

(No Model.)

G. E. MELLEN.
HOOK AND EYE.

No. 543,496.

Patented July 30, 1895.

Fig. 1.

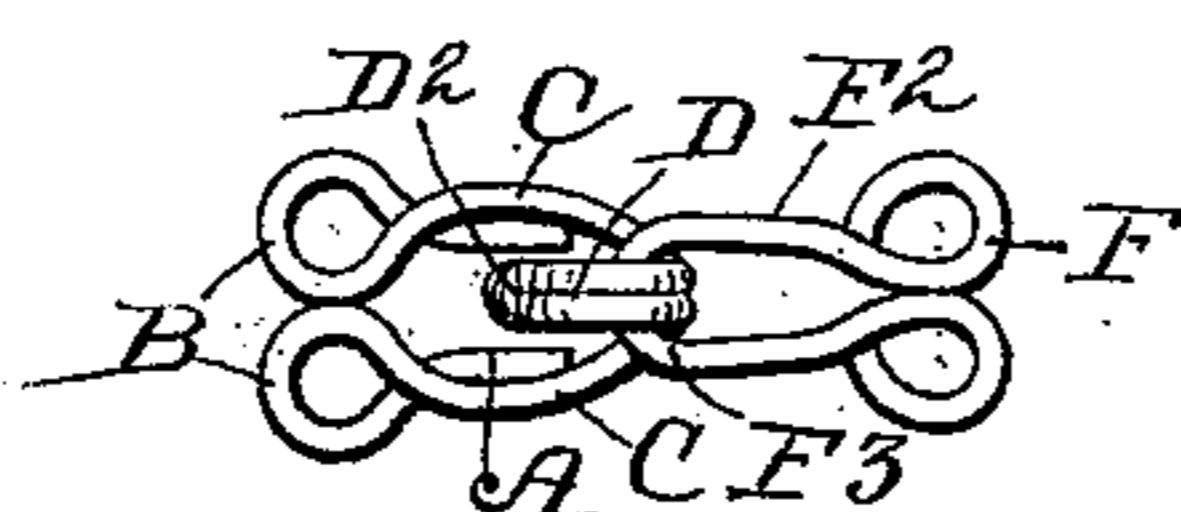


Fig. 2.

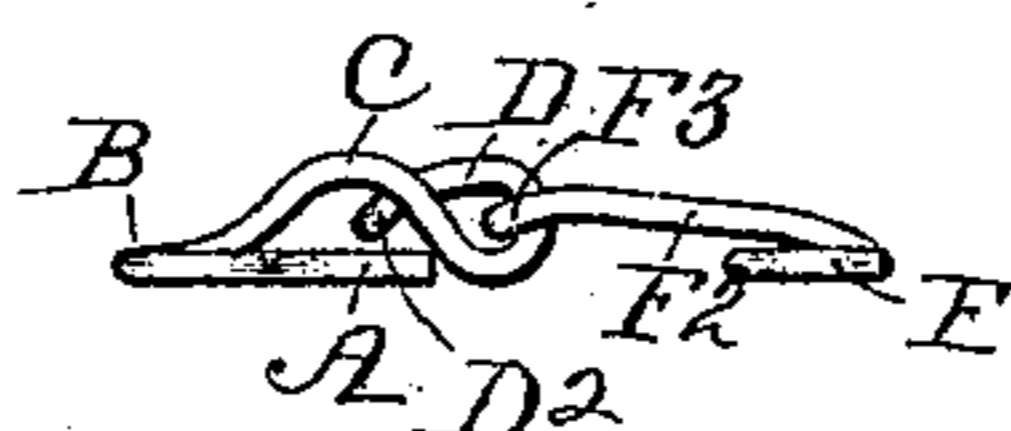
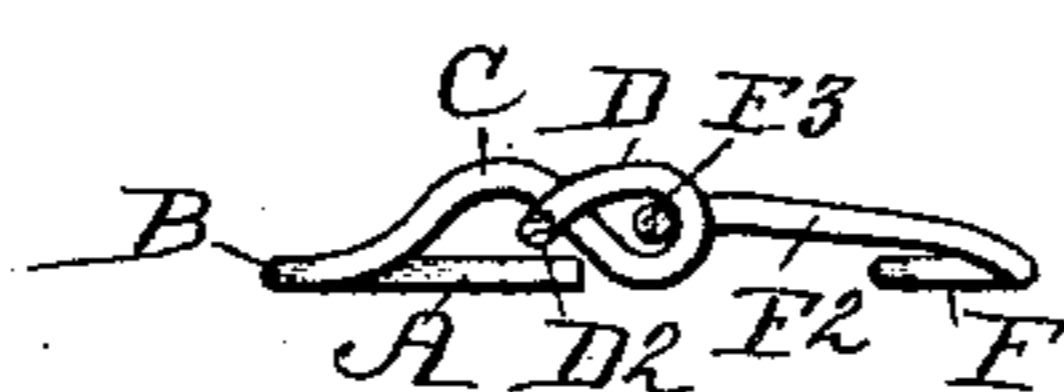


