

(No Model.)

J. F. THAYER.  
BUTTON FASTENER.

No. 373,541.

Patented Nov. 22, 1887

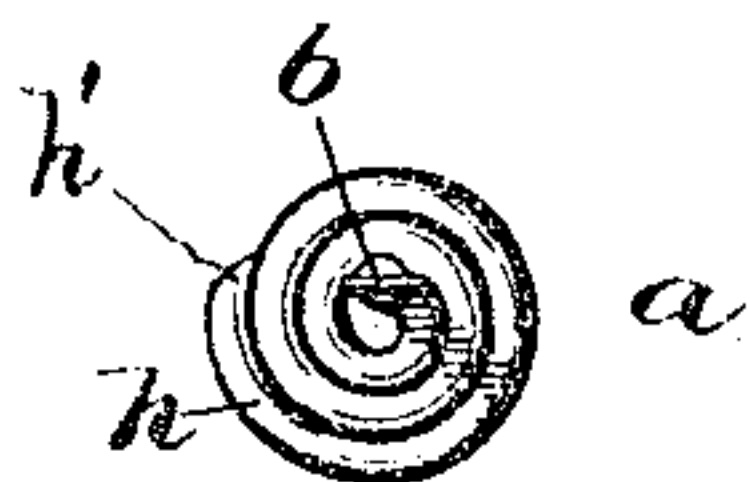


FIG. 1.

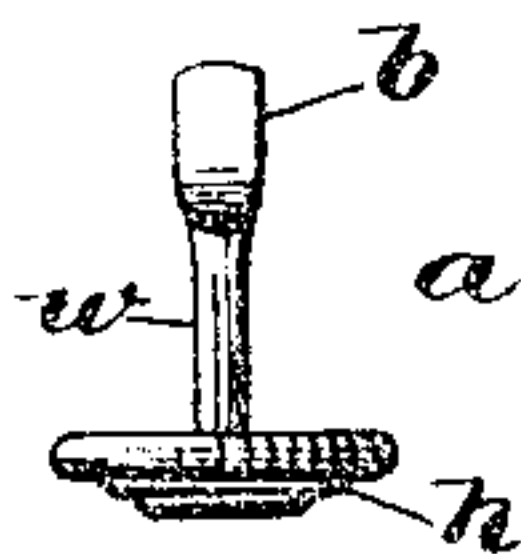


FIG. 2.

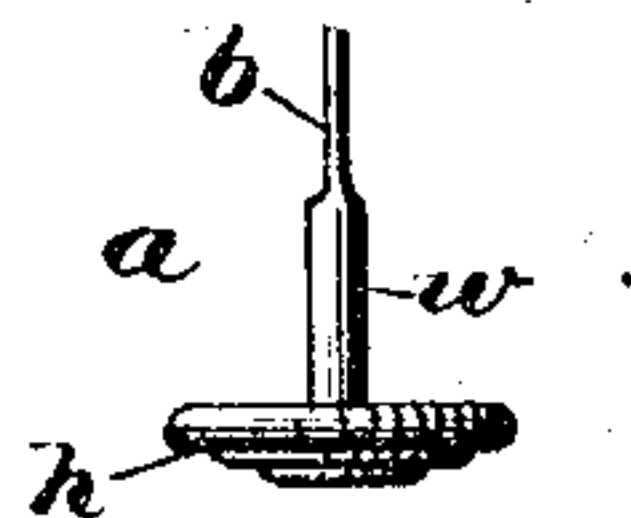


FIG. 3.

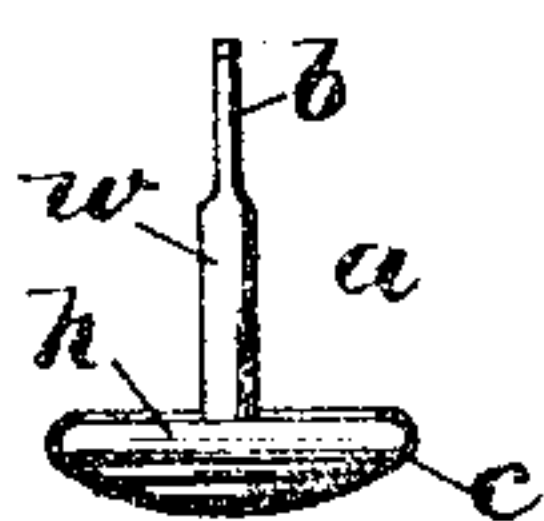


FIG. 7.

