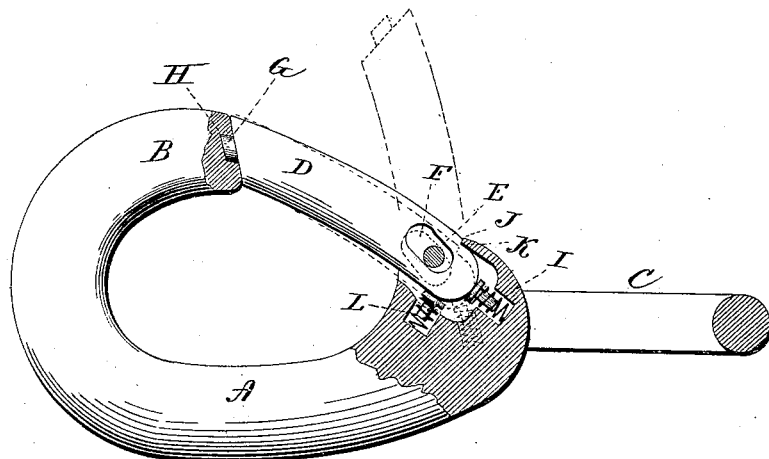


(No Model.)

C. P. BONFOEY.
HOOK.

No. 453,877.

Patented June 9, 1891.



Witnesses:
J. K. Shumway
L. D. Kellogg

Clarence P. Bonfoey
Inventor
By Atty.
Earl Seymour

UNITED STATES PATENT OFFICE.

CLARENCE P. BONFOEY, OF ROCKFALL, CONNECTICUT.

HOOK.

SPECIFICATION forming part of Letters Patent No. 453,877, dated June 9, 1891.

Application filed October 6, 1890. Serial No. 367,178. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE P. BONFOEY, of Rockfall, in the county of Middlesex and State of Connecticut, have invented a new Improvement in Self-Mousing Hooks; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents a sectional side view of a hook embodying the invention.

This invention relates to an improvement in that class of self-mousing hooks in which the tongue is arranged to turn outward from the hook in opening, and in which the end of the tongue interlocks with the nose of the hook to engage it in its closed position, and so that in opening the tongue longitudinal movement must be given it to take it out of such engagement with the nose of the hook, the object of the invention being to substantially lock the tongue in the closed position to prevent the longitudinal movement being accidentally produced; and the invention consists in the construction as hereinafter described, and particularly recited in the claim.

A represents the body of the hook, terminating at one end in a nose B, and at the other end provided with an eye or loop C or other device by which the hook may be attached.

D represents the tongue, which is hung in the body of the hook upon a pivot E, the tongue being constructed with a diagonal slot F, through which the pivot extends, so that a longitudinal movement of the tongue on the pivot may be permitted. The opposite end of the tongue is constructed with a tenon G, which is adapted to enter a corresponding recess H in the end of the nose B, and in the body at the rear of the tongue a spring I is introduced, the tendency of which is to force the tongue toward the nose of the hook and yieldingly hold the tongue in engagement with the nose of the hook when in the closed position. From this engagement it is released by giving to the tongue a rear movement against the pressure of the spring I to an extent sufficient to take the tongue out of engagement with the nose, and so that when thus disengaged the tongue may

turn outward upon its pivot. Thus far the construction is a common and well-known hook, and is known as the "Henshaw Patent," of June 12, 1860. In this construction the spring I is the only means by which the tongue is held forward in engagement with the nose of the hook, a longitudinal movement of the tongue only being necessary to produce such disengagement. From this fact the tongue is liable to be accidentally opened. To overcome this difficulty I enlarge the slot F to a width somewhat greater than the diameter of the stud E, and construct the tongue with a shoulder J upon its outside near the pivot, which, when the tongue is in the closed position, may abut against a corresponding shoulder K on the body of the hook, and in the body beneath the tongue I arrange a spring L to bear upon the under side of the tongue, the tendency of which is to force the pivot end of the tongue up to bring the shoulder J of the tongue into engagement with the shoulder K of the body, and when the shoulders J and K are thus engaged longitudinal movement of the tongue to take it out of engagement with the nose of the hook is impossible; but upon pressing the pivot end of the tongue downward against the spring L, as indicated in broken lines, the shoulder J is brought below the shoulder K, so as to escape therefrom, and then the requisite longitudinal movement may be imparted to the tongue so as to open it. Then when the tongue is again closed and brought into engagement with the nose of the hook the spring L will react and again bring the shoulder J into engagement with the shoulder K to lock the tongue in the closed position.

A single spring may answer the purpose of the two springs I and L, and, as indicated in broken lines, the spring being arranged so as to apply its power longitudinally to force the tongue into engagement with the nose of the hook, and also to force the tongue upward to bring the shoulder J into engagement with the shoulder K.

I do not wish to be understood as claiming, broadly, a snap-hook having the tongue arranged for longitudinal movement previous to its opening movement or after its closing movement, which longitudinal movement adapts it to disengage or engage the nose of

the hook as a lock, as such construction, broadly considered, I am aware is not new.

I claim—

5 A snap-hook composed of the body A, terminating at one end in the nose B and at the other end in means for attaching the hook, combined with a tongue D, hung upon a stationary pivot E in the body, the body recessed around and in rear of the pivot to form a
10 chamber to receive the pivot end of the tongue and the spring, the tongue constructed with a diagonal slot F, greater in width than the diameter of the pivot and through which the pivot passes, the tongue also constructed
15 with a shoulder J upon its outer side at the pivot end, and the body constructed with the shoulder K, adapted to engage the shoulder J of the tongue when the tongue is in the closed position, with a spring arranged

below the tongue in rear of the pivot, the 20 tongue being adapted to swing outward in opening against the pressure of the said spring, the tendency of the spring in rear of the pivot being to turn the tongue inward, and the free end of the tongue and the nose of the hook, 25 the one constructed with a projection and the other with a corresponding recess upon their adjacent faces, the spring at the rear of the hook being adapted to force and yieldingly hold the tongue and hook in engagement, sub- 30 stantially as described.

In witness whereof I have signed this specification in the presence of two subscribing witnesses.

CLARENCE P. BONFOEY.

Witnesses:

ARTHUR E. COE,
ELDON B. BIRDSEY.