

(No Model.)

E. KEMPSHALL.
HOOK.

No. 504,039.

Patented Aug. 29, 1893.

Fig. 1

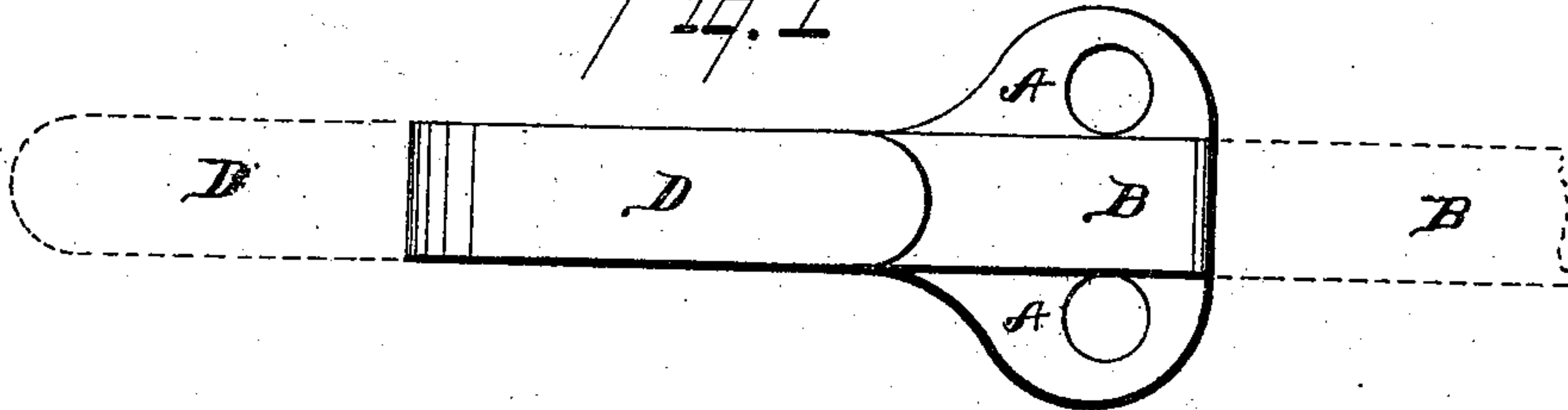


Fig. 3

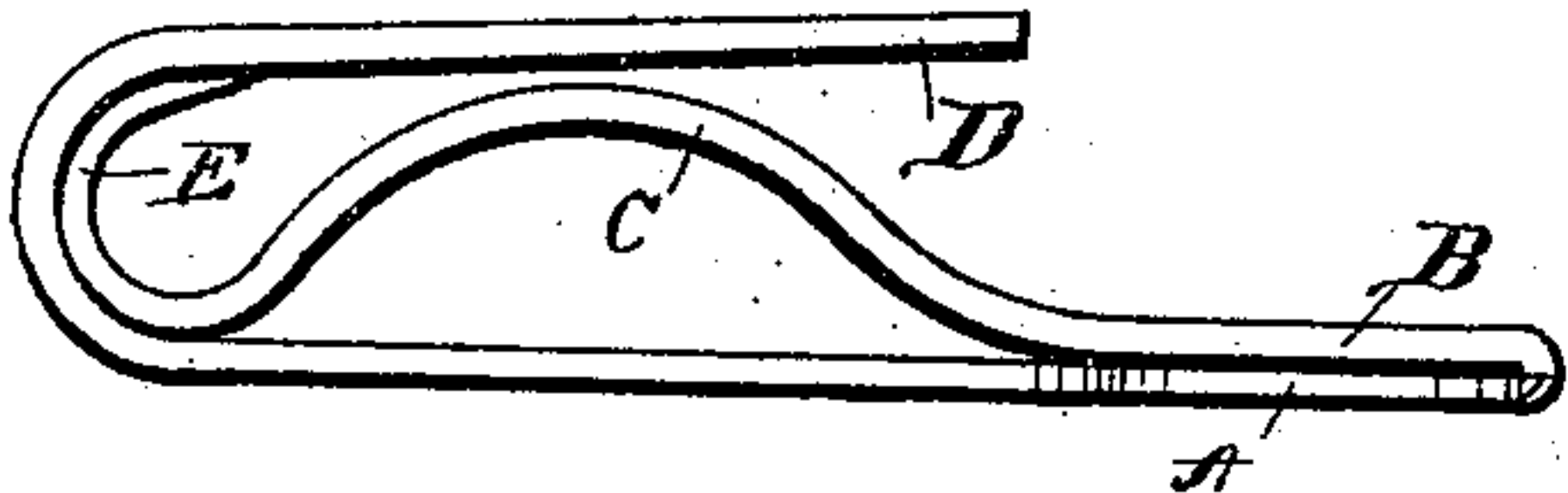


