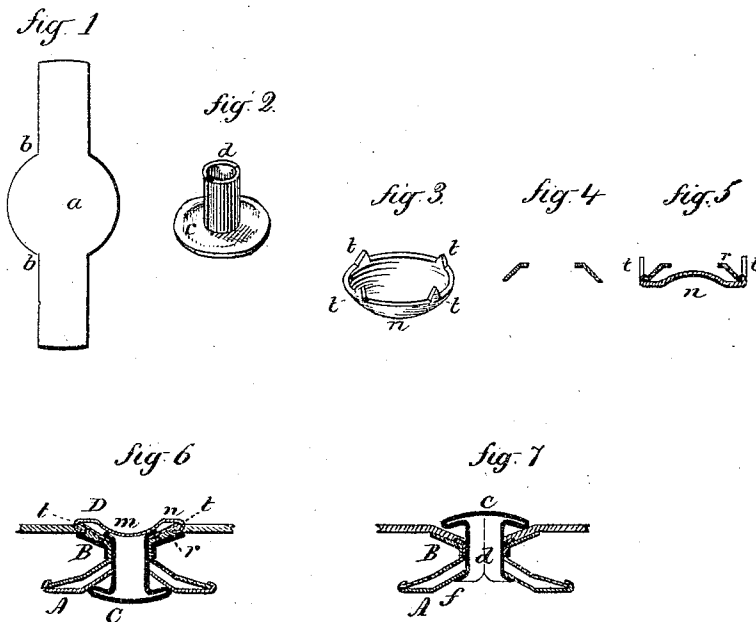


E. S. WHEELER.
Button-Fastenings.

No. 141,743.

Patented August 12, 1873.



Witnesses
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UNITED STATES PATENT OFFICE.

ELONZO S. WHEELER, OF WESTPORT, CONNECTICUT, ASSIGNOR TO HIMSELF AND JONATHAN E. WHEELER, OF SAME PLACE.

IMPROVEMENT IN BUTTON-FASTENINGS.

Specification forming part of Letters Patent No. 141,743, dated August 12, 1873; application filed April 10, 1873.

To all whom it may concern:

Be it known that I, ELONZO S. WHEELER, of Westport, in the county of Fairfield and State of Connecticut, have invented a new Improvement in Button-Fastening; and I do hereby declare the following, when taken in connection with the 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, the blank from which the rivet is constructed; Fig. 2, a perspective view of the rivet; Fig. 3, a perspective view of the reverse head, enlarged to twice full size; Figs. 4 and 5, sectional views, illustrating the construction of the same, enlarged to twice full size; Fig. 6, a central section, illustrating the manner of securing a button by means of the said rivet and reverse head; and in Fig. 7, a button secured by means of the rivet only.

This invention relates to an improvement in device for securing what are termed suspender-buttons—that is to say, buttons which are secured to the garment by a single central perforation by means of a rivet passing through the said perforation and garment; and the invention consists in constructing the reverse head, as hereinafter described, with several teeth, which turn into the fabric of the garment, so as to interlock with the threads of the fabric and prevent removal.

From suitable sheet metal, as copper, tin, brass, &c., I cut a blank of the form shown in Fig. 1, *a* being a central disk, with arms *b b* projecting in opposite directions, the central portion in diameter being a little more than the diameter of the head of the rivet to be produced, the arms or projections *b b* being designed to form the barrel of the rivet. It will be understood that the barrel of the rivet is to be hollow. This blank is placed in suitable dies, which turn up the arms *b b*, double over the edge of the central portion, bringing the projections *b* each into semi-cylindrical form, and bringing them together at the center to form the barrel *d*, as seen in Fig. 2, the doubling of the edge of the disk forming the doubled head *c*, as seen in Fig. 2. This completes the rivet, and it is applied to the but-

ton A, Fig. 7, which is formed in the usual manner, with a central perforation and with a base, B, to rest upon the surface of the fabric. From the opposite side the rivet is passed through the fabric and through the perforation in the button, and upon the surface of the button the end of the barrel of the rivet is turned down, as at *f*, Fig. 7, which firmly secures the button to the garment.

For a better class of work, it is desirable that this turned-down end of the rivet should not be exposed; hence the rivet is put through the button from the front side, as seen in Fig. 6, bringing the head of the rivet upon the surface of the button, then upon the reverse side an auxiliary head, D, is placed, which is constructed as seen in section, Fig. 5.

An outer disk, *n*, is formed, with a depression, *m*, in the center, and into this a conical disk, *r*, is placed, the latter perforated so as to set over the barrel of the rivet; then, when the head D is pressed down onto the rivet, the depression *m* turns the end of the barrel over into the space between the two disks *n* and *r*, as seen in Fig. 6. The construction of this head and its combination with the rivet is substantially the same as in the patent granted to me August 4, 1868; but in that construction the head in no way engages the fabric, except simply closing it between the head and the base of the button; hence, in very elastic fabrics, there is a liability to draw the head through the fabric. To avoid this I construct the disk *n* with several teeth, *t*, and which, when the head is pressed down onto the fabric, will pass through the fabric, strike up the base B of the button, and there be turned under, as seen in Fig. 6, thus firmly attaching the head to the fabric.

I claim as my invention—

In combination with a tubular rivet, substantially such as described, the head D, formed from two disks, *n r*, when the said disk *n* is formed with teeth *t*, more or less in number, substantially as and for the purpose specified.

ELONZO S. WHEELER.

Witnesses:

MOSES W. WILSON,
CHARLES L. WILSON.