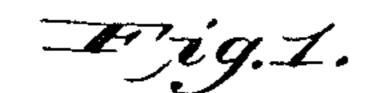
(No Model.)

## E. BRADLEY.

SNAP HOOK.

No. 388,254.

Patented Aug. 21, 1888.



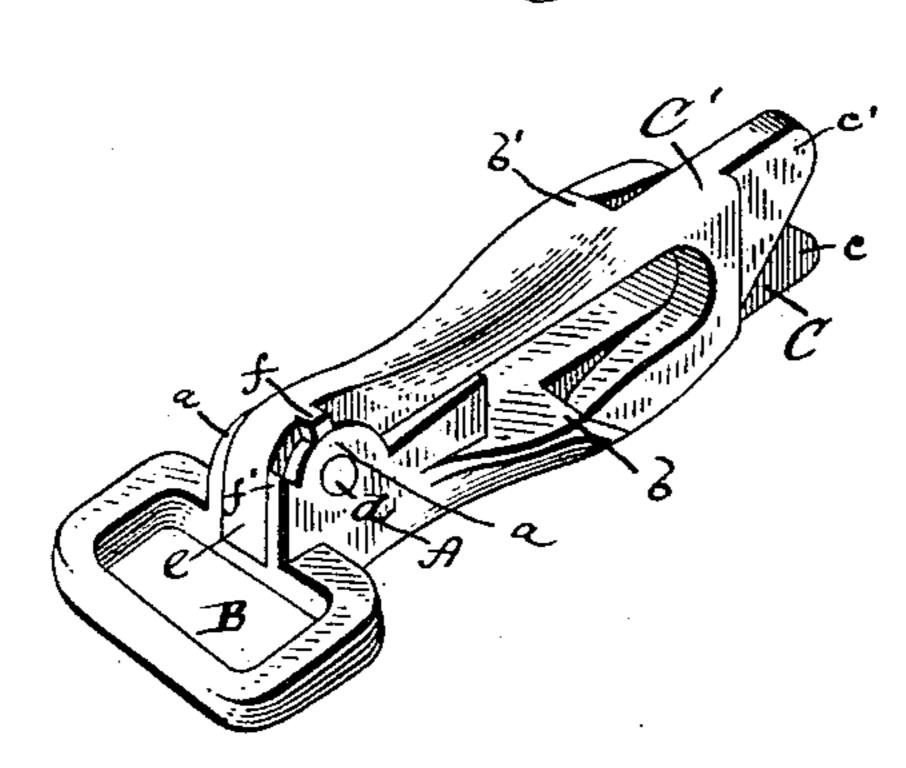


Fig. 2.

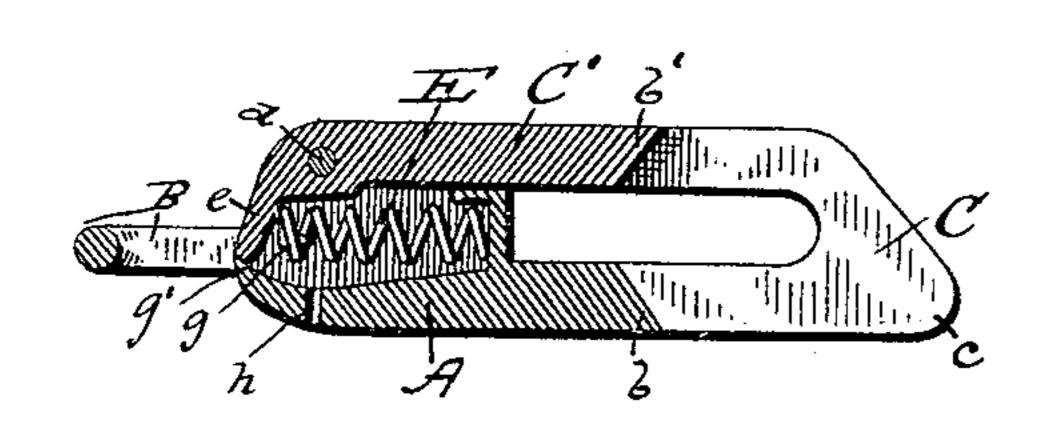
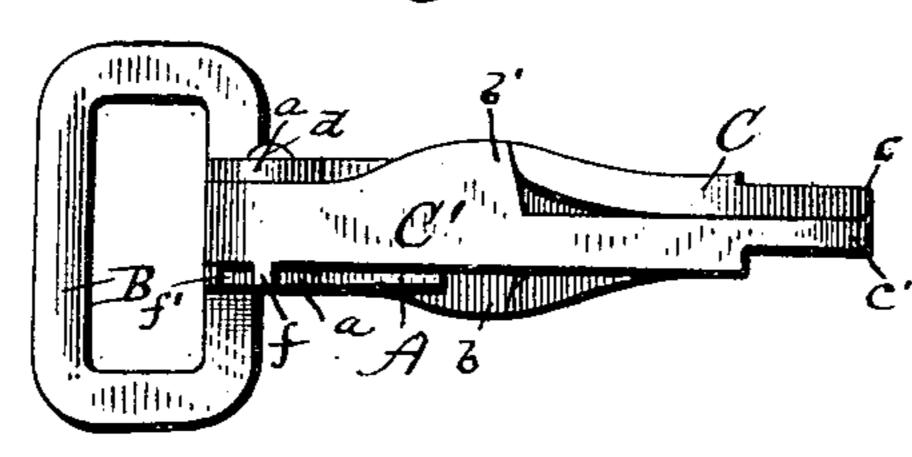


Fig. 3.



