

(No Model.)

T. R. HYDE, Jr.

BUTTON.

No. 376,958.

Patented Jan. 24, 1888.

Fig. 1



Fig. 2

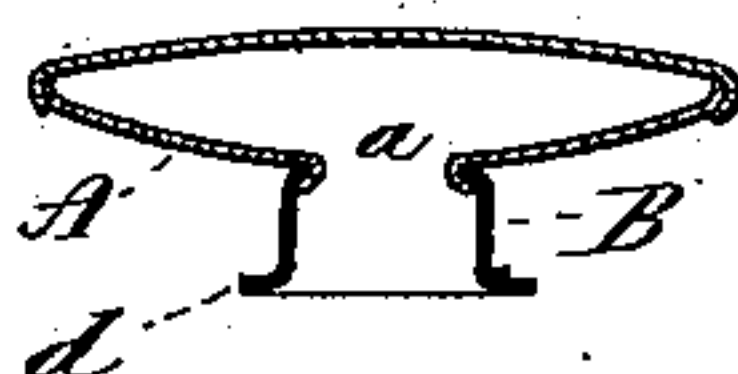


Fig. 3

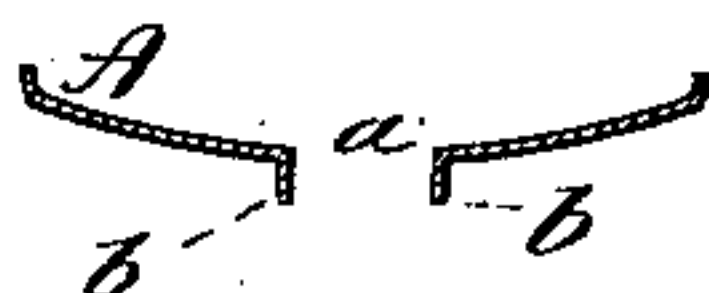


Fig. 4

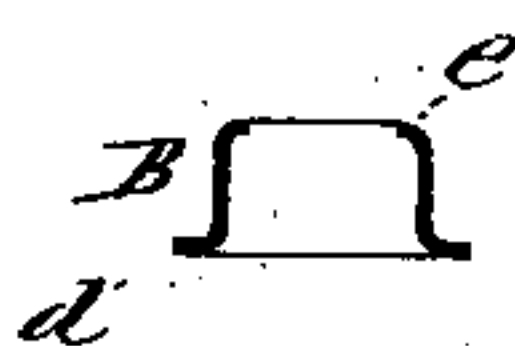


Fig. 5

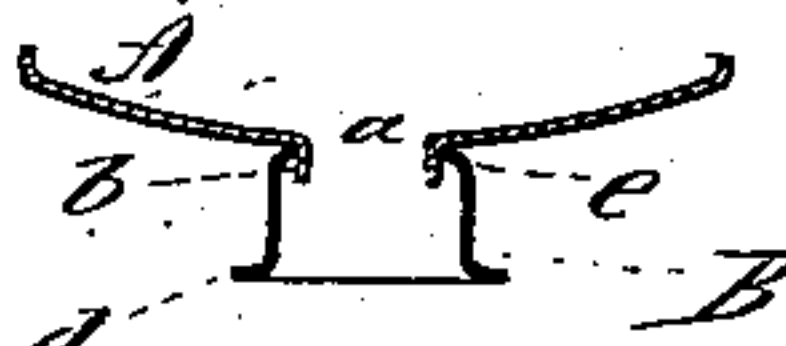


Fig. 6



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UNITED STATES PATENT OFFICE.

THEOPHILUS R. HYDE, JR., OF WATERBURY, CONNECTICUT, ASSIGNOR TO
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BUTTON.

SPECIFICATION forming part of Letters Patent No. 376,958, dated January 24, 1888.

Application filed November 21, 1887. Serial No. 255,705. (No model.)

To all whom it may concern:

Be it known that I, THEOPHILUS R. HYDE, Jr., of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Buttons; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the button complete; Fig. 2, a vertical central section of the same; Fig. 3, a vertical central section of the back as prepared to receive the shank; Fig. 4, a vertical central section of the shank as prepared for attachment to the back; Fig. 5, a vertical central section of the back and shank set together preparatory to closing the flange of the back upon the flange of the shank; Fig. 6, a modification in the form of a shank.

