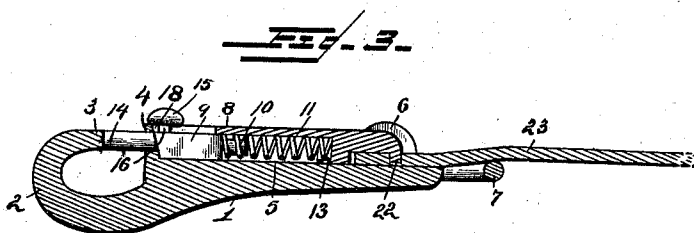
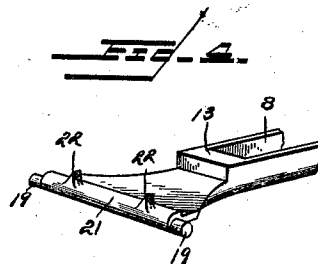
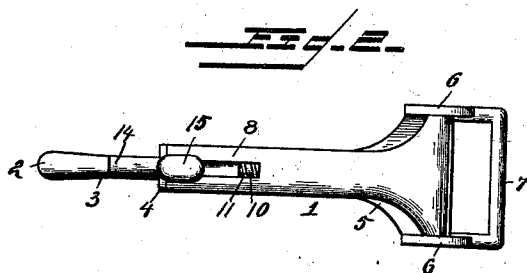
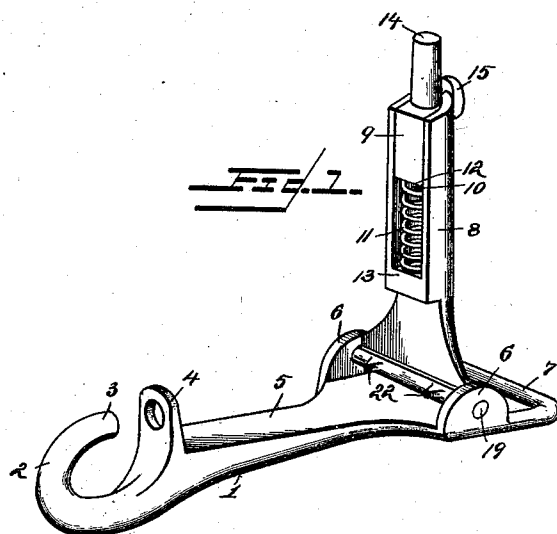


(No Model.)

E. MANES.
SNAP HOOK.

No. 545,966.

Patented Sept. 10, 1895.



Inventor

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Witnesses
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UNITED STATES PATENT OFFICE.

EPHRAIM MANES, OF SHERMAN HEIGHTS, ASSIGNOR OF ONE-HALF TO
THOMAS W. FRITTS, OF CHATTANOOGA, TENNESSEE.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 545,966, dated September 10, 1895.

Application filed May 24, 1895. Serial No. 550,558. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM MANES, a citizen of the United States, residing at Sherman Heights, in the county of Hamilton and State of Tennessee, have invented a new and useful Snap-Hook, of which the following is a specification.

This invention relates to an improvement in snap-hooks, and has for its object to provide a simple, inexpensive, and efficient construction of snap-hook, consisting of a hook member and a hinged member, which are adapted to co-operate for snapping over and engaging a harness-ring or other device, said snap-hook also comprising novel means whereby it may be quickly and easily affixed to the end of a holding-strap.

Other objects and advantages of the invention will appear in the course of the subjoined description.

In order to accomplish the objects above referred to, the invention consists in certain novel features and details of construction and arrangement of parts whereby advantages in point of simplicity and efficiency are attained, as hereinafter fully described, illustrated in the drawings, and finally embodied in the claims.

In the accompanying drawings, Figure 1 is a perspective view of an improved snap-hook constructed in accordance with this invention, the same being shown open or with the hinged member thrown back. Fig. 2 is a plan view of the hook closed. Fig. 3 is a longitudinal section through the hook, the same being shown closed and engaging the end of a strap. Fig. 4 is a detail view of one end of the hinged member, showing the eccentrically-arranged barbs or teeth for engaging the holding-strap.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates the main body of the hook, which will be hereinafter termed the "hook member," the same comprising a hook proper (indicated at 2) having a reversely-curved and backwardly-extending point 3.

4 designates a lug or ear extending substantially at right angles to the body of the hook

member and having a perforation in longitudinal alignment with the point of the hook. The hook member is further provided with a flat surface 5, extending lengthwise of the body of the hook member, the latter being expanded in width at its rear end and provided with a pair of perforated ears or lugs 6, formed integrally with the body of the hook member and spaced sufficiently apart to receive the pivot or trunnions of the hinged member of the hook. The hook member is also formed, if desired, with a loop or bar 7, providing for the attachment of the holding-strap in the usual manner.

