

No. 656,938.

Patented Aug. 28, 1900.

A. B. CAMERON.

HARNESS SNAP.

(Application filed May 23, 1899.)

(No Model.)

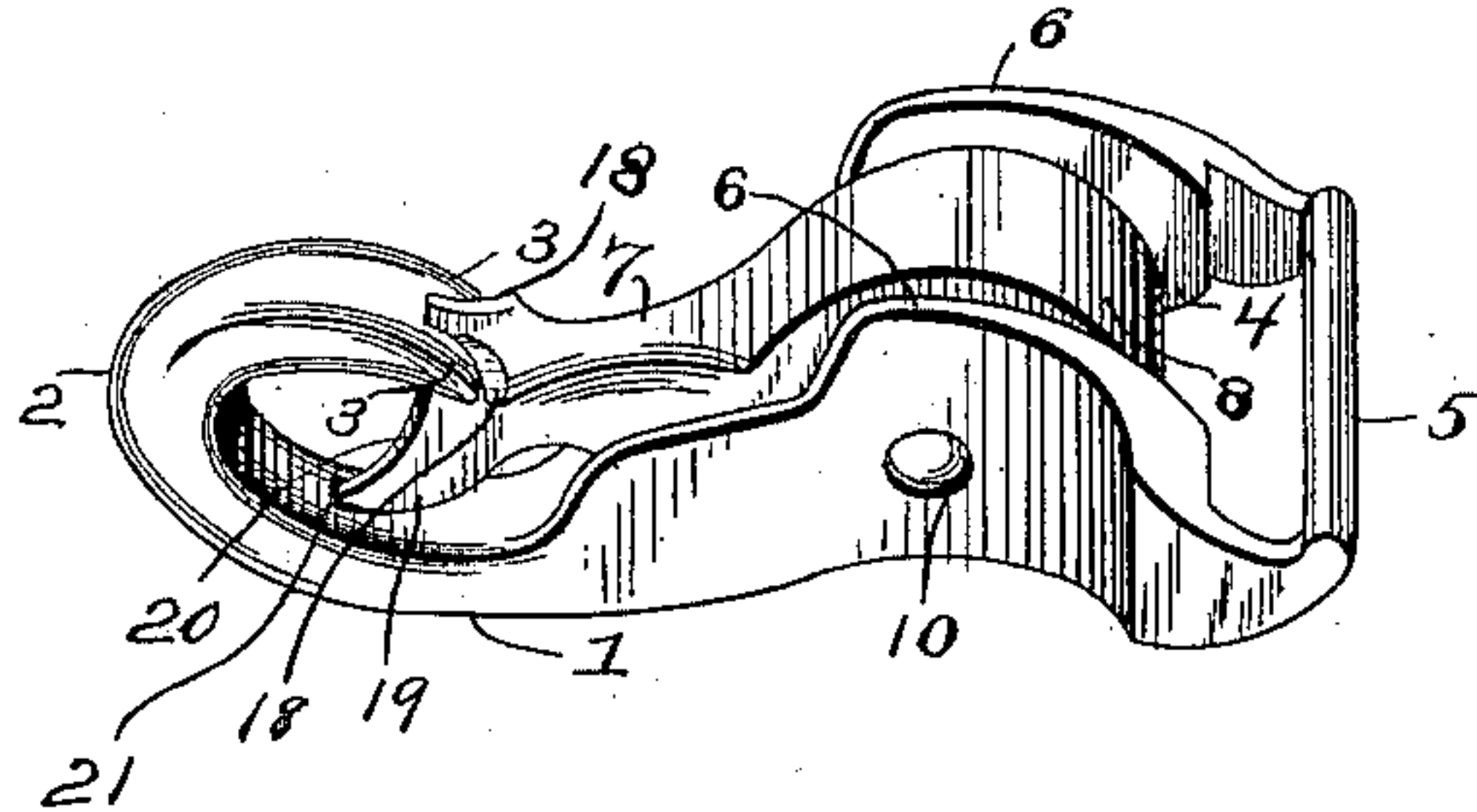


Fig. 1.

