

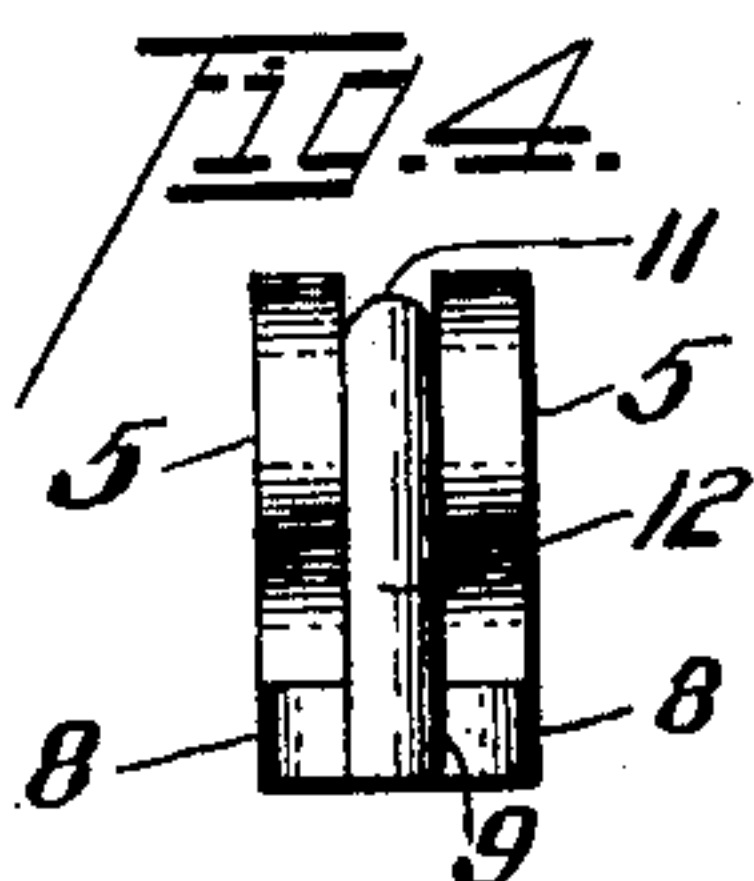
