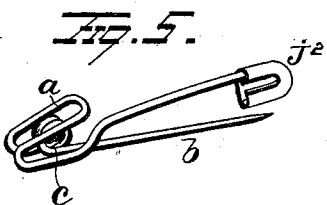
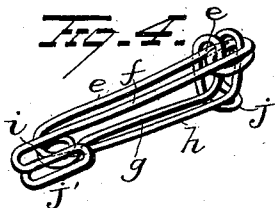
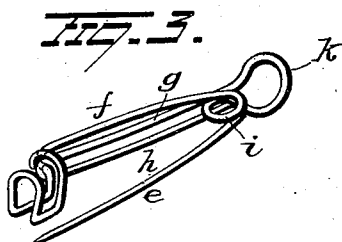
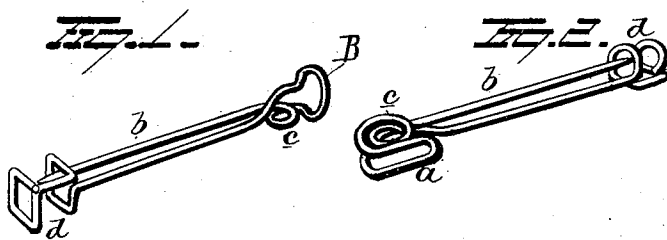


(No Model.)

E. M. WRIGHT.
HOOK AND EYE SAFETY PIN.

No. 483,886.

Patented Oct. 4, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

ELIZA M. WRIGHT, OF BROOKLYN, NEW YORK.

HOOK-AND-EYE SAFETY-PIN.

SPECIFICATION forming part of Letters Patent No. 483,886, dated October 4, 1892.

Application filed November 27, 1891. Serial No. 413,245. (No model.)

To all whom it may concern:

Be it known that I, ELIZA M. WRIGHT, a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hook-and-Eye Safety-Pins; 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.

My invention relates to an improvement in hook-and-eye safety-pins, the object of the invention being to produce hook-and-eye safety-pins so constructed that they will lie close, firm, and flat on the garment to which they are attached.

A further object is to construct a hook-and-eye safety-pin in such manner that the hook and eye and pins shall all run in the same direction.

A further object is to construct hook-and-eye safety-pins in such manner that when the hook is in engagement with the eye they will not be liable to become separated accidentally, and so that the devices shall be simple and effectual in the performance of their functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figures 1 and 2 represent my improved safety hook and eye. Figs. 3, 4, and 5 are views of modifications.

The safety-pin and hook, as well as the safety-pin and eye, are each made of a single piece of wire. In forming the safety-pin and hook the wire is doubled upon itself and the closed end of said doubled wire is bent to produce a hook *a*. The safety-pin *b* is coiled to produce a spring *c* near and under the hook *a*. The wire at one end of the coil or spring *c* is continued, so as to form the hook *a*, above referred to. The coil or spring *c* rises to or near the hook at some little distance in from the end of the rounded part of the hook or where the bend is which forms the hook, thereby leaving a space for the reception of the eye *B* between the spring *c* and the bend in the hook, from which it cannot escape with-

out being detached by hand, thus making a safety-fastening for the hook and eye. The end of the wire being continued after the hook is formed is bent to one side of the spring *c* and is carried slightly upward a short distance from the bend in the hook until it is about over the safety-pin, and then the wire is turned in the same direction as the pin and ends in a catch *d* for the reception of the end of the pin *b*, the entire device being made of a single piece of wire. When this combined safety-pin and safety-hook is attached to a garment, it is as firmly set as an ordinary hook that is sewed at both upper and lower ends. It is immovable whether pulled backward or forward. The construction of the hook end makes said hook lie close, firm, and flat on the garment. The catches for the reception of the pin may be constructed in various ways; but that above described is preferred. The said loop or catch *d* may be made of sheet metal and secured to the end of the wire, being bent slightly outward and downward and rounded up, leaving an open space for the reception of the pin *b*. The combined eye and safety-pin is made in the same manner as the hook and safety-pin above described, except that, instead of forming the hook *a*, the metal is bent to produce a loop or eye *B*. From the construction above set forth it will be seen that the spring *c* serves two purposes—first it gives the necessary spring to the pin and is also located in such manner relatively to the hook *a* as to produce a snap-hook.

In the form of the invention shown in Figs. 3 and 4 the pin *e* is located in the center of the device beneath the middle one of three parallel wires *f g h*. At the inner end of the pin *e* the wire is coiled to produce a spring *i*, and the wire *g*, extending from said spring, terminates at a point near the pointed end of the pin *e*. The wires *g h* are next bent laterally parallel with each other and then bent upon themselves and made to extend slightly beyond the opposite side of the device or slightly beyond the wire *h*, and are preferably slightly curved to produce a catch or loop *j* for the reception of the free end of the pin *e*. The wires *f h* are bent to produce a hook *j'*, and the free end of the wire *f* is coiled about the wires *g h*, where the loop or catch *j* is

formed. The end of the wire might, if desired, be secured by a small piece of flat metal j^2 , Fig. 5. The spring i in this form of the invention serves precisely the same function, as above explained, in connection with the construction first described—that is to say, it imparts a spring action to the pin and also constitutes the hook a snap-hook.

The safety-pin and eye shown in Fig. 3 is formed similarly to the pin and hook last described, except that, instead of making the hook j' , an eye k is formed, and instead of bending the wires $f h$ to form the catch j only the wire f is so bent.

From the construction of the devices above described it will be seen that the hook and eye and pins all run in the same direction.

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

1. A combined safety-pin and eye composed of a single piece of wire having a pin, a guard for the end of the pin, said guard extending around and beyond the extreme outer end of the pin, a spring-coil formed in the wire, and

a loop formed in the wire independent of the spring-coil, substantially as set forth.

2. The combination, with a pin having an eye or loop, of a combined safety-hook and pin composed of wire having a hook at one end and catch at the other end for the reception of the free end of the pin, the wire at the inner end of said pin coiled, and this coiled portion forming a latch adapted to enter the said hook and constitute it a snap-hook, substantially as set forth.

3. A combined wire safety-hook and safety-pin having a hook at one end and a catch at the other end for the reception of the free end of the pin, and a spring formed at the inner end of the pin, said spring adapted to enter the hook and constitute it a snap-hook, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ELIZA M. WRIGHT.

Witnesses:

BERTHA E. ROESSEL,
HERMANN B. ROESSEL.