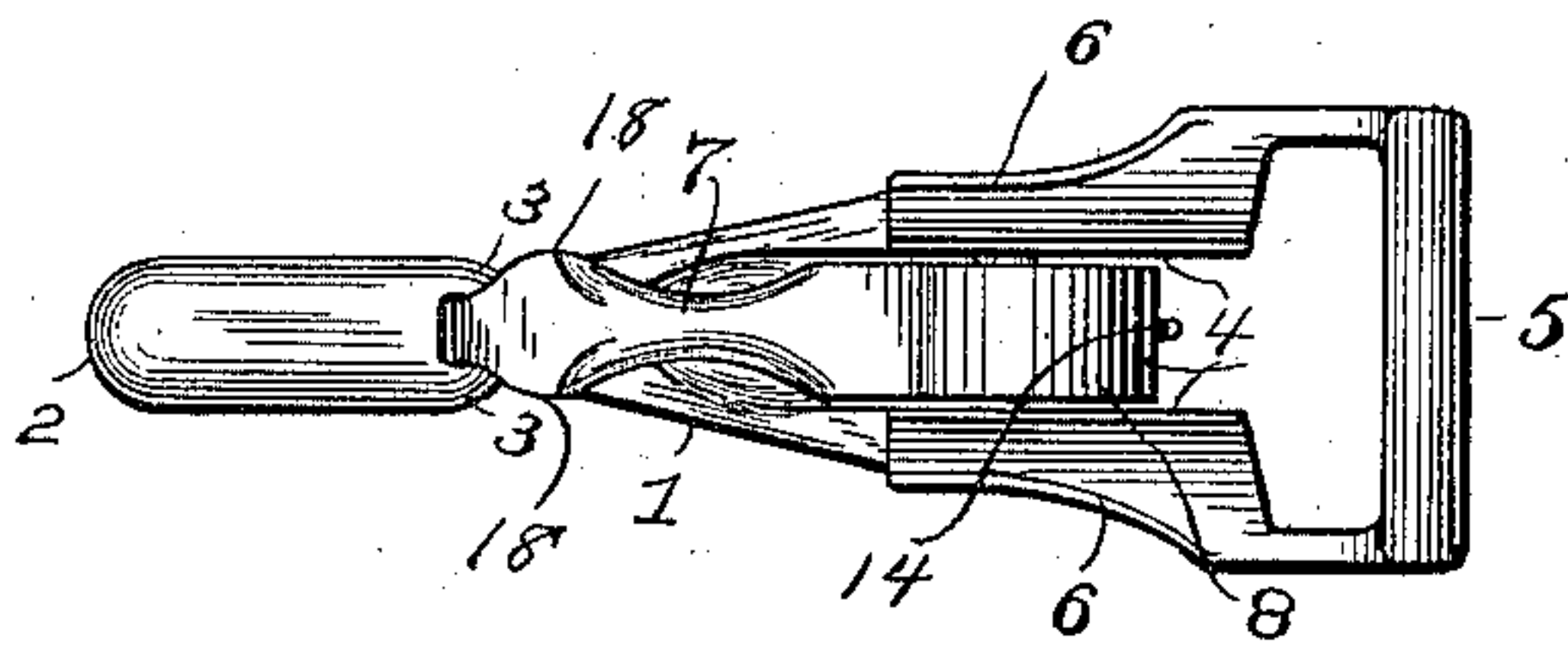


Fig. 2.

