C. Atwood,

Hooks and Eyes,

No. 2,978. Patented Feb. 24, 1843.

Fig. 1.

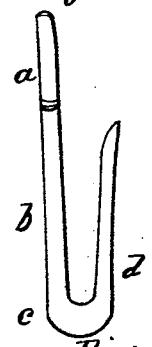


Fig. 2.

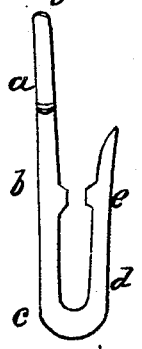
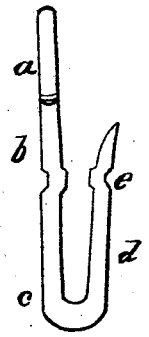


Fig. 3.



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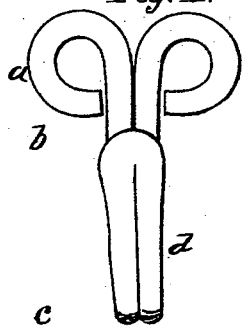
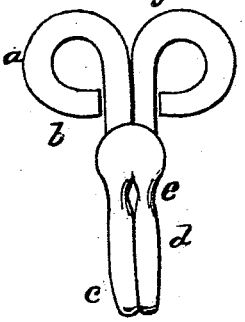


Fig. 2.



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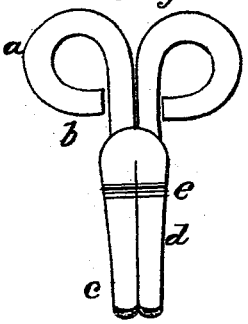

Witnesses;
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Sylvester Allum

Inventor;
Charles Atwood

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES ATWOOD, OF DERBY, CONNECTICUT.

HOOKS AND EYES FOR FASTENING GARMENTS.

Specification of Letters Patent No. 2,978, dated February 24, 1843.

To all whom it may concern:

Be it known that I, CHARLES ATWOOD, of Derby, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in the Manufacture of Hooks and Eyes; and I do hereby declare that the following is a full and exact description of the same.

My improvement consists, firstly, in making plain common hooks and eyes of wire so flattened in some parts and left full in other parts as to unite greater strength and just proportions with delicacy of form in the hook, than has heretofore been known or used. Secondly, in so forming the hook that it shall constitute in itself and without any additional piece, a kind of lock to fasten itself to the eye so as not freely, or accidentally to unhook.

To enable others skilled in the manufacture of hooks and eyes to use my improvement I give the following description of it.

Firstly, to give greater strength and delicacy to the hook it is necessary to flatten the wire both in the shank and eyelets, and also in the outer end of the hook, and to leave it round and of full thickness, or at least of greater thickness in the curve, than it is in either the shank or the point; and the proper parts may be flattened, either after the curls or eyelets are turned and the wire doubled and before the hook is turned—or it may be done equally well upon the punch over which the hook is bent, as the last operation. And in order to give the desirable form to the hook, or the right curve where it is bent, I find it best to apply a force or pressure of greater intensity than has heretofore been applied while the punch is in the curve of the hook, in order to set the wire close to the point or edge of the punch; and this pressure upon the wire while it is around the punch, I find to be more necessary when harder and more elastic wire is worked than has heretofore been commonly used for the manufacture of this article; and it is well known to those skilled in this manufacture that such elastic wire as would make the best hooks is often rejected because it will not readily bend into the ordinary form; but by applying the extra pressure aforesaid in any suitable way, the closer bend, which I prefer, can easily be given.

Secondly, the form and proportions of my improved "locking hook" does not greatly differ from that of the plain hook before described. The wire is flattened in the shank and eyelets, and in the point, and is left of greater thickness in the curve; but it is not only left thicker, or of its full thickness, in the curve, but it is also left so for a very short space, at any proper place between the point and the curve, and likewise for another very short space on the shank, between the curve and the eyelets—these two thicker portions corresponding with each other at opposite sides of the inner side of the curve each being a little raised inwardly above the plane of the flattened parts of the hook, they so form a narrower passage through which the wire of the eye having once passed into the curve of the hook by means of the springing open of the hook itself, will not easily disengage itself, although readily unhooked by the fingers at pleasure.

I do not claim any gradual or easy bending of the wire in order to form a narrower passage for the wire of the eye to pass through into the curve of the hook, and thus making something resembling a lock; but I do claim the bold, sudden or abrupt bending, or offsetting, of a small portion of the wire, and so making raised projections on the inside of the curve of the hook for the purpose aforesaid, as new and a part of my improvement; although I esteem it not quite so neat and so good a method as to leave a small portion of the wire in the flattening, a little raised inwardly for this purpose, as before described.

Neither do I claim the flattening of the shank separately—nor of the point separately—nor the flattening of the wire of the whole hook; but I do claim the flattening of the shank and the point nearly or quite down to the curve and yet leaving the curve thicker, and of course stronger in proportion than it would be otherwise—and at the same time more convenient in use, and neater in appearance.

Although my improvements as aforesaid are on hooks made by machinery; yet as there are a great variety of ways in which parts may be added to machinery now in common use, which would thereby make my improved kinds of hooks—and the parts so added for that purpose would be different according to the present various construction of each machine, or each set of machinery; and would readily suggest themselves to any mechanic skilled in the making and use of

such machinery, after having seen the improved article, with the full and exact description of it, herein before given; I deem it superfluous to describe the process by which hooks and eyes are now commonly made.

What I desire to secure by patent, and claim as my improvement is—

The making of hooks, of both the kinds herein described, from wire so flattened and reduced in both the shanks and points, and left thicker and stronger in the curve, as to unite greater strength with lightness, and neatness of appearance; and for making the locking hooks by raised projections on the wire without any additional parts—as herein set forth.

CHARLES ATWOOD.

Witnesses:
SYLVESTER COLLUM,
ISAAC KELLOGG.