This invention relates to an improvement in that class of metal buttons which are provided with a tubular shank, the said shank constructed to rest upon the surface of the garment, and so as to leave a space between the surface of the garment to which the button is attached and the button-back itself, and so as to form a neck between the button-back and the surface, upon which the button-hole may take its bearing. These shanks are usually tubular, and the attaching device passes through the shank. In some cases this is a tubular rivet—such as seen in Letters Patent No. 248,511, granted to George O. Schneller October 18, 1881; but in many cases it is thread introduced through perforations in the front—such, for illustration, as seen in Patent No. 366,101, granted to Philip Hirshfield July 5, 1887—or some substantial equivalent therefor.

In the more general construction of this class of buttons the shank is made separate from the back, its flanged end outside, and so as to rest upon the surface of the garment, while the inner tubular end of the shank passes through a corresponding hole in the back, and then that inner end turned down upon the inside of the back around the opening. In upsetting or closing the inner end of the tubular shank upon the back, the turned-over portion un-

avoidably splits as it is spread upon the back, and the splits frequently extend down into the shank, so as to make a rough opening through the shank, which, in case of thread as the means of securing the button, is liable to cut the thread.

The object of my invention is to overcome this last-mentioned difficulty and attain other advantages, which will more fully hereinafter appear.

A represents the button-back, which is made from metal, and of any of the usual or desirable shapes. (See Fig. 3.) Through the center the usual attachment-hole, *a*, is made; but, instead of punching a hole directly through the back, a short outwardly-turned flange, *b*, is formed around the hole in the back, the diameter of the hole *a* being that required for the opening through the back of the button.

B represents the shank, (see Fig. 4,) which is of tubular shape, somewhat larger in internal diameter than the external diameter of the flange *b*. The outer or bearing end of the shank is constructed with an outwardly-turned flange, *d*, in the usual manner, so as to form a considerable extent of bearing for the shank upon the surface to which the button is to be attached. At the other end of the shank an inwardly-turned annular flange, *e*, is formed, the internal diameter of which corresponds substantially to the external diameter of the flange *b* on the back, and the length of the flange *b* is somewhat greater than the thickness of the flange *e*. In attaching the shank to the back the flange *b* is introduced through the smaller open end of the shank, as seen in Fig. 5, the flange *b* of the back extending below the flange *e* of the shank. Then the flange *b* is spread and closed upon the flange *e*, as seen in Fig. 2, which firmly secures the shank to the back.

The spreading or closing of the flange *b* upon the inside of the eyelet produces a round smooth surface at the point of attachment and avoids the splitting incident to the closing of the shank flat upon the inside of the back, as in the usual construction, and as before mentioned.

Another advantage of this invention is that the shank is more simple to manufacture than where the contracted tubular end is necessa-

rily produced for its introduction into the back. The shank and back are secured together in the most positive manner, and the opening through the back, when thread is employed as the means of attachment, is so smooth and perfect that there is no liability of the button cutting the thread, as must be the case in the constructions before described.

10 The outwardly-turned flange *d* on the shank is employed as giving a better seat for the shank upon the surface of the garment than the edge of the metal without the flange would do. The flange *d* on the outer end may therefore be omitted, as indicated by Fig. 6.

15 As this invention resides solely in the attachment of the shank to the button-back, I do not illustrate any particular formation of the front or interior of the button, as this portion of the button may be made in various

ways—as, for illustration, see the before-mentioned prior patents. 20

I claim—

The herein-described improvement in buttons, which consists of a metal back, *A*, constructed with a central opening through it, 25 and with an outwardly-turned flange, *b*, around said opening, combined with the tubular shank *B*, having an annular inwardly-turned flange, *e*, around its inner end, the internal diameter of the said flange *e* corresponding substantially 30 to the external diameter of the flange *b*, the said flange *b* of the back extending into said shank and closed upon said flange *e*, substantially as described.

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Witnesses:

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