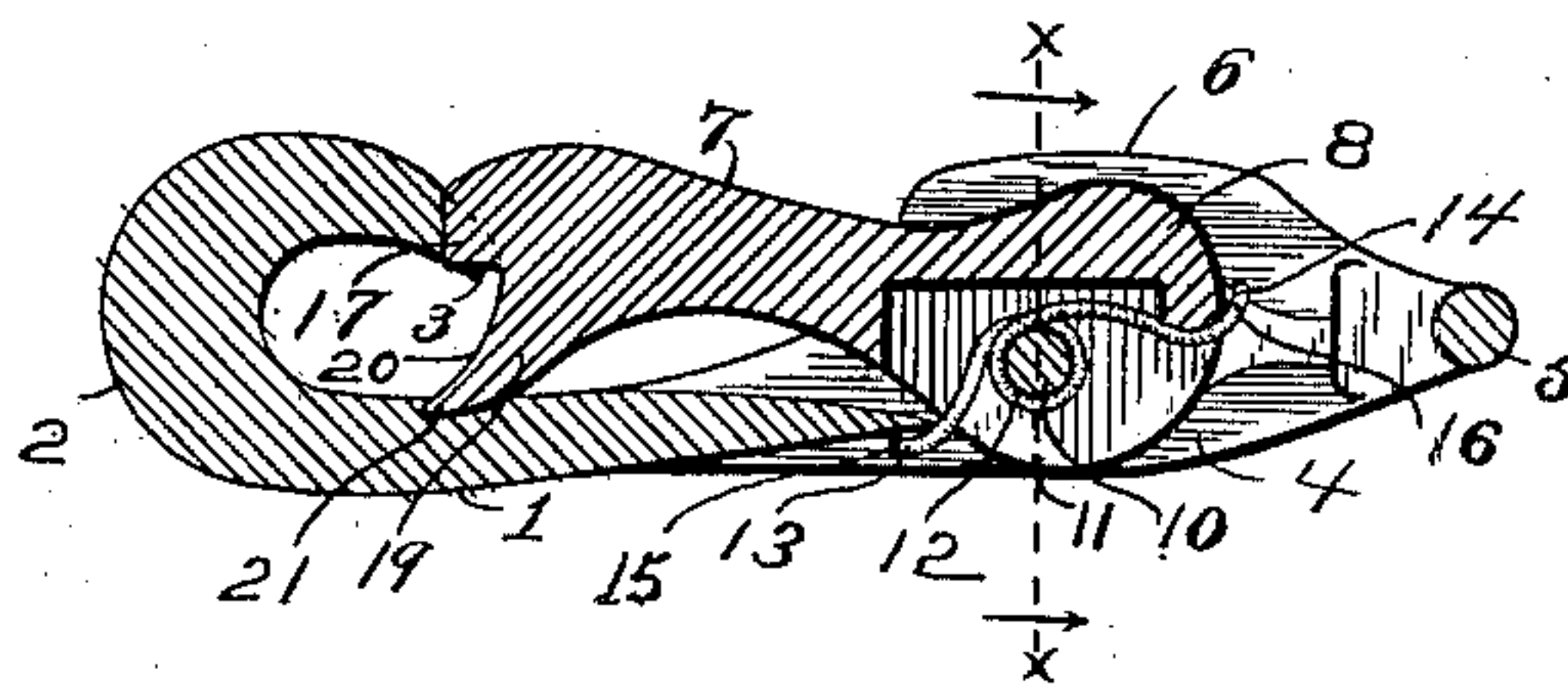


Fig. 3.

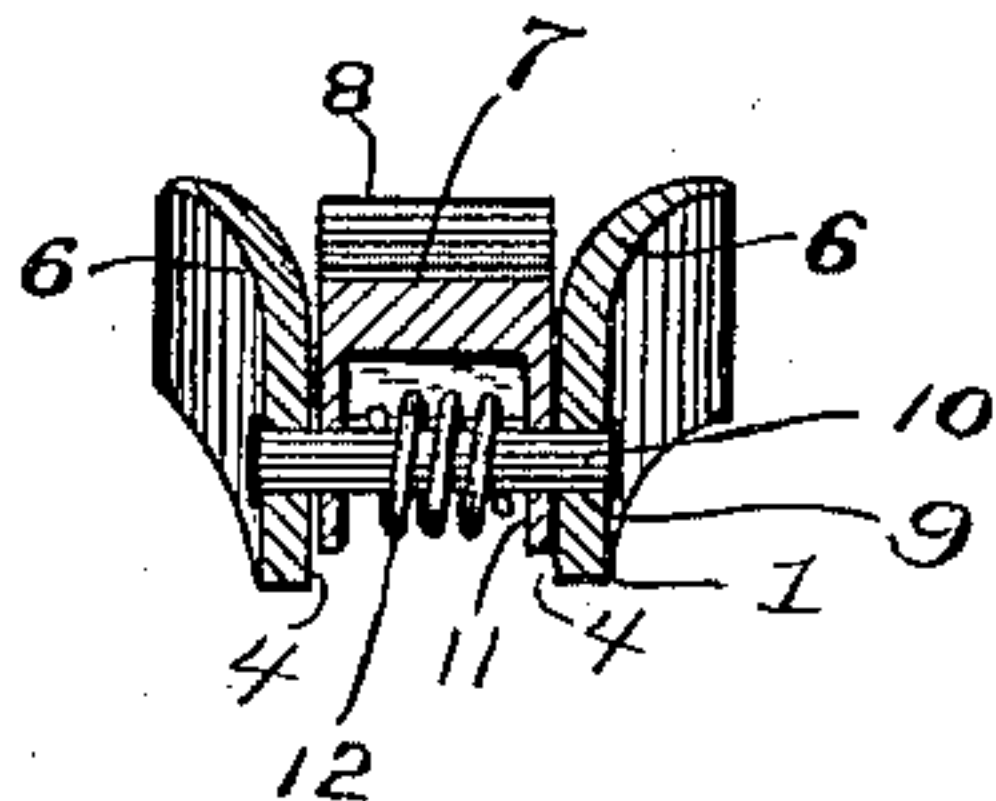


Fig. 4.

