

(No Model.)

G. H. THOMAS.
BUTTON.

No. 401,084.

Patented Apr. 9, 1889.

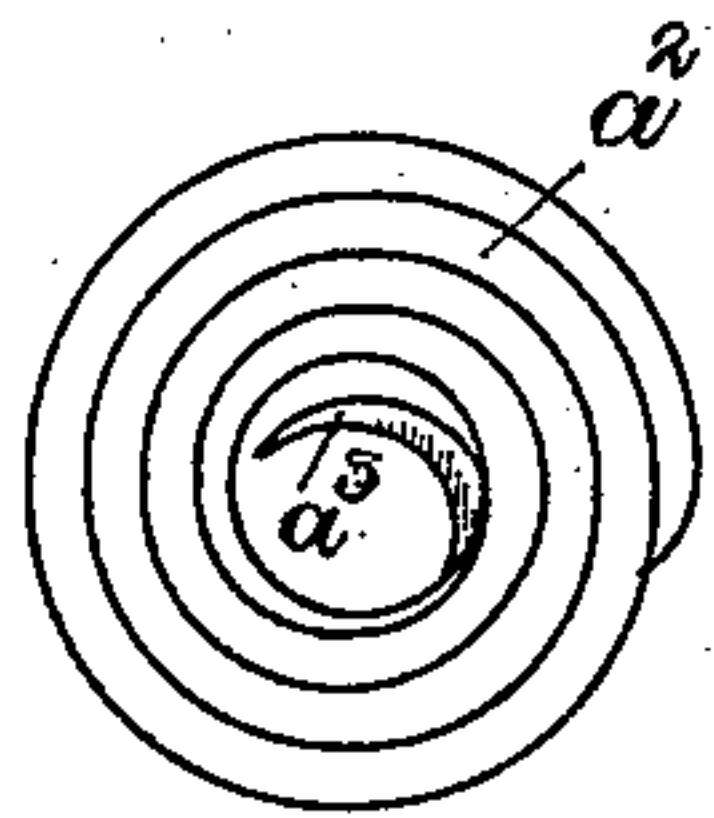


Fig. 1-

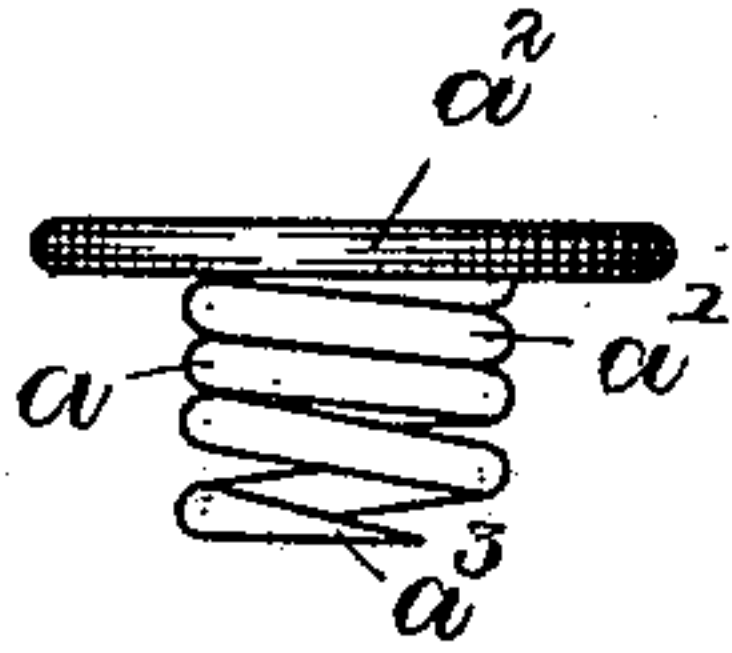


Fig. 2-

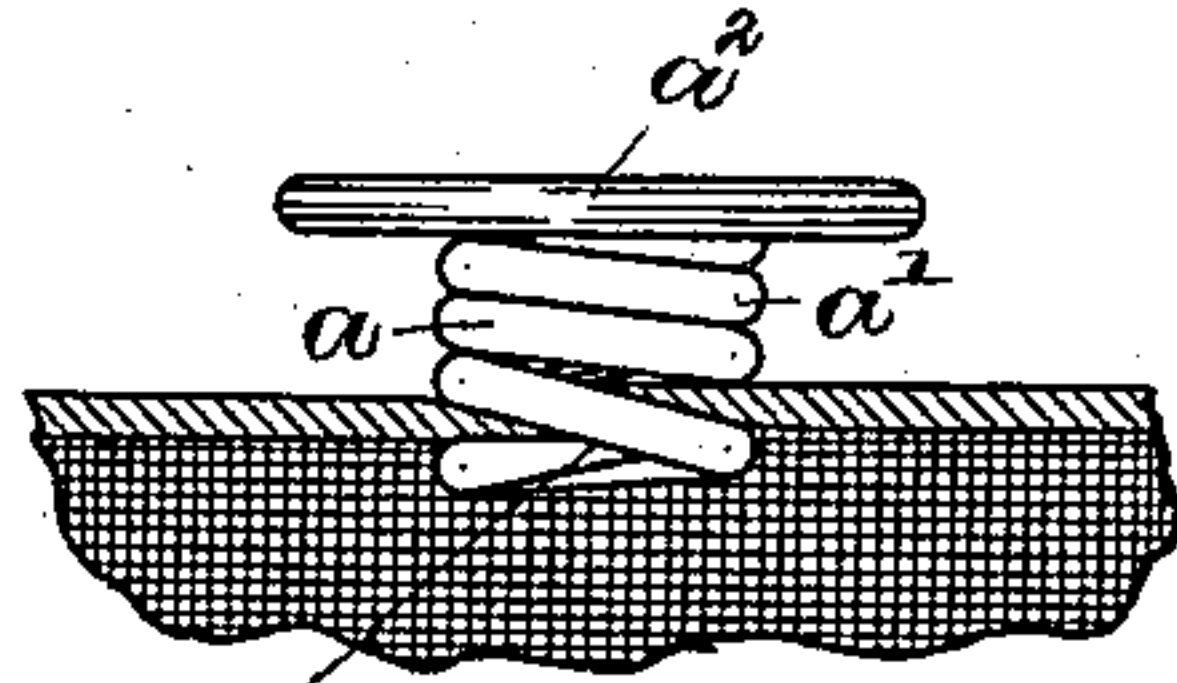


Fig. 3-

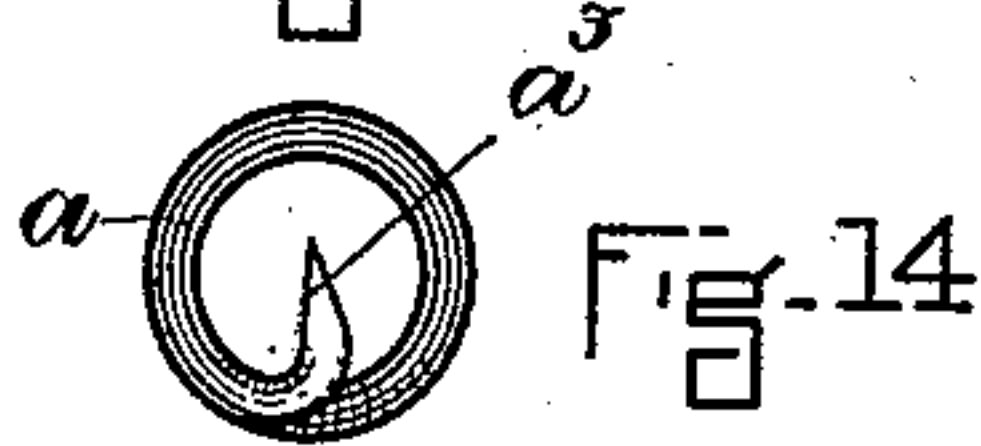


Fig. 14-

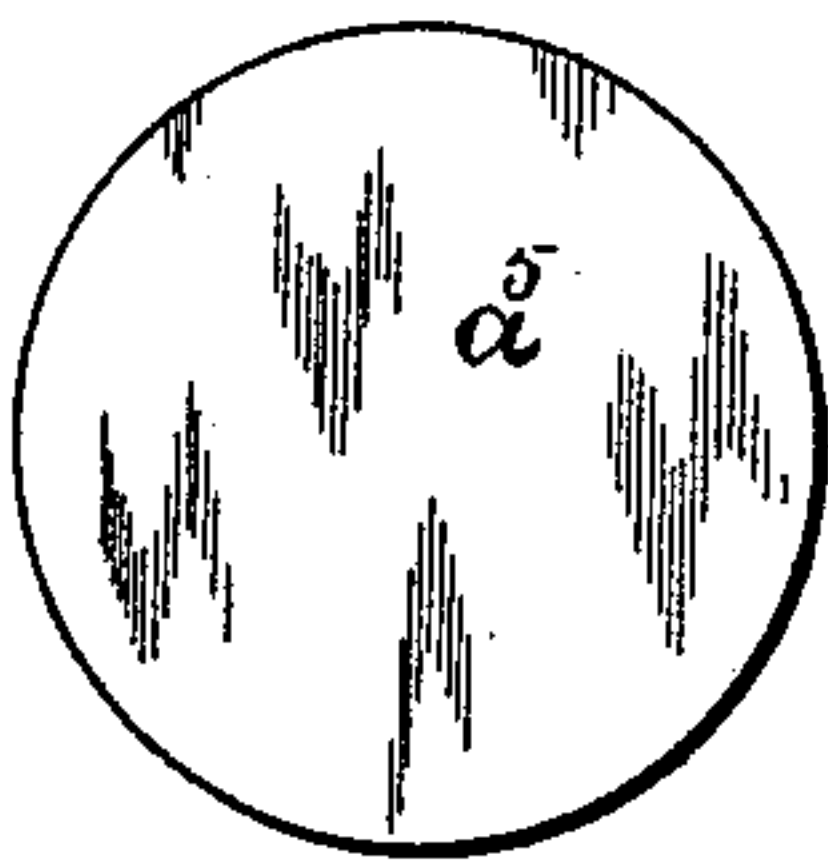


Fig. 4-



Fig. 5-

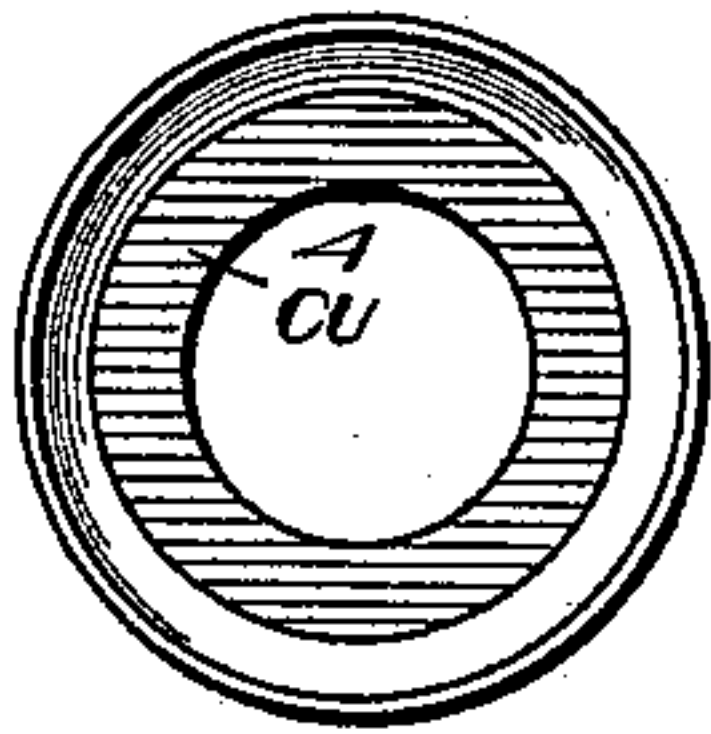


Fig. 6-



Fig. 7-

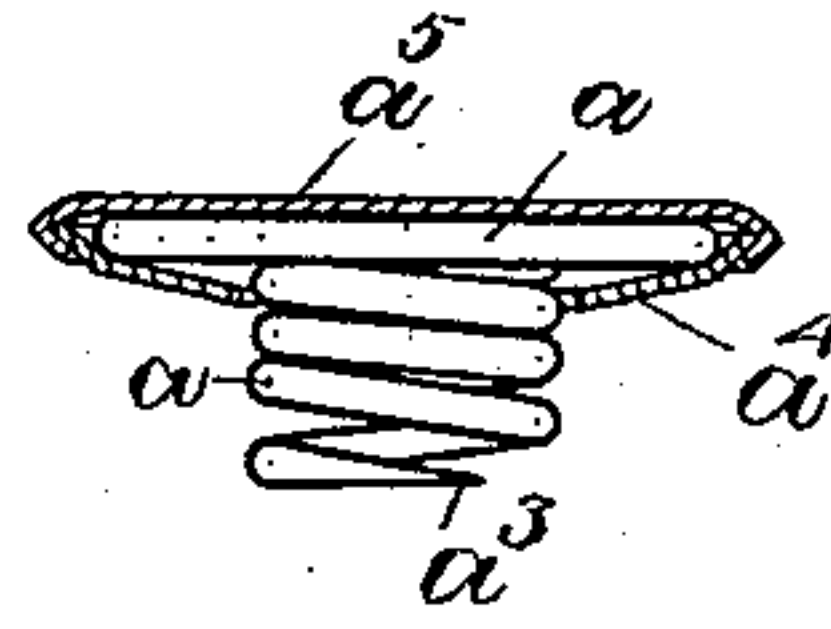


Fig. 8-

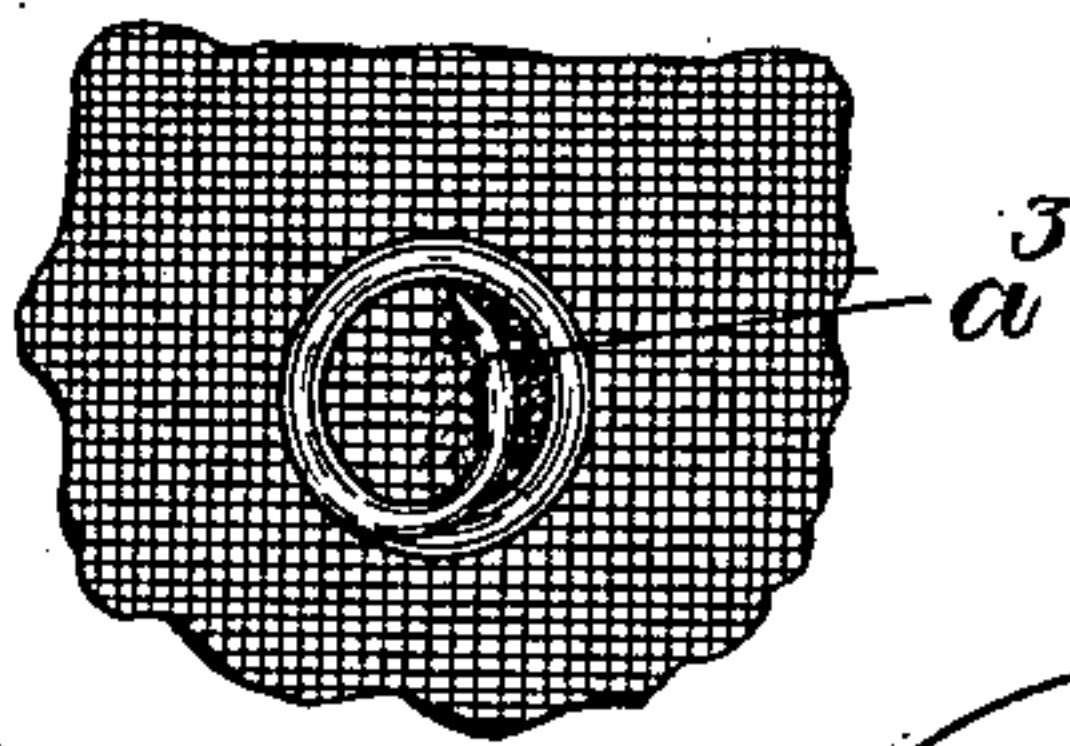


Fig. 15-

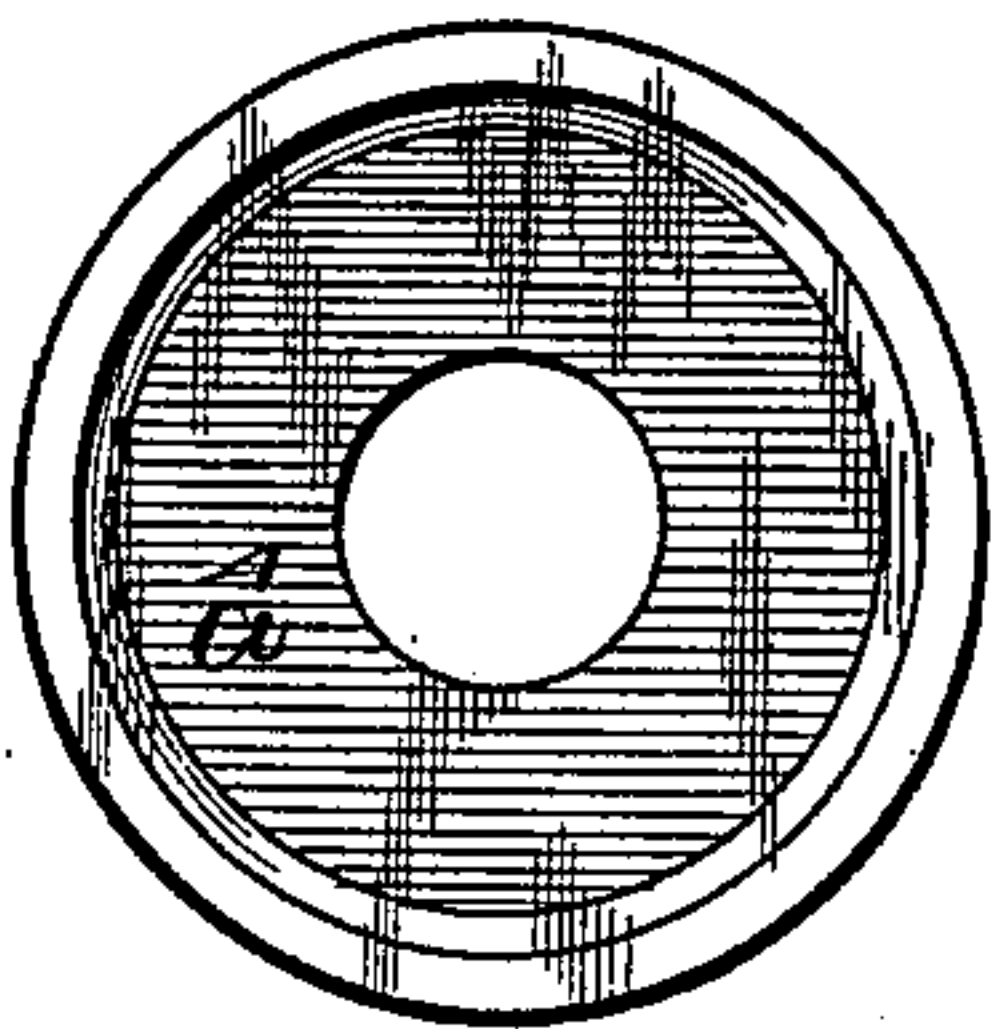


Fig. 9-

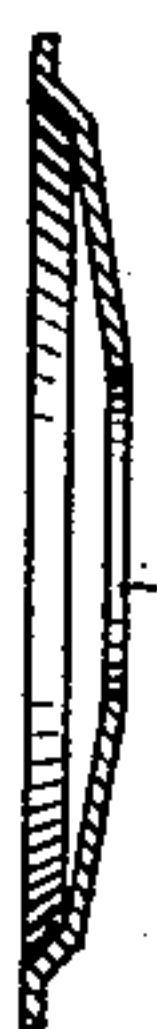


Fig. 10-

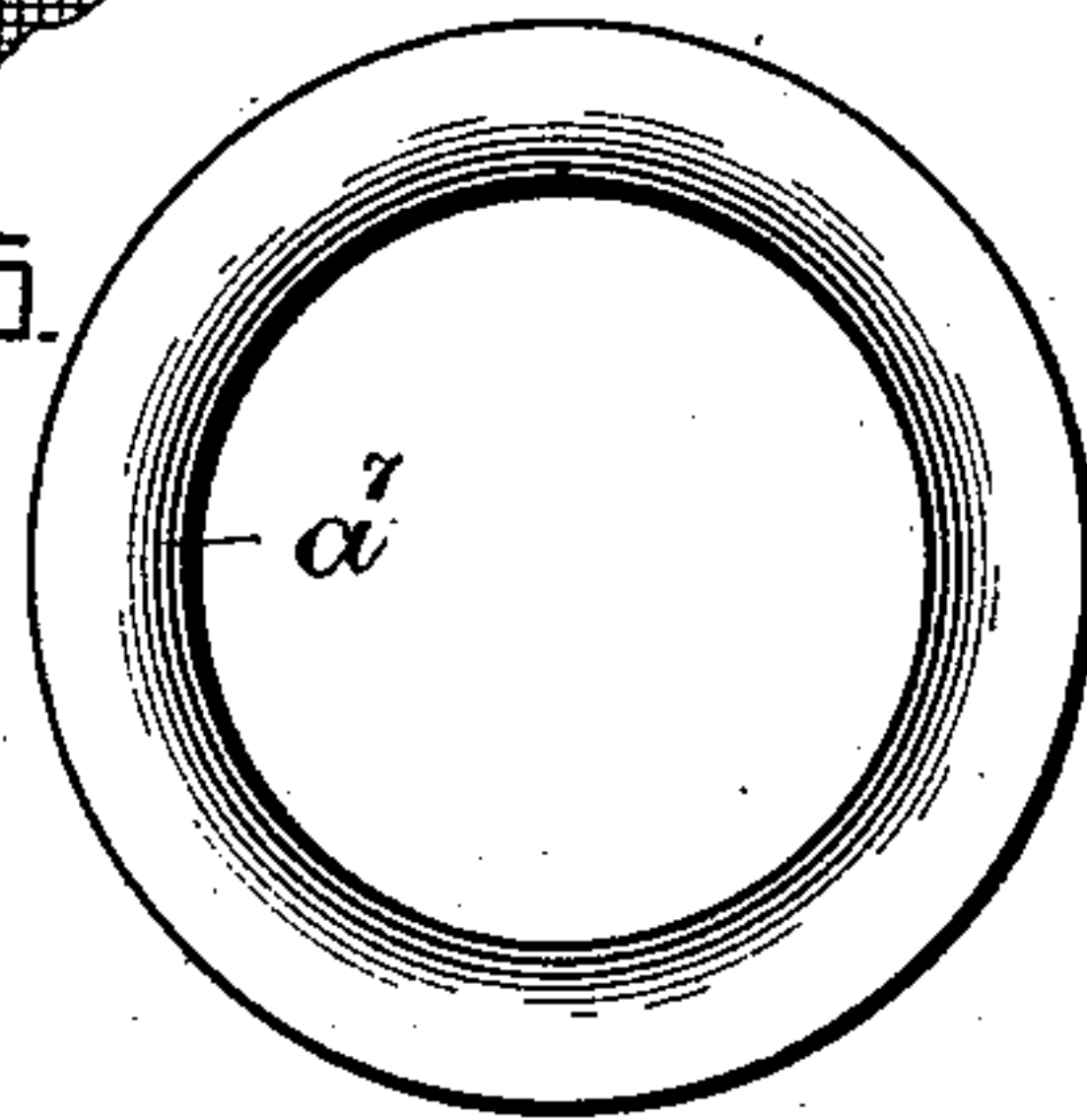


Fig. 11-



Fig. 12-

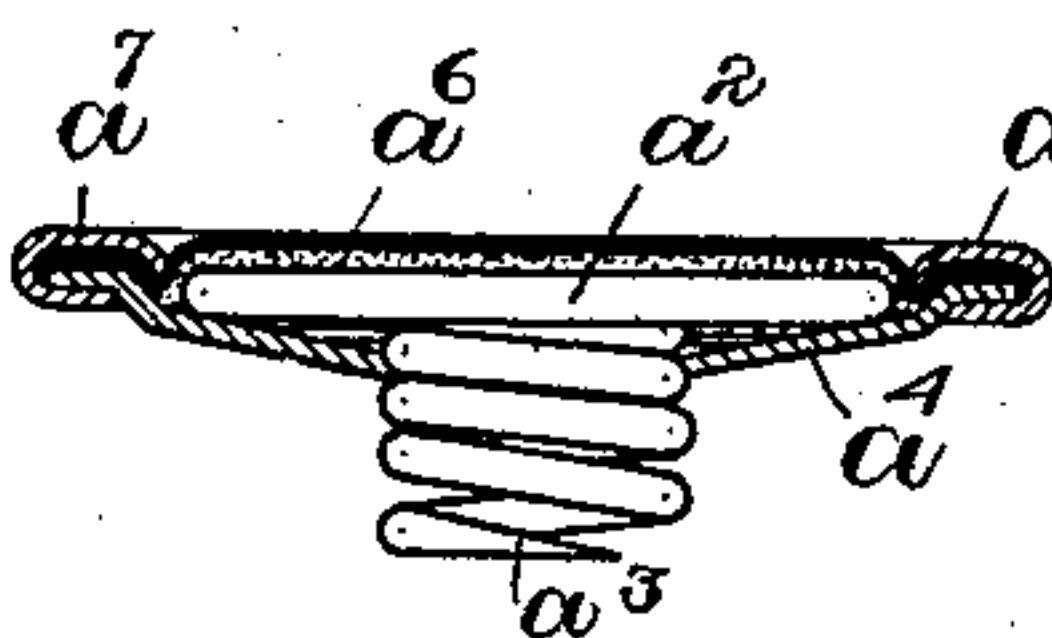


Fig. 13-

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UNITED STATES PATENT OFFICE.