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Attorney .

## United States Patent Office.

EVERAL BRADLEY, OF TRUMANSBURG, NEW YORK.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 388,254, dated August 21, 1888.

Application filed June 2, 1883. Serial No. 2:5,819. (No model.)

To all whom it may concern:

Be it known that I, EVERAL BRADLEY, a citizen of the United States, residing at Trumansburg, in the county of Tompkins and 5 State of New York, have invented certain new and useful Improvements in Snap-Hooks, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved snap-hook; Fig. 2, a longitudinal sectional view of the same, and Fig. 3 a

plan view thereof.

This invention is particularly designed as an improvement upon that class of snap-hooks covered by Letters Patent No. 364,572, issued to me on the 7th day of June, 1887; and it has for its objects to simplify and improve the construction generally of such hooks, whereby they are rendered more practical and positive in operation, as will more fully hereinafter appear.

The invention will be fully understood from the following description and annexed drawings; and it consists in certain novel features of construction, that will be specifically pointed

out in the claims appended.

Referring to the drawings by letters, A designates the stationary body portion of the hook, so which is provided with a strap or chain loop, B, at its rear end and a pair of perforated ears, a a, upon its upper side.

Projecting from the forward end of the body A is the stationary hook C and the bev-35 eled shoulder b, this hook C being inclined rearwardly at its forward end, forming a nose, c. Pivoted between the ears a a by means of a transverse pivot-pin, d, is the rear end of the movable hook C', corresponding in size 40 and shape to the hook C, but oppositely inclined at its forward end, forming the nose c', this hook C' being provided with a lateral beveled shoulder, b'. As thus constructed, the beveled free ends of the hooks C C' abut, re-45 spectively, against the correspondingly-beveled shoulders b b', and the contiguous faces of the hoops themselves lie flat against each other. The rear end of the hook C' is provided with a short downwardly-projecting lug 50 or extension, e, against which bears the rear end of a coil-spring, E, this spring being in-

serving to keep the hooks normally closed. The lug e fits between the ears a a, and when the hooks CC' are forced apart the spring E 55 is compressed.

I have described the snap-hook generally as shown in my former patent, and I will now

describe my improvements thereon.

In order to restrict the movement of the 60 hook C', I provide the same near its rear end with a lateral lug, f, which is adapted to contact with a shoulder, f', formed on one of the ears a, when the hooks are forced apart, thereby preventing the hook C' from being thrown 65 too far back when the snap is opened.

A difficulty with my former snap-hook was that the rear end of the spiral spring E would work out under the lower end of the extension e, and by the continual opening and clos- 70 ing of the hook this spring would eventually worm itself entirely out of its cavity. In order to remedy this defect, I bend the rear end of the spring in toward the center of the same, as shown in Fig. 2 at g. I also curve or turn 75 up the portion g' of the body between the ears a a, the degree of curvature of this portion g' being approximately equal to the arc described by the lower end of the extension e when the hooks are separated. By this means 80 the rear end of the spring will be effectually prevented from working out under the lower end of the extension e.

The letter h designates a hole to permit the ready egress of any water or sand that may 85

find its way into the spring-cavity.

It will be observed by reference to Figs. 1 and 3, particularly, that the free ends of the hooks CC' are turned slightly outward in opposite directions, and that the beveled shoul- 90 ders bb' are correspondingly laterally enlarged. The object in thus curving the ends of the hooks and laterally enlarging the shoulders  $b \ b'$  is to facilitate the removal of a ring from the snap hook. All that is necessary to do to 95 remove the ring is to hold the same firmly in one hand and at the same time twist or turn the snap-hook to one side. By this means the hooks are forced apart, and then the ring may be easily slipped out from between the hooks, 100 the curved ends of the hooks permitting this to be done.

end of a coil-spring, E, this spring being in- I also find that by making the recess in serted in a recess or cavity in the body A, and which the forward end of the spring rests

shallower than in my former patent, as shown in Fig. 2, the body portion A will be easier to manufacture, and a new spring can be substituted for the old one without removing the pivot-pin d.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination, with the hook-body A, provided with a loop, B, and forwardly-extending hook C, and beveled shoulders b, of the spring-actuated hook C', provided with a shoulder, b', the free ends of the said hooks C C' being curved outwardly in opposite directions, and the shoulders b b' being correspondingly laterally enlarged, substantially as herein set forth.

2. The combination, with the hook-body A, provided with perforated ears a, a loop, B, and forwardly projecting hook C, and beveled shoulder b, one of the said ears a being provided with a shoulder, f', of a movable hook, C', provided with a lateral beveled shoulder, b', and a downward extension, e', this portion

C' being pivoted between the said perforated 25 ears a a, and also provided with a lateral lug, f, and a spiral spring inserted in a cavity in the body A and adapted to bear against the said extension e and hold the hooks closed, substantially as described.

3. The combination, with the body A, provided with a loop, B, and a hook, C, and a pair of perforated ears, a a, and a slightly-curved portion, g', between these ears, of a movable hook, C', pivoted between the said 35 ears a a and provided with a downward extension, e, and a spiral spring, E, inserted in a cavity in the body A, and adapted to press with its rear end upon the said extension e and hold the hooks normally closed, the rear 40 end of the said spring being turned in toward its center, as at g, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

EVERAL BRADLEY.

Witnesses:

GEORGE COMFORT,
ARTHUR YOUNG.