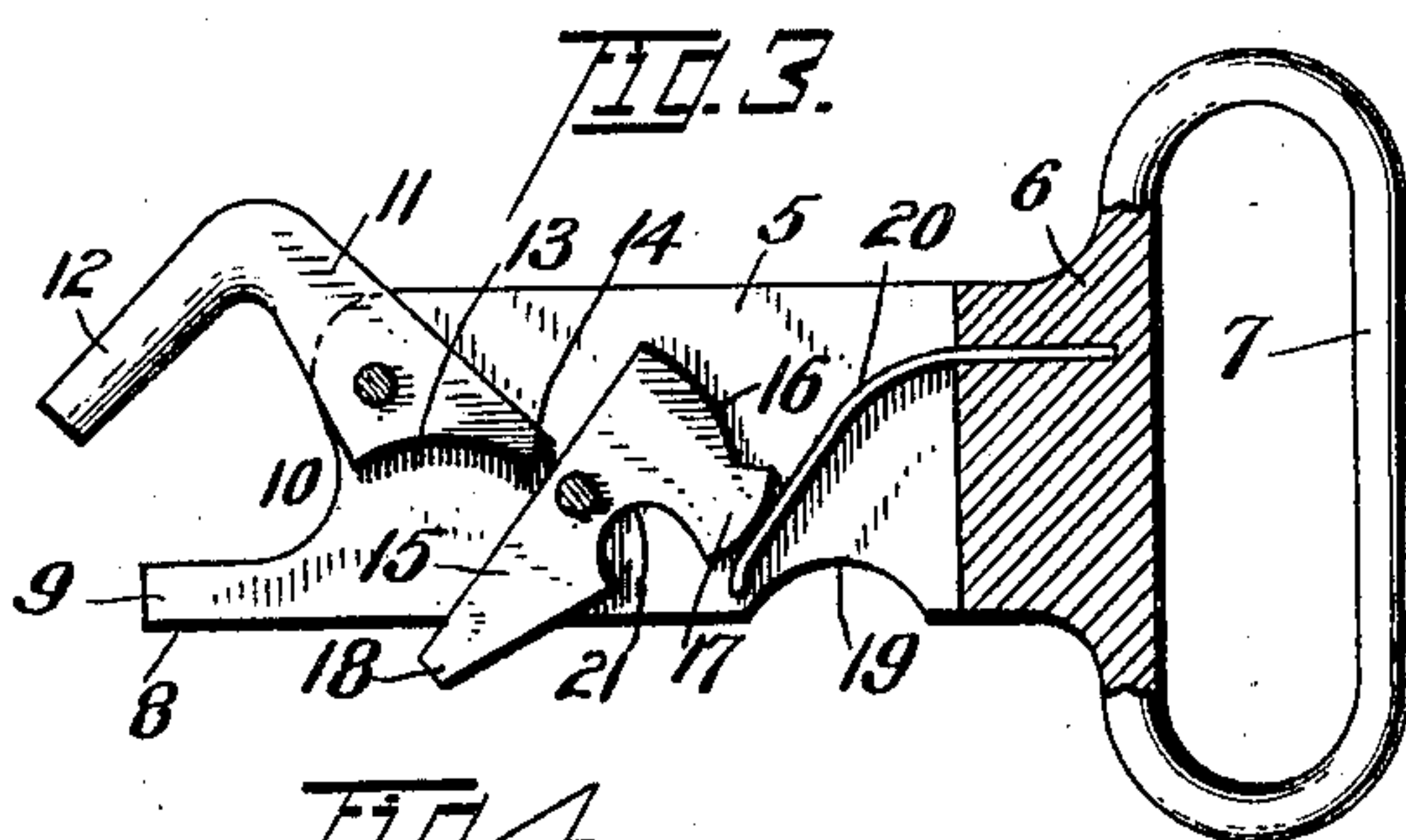
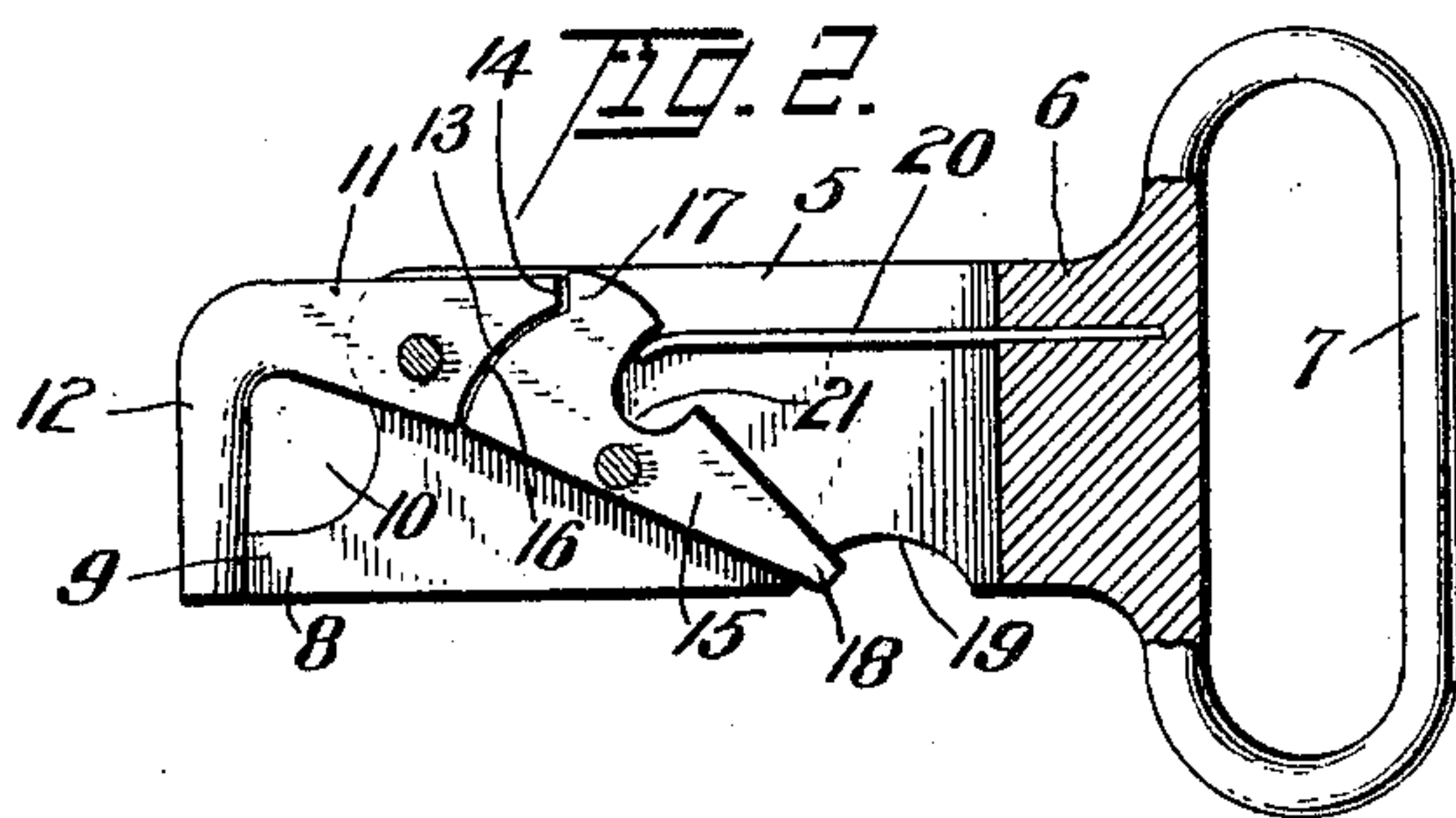