Fig. 2

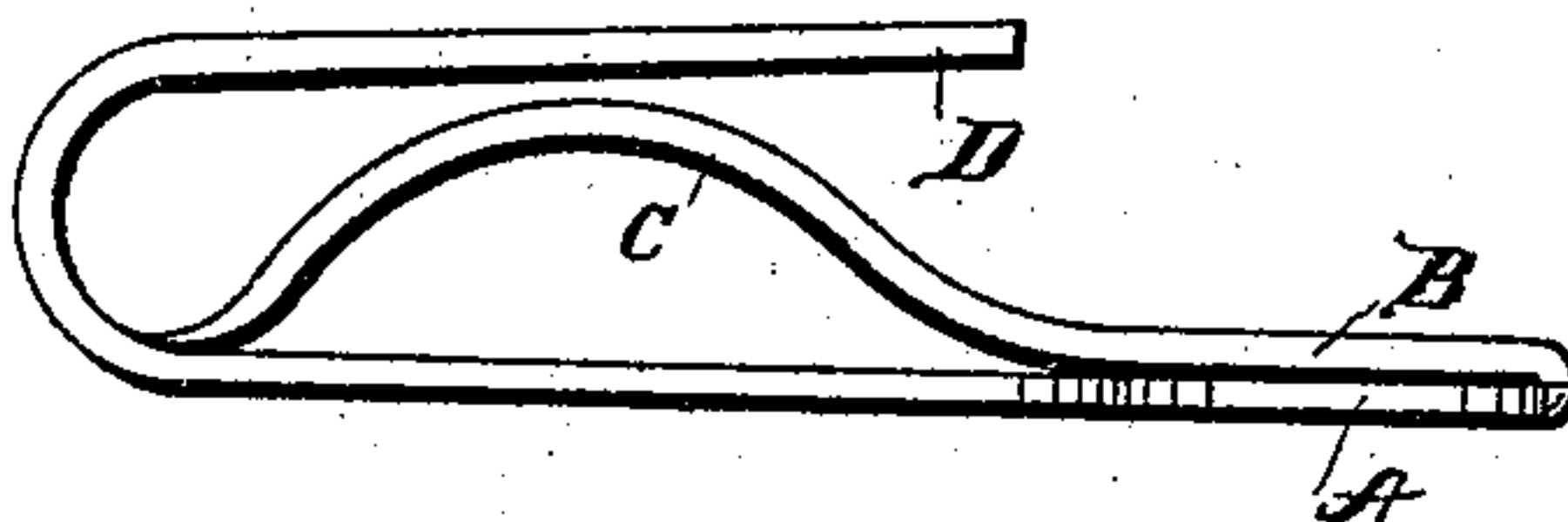


Fig. 4

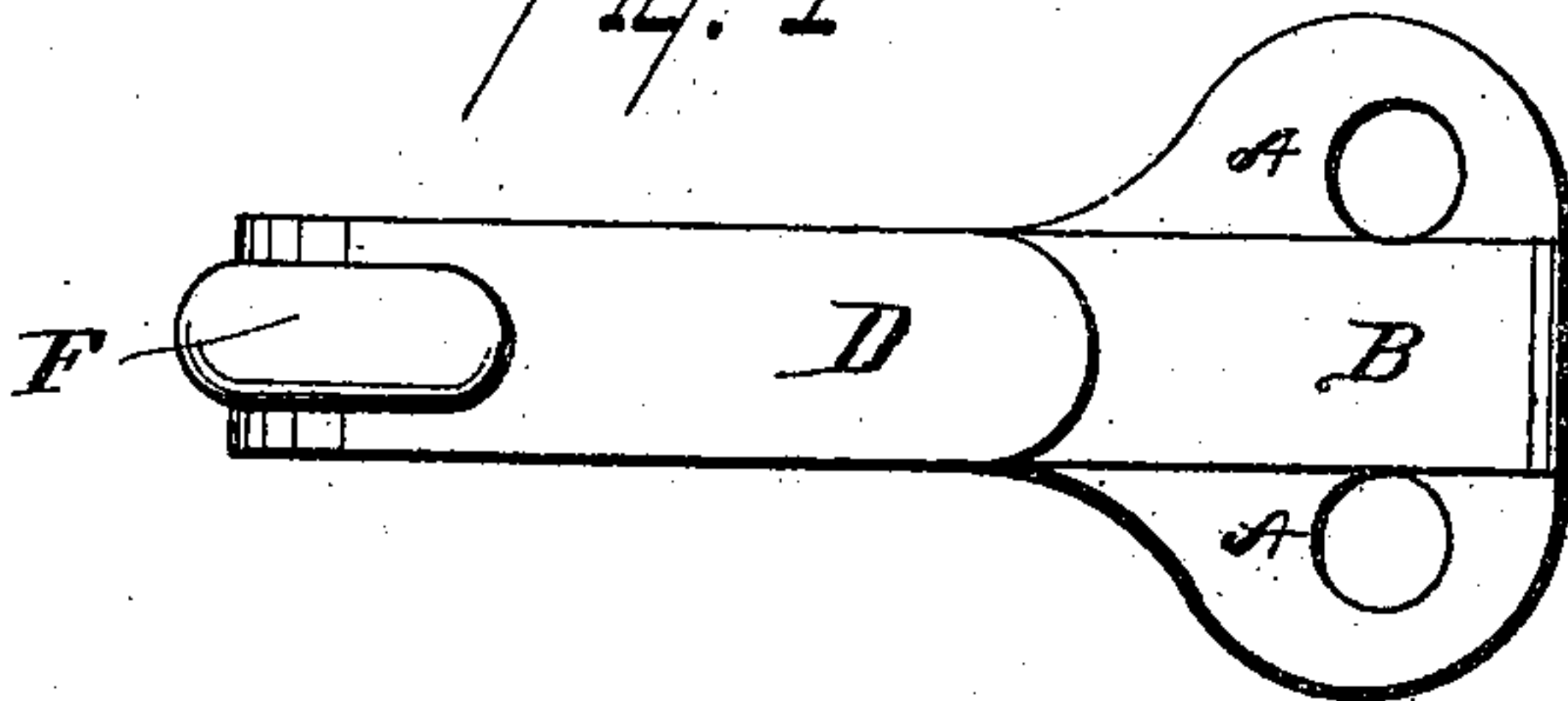
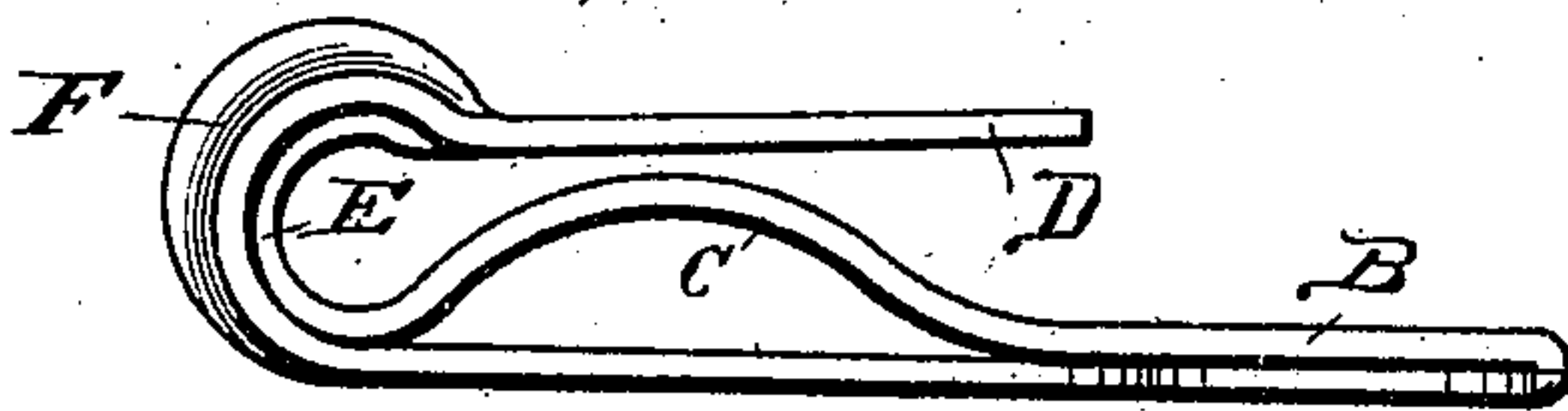


Fig. 5



WITNESSES:

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ELEAZER KEMPSHALL, OF BROOKLYN, NEW YORK, ASSIGNOR TO WEBSTER
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HOOK.

