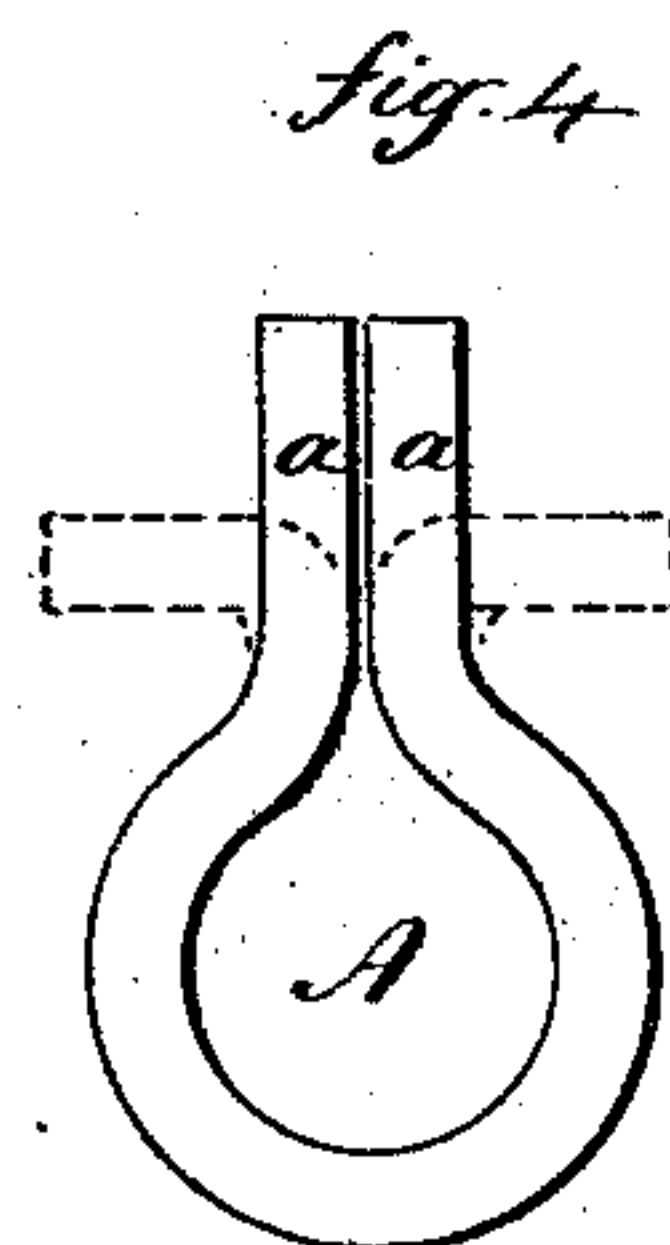
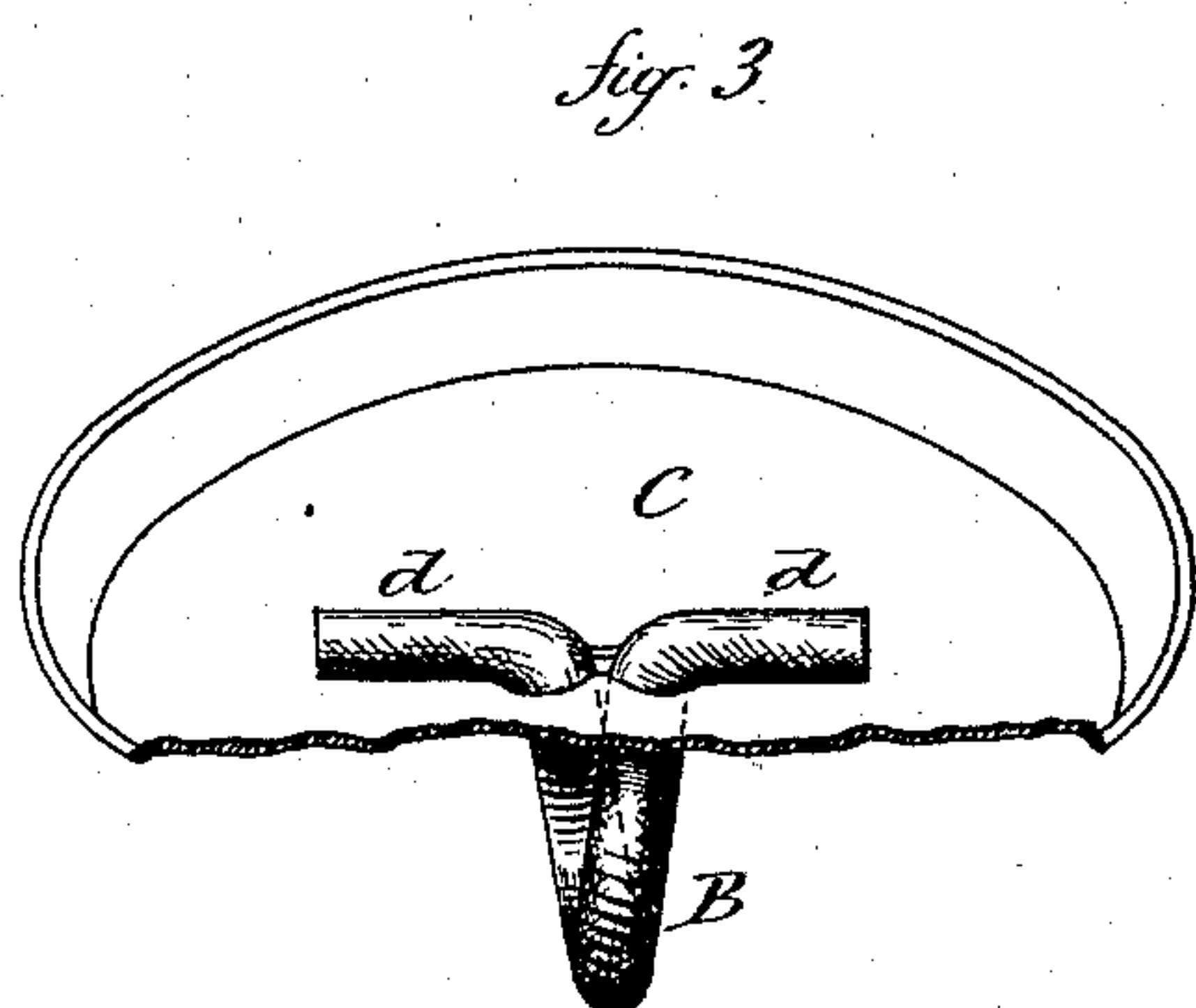