The hinged member of the snap-hook comprises a socket portion 8, which is substantially U-shaped in cross-section, adapting it to receive a sliding bolt arranged therein and having a similar cross-sectional shape, so as to fit snugly and slide evenly within its socket in the hinged member. The bolt 9 is provided at its rear end with a longitudinally-projecting stud 10, adapted to receive one end of a spiral spring 11, arranged within the socket portion of the hinged member and interposed between the shoulder 12 of the bolt and the base of the socket, the rear end of the spring being further engaged and prevented from displacement by a web or guard 13, formed integrally with the socket portion, as shown. The forward end of the bolt is slightly reduced and rounded in cross-section, as shown at 14, adapting such end of the bolt to pass through the perforation in the forward lug of the hook member and to abutt against the point of the hook proper, as shown.

15 designates a button or stud rigidly attached to the sliding bolt and having a reduced shank 16, working within a longitudinally-elongated slot in the U-shaped socket portion of the hinged member. This construction permits the spring-actuated bolt to be moved backward in its socket by pressing against the stud or button thereof with the thumb or finger, and the forward movement of said bolt is limited by forming inwardly extending points or spurs 18 at the forward end of the hinged member and projecting partially across the end of the longitudinally-extending slot in which the shank of the stud or button slides. The hinged member is ex-

tended rearwardly and expanded in width, as shown, and also provided with oppositely-projecting trunnions 19, which engage the perforated ears at the rear of the hook member, whereby a pivotal connection is established between the two principal members of the snap-hook.

21 represents a transversely-extending rib arranged in eccentric relation to the trunnions of the hinged member and formed integrally with the latter. Upon the inner face of this rib are formed two or more prongs or teeth 22, which are adapted, when the hinged member is vibrated toward the hook member, to press firmly against and embed themselves into the end of a holding-strap 23, inserted between the hinged member and hook member, as shown in Fig. 3. It will be observed that the inner face of the sliding bolt is flattened for adapting it to bear against the corresponding flat face of the hook member and to slide thereon, the object of which is to steady the movements of the sliding bolt when the hinged member is closed.

From the foregoing description it will be apparent that by pressing backwardly upon the stud or button of the sliding bolt the end of the latter may be withdrawn from the point of the hook for enabling the latter to be engaged with any desired object. By means of the particular arrangement and construction of the hinged member and its relation to the hook member and the eccentric arrangement of the barbs or teeth thereon the end of the holding-strap may be instantly engaged with or disengaged from the snap-hook. If so desired, the end of the holding-strap may be passed through and looped around the integrally-formed loop at the rear of the hook member and stitched or riveted in the usual manner. The hook may also be adapted, by a slight change in form, to be engaged with the end of a rope in lieu of the strap described, if desired.

The construction described is very simple and the hook may be manufactured at a very low price, while the efficiency of the device will at once be apparent to those familiar with the art to which this invention appertains.

Changes in the form, proportion, and minor details of construction may be resorted to

without departing from the spirit or sacrificing any of the advantages of this 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 hook member, a hinged member pivotally connected therewith and provided with teeth for engaging a strap or rope, a sliding bolt carried by said hinged member and adapted to engage the hook member, and a spring for actuating said bolt and holding the same normally in engagement with the point of the hook, substantially as specified.

2. A snap hook comprising a hook member, a hinged member pivotally connected therewith and provided with teeth for engaging a strap or rope, and a sliding bolt carried by said hinged member and adapted to engage the hook member, substantially in the manner and for the purpose specified.

3. A snap hook comprising a hook member, a perforated lug formed integrally therewith and arranged in longitudinal alignment with the point of the hook, a hinged member connected with said hook member and provided with teeth for engaging a strap or rope, and a sliding bolt carried by said hinged member and adapted to be projected through said perforated lug and toward the point of the hook, substantially as specified.

4. In a snap hook, the hook member having an integral lug perforated in alignment with the point of the hook, in combination with a hinged member pivotally connected with the hook member and provided with teeth for engaging a strap or rope and formed with a U-shaped socket, a sliding bolt arranged within said socket, a spiral spring interposed between said bolt and the base of the socket, and a stud or button connected with said bolt and operating through a longitudinally elongated slot in the hinged member, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EPHRAIM MANES.

Witnesses:

PERCY H. WILSON,
E. P. SMITH, Jr.