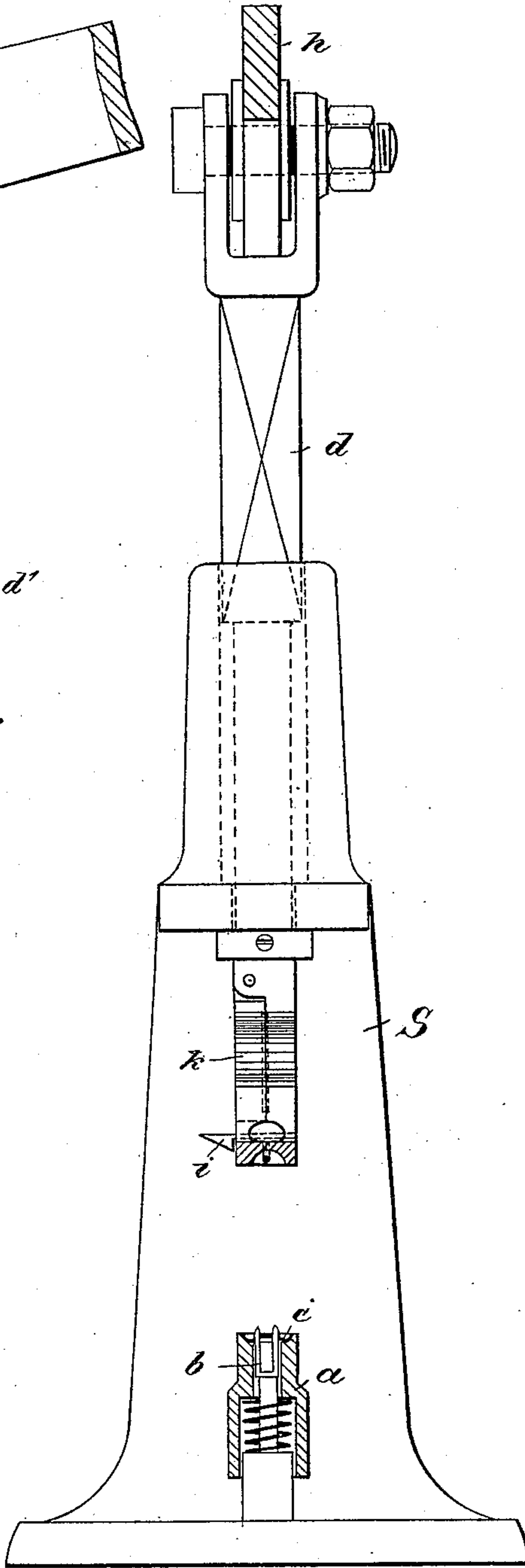


Fig. 2.



Witnesses:

Hayden

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

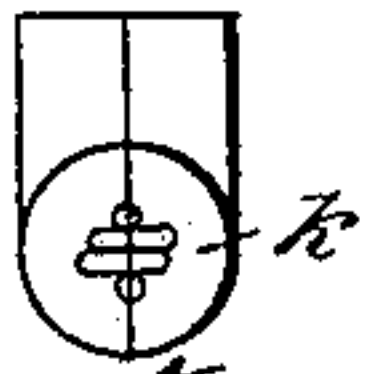


Fig. 5.