SPECIFICATION forming part of Letters Patent No. 504,039, dated August 29, 1893.

Application filed April 17, 1893. Serial No. 470,577. (No model.)

To all whom it may concern:

Be it known that I, ELEAZER KEMPSHALL, of the city of Brooklyn, county of Kings, and State of New York, have invented a certain
5 new and useful Improvement in Hooks, of which the following is a full, clear, and exact specification.

My invention relates to new and useful improvements in hooks, particularly adapted to
10 use in connection with garments but which may be constructed on a large scale and adapted to general use as a snap-hook.

My hook is constructed of sheet metal.

The objects of my invention are to first
15 construct a simple and inexpensive hook of light weight, yet very strong, and, second, to form integral with the hook a mechanism which will not permit the accidental disengagement of the hook and which can at the
20 same time be formed to afford an extra means of strength to the hook.

My invention is illustrated by the accompanying drawings in which—

Figure 1 is a plan view of the improved
25 sheet metal hook. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a side elevation of a modification of my invention. Fig. 4 is a plan view of a modified construction, and Fig. 5 is a side elevation of Fig. 4.

30 Similar letters refer to similar parts in all figures.

A blank is first formed having substantially parallel sides. Preferably about midway in these sides project outward two or more fastening lugs A A. These lugs are perforated for the purpose of securing the hook to a fabric by means of thread, or to a strap by means of rivets, or the like. The dotted lines in connection with the outline formed by the
40 solid lines in Fig. 1, show the form of the blank before the hook is made. The end B is bent in the manner shown in Figs. 2, 3 and 5 of the drawings, to form a raised hump C, intermediate in the length of the end B, and
45 located under the spring end or bill D formed by turning back the opposite end of the blank as shown in the several figures. As the extreme end of the end B is bent down to touch

the inner surface of the shank, as shown in Fig. 3, an incline is formed on both sides of the bend C, thus facilitating the engagement and disengagement of the hook with any suitable eye.

The bend formed by the end D should be gradual, while by preference the other end
55 when bent over should form a very acute angle, as shown in the drawings.

As an extra means of strength to the hook, I form a bend E in the end B of the blank, in such a manner that the outer side of the
60 bend forms the same curve as the inner side of the bend formed by the end D. When the hook is completed, therefore, there is a double thickness at that point, which very materially increases the strength of the device. This
65 modification is shown in Figs. 3, 4 and 5.

Figs. 4 and 5 also illustrate a modification of this invention, in which the bent hooked end is provided with a corrugated rib F, as another means for additional strength. In
70 these figures the end D is shown also as bent down over the edge of the end B, for the purpose of affording a smooth surface to the inner side of the hook.

In operation, the hooked end D of the device is slipped into a ring, or the like, and pulled until it slips through the narrowed space above the hump C into the bend of the hook. The presence of the hump C prevents, in a very great measure, any accidental dis-
80 engagement of the hook.

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

1. A sheet metal hook having the end B
85 turned back against the flat inner surface of the hook shank and provided with an intermediate raised bend C, forming the inward and outward inclines beneath the end D, the extreme end of the end B resting against the
90 flat inner surface of the shank at a point adjacent to the bend forming the hook, substantially as and for the purpose specified.

2. A sheet metal hook in which the end B is turned back against the inner surface of the
95 hook shank and provided with a raised bend

C beneath the spring end D said spring end being provided with the corrugated strengthening rib F substantially as described.

5 3. A sheet metal hook in which the end B is turned back against the inner surface of the hook shank and provided with the raised bend C and a reinforcing hook bend E imme-

diately adjacent to and bearing against the inner surface of the bend forming the hook proper, substantially as described.

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Witnesses:

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