

UNITED STATES PATENT OFFICE.

JOHN H. AKERS, OF WASHINGTON, DISTRICT OF COLUMBIA.

HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 563,637, dated July 7, 1896.

Application filed April 13, 1896. Serial No. 587,304. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. AKERS, of Washington, in the District of Columbia, have invented a new and useful Improvement in Hooks and Eyes, of which the following is a specification.

The object of my invention is to provide a new form of hook and eye for the purpose of fastening the meeting edges of garments in an easy and secure manner, that will not allow the two members to become accidentally disconnected when they are pressed together from any cause; and it consists in the peculiar construction and arrangement of the two parts, as will be hereinafter fully described with reference to the drawings, in which—

Figure 1 is a side view of the two parts detached; Fig. 2, a side view of the two parts connected. Fig. 3 is a perspective view of the two parts disposed at right angles and in the position for connecting or disconnecting them; and Fig. 4 is an edge view of the two parts, showing how the two parts lock when one part is folded over the other.

In the drawings, A represents the eye, and B is the hook. The eye A is made of a single piece of wire bent in the middle to form a cross-loop a , then turned inwardly to form two hook-eyes a' a' , then extended parallel for a short distance to form shank portions a^2 a^2 , and then turned outwardly and around to form attaching terminal eyes a^3 a^3 , by which it is stitched to the garment. This form of eye is not new, and I make no claim to its construction. The hook B is also formed of a single piece of wire bent inwardly at its middle portion, and then outwardly and around to form attaching-loops b b , by which it is fastened to the garment, then extended a short distance with the two branches substantially parallel, and then having its two ends turned over upon the body portion to form terminal hooks b' b' . These terminal hooks are, however, not parallel, but approach each other to a proximate point b^2 and then diverge and have their extreme ends b^3 b^3 turned outwardly. The two hooks b' b' are arranged to form spring-jaws, which spring apart from each other in the direction of the arrow, as shown in dotted lines in Fig. 1, and the outturned ends b^3 form locking-recesses b^4 , as seen in Fig. 4.

When the two members are to be coupled,

the two eyes a' a' receive the two hooks b' b' , as shown in Fig. 2, but to couple them the part B must be turned at right angles to the part A, as shown in Fig. 3, and the double shank a^2 a^2 of the part A passes between the proximate edges b^2 of the hooks b' b' and spreads them apart with a yielding spring-tension. When the two parts are thus coupled, it is practically impossible for them to become accidentally detached, for if the parts are advanced against each other in the same plane, as in Fig. 2, the cross-loop a strikes the end of the hooks and prevents disengagement, and if the garment's edges are pressed together the two parts will fold over, as seen in Fig. 4, in which the cross-loop a seats itself in the recess b^4 and locks against disengagement, and the two parts cannot be separated except they are held by design in a right-angular position, as in Fig. 3, and then the application of some force is necessary to bring the shanks a^2 a^2 out past the proximate edges b^2 of the hooks, which are compelled to yield as springs to this pressure.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The hook B made of a single piece of metal bent in the middle to form attaching-loops b b , and having its ends thence extended and bent over to form hooks b' b' converging toward each other at b^2 to form spring-jaws, and then turned away from each other and bent outwardly substantially as and for the purpose described.

2. The hook B made of a single piece of metal bent in the middle to form attaching-loops b b , and having its ends thence extended and bent over to form hooks b' b' converging toward each other at b^2 to form spring-jaws and then turned away from each other and bent outwardly to form locking-recesses b^4 , in combination with the eye part A having two eyes a' a' to receive the hooks b' b' , two shanks a^2 a^2 to pass between the spring-jaws of the hooks, and a cross-loop a adapted to lock in the recesses b^4 substantially as and for the purpose described.

JOHN H. AKERS.

Witnesses:

EDW. W. BYRN,
SOLON C. KEMON.