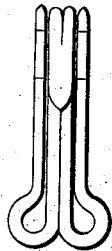


C. ATWOOD.  
SPRING HOOK FOR HOOKS AND EYES.

No. 8,198.

Patented July 1, 1851.

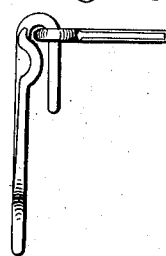
*Fig. 2.*



*Fig. 1.*



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

CHARLES ATWOOD, OF DERBY, CONNECTICUT.

## WIRE HOOK AND EYE.

Specification of Letters Patent No. 3,198, dated July 1, 1851.

*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 Hooks for Wire Hooks and Eyes to Prevent the Accidental Unhooking of the Eye from the Hook; and I do hereby declare that the following is a full and exact description.

10 The nature of my improvement consists principally in the addition of two side springs, one on each side of the hook, formed of the same wire of which the hook is made, by extending it from the eyelets, or  
15 eyelet loops almost to the outer end or bow of the hook, and so bent upward toward the beak of the hook as to form a small ridge nearly under the beak and laterally on each side of it, which ridges near the ends of the  
20 side springs prevent the bow of the eye from escaping easily or accidentally from the hook, yet at the same time it may be easily unhooked by the fingers.

To enable others to make and use this improvement I will more particularly describe its construction operation and use.

The proper hook or beak part of it, and its shank or body, and the eye, may be of the usual forms, either for attaching directly to garments, or for attaching to tape and then by the tape attached to garments; but for both of these uses I prefer to vary the form of the eyelet loops to one which is more consistent with the intention of extending the ends of the wire so as to make side-springs thereof, and the form of the eyelet bows for this purpose I call the "jews'-harp" form which will be more clearly shown by reference to the small  
40 drawings hereto annexed and forming a part of this description.

Figure 2, shows a perpendicular view of a hook with eyelet loops and side springs, with its shank or body long enough to insert tape and somewhat longer than would ordinarily be desirable otherwise. Fig. 1, is a side view of the same showing one of the side springs. Fig. 3 is also a side view showing the eye turned up for hooking or  
50 unhooking most easily.

The practical fact is, that the hook and eye do generally lie on nearly the same plane with each other, while they are required to remain hooked together, and that when they  
55 are intentionally either hooked or unhooked by the fingers they are easily and most nat-

urally turned up to a considerable angle perhaps from 45 to 90 degrees. The reason why the eye escapes much easier from the hook when their planes make an angle will appear by inspection, and is this, that when the ring like circular bow of the eye lies on the same plane as the hook and side springs, the bent ends of these springs forming small ridges above the general plane, make obstructions to the passage of the bow of the eye under the beak of the hook in like manner as the passage of a straight wire of same size would be obstructed, but when they form an angle depressed under the beak of the hook, the bow of the eye becomes a segment of a circle, or circular segment between the raised ridges of the springs downward from the beak of the hook, and thus the bow of the eye can pass and repass into the hook very easily and almost without obstruction. This result follows from placing the springs with their small ridges on the outsides of the shank of the hook and not directly under its beak, which has heretofore been done in some kinds of common hooks and eyes, by placing a spring between the two wires which constitute its shank, which middle spring was designed to answer a similar purpose but did not answer it so perfectly as my side springs do. The jews'-harp form of the eyelets and side springs are an improvement, not only for reasons before stated but also because the side springs running parallel to the shank on each side of it do in effect make a broader shank and better for fingering, and also because this form is better for hooks to be attached to tape, by more closely embracing the tape than the more open loops heretofore used and the upward bend which forms the ridge in the spring assists to prevent the slipping of the hook from its proper place on the tape before it is attached to the garment.

Having thus declared the nature or character of my invention and specified the forms and manner of application of my improvements on wire hooks and eyes for garments and their purposes and uses; I do not claim any of the forms of hooks and eyes heretofore made of wire nor any peculiar difference in what belongs to any of the various kinds of them except in the eyelets or loops.

What I do claim as my invention and desire to secure by Letters Patent is,

1. The addition of side springs to the

common forms of hooks for wire hooks and eyes substantially in the manner and for the purposes set forth.

2. I claim the small ridges or elevations  
5 on each side of the beak of the hook made by bending the wire of the side springs, or by other means equivalent thereto for the purposes set forth.

3. I claim the jews'-harp form or partly

circular eyelets extended to form loops 10 adapted to receive tape in connection with the small elevations to keep the tape in its proper place substantially as set forth.

CHS. ATWOOD.

Witnesses:

GEO. KELLOGG,  
JOS. P. CANFIELD.