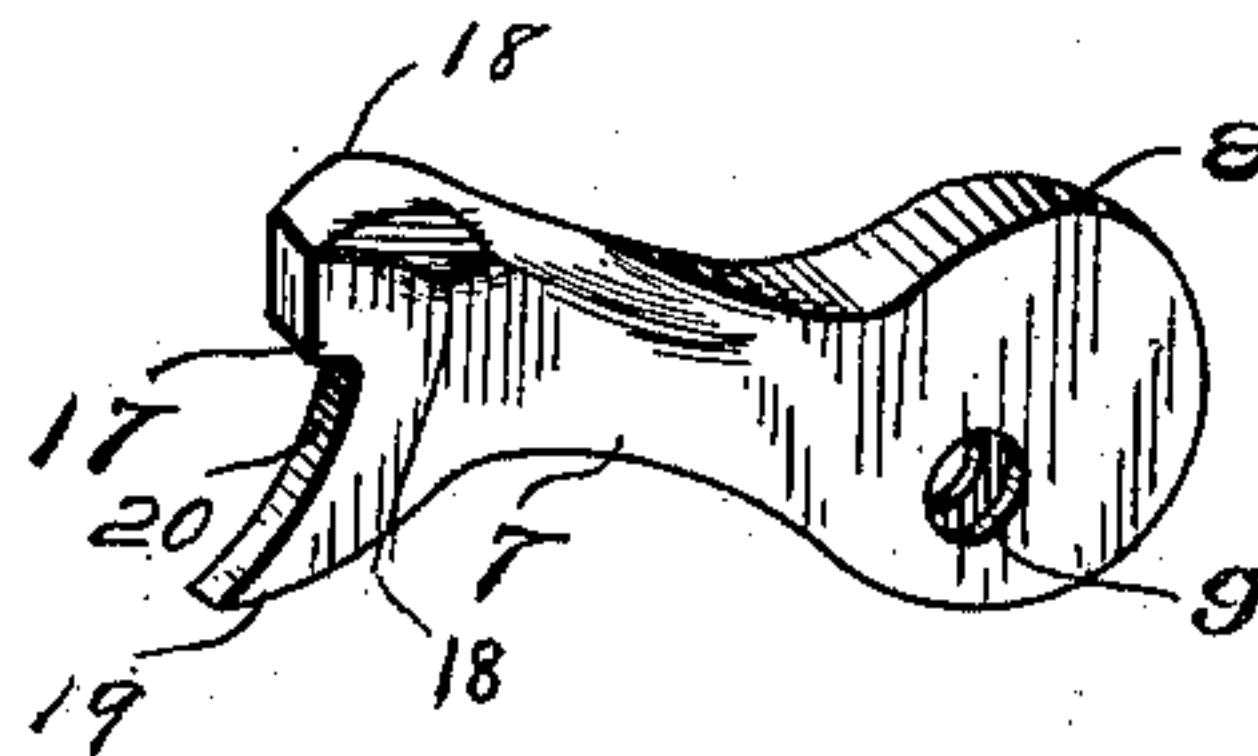


Fig. 5.

Witnesses

Frank Campbell

[Signature]

Addison B. Cameron, Inventor.
By His Attorneys,

CA Snow & Co.

UNITED STATES PATENT OFFICE.

ADDISON B. CAMERON, OF CAMERON, MONTANA.

HARNESS-SNAP.

SPECIFICATION forming part of Letters Patent No. 656,938, dated August 28, 1900.

Application filed May 23, 1899. Serial No. 717,973. (No model.)

To all whom it may concern:

Be it known that I, ADDISON B. CAMERON, a citizen of the United States, residing at Cameron, in the county of Madison and State of Montana, have invented a new and useful Safety Harness-Snap, of which the following is a specification.

This invention relates to snap-hooks, and has for its object to provide certain new and useful improvements whereby the tongue is effectively braced and prevented from being accidentally opened by the turning or moving of a ring or other device to which the bill of the hook may be applied. It is further more designed to provide improved means for facilitating the operation of the tongue, so that the latter may be readily opened by a gloved hand, and also to protect the free end of the bill or hook, so as to prevent the same from catching in the harness or the mane and tail of an animal.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the appended claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a snap-hook constructed in accordance with the present invention. Fig. 2 is a plan view of the device. Fig. 3 is longitudinal sectional view thereof. Fig. 4 is a transverse sectional view taken on the line *xx* of Fig. 3. Fig. 5 is a detail perspective view of the tongue.

