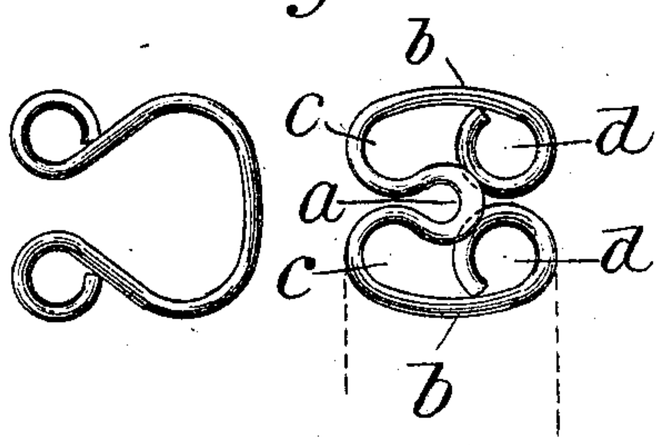
(No Model.)

W. S. SEYMOUR.

HOOK AND EYE.

No. 574,634. Patented Jan. 5, 1897.

Fig. 1.



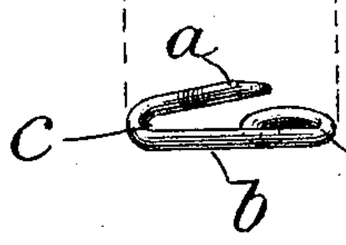


Fig. 2.

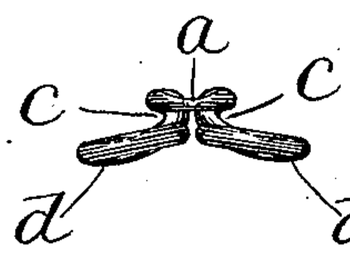


Fig. 3.

Witnesses
On. Darley.
A. M. Parkins.

Inventor:
W. S. Seymour,
by
Dennis & Goldsborough,
attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM S. SEYMOUR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOSEPH S. KELLER, OF SAME PLACE.

HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 574,634, dated January 5, 1897.

Application filed April 10, 1896. Serial No. 587,021. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. SEYMOUR, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hooks and Eyes; and I do hereby 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.

The invention relates more particularly to the construction of the hook, and has for its object to dispense with the loose spring-tongues commonly employed in certain types of hooks, to economize in the amount of material employed in making the hooks, to strengthen and simplify the construction, and to provide a hook that will hold the eye without danger of accidental displacement and yet permit a quick and easy unhooking when desired.

To these ends the invention consists in the construction of hook shown in the accompanying drawings, wherein—

Figure 1 is a plan view showing also an eye; Fig. 2, a side or edge view, and Fig. 3 a rear or outer end view.

I prefer to make hooks constructed in accordance with the invention out of a single piece of metal, for example, a continuous strand of wire. This wire I bend by hand or any appropriate devices or machine into the form best shown in Fig. 1 of the drawings, where *a* denotes the bill; *b b*, the side pieces; *c c*, the curves or angles where the eye engages, and *d d* the anchorage-loops, whereby the hook is attached to the fabric.

As best shown in Fig. 2, the bill *a* has preferably a slight upward inclination extending from its base at the front end of the hook rearward to the point of nearest approach of certain guards to be hereinafter described. It is also preferably widened out and flattened at its end, as clearly indicated in Figs. 1 and 2.

The side pieces *b b*, instead of lying practically in the plane of the bill, as usual heretofore, are widely separated, as shown in Fig. 1, so as to lie on opposite sides of the plane of the bill and afford a wide flat base for the hook to rest upon the fabric and be fastened thereto. The bill extends rearward midway between these side pieces, with considerable space between them, so that the eye will readily pass under the hook, though the latter lie down flatter or more nearly in the horizontal plane of the side pieces than is commonly the case.

At the rear ends of the side pieces the anchorage-loops *d d* are formed, and a further advantage of spraddling the side pieces apart, as above described, is that it enables these loops to be formed by bending or turning the metal inwardly instead of outwardly, whereby the appearance of the hook is much improved and lateral projections of the side pieces are entirely done away with. The most important advantage of this arrangement is, however, that it enables me to utilize these anchorage-loops for spring-guards to hold the eye within the grasp of the bill, thereby dispensing with all loose tongues, humps, and other contrivances for this purpose. This I accomplish by bending the meeting edges of the loops *d d* slightly upward above the plane of the side pieces, as indicated most clearly in Figs. 2 and 3, and bringing them into such proximity to the overhanging end of the hook *a* that the eye cannot pass between them into or out of the space inclosed by the hook without causing the sides of the loops to yield downwardly, and I prefer to leave a small space between the edges of the loops to permit freedom of action.

The bending of the side pieces to form the anchorage-loops of course stiffens the metal at the rear ends of these pieces, and the size of the loops is too small to permit of much yielding in the loops proper. Consequently in the practical operation of the hook it will be found that there is a torsional yield in the side pieces themselves—that is to say, the spring of the guards formed by the loops comprises a torsional one that is due to the twisting of the side pieces, it being apparent upon examination of Fig. 1 of the drawings that the loops act as levers on the side pieces and give them a torsional strain when depressed by the passage of the eye between them and the bill.

The turning inwardly of the anchorage-loops also provides two guards for the bill, one on each side of the center, which has the

advantage of more effectually resisting any tendency of the eye to pass out of the bill in a straight line rearwardly, but permits its easy disengagement by a slight rolling motion, so that the guards yield consecutively rather than simultaneously.

Having thus described the invention, what I claim is—

In a hook and eye, a hook having the rearwardly-extending bill *a*, the side pieces *b*, *b*, on either side of said bill and separated therefrom by an intervening space, and the anchorage-loops *d*, *d*, formed by turning or bending the side pieces inwardly at the rear ends the adjacent edges of said loops being inclined upwardly toward the overhanging end of the bill *a* so as to act as spring-guards to prevent the disengagement of the eye.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM S. SEYMOUR.

Witnesses:
JOHN S. LAY,
J. S. FETTER.