GEORGE HIBBARD THOMAS, OF CHICOPEE FALLS, MASSACHUSETTS.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 401,084, dated April 9, 1889.

Application filed August 3, 1888. Serial No. 281,899. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HIBBARD THOMAS, of Chicopee Falls, in the county of Hampden and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Buttons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to a button having a worm-shank formed of wire, and also having a head or head-receiving section extending from the shank, also formed of wire, in one piece with the shank.

The invention further relates to a wire button having a wire head or head-receiving section, a wire worm-shank integral with the head, the worm having an entering end for entering the material, to which the button is secured.

The invention further relates to a wire button having the head-receiving section or end, the worm-shank, and a cover secured to the said head-receiving end.

It further relates to a button having a worm-shank of wire, the end of which is shaped at its end to enter the material by being bent outward from the worm, and which end serves to lock the button to the fabric by being bent inward toward the center of the worm or shank after it has served as a means of puncturing the material.

Referring to the drawings, Figure 1 is a view in elevation of the button. Fig. 2 is a plan view thereof. Fig. 3 represents it secured to the fabric. Figs. 4 and 5 are views of a cover, and Figs. 6 and 7 of the collet. Fig. 8 represents the cap and collet secured to the head of the button. Figs. 9, 10, 11, and 12 represent the collet and binding-rim used in the button-head cover represented in Fig. 13; and Fig. 13 is a view representing in section and elevation the button having its head covered in a slightly-different manner from that represented in Fig. 8. Fig. 14 is a view in elevation of the end of the tubular shank, showing the position of the pointed or entering end in relation to the coil; and Fig. 15 is a view in elevation representing the relation

which this end bears to the end coil of the shank when it is bent downward to fasten the button in place.

The shank a of the button is formed by spirally coiling the wire a' closely together, and preferably in cylindrical form of substantially the same