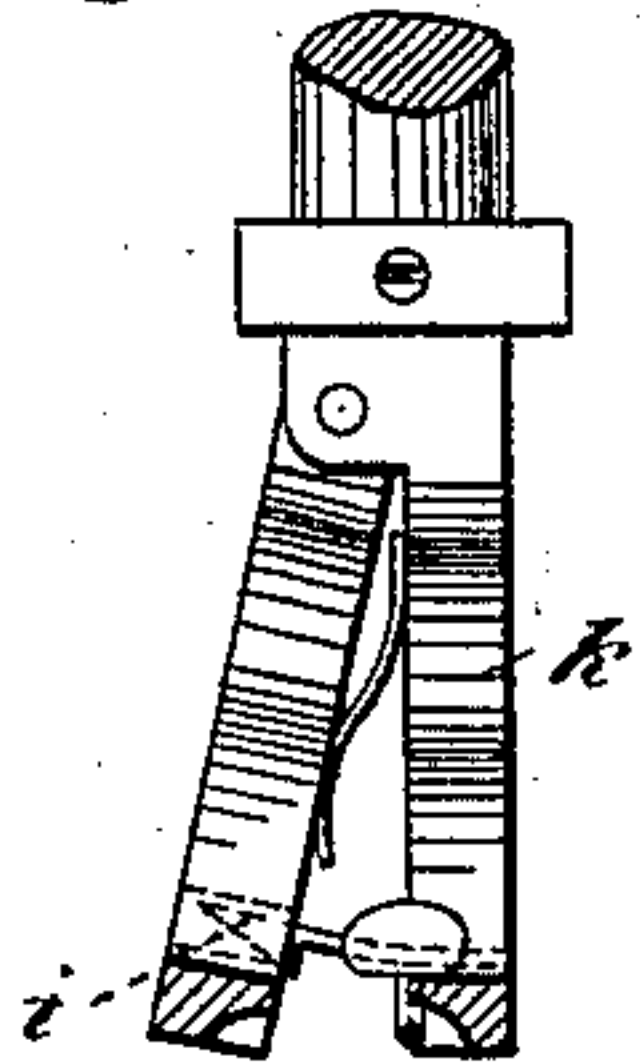


Fig. 6.

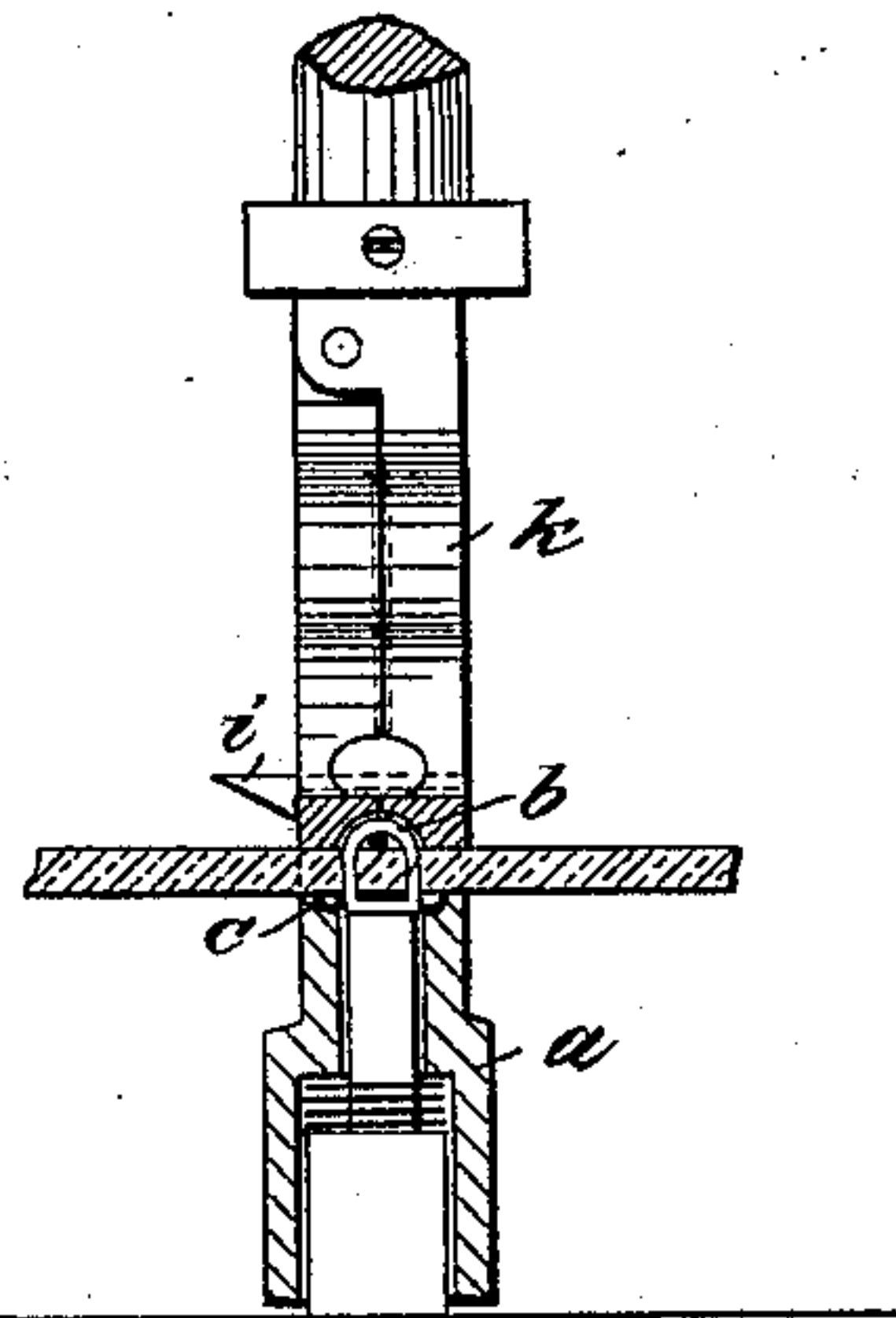


Fig. 4.

