

No. 646,519.

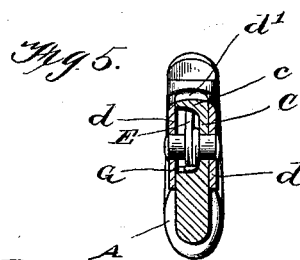
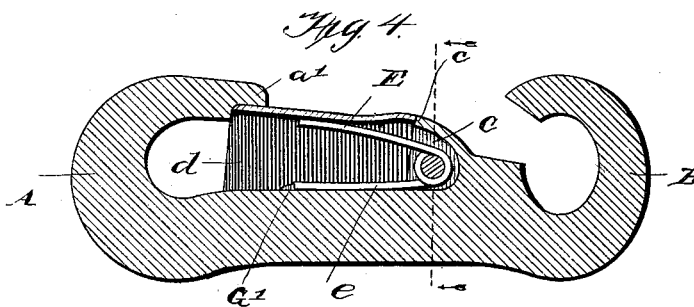
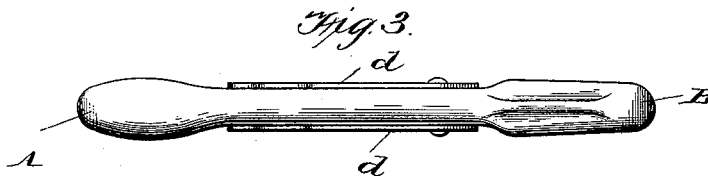
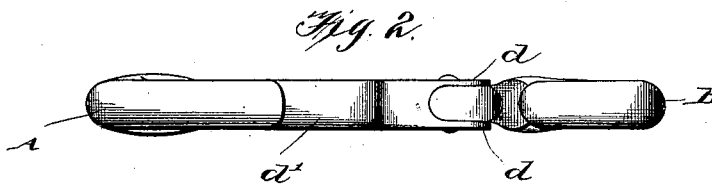
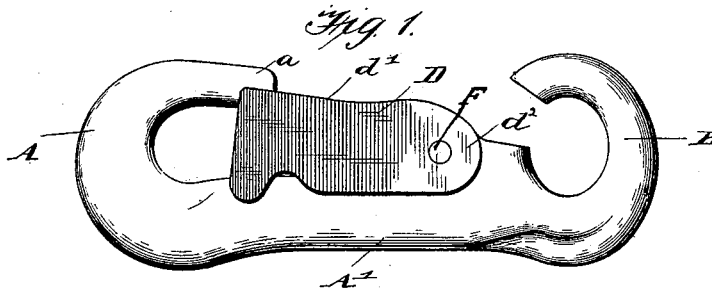
Patented Apr. 3, 1900.

J. C. COVERT.

SNAP HOOK.

(Application filed Dec. 19, 1899.)

(No Model.)



Witnesses

James C. Covert
John V. Mibius

Inventor

James C. Covert
By A. S. Mibius

Attorneys

UNITED STATES PATENT OFFICE.

JAMES C. COVERT, OF WATERVLIET, NEW YORK.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 646,519, dated April 3, 1900.

Application filed December 19, 1899. Serial No. 740,849. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. COVERT, a citizen of the United States, residing at Watervliet, in the county of Albany and State of New York, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby 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.

This invention relates to an improvement in snap-hooks; and it is embodied in the construction and arrangement of parts hereinafter described, and defined in the claims.

The invention relates more particularly to that type or class known as "spring-tongue" snap-hooks, and, more specifically speaking, is an improvement in that particular style of spring-tongue snap wherein the tongue is in the form of a shell or casing the sides of which embrace the shank or body of the hook and the forward edges act as abutments or retainers against which the confined ring or link strikes or rests when pressure is exerted in a direction opposite the hook proper.

Heretofore in shell-tongue hooks coiled springs have been employed, which have been held in place by a teat or lug on the shank and an enlargement or barrel in which the spring is seated formed by bulging or bending out the sides of the shell. This barrel formation has been found particularly objectionable in that the same extends transversely beyond the sides of the shank, thus allowing the end of the spring to escape between the sides of the shank and shell. In such constructions a central ear has been cast with a pivot-pin opening, and owing to the necessarily small size of the opening it has been found quite difficult to cast the ear with a perfect cylindrical opening, and owing to the thickness of the ear it is impracticable to form the opening with punches.

