

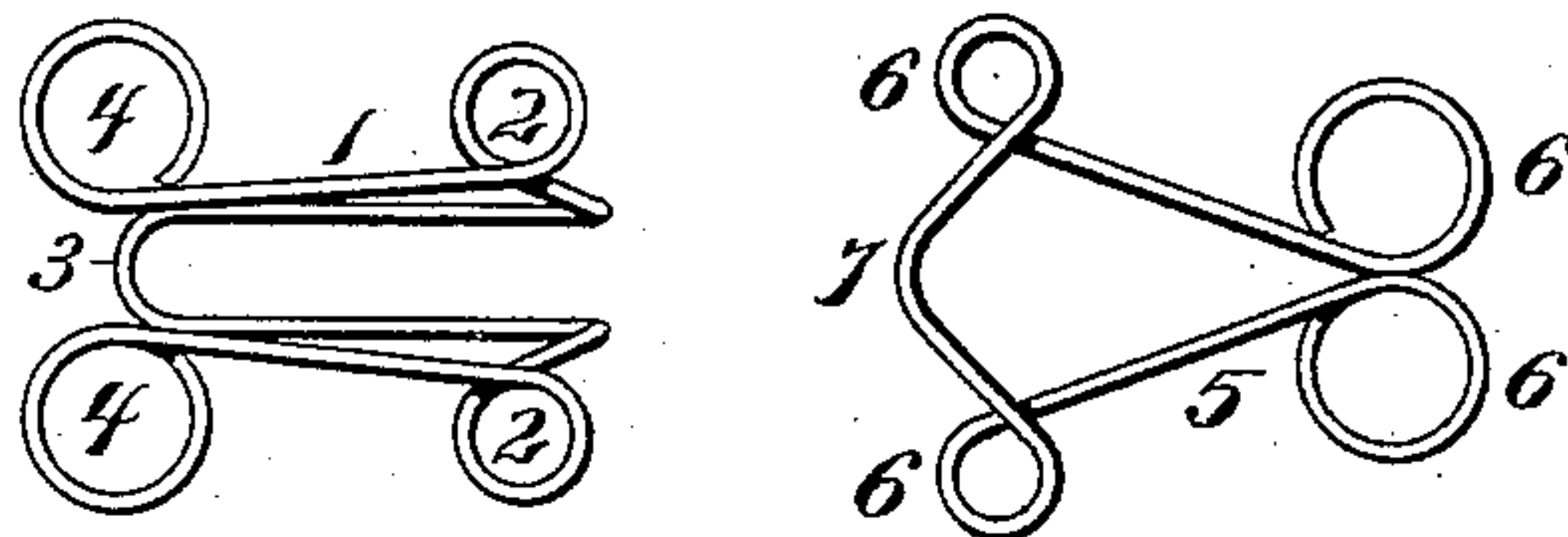
(No Model.)

Z. E. BATES & M. E. COLLINS.  
HOOK AND EYE.

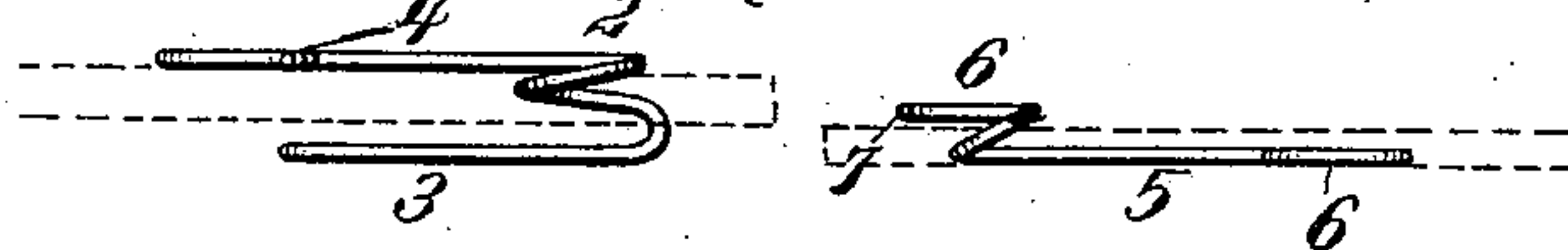
No. 489,520.

Patented Jan. 10, 1893.

*Fig 1*



*Fig 2*



Witnesses

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# UNITED STATES PATENT OFFICE.

ZERVAH E. BATES AND MARY E. COLLINS, OF GRAND RAPIDS, MICHIGAN.

## HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 489,520, dated January 10, 1893.

Application filed April 18, 1892. Serial No. 429,597. (No model.)

*To all whom it may concern:*

Be it known that we, ZERVAH E. BATES and MARY E. COLLINS, citizens of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Hooks and Eyes; and we 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 figures of reference marked thereon, which form a part of this specification.

Our invention relates to that class of hooks and eyes used particularly on ladies' garments, and our object is to produce a device by which when the edges of the goods are drawn apart, the hook or eye will not be exposed to view, and a further object is to so attach the hook that the goods will not be allowed to draw apart, and a still further object is to so attach the hook and eye that only a portion of it will be seen above the goods to which it is applied.

To attain these ends, our invention consists in the peculiar features and combinations of parts more fully described hereinafter and pointed out in the claim.

In the accompanying drawings: Figure 1 represents our device on an enlarged scale. Fig. 2 represents our device attached to a piece of cloth.

The reference figure 1 represents the hook section of our invention, which is made of an integral piece of wire, or any desirable kind, bent to form loops 2 at the base of the hook 3, which is bent backward. Directly under the point of the hook, the two ends of the wire are bent and form loops 4. The loops 2 and 4 are placed beneath the face of the cloth, and are there secured, it being readily seen that the two pairs of loops facilitate a more secure fastening.

The reference figure 5 represents the eye portion of our invention which is also made of an integral piece of wire having the general outline of a triangle, and bent so as to form loops 6, on its three corners, one side 7 of which triangle is arc-shaped, and receives the hook 3. The four loops of our eye portion are placed under the face of the cloth, and only a portion of the side 7 can be seen above the face. The eye is secured in place by means of the loops 6. By having the four loops, it will be seen that the eye can be more securely stitched to the garment, and will not be so apt to pull loose from the cloth on account of the side 7 being the only part above the face of the cloth. Then again, the eye is not allowed the play, as is usually the case with eyes of this class, for it will be seen that the forward loops of the eye are about on a line with the side 7, therefore any strain will be more evenly divided, and not only upon its rear portion. The same will be seen of the hook-portion.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

The hereindescribed hook and eye, consisting of an integral piece of wire bent to form a hook having loops at the base of the hook and beneath the point thereof, whereby a double fastening is supplied, in combination with an eye consisting of a triangular piece of wire having loops formed in its corners, one side of the eye being arc-shaped and adapted to be engaged by said hook, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

ZERVAH E. BATES.  
MARY E. COLLINS.

Witnesses:

ALICE A. CROSS,  
CHAS. J. POTTER.