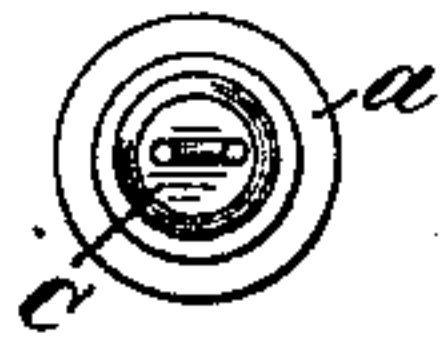


Fig. 7.

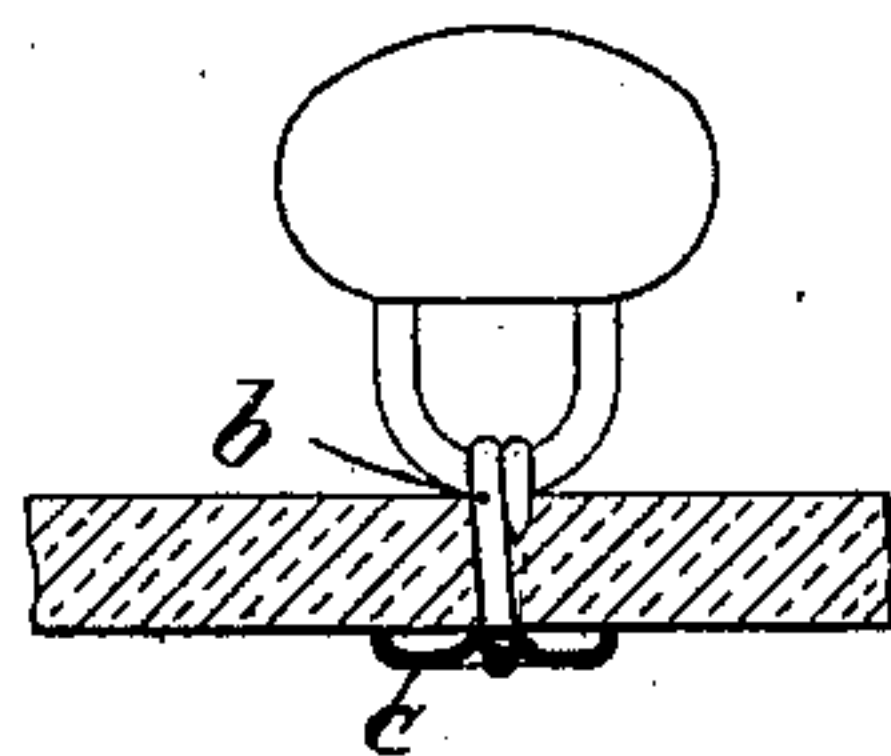
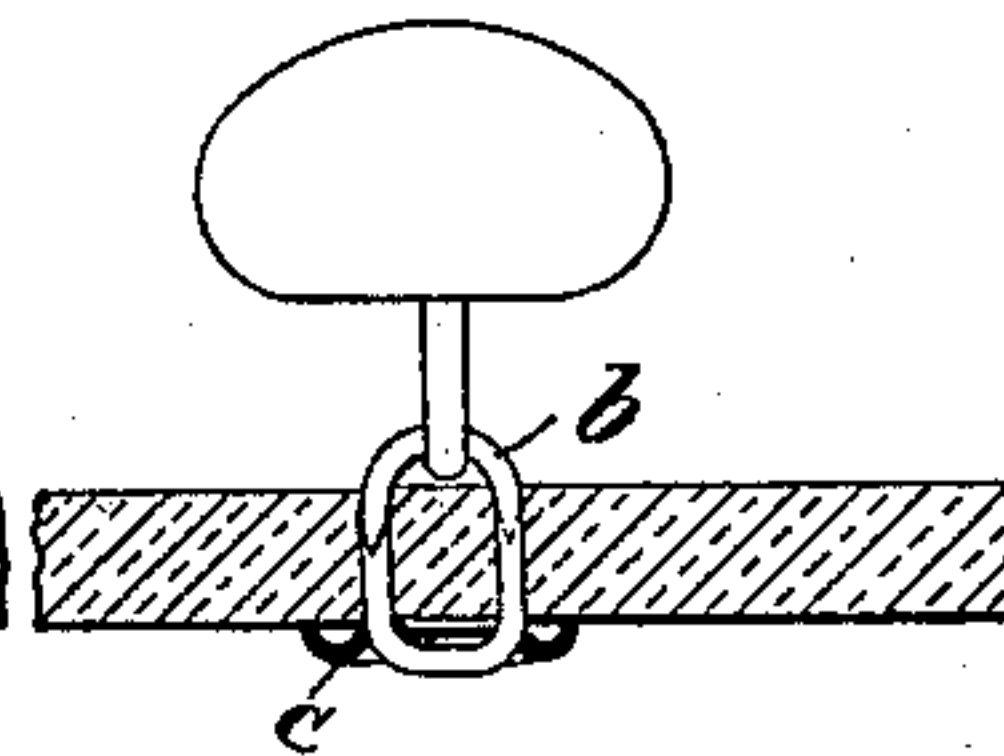


Fig. 8.