The present improvement is designed and intended to overcome the objections above stated.

The further object is the provision of a spring-actuated shell-shaped tongue which will clearly embrace the sides of the shank throughout, presenting flat side faces without bulge or enlargement; further, to provide a hook of this character which will permit of

utilizing the yielding-arm springs as distinguished from the spiral-coil type; further, in so forming the body with flanges that they will act as a housing for the coil or bend of the spring and forming the vertical flange relatively thin, so that by using a power-punch the pivot-hole can be readily formed.

Other advantages and objects will be presently stated.

In the drawings is shown an embodiment of the invention; but it is to be understood that various changes can be made without departing from the nature and principle of the invention.

Figure 1 is a side elevation. Fig. 2 is a top plan view. Fig. 3 is a bottom plan view. Fig. 4 is a longitudinal section showing parts in elevation. Fig. 5 is a cross-section on the line *x x*, Fig. 4.

In the drawings, A designates the hook proper, having the point *a* and shank or body A'. This latter is formed with straight parallel sides.

B designates an eye or loop, which may be of any desired shape or form.

Springing from the upper edge of the rear of the body at one side is a flange or fin C, having an opening therein. The rear of the body is carried up, as at *c*, and forward at an incline, constituting an overhanging flange which terminates at the forward edge of flange C, thus forming, in conjunction with the body and flange, a cavity or seat which is centrally located.

D designates the tongue, which is formed with flat parallel sides *d*, closely embracing the sides of the body or shank. The sides are connected by the curved plate *d'*, the forward edge of which engages below the point of the hook. The plate *d'* terminates short of the ends of the sides, the latter constituting ears *d''*, which closely embrace the body at the rear and the sides of flanges C *c*. The tongue is conveniently made of a single piece of metal.

E designates a U-spring having its lower arm *e* lying on the upper edge of the shank or body, its upper arm resting against the under surface of plate *d'*, and its central portion coiled and seated in the cavity or chamber formed by the body and flanges C *c*.

Through the ears, coil of the spring, and

flange C passes the pivot-pin F, which retains the parts in position.

Conveniently on the upper edge of the body or shank are lugs G G', located on opposite sides and between which the arm e of the spring is placed. They serve to hold the arm in place against lateral movement.

By the above-described construction it will be observed that the tongue is held against lateral movement, the spring occupies a position wholly within the planes of the sides of the shank and cannot escape, that the parts are so fashioned that all corework is dispensed with and avoided, and that by the construction a U-spring can be employed, which permits of a full movement of the tongue and which permits of a construction of relatively small proportions, distinguishing it in these respects from the coiled-spiral spring types.

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

1. A snap-hook comprising a hook portion, a body portion having a vertical flange on its upper edge at one side and an overhanging flange, a shell-shaped tongue having straight sides parallel with the sides of the body and embracing the same, and having ear portions at the rear, a U-shaped spring having oppositely-arranged arms, its curved portion be-

ing located at the side of the vertical flange and below the overhanging flange and a pivot passing through the ears and vertical flange, substantially as described.

2. In a snap-hook, the combination with a hook proper and its shank, the latter having a vertical flange at its rear, of a shell-shaped tongue having straight sides parallel with and closely embracing the sides of the shank, a pivotal connection between the sides of the tongue and flange and a U-shaped spring having opposite arms located between the upper edge of the body and the tongue and occupying a space wholly between the planes of the sides of the shank, substantially as described.

3. In a snap-hook, the combination with the hook proper, and its shank, the latter having a vertical flange thereon at one side in the rear, of a shell-shaped tongue having straight sides parallel with and closely embracing the sides of the shank, a curved spring having one arm resting against the shank and its other against the tongue, and projections on the shank, on opposite sides of the spring, substantially as described.

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

JAMES C. COVERT.

Witnesses:

L. S. BACON,
D. C. DENNISON.