

(No Model.)

R. ELY.

HOOK.

No. 311,968.

Patented Feb. 10, 1885.

Fig. 1.

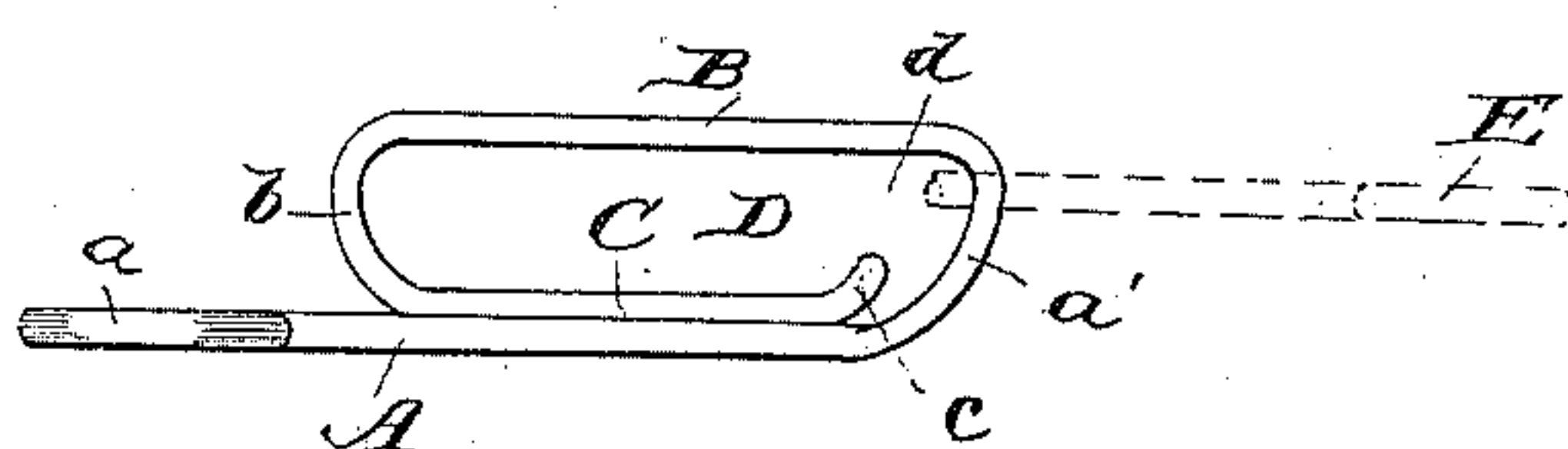


Fig. 2.