Fig. 3.



Witnesses: } Inventor: George E. Mellen,
W. J. Danney. }
R. H. Orwig. } Thomas G. Orwig, J. Ralph Orwig,
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE E. MELLEN, OF DES MOINES, IOWA.

HOOK AND EYE.

SPECIFICATION forming part of Letters Patent No. 543,496, dated July 30, 1895.

Application filed December 7, 1894. Serial No. 531,083. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. MELLEN, a citizen of the United States of America, residing at Des Moines, in the county of Polk and State of Iowa, have invented an Improved Hook and Eye, of which the following is a specification.

The object of this invention is to provide a hook and eye in which the hook cannot become caught in the wearing-apparel, and, further, to protect the hook proper from becoming bent by pressure thereupon.

My invention consists in details in the construction of the hook and eye, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top or plan view of the hook and eye. Fig. 2 is a side view of the same, and Fig. 3 is a longitudinal sectional view.

Referring to the accompanying drawings, the hook is composed of a single piece of wire having its two ends bent straight and parallel with each other at A to protect the cloth. Said ends are adapted to be separated or forced outwardly by means of the eye. When said eye is being connected with or detached from the hook the parts are then curved to form the loops B, by which the hook may be sewed to a garment. From the central portion of these loops the wires are then bent upwardly and outwardly to form the combined guards and guides C. The wires are then bent downwardly, where they may be sewed to the garment and brought together and curved back over the central portion of the hook directly above the parts A to form the hook proper D, and the highest part of this hook is on a lower or the same plane as the combined guards and guides C, so that a downward pressure upon the hook will first be compelled to bend the guards C before the hook proper can be bent. The end of the hook proper is curved downwardly at D² to a point near enough to the ends A to prevent the eye from being disengaged from the hook without spreading the ends A.

The eye is composed of a single piece of wire with its ends bent in loops F and its

central portions extended parallel with each other at F² some distance apart, bent first upwardly and then downwardly at F³ near its end to pass beneath the hook when its rear end is elevated, with its forward end between the straight portion A and in engagement therewith.

When connecting the hook and eye, the parts are brought together and the rear end of the eye is elevated and the eye proper admitted between the guides C beyond the end of the hook, and is then drawn outwardly to pass under the hook and above and between the ends A. It will readily be seen that this may easily be accomplished, because the parts C will direct the eye to the hook even if it should be presented at either side thereof.

It will be obvious that articles of clothing or loose threads, &c., cannot become caught by the hook either directly from the front of the hook or from either side on account of the guards C and the hook D being placed below the guards, and, further, that the hook will be prevented from being bent out of its proper position and cannot become disengaged until the rear end of the eye is elevated and passes under the end of the hook.

It is obvious, further, that the eye cannot become disengaged from the hook without first spreading the ends A. This will require a certain amount of force and will prevent the eye from becoming accidentally disengaged.

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

1. An improved hook, composed of a single piece of spring wire with loops near its end portions adapted to be sewed to a garment and its ends extended under the hook proper, combined guards and guides at its sides and a hook at its central portion bent backwardly between the guards and guides and having its lower end in such proximity to the aforesaid ends, that an eye to be admitted between the hook and said ends, must separate the ends, for the purposes stated.

2. An improved hook and eye, comprising a hook having straight ends parallel with each other, loops formed at the outer end of

the hook, combined guards and guides bent
upwardly and outwardly therefrom and a
hook proper bent to overlap the said straight
ends with its ends between and below the
5 level of the guards and guides and an eye
having loops at one end and its central por-
tion bent to enter between the guides and

guards and under the hook and bent down-
wardly at its outer end, substantially as and
for the purposes stated.

GEORGE E. MELLEN.

Witnesses:

REUBEN G. ORWIG,
J. RALPH ORWIG.