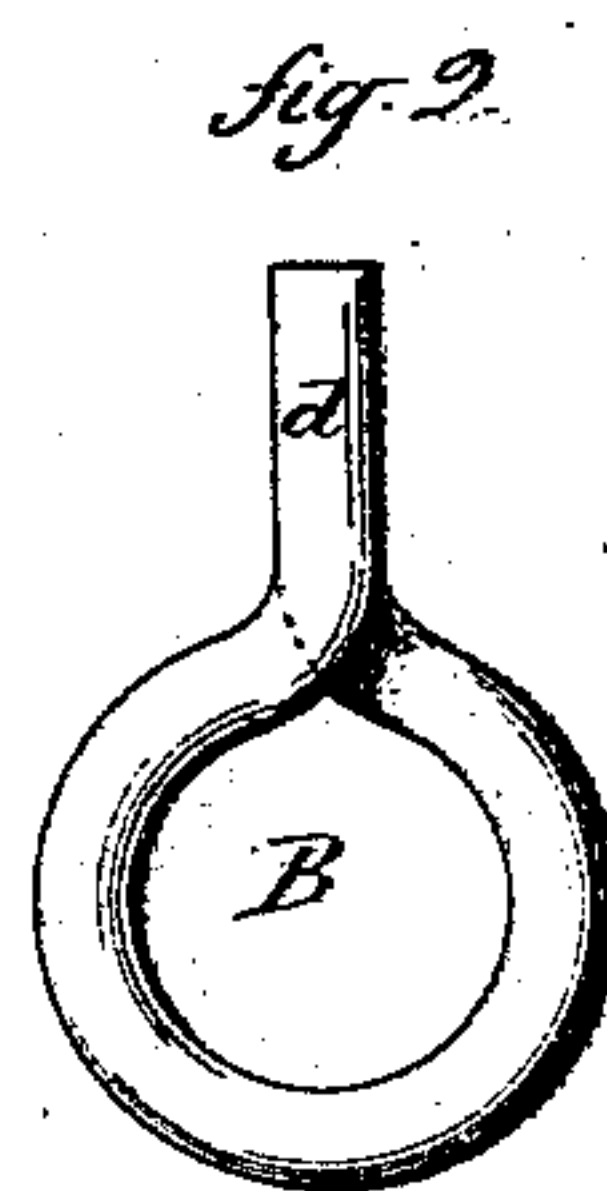
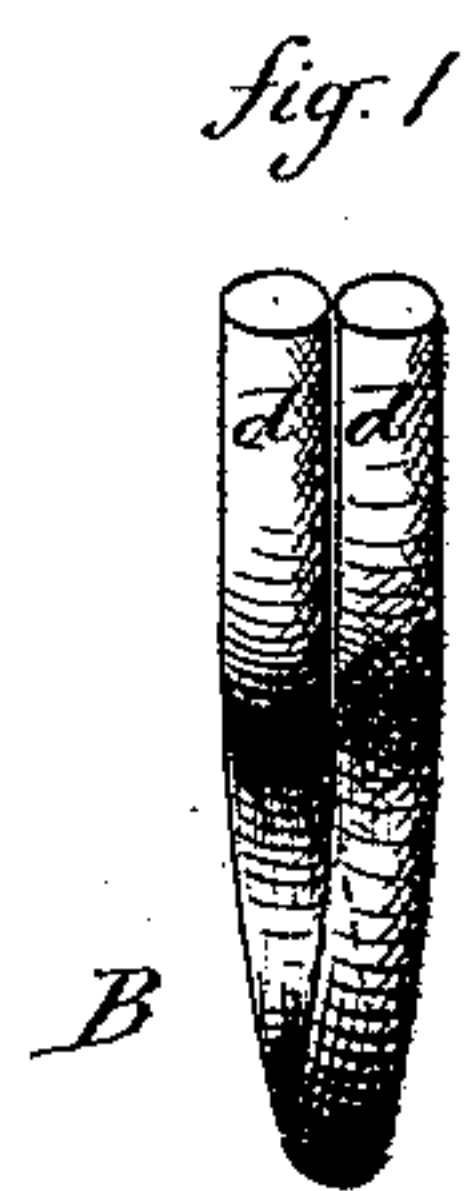