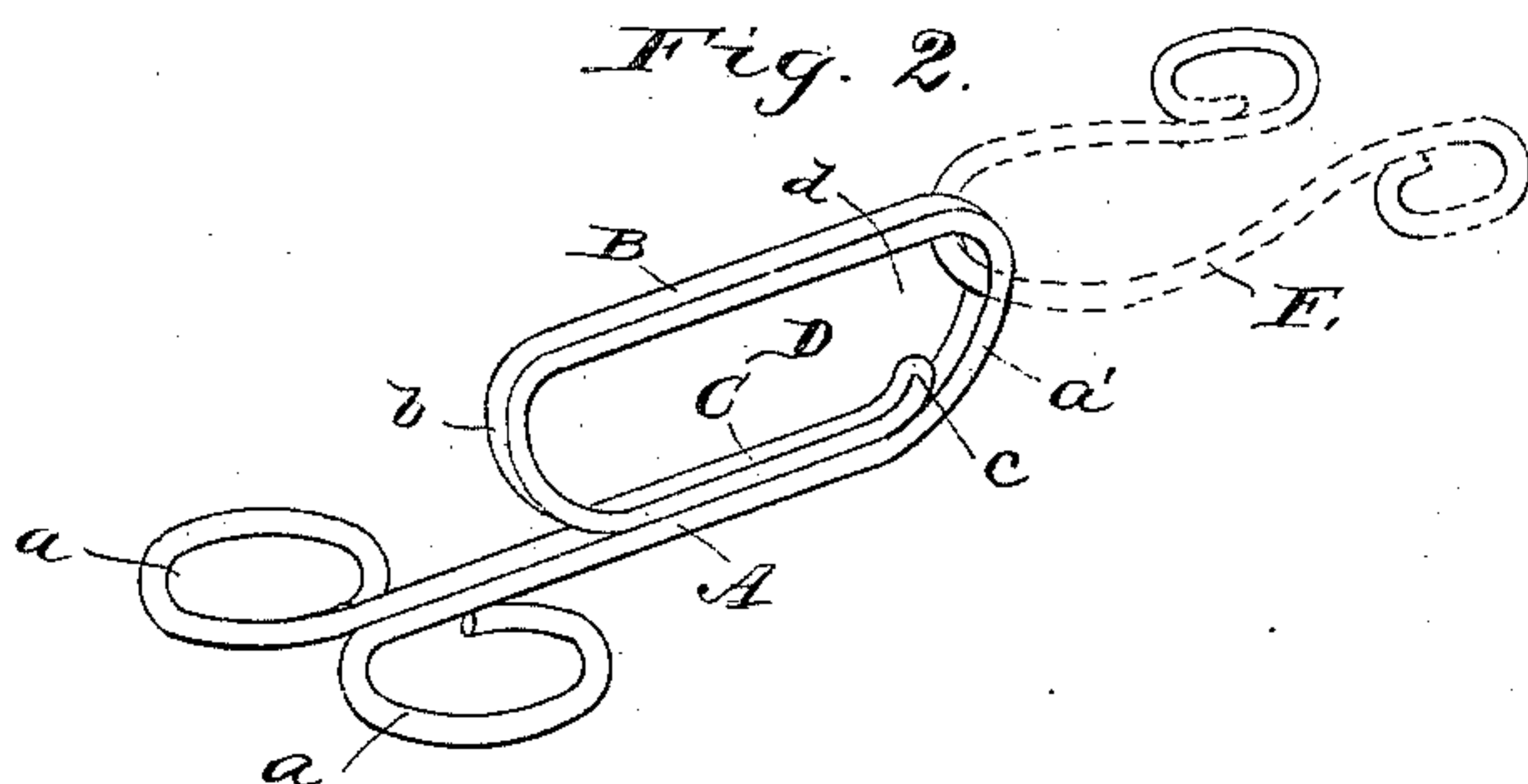
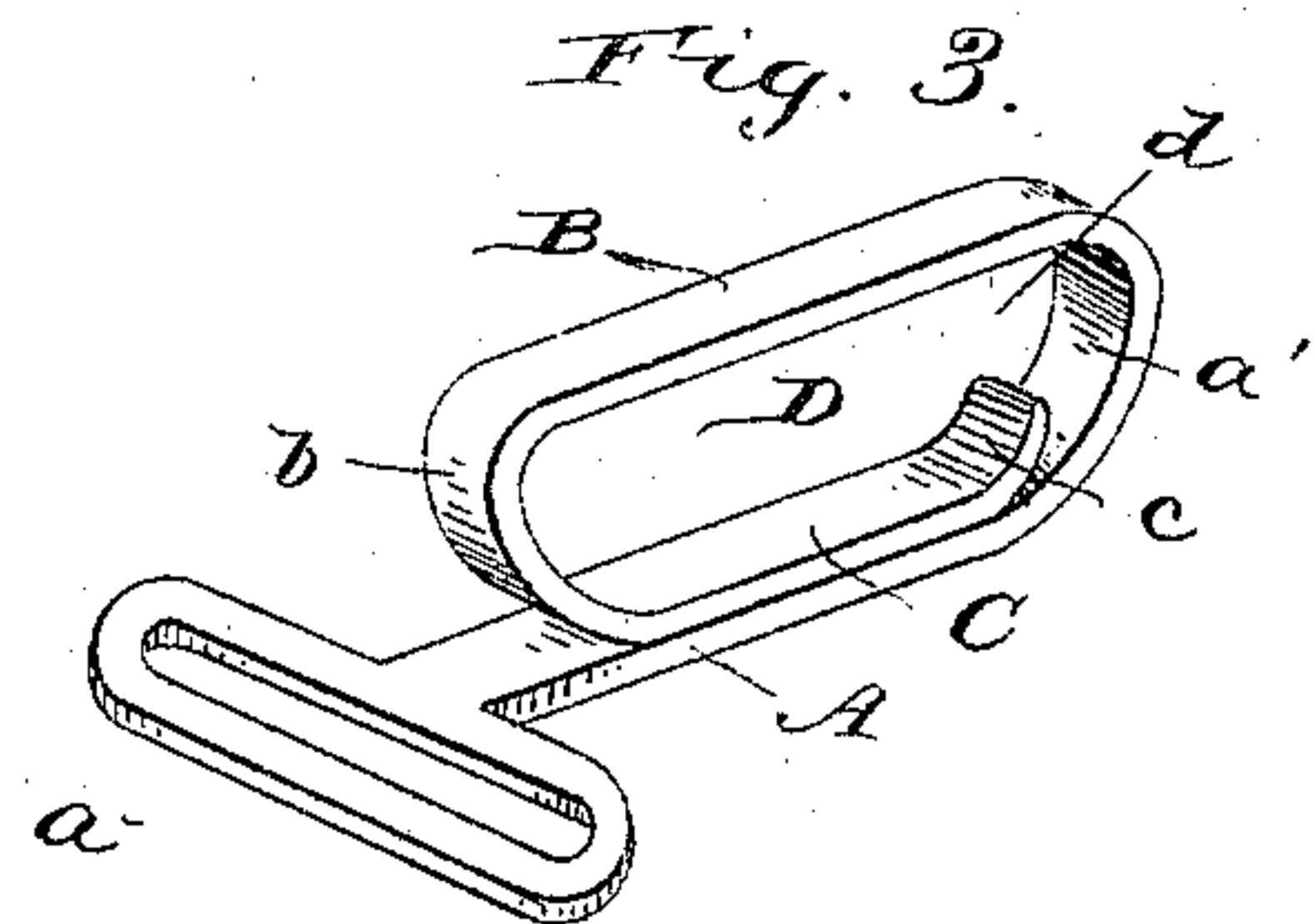