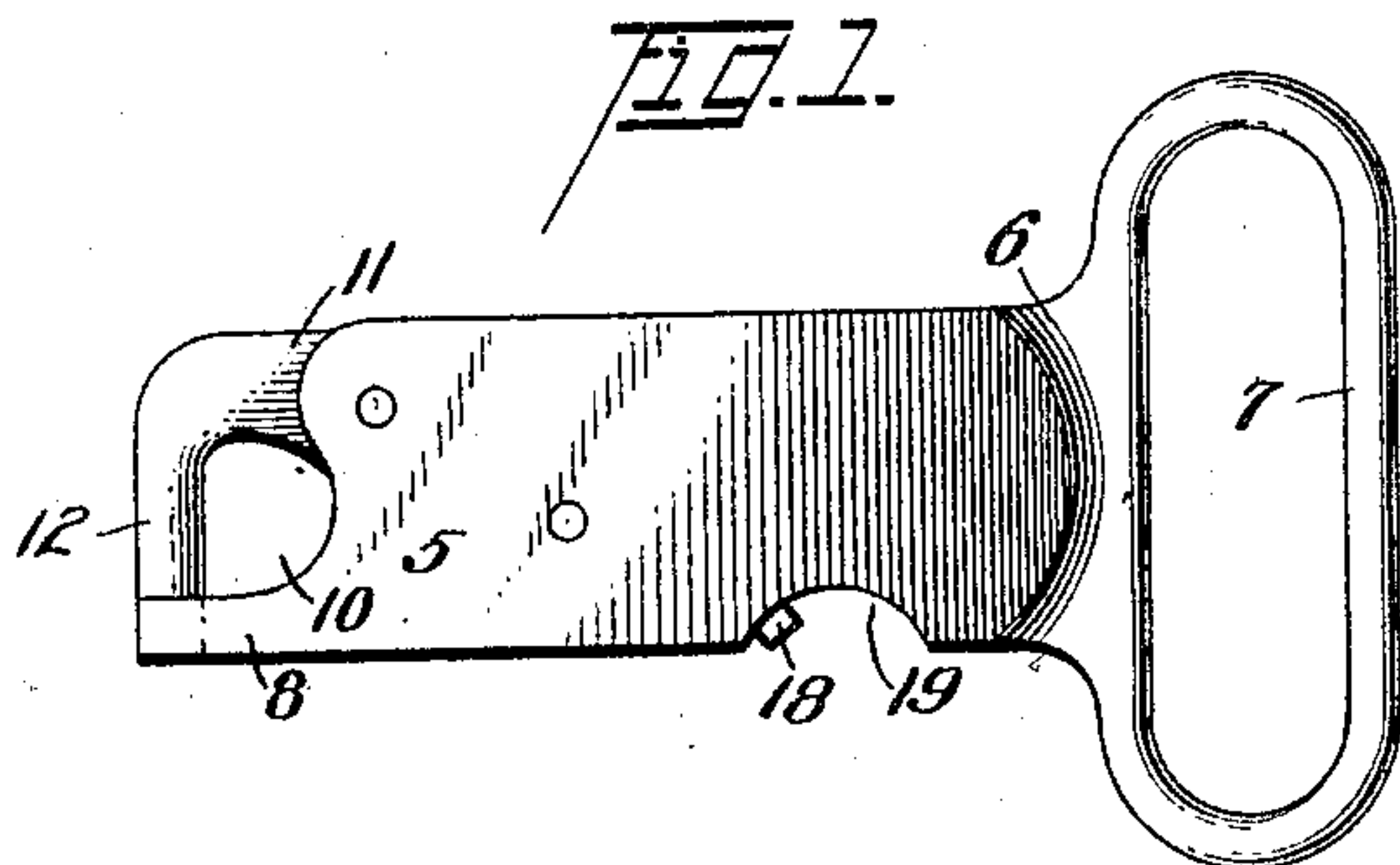
No. 804,175.

