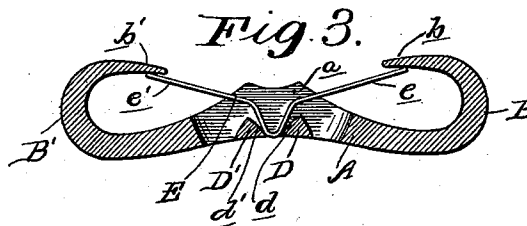
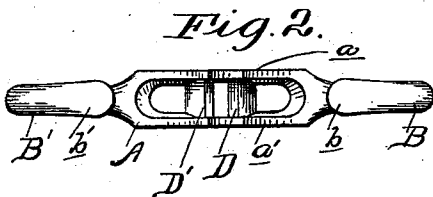
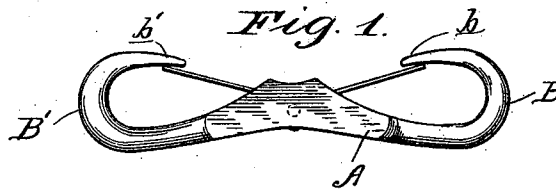


(No Model.)

J. C. COVERT.
SNAP HOOK.

No. 547,877.

Patented Oct. 15, 1895.



WITNESSES

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JAMES C. COVERT, OF WEST TROY, NEW YORK.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 547,877, dated October 15, 1895.

Application filed May 23, 1895. Serial No. 550,432. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. COVERT, a citizen of the United States, residing at West Troy, 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.

Generally speaking the invention comprehends the improvement of the double snap-hook wherein a single flat spring is employed for both hooks, and the special improvement resides more particularly in so fashioning the several parts that the effect of the compression of either end of the spring may be distributed throughout the length of the spring, and thereby avoid the danger of breaking the ends or holding-sections of the spring.

The invention further contemplates a formation of a casting and spring, so that the connection between may be effected in a manner to acquire the above-indicated advantages, and which will render an easy and inexpensive adjustment and production of the parts.

Briefly speaking, the invention consists, primarily, in loosely securing a spring in the casting, so that its opposite ends will constitute tongues.

The objects of the invention are attained by the construction illustrated in the accompanying drawings, wherein like letters of reference designate corresponding parts in the several views, and in which—

Figure 1 is a side elevation of my improved hook. Fig. 2 is a top plan view, the spring being removed. Fig. 3 is a longitudinal section, and Fig. 4 is a detail view of the spring.

In the drawings, A designates the frame, having the hooks BB' at opposite ends, formed with the points bb', having the flat under faces arranged equidistant from the center of the frame and on the same plane. The frame and hooks constitute a single casting. The frame A consists of the two side webs a a', united at their ends by the sections c of the hook-shanks. These webs a a' are parallel and the space between is open, except at points at the base on

opposite sides of the center, at which points the cross-bars D D' are located. These cross-bars are integral with the sides, and their contiguous sides are curved in relatively opposite direction, as at d d', forming the curved seat between with an open base.

E designates the keeper-spring, the opposite ends of which constitute the tongues e e', while the central or connecting portion E' is bent down into a substantially V-shaped offset, the apex of which is rounded or curved. The shape of this central portion conforms substantially to the shape of the lower portion of the seat in which it rests, and, owing to the curvature of the seat and of the V shape of the spring, a substantially pivotal connection is effected. The opposite ends of the springs constitute the tongues e e' and are inclined obliquely upward, their outer ends normally resting against the under face of the points b b'. It will be noticed that by the formation of the V-shaped section and seating the same in the space between the cross-bars the tongues are held in their proper positions relative to the points, and all longitudinal movement of the spring is prevented, and by locating the seat at the base of the frame all lateral movement is prevented.

In operation as pressure is applied on one of the tongues the same is forced down, which, owing to the pivotal connection of the central portion, forces or tends to force the opposite tongue up, and this compression or movement is to some extent transmitted or distributed throughout the entire spring. By this means it is practically impossible to break the spring. Were, however, the spring fixedly secured at its center, the tendency would be to crank or break at its point of union. In other structures of this class the springs are greatly weakened by grooving the sides or perforating the same at the point of attachment. The strength of the spring is thereby proportionately lessened. Should it be desirable to place a holding means above the spring, but out of contact, the same may be done in any desirable manner, preferably by inserting a pin transversely through the sides, as shown at h in dotted lines, Fig. 1. In forming the frame open any sticks, dirt, or foreign substance that enters the "snap" below the spring finds an easy escape.

I am aware that many minor changes in the construction and arrangement of the parts can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A snap hook comprising a frame having oppositely arranged hooks at opposite ends, an open center and cross-bars at the center spaced apart, and a keeper spring having its opposite ends arranged to engage the hooks and formed at its center with a downwardly extending loop of a size to fit between the cross-bars, substantially as described.

2. A double snap hook comprising two oppositely arranged hooks, an intermediate seat,

and a keeper spring, the opposite ends of which constitute the tongues engaging respectively with the hooks, and an offset between the tongues loosely resting on the seat, substantially as described.

3. In a snap hook, the combination with the frame, a curved seat at the lower central portion thereof, oppositely arranged hooks, and a keeper spring engaging the hooks and having a downwardly curved offset at its center loosely resting in said seat, substantially as described.

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

JAMES C. COVERT.

Witnesses:

L. S. BACON,

G. A. PENNINGTON.