(No Model.)

E. A WILSON.

SNAP HOOK.

No. 381,739.

Patented Apr. 24, 1888.

FIG\_I\_

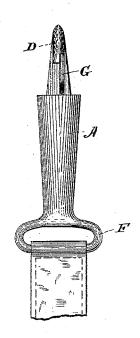
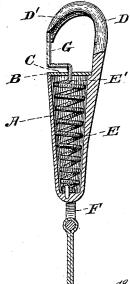


FIG \_ 2 \_



Attess: Geo. T. Smallword, Jas. K. M. Cathran.

Inventor: Edward A. Wilson 134 Rozers Cory his Attorneys.

## UNITED STATES PATENT OFFICE.

EDWARD A. WILSON, OF DECKERTOWN, NEW JERSEY.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 381,739, dated April 24, 1888.

Application filed February 24, 1888. Serial No. 265,165. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. WILSON, a citizen of the United States, residing at Deckertown, in the county of Sussex and State of New Jersey, have invented certain new and useful Improvements in Snap-Hooks for Harness; 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 snap-hooks used on harness, and provides means for preventing the freezing of the different parts of the same.

In cold climates, especially during the winter, there is a great deal of trouble and annoy-20 ance experienced from the freezing of harnesssnaps from mud and water splashing onto them. My invention completely avoids all such freezing, and provides a snap which is easily and cheaply constructed and thoroughly efficient 25 in practice. I attain these objects by placing a spiral or coiled spring in a sleeve and turning the upper end at right angles, so as to form the tongue, the end of the sleeve being made into the hook or draw. To prevent ice form-30 ing in the hinge of the usual form of snaphooks, I make the tongue without a hinge, the coiled spring acting as such, and the torsion of the spring keeping its end, which forms the tongue, always bearing against the point 35 of the hook.

In the accompanying drawings, which form part of this application, and which illustrate my invention, the same letters of reference indicate like parts.

Figure 1 is a front view of my invention. Fig. 2 is a side view, partly in section.

A is the body of the snap, formed hollow in the shape of a sleeve, being cast in one piece with the hook, and provided with the shoulder B for the reception of the head C, and at the other end with the eye F. The hook at D' is beveled, so as to give greater facility in

E is the coiled spring, the lower end of which 50 may rest against a stop in the bottom of the sleeve, and in shape made to conform to that the sleeve. The other end of the wire form-

passing a thick ring into the snap-hook.

ing the said spiral spring is carried inward to the center of the coil at E', bent upward sufficiently to clear the surface of the head of the 55 sleeve, then bent at right angles outwardly, and again bent upward to form the tongue G. The head C of the sleeve has an aperture in the center to receive the wire, the said aperture being only sufficiently large to allow the 60 wire to turn easily, but not to allow dirt or mud to reach the coil, thus preventing any freezing from taking place. The sleeve carries the hook D, which may be cast in one piece with the sleeve, and the eye F for the 65 reception of a strap.

My invention may be applied to any part of a harness. For instance, it may be attached to the saddle-tree. In fact, my snap-hook may advantageously be used for fastening back the 70 checkrein, for in cold weather, when the usual form of snap-hook is used, the freezing of the tongue to the end of the hook occasions a great deal of trouble, from the fact that it is placed at such a height from the ground; or it may 75 be attached to any of the straps of the harness or carriage and to the ends of the reins where they hook onto the bridle or bits.

I do not restrict myself to the shape of the body of the snap-hook, as shown and herein 80 previously described, for it is evident that the hook of the snap-hook may start from the center of a sleeve in the form of a post, around which the coiled or spiral spring may be placed, and when it reaches the end of the sleeve it 85 may branch and form the hook. It is not intended that the snap-hook should be used only for harness, but may be used for any purpose where such a device is required.

Having described my said invention, what I 90 claim is—

1. In a harness or other snap hook, the combination of a sleeve forming the body of the snap and provided with a hook, a coiled or spiral spring in the sleeve, and a tongue made 95 integral with the said spring, substantially as described.

2. In a harness or other snap hook, the combination of a sleeve forming the body of the snap hook and provided with a hook, and a roo coiled spring placed within said sleeve and bent so as to project and form a tongue bearing against the hook, substantially as described.

3. In a harness or other snap-hook, the com-

bination of a sleeve having a hook formed integral with it, a wire coiled in the shape of a spiral spring within the sleeve and having one end projecting through an aperture in the head of the said sleeve and bent so as to form a tongue adapted to bear against the end of the hook and close the snap, substantially as described.

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

EDWARD A. WILSON.

Witnesses:
FRANK KEYS,
THOS. E. WOODS.