Fig. 3.



Witnesses:

H. N. Low
J. A. R. Smith

Inventor:

Ralph Ely
J. N. Houghton
attorney

UNITED STATES PATENT OFFICE.

RALPH ELY, OF DELAWARE, OHIO, ASSIGNOR TO MARY C. ELY, OF SAME PLACE.

HOOK.

SPECIFICATION forming part of Letters Patent No. 311,968, dated February 10, 1885.

Application filed December 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, RALPH ELY, a citizen of the United States, residing at Delaware, in the county of Delaware and State of Ohio, have invented certain new and useful Improvements in Hooks; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to a peculiar form and construction of hook, particularly adapted for use with an eye to form what is commonly known as a "hook and eye" for fastening clothing; but the hook is capable of other useful applications.

My improvements are particularly directed to forming a hook which shall hold the eye securely, which shall be easily detachable when desired, which shall have its point so turned or finished as not to be liable to catch or wear the clothing, and which shall be simple and easy of construction, from a single piece of wire, if desired, as are other hooks of this class.

For the purpose of illustrating and clearly describing my invention I have shown in the accompanying drawings a method of carrying it into effect.

Referring to said drawings, Figure 1 is an enlarged side elevation of a hook embodying my invention. Fig. 2 is a perspective view. Fig. 3 is a similar view of a hook made from sheet metal.

A is the shank of the hook, having the usual eyes, *a a*, for securing it in place. The shank A terminates in a bend, *a'*, from which returns the hook portion B, as in the ordinary plain hook. The portion B, however, instead of terminating in a point, or being bent down in contact with the shank A and then upward and outward again, ends in a bend, *b*, from which a portion, C, returns toward the first bend, *a'*. The part C is substantially parallel and in contact with the shank A, and incloses, with the part B and the bends *a' b*, a space, D, in which the eye (shown in dotted lines at

E) can play freely over the part C, but without chance of escape, the usual opening at the point of the hook being closed by the bend *b*.

To enable the eye E to be readily slipped under the part C when it is desired to unhook the device, the part C is provided with an upturned portion, *c*, of just sufficient height to guide the eye beneath said part when the eye is intentionally pressed into the angle between parts A and *c*, but low enough to leave the space *d* between it and the part B, to permit, under ordinary circumstances, the eye to pass freely back over the part C, and between it and the part B when such relative movement of the eye and hook is unintentionally caused, as by the movement of the wearer. The practical result of this construction is that when the parts are in the hooked position and the hook and eye are accidentally pushed together the eye will follow down the part B and through the space *d* into the space D, where it is entirely inclosed, and whence it cannot escape except by passing back again toward the bend of the hook and through the space *d*. If, however, the eye should by accident be pushed under the part *c* and pressed hard enough to separate the parts A and C and enter between them, it will be seen that said parts are in contiguity for such distance that before the eye shall have worked its way out a strain in the ordinary direction may have drawn the eye back into the hook. It will be observed that it is not necessary to turn the eye out to a right angle to the hook in order to detach it, as is necessary with some hooks in which it has been attempted by a series of bends to retain the hook more securely. To be obliged to so turn the eye is a disadvantage, particularly when the device and the objects which it connects are under tension.

It will be seen that, with the advantages already mentioned, the hook is rounded and finished at the point by the bend *b*, thereby preventing the catching and wearing of the clothing.

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

1. A hook having its point bent around par-

allel to and in contiguity with the shank, and terminating near the bend of the hook in the upturned portion *c*, substantially as set forth.

2. A hook formed of a single piece of wire
5 laid double, and having its point bent around parallel to and in contiguity with the shank, and terminating near the bend of the hook in the upturned portion *c*, substantially as set forth.

10 3. A hook formed of a single piece of wire bent at its middle, having its two portions laid side by side and parallel with one another,

and bent at its ends into the eyes *aa*, said hook having its point bent around parallel to and in contiguity with the shank, and terminating 15 near the bend of the hook in the upturned portion *c*, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

RALPH ELY.

Witnesses:

A. M. RAWN,
CHARLES M. JAYNES.