diameter throughout. This disposes the wire in the form of a tubular worm. The head or head-receiving portion a^2 is likewise formed from the wire which is integral with the wire of the shank by coiling it in a flat form. The shank of the button also has the entering end a^3 , which is formed by sharpening or pointing the end of the wire and extending it outward and inward to a line taken through the center of the tubular shank. (See Fig. 14.) The head may be of wire alone, as represented in Figs. 1, 2, and 3, or it may be covered, as represented in Figs. 8 and 13, in which case the head is inclosed between a collet, a^4 , and a cap, a^5 , or between a collet and a cap comprising a covered disk, a^6 , united to the collet by an annular binding-ring, a^7 .

To secure the button to the plates or to the fabric or material upon which it is used, it is necessary only to enter the pointed end a^3 through the material to give the button about one full turn in relation thereto sufficient to bring one complete ring of the coil upon the inner surface of the fabric, and the pointed end is then bent forcibly downward across the center of the shank to form a lock, which prevents the shank from becoming unscrewed or detached from the material. The inner section or ring of the coil may also by the same pressure be set forcibly against the other or outer rings of the coil. The locking end preferably should extend so that its end comes in contact with the wire of the coil.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. As an improved article of manufacture, a button having the head a^2 , formed of wire, and the worm or tubular shank a , formed by a close spiral coil of wire integral with the wire of the head, substantially as described.

2. A button having the flat coiled head a^2 and shank a , the said head and shank being

formed of wire in one piece, as specified, and a cap or covering secured to the flat coiled head by a collet, substantially as described.

3. A button having the flat coiled head a^2
5 and shank a , the said head and shank being formed of wire in one piece, the end a^3 of the wire being pointed and bent to a position in

line with the axis of the shank, but slightly removed from the last coil thereof, substantially as described.

GEORGE HIBBARD THOMAS.

Witnesses:

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