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UNITED STATES PATENT OFFICE.

EWALD NOELLE, OF LÜDENSCHIED, GERMANY.

BUTTON-FASTENING MACHINE.

SPECIFICATION forming part of Letters Patent No. 429,052, dated May 27, 1890.

Application filed August 19, 1889. Serial No. 321,266. (No model.) Patented in Germany June 28, 1889, No. 50,187; in France July 20, 1889, No. 199,711; in Belgium August 2, 1889, No. 87,236; in Austria-Hungary August 2, 1889, No. 34,110 and No. 56,295, and in England August 2, 1889, No. 12,304.

To all whom it may concern:

Be it known that I, EWALD NOELLE, a subject of the King of Prussia and Emperor of Germany, and a resident of Lüdenschied, in the Province of Westphalia, German Empire, have invented certain new and useful Improvements in an Apparatus for Fastening on Buttons with Wire, (for which I have obtained patents in Germany, No. 50,187, dated June 28, 1889; in France, No. 199,711, dated July 20, 1889; in Belgium, No. 87,236, dated August 2, 1889; in Austria-Hungary filed August 2, 1889, No. 34,110 and No. 56,295, dated November 21, 1889, and in England, No. 12,304, dated August 2, 1889,) of which the following is an accurate description.

My invention consists of an apparatus by means of which a wire loop is passed through the stuff, then through the eye or loop of the button and bent round on each side, so that the button is securely fastened to the stuff.

In order to make my invention more clear, I refer to the accompanying drawings, which form part of this specification, and in which similar letters denote similar parts throughout the several views.

Figure 1 is a side view of the apparatus, partly in section. Fig. 2 is a front view of the same. Fig. 3 is an under view of the piece *k*. Fig. 4 is a top view of the piece *a*. Fig. 5 is a front view of the piece *k*. Fig. 6 is a sectional view of *k* and *a*, showing how the button is fixed to the stuff. Figs. 7 and 8 show the button fixed to the stuff.

To the foot of the cast-iron (or any other suitable metal) stand *s* of the machine is fixed elastically the cap *a* by means of a spiral spring and screw, Fig. 1. This cap is vertically movable, and into the same are placed the small plate *c* and wire loop *b*. The piece *k*, which holds the button, consists of two pieces hinged together. Its upper part *d* extends through the cast stand *s*, by which it is guided and is under the influence of the spring *f*, which has the tendency to hold the same always in its highest position. The upper end of *d* is pivoted to the lever *h*, which is pivoted to piece *h'*, which in its turn is pivoted to the stand of the machine. The upper part of rod *d* is square and guided in the stand.

The two pieces hinged together and forming the piece *k* are held apart by the small flat spring, Fig. 5; but when the button is in place they are pressed together and held so by means of the spring-catch *i*.

The rod *d* is formed of two rods screwed together at *d'*, so that it can be easily taken out of the stand of the machine if it should be required to regulate the spring *f*.

When now the button is placed in the piece *k* and the two halves of the same are pressed together, the wire loop *b* and holding-plate *c* placed in the cap *a*, the stuff is then placed between pieces *k* and *a* and the handle of lever *h* pressed down. The ends of wire loop *b* will then be pressed through the stuff and will come against the sides of the spherically-rounded-out cavity in the under part of *k*, in the middle of which the loop of the button is hanging. By means of this cavity the ends are guided through the loop of the button, Fig. 6, and pressed round, as shown in Figs. 7 and 8. The button is then securely fastened to the stuff by means of the plate *c* and wire loop *b*.

Having thus fully described the nature of my said invention and the manner in which the same is to be performed, what I claim, and desire to secure by Letters Patent of the United States, is—

The combination of the button-holder *k*, consisting of the two parts hinged together at their upper ends, operated by a flat spring situated between the two pieces, and by a spring-catch *i*, and having in their under side a hemispherical cavity common to both parts, the guide-rod *d*, operated by lever arrangement *h* and *h'* and spring *f*, and the spring-seated cap *a*, adapted to hold fastening-plate *c* and loop *b*, in the manner and for the purpose substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

EWALD NOELLE.

Witnesses:

CARL KRÜGER,
EWALD PLEUGER.