

(No Model.)

R. T. PALMER, Jr. & F. W. MERCER.
HOOK AND EYE.

No. 577,316.

Patented Feb. 16, 1897.

Fig-1-

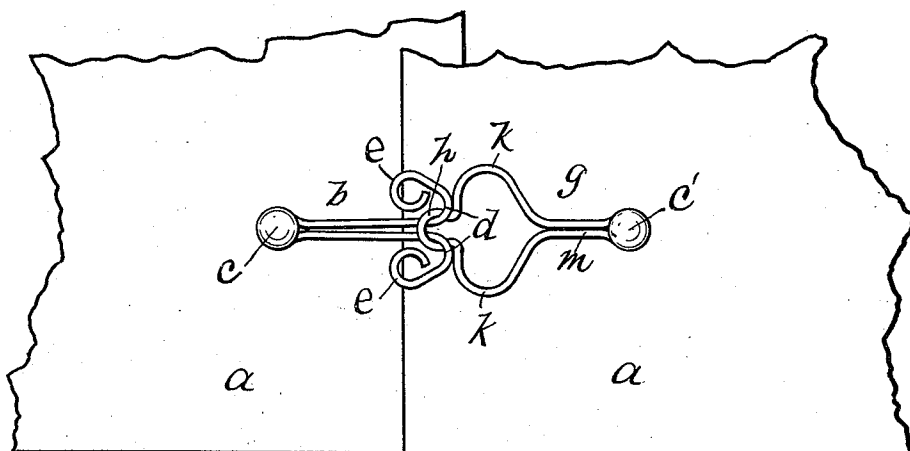


Fig-2-

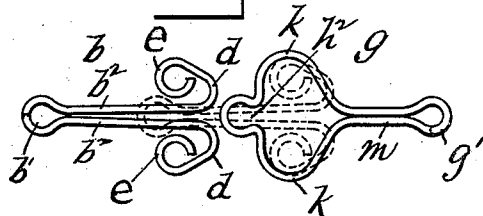


Fig-3-

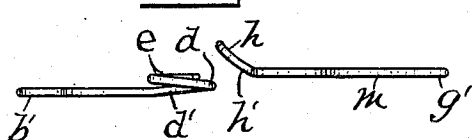


Fig-4-

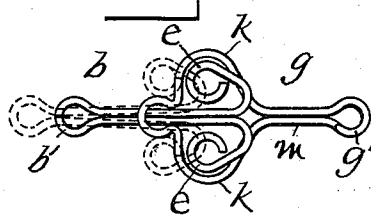


Fig-5-

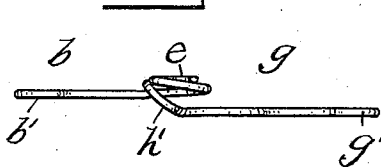
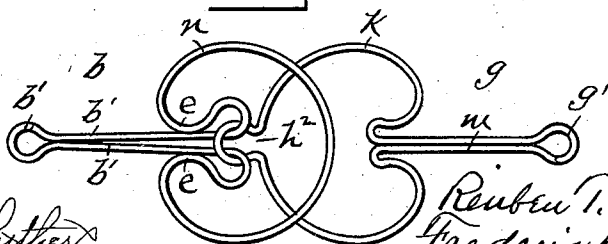


Fig-6-



Witnesses

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UNITED STATES PATENT OFFICE.

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HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 577,316, dated February 16, 1897.

Application filed May 25, 1896. Serial No. 593,014. (No model.)

To all whom it may concern:

Be it known that we, REUBEN T. PALMER, Jr., and FREDERIC W. MERCER, citizens of the United States, and residents of the city and county of New London, State of Connecticut, have invented certain new and useful Improvements in Hooks and Eyes, which improvements are fully set forth and described in the following specification, reference being had to the accompanying sheet of drawings.

This invention is in the class of fastenings usually employed in securing the meeting edges of fabrics; and our object is to provide a device which can be very cheaply produced and which can be much more readily operated than clasps of this kind now in common use.

Our device is constructed, preferably, of wire; and it consists of two members so shaped as to be very readily interlocked together, or released from locking contact with each other, to unite or separate the fabric-sections to which they are attached.

To assist in the explanation of our invention, we have provided the accompanying sheet of drawings, of which Figure 1 shows a simple form of our device properly secured upon portions of a blanket and illustrates the manner in which its members are locked together to fasten said blanket. Figs. 2, 3, 4, and 5 illustrate successive steps in the process of locking together said fastener members, and Fig. 6 illustrates a modification of our device.

Referring to the drawings, the letter *a* denotes the fabric to which our fastener is secured.

The letters *b* and *g* denote the two companion members of our clasp.

In the production of member *b* a piece of wire of proper length is first doubled back upon (and substantially parallel with) itself, forming an eye *b'*, adapted to receive a rivet *c*, by means of which the member *b* may be secured to the fabric. The end portions of said wire are then bent outward and rearward to form loops *d*, whose extreme ends terminate in rings *e*, which are so located that the space between said rings and the parallel body portions of member *b* is slightly less than the diameter of the wire, so that the act of passing

a piece of wire between either of said rings and the adjacent body portion will result in springing the rings *e* outward as the wire passes between.

The parallel limbs of section *b* are bent upward slightly, as at *d'*, thus raising the rings *e* above the plane of said parallel limbs a distance about equal to the thickness of the wire.

In producing the companion member *g* of my device a piece of wire of proper length is first bent to produce an eye *h*, that forms, as here shown, about three-fourths of a circle, said wire being then bent outward and inward to form lateral semicircular loops *k*, and finally the two limbs of the wire are brought together and extended parallel with each other, as at *m*, terminating in an eye *g'*, adapted to receive a rivet *c'*. The eye *h* is preferably bent upward, as at *h'*.

When it is desired to interlock the two sections *b* and *g*, the loops *d e* are first passed through the opening formed by the lateral loops *k k*, as seen in Figs. 4 and 5. The two sections are then drawn outward again in such manner as to guide the eye *h* and loops *k k* between the terminal eyes *e* of member *b* and the body portion of said member. (See Fig. 1.) During this last-mentioned operation the eyes *e* are sprung outward by the passage of eye *h*, and said eyes *e* then serve to prevent the accidental separation of the interlocked members, considerable force being necessary to crowd the eye *h* past the eyes *e*. The offsets *d' h'* allow the parts to be readily guided to interlock the same and when thus interlocked the straight body portions are substantially in alinement with each other. As a further precaution against the accidental separation of the two members *b g*, we make the open side *h²* of eye *h* slightly less than the width of the combined body portions *b²* of section *b* when the said body portions are in their normal positions, so that when eye *h* is slipped down over the limbs *b²* said limbs must be sprung together to allow the passage of the side walls of said opening *h²*.

In Fig. 6 we have shown the wire of which the described eyes *e* are formed as bent outward to form a bow *n*, this variation of form being made in order that the two members

b g may have substantially the same appearance, but it will be noticed that this does not affect in any way the operative or interlocking parts.

- 5 Our described hook and eye may be produced in various sizes. They may be very easily operated and when once properly interlocked cannot be separated by accident.

Having described our invention, we claim—

- 10 In combination, two interlocking members, one consisting of an eye *h* opening into an enlargement formed by laterally-extending loops *k k* and having at the opposite end of

said eye *h* an eye by means of which said member may be secured to the fabric, and a 15 companion member formed of wire doubled to provide an eye *b'* and bent outward to form oppositely-disposed loops *d* and eyes *e* that are adapted to interlock with the eye *h*, all being substantially as and for the purpose 20 specified.

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Witnesses:

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