Corresponding parts in the several figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 designates the substantially-straight shank of the hook, which is provided at its forward end with the bill 2, the extremity of the latter being bifurcated longitudinally, so as to provide the opposite shoulders 3. The rear end of the shank is preferably somewhat wider than the forward end thereof and is provided with a longitudinal bifurcation or slot

4, which is enlarged laterally at its rear end, and a transverse bar 5, connected to opposite sides of the slot or bifurcation, closes the latter and forms a loop for engagement with a strap or other device.

Located longitudinally at opposite sides of the slot 4 are the opposite flanges 6, which flare laterally outward in opposite directions, as best indicated in Fig. 4 of the drawings.

Mounted longitudinally within the slot 4 is the tongue 7, having its rear end enlarged and rounded, so as to form an operating thumb-piece 8. The latter is received within the slot, while the forward free end extends longitudinally beyond the slot, so as to cooperate with the bill 2. The operating thumb-piece is provided with a transverse perforation 9, which is located inward from the rear of the rounded portion and also adjacent to the lower side thereof and receives a pivot-pin 10, which extends transversely through the opposite flanges 6 and pivotally mounts the tongue. It will thus be apparent that the enlarged rounded portion of the tongue is pivoted eccentrically, so as to form a cam-operating thumb-piece, which has an easy rolling movement. As clearly indicated in Fig. 4 of the drawings, it will be seen that the outer edge of this thumb-piece lies flush with or within the plane of the outer edges of the flanges 6, so that said thumb-piece is protected against accidental engagement with the parts of a harness or other object, and thereby accidental opening of the tongue is precluded. Furthermore, it will be seen that the oppositely-flaring flanges permit of the thumb or finger being readily engaged with the cam-operating piece, and by reason of the gradually-rolling movement thereof the thumb or finger is received into the widened end of the slot 4, which facilitates the opening of the tongue and prevents binding of the thumb or finger upon the opposite flanges. This operation of the thumb-piece permits of the tongue being opened by a gloved hand, which would bind upon the flanges if the movement of the thumb-piece were straight inwardly between the flanges instead of rolling outward into the enlargement of the slot.

To hold the free end of the tongue normally in contact with the bill 2, the thumb-piece is provided with a recess or socket 11,

which opens at the inner side of the tongue, and located within the recess is a coiled spring 12, which encircles the pivot-pin 10 and is provided with the respective forwardly 5 and rearwardly extending arms 13 and 14. The free end of the spring-arm 13 is bent into a hook 15, which engages the outer side of the shank immediately in advance of the forward end of the slot 4, and the free extremity of 10 the arm 14 is bent into a hook 16 for engagement with the rear end of the operating thumb-piece. It will thus be seen that the opposite spring-arms engage the outer side of the shank and the inner side of the front 15 piece, respectively, and at opposite sides of the pivot thereof, so as to normally force the free end of the tongue inward toward the shank and in engagement with the bill.

At the outer side of the free end of the 20 tongue there is provided a forwardly-extending lug 17, which is normally received between the opposite shoulders of the bill, so as to brace the tongue against a lateral strain. Extending outwardly in opposite directions 25 from the outer end of the lug 17 are the shoulders 18, which overhang the respective shoulders 3, so as to cover the latter and prevent them from catching in parts of a harness or in the mane or tail of an animal. The 30 inner extremity of the free end of the tongue is extended into a nose 19, which projects in advance of the lug 17, and the outer edge

thereof is rounded or concaved, as indicated at 20 from the inner side of the lug 17 to the forward extremity of the nose, and the latter 35 is normally seated in a notch 21, formed in the inner side of the shank. Thus the nose is braced against lateral movement and strain, and by reason of the concaved shape of the nose and the fact that its extremity ex- 40 tends within the exterior face of the shank said tongue is prevented from being accidentally opened by the movement or twisting of a ring or other object to which the hook may be applied. 45

What is claimed is—

A snap-hook, comprising a shank, having a bill, and a longitudinal slot, a tongue co-operating with the bill, pivotally mounted within the slot, and provided with a socket or 50 recess formed in its inner side, and a coiled spring housed within the socket or recess and encircling the pivot of the tongue, and provided with forwardly and rearwardly extending arms, the forward arm engaging the outer 55 side of the shank immediately in advance of the slot, and the rear arm engaging the tongue at the rear side of the socket and said arms also extending in opposite directions from the pivot of the tongue.

ADDISON B. CAMERON.

Witnesses:

ELANSON U. DAVIS,
AMOS STOREY.