C. H. GOODWIN.  
Buttons.

No. 166,091.

Patented July 27, 1875.



Witnesses  
*J. S. Shumway*  
*Clara Broughton*

*Chas. H. Goodwin*  
By Atty. *Inventor*  
*John E. Earle*

# UNITED STATES PATENT OFFICE.

CHARLES H. GOODWIN, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE  
WATERBURY BUTTON COMPANY, OF SAME PLACE.

## IMPROVEMENT IN BUTTONS.

Specification forming part of Letters Patent No. **166,091**, dated July 27, 1875 ; application filed  
May 31, 1875.

*To all whom it may concern :*

Be it known that I, CHARLES H. GOODWIN, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Manufacture of Buttons ; 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 an edge view, and in Fig. 2 a side view, of the eye, as prepared for attachment to the button ; Fig. 3, perspective view, showing the manner of attaching to the button-back ; Fig. 4, diagram, illustrating previous constructions.

This invention relates to an improvement in the manufacture of that class of buttons which are constructed with an eye made from bent wire.

The usual method of forming these eyes is illustrated in Fig. 4. The two ends *a a* of the wire are brought together in the same plane with the eye A. These ends are then inserted through the button-back, and turned down, as denoted in broken lines, still in the same plane with the eye.

By such construction there is very little to support the eye laterally, and prevent it from tipping to the right or left, unless the ends be soldered to the button-back.

The object of this invention is to so form the eye that in its attachment it shall be firm in all directions ; and it consists in an eye formed from wire, the two ends of which are brought together in a plane at right angles

to the plane of the eye, and secured to the back, as hereinafter set forth.

This improved eye is formed from wire of substantially the usual length, and is bent into ring-shape to form the eye B, the two ends *d* overlapping each other, so that the plane of the two is at right angles to the plane of the eye. Thus constructed the two ends are passed through the button-back C, and turned to the right and left from the plane of the eye, as seen in Fig. 3, clamping the back firmly between the ends and the body of the eye. The eye itself bearing against the back prevents the tipping of the eye in the direction of its own plane, and the ends *d* prevent the tipping of the eye across such plane, the two sides of the eye bracing one against the other, as clearly seen in Fig. 3. The two ends may be bent into the same plane with the eye, and then be very much stronger than the usual construction, because of the bracing position in which the two sides of the eye stand to each other. By this construction the eye is attached to the button-back in the most substantial manner, and without the intervention of any part of material except that contained in the eye itself.

I claim—

The herein-described improvement in the manufacture of buttons, consisting of the button-eye formed from wire, bent to bring the two ends into a plane, substantially at right angles to the plane of the eye proper, and substantially as set forth.

CHARLES H. GOODWIN.

Witnesses :

JOSEPH R. SMITH,  
GEO. H. COWELL.