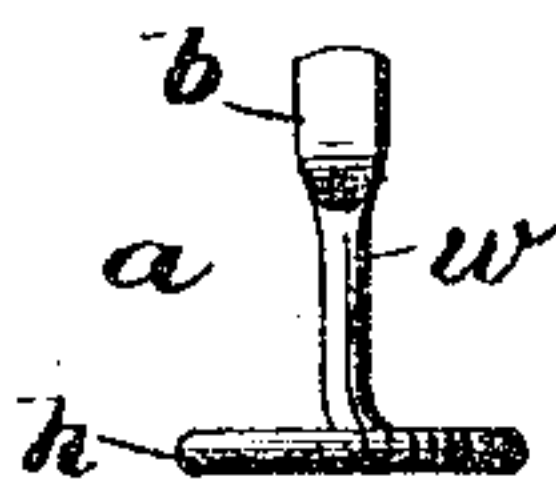


FIG. 4.

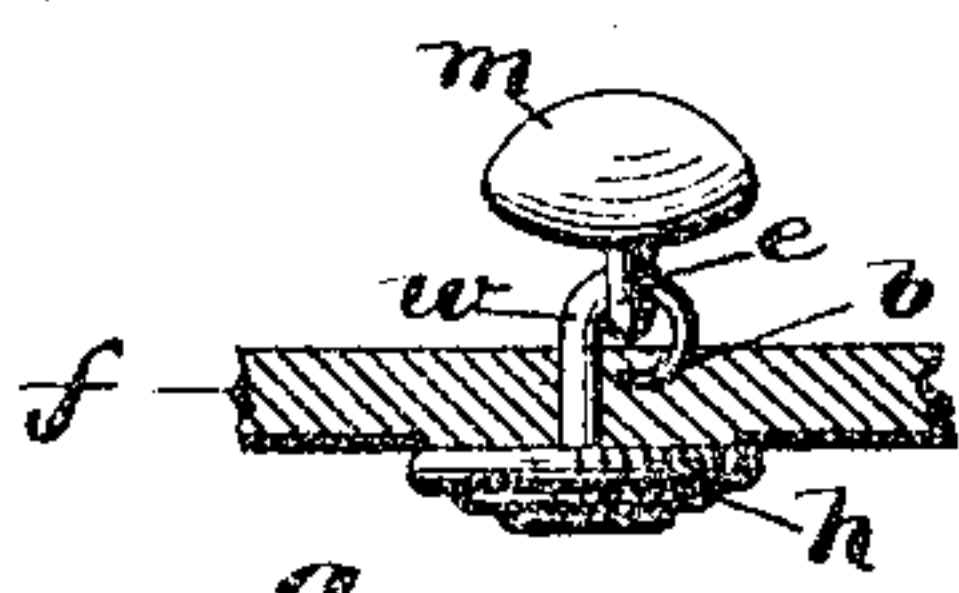


FIG. 5.

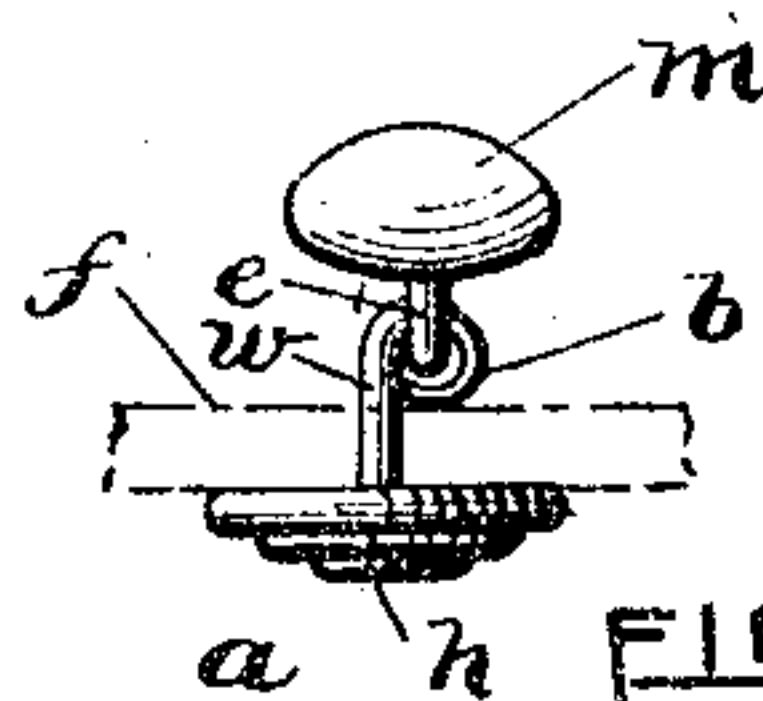


FIG. 6.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES F. THAYER, OF PROVIDENCE, RHODE ISLAND,

## BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 373,541, dated November 22, 1887.

Application filed October 1, 1887. Serial No. 251,162. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES F. THAYER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Button-Fasteners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The improved button-fastener hereinafter described is made wholly of wire; and it consists of a central shank having its lower or point portion swaged or flattened to a width exceeding the normal size of the wire, and having a head produced by bending the wire so as to form a flat spiral, which is subsequently made cup shape. In fasteners of this class having a single central prong the latter is forced up through the fabric or material and through the eye of a button, and then clinched, the head of the fastener in use being next the wearer. The shank of the fastener herewith is flattened rearwardly from the end to a considerable distance, thereby adapting the point portion to be more easily bent around the button-eye, and also forming a smaller loop. The flattened portion when thus bent further serves to maintain the button in position by preventing it from falling toward the loop. By making the head cup-shaped or convex, as before stated, the end of the wire at the periphery of the head is removed from contact with the wearer, thereby permitting it to partially embed itself in the under side of the fabric, all as will be more fully set forth and claimed.

In the accompanying sheet of drawings, Figure 1 represents, enlarged, a plan view of my improved fastener as made of wire. Figs. 2 and 3 are front and edge views thereof, respectively. Fig. 4 is a front view of the fastener having a flat head. Fig. 5 is a perspective view of the fastener bent to a loop form and clinched into the fabric and retaining a button in the loop. Fig. 6 is a similar view, showing the loop formed wholly above the surface of the fabric; and Fig. 7 is a view in elevation, showing the under or convex surface of the head of

the fastener covered or capped with sheet metal.

The following is a more detailed description of my improved button-fastener.

*a*, referring to the drawings, designates the fastener complete, made of wire. The metal composing the same may be iron, steel, brass, &c., as may be deemed preferable. The wire itself, in cross-section, may, obviously, be round, half-round, angular, or polygonal, &c., although I prefer to use the first-named.

*w* indicates the shank of the fastener, the same extending vertically from the center portion of the head and terminating in the swaged or flattened point portion *b*. The width of this latter portion is somewhat greater than the normal size of the wire, and extends rearwardly from the point about one-third of the length of the shank. The head *h* of the fastener, which is an integral part of the wire, is produced by closely coiling it from the center or shank in a flat spiral form and terminating at *h'* of the outer coil, as clearly shown in Figs. 1 and 4. The head is next subjected to a suitable press, or "spinning" process, which gives to it the convex or cup-shaped form represented in the other figures. In order to present a smooth exterior surface, the head may be covered with thin sheet metal or other suitable material, as indicated at *c*, Fig. 7.

A manner of attaching buttons *m* to fabric *f* is substantially as follows: A fastener *a* is retained by one jaw of a suitable setting-instrument, which forces the point of the shank through the fabric. A button is next connected therewith by passing the point *b* through its eye-shank *e*, when, finally, the said point portion is bent and clinched by the other jaw of the instrument, or other suitable means, thereby forming the eye-retaining loop shown in Figs. 5 and 6. Owing to the peculiarity of the flattened point, the same may be bent much shorter and produce a correspondingly smaller loop. (See Fig. 6.)

What I claim is—

1. The improved button-fastener hereinbefore described, formed from a piece of wire, the same having a central shank terminating in a flattened point portion whose width exceeds that of the normal size of the wire, and having a head portion composed of said wire



bent to a spiral-shape form, substantially as specified.

2. The button-fastener *a*, formed from a single piece of wire, having a stem terminating in a flattened point portion whose width is greater than the normal size of the wire, and having a head composed of said wire bent to form convolutions of a spiral and producing a cup-shape or convex head.

10 3. The wire button-fastener *a* hereinbefore described, provided with a central stem ter-

minating in a flattened point portion, a head composed of said wire bent to form a convex spiral, and a cap, *c*, covering the exterior surface of said head, substantially as specified. 15

In testimony whereof I affix my signature in the presence of two witnesses.

JAMES F. THAYER.

Witnesses:

CHARLES GREENE,  
GEO. W. PRENTICE.