PATENTED NOV. 7, 1905.

F. SHERKEL, JR.

SAFETY HOOK.

APPLICATION FILED JAN. 10, 1905.



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FRANK SHERKEL, JR., OF HOUTZDALE, PENNSYLVANIA.

SAFETY-HOOK.

No. 804,175.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed January 10, 1905. Serial No. 240,446.

To all whom it may concern:

Be it known that I, FRANK SHERKEL, Jr., a citizen of the United States, residing at Houtzdale, in the county of Clearfield and State of Pennsylvania, have invented a new and useful Safety-Hook, of which the following is a specification.

The present invention relates to improvements in lock or snap hooks and is adapted for successful use for a variety of purposes.

The principal object is to provide a simple device of a novel character that will constitute an efficient locking connection between two elements and yet will permit the ready disconnection of said elements even when the same are under strain.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a view in side elevation of the hook. Fig. 2 is a longitudinal sectional view therethrough. Fig. 3 is a similar view, but showing the hook unlocked; and Fig. 4 is an end elevation of the structure.

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

In the embodiment illustrated a body is employed comprising spaced longitudinally-disposed members 5, connected at one end, as shown at 6, and having an elongated eye 7, though the formation and arrangement of this eye is not important and may be varied to suit the different requirements of use. The spaced members 5 are provided at their free ends and at one corner of the body with longitudinally-projecting portions 8, constituting sections of a tongue, said sections forming between them a socket 9. The projecting tongue, together with the adjacent ends of the side members 5 of the body, form an article-receiving seat 10, which opens at the end of said body.

Pivoted to and between the corners of the side members 5, opposite the tongue-sections 8, is a retaining-hook 11, the main portion of which extends longitudinally of the body and has at its free end an offset bill 12, located transversely of said body, extending across the seat 10 and having its free terminal engaging in the socket 9 or, in other words, between the sections 8. The inner portion of the hook has a curved edge 13 and an abutment-shoulder 14. A locking-dog 15 is pivoted between its ends to and between the side members 5 of the body, this dog having a

curved edge 16 coacting with the curved edge 13 of the hook and being, furthermore, provided with an outstanding shoulder 17, coacting with the shoulder 14 of said hook. The other end 18 of the dog is normally located in a recessed portion 19 of the body and constitutes means for actuating said dog. A spring 20 has one end seated in the connecting portion 6 of the body, while its other end is located in a recess 21 in the dog, said spring bearing upwardly against the dog, holding it in operative position. It will be seen by reference to Fig. 2 that when the hook extends across the seat 10 of the body said seat is entirely closed and said hook is locked against movement by the dog. If, therefore, a ring or other element is located in said seat, it will be securely retained against detachment from the device. If, however, it is desired to release such ring, it is only necessary to swing the dog 15, whereupon the portions 16 and 17 will move out of the path of movement of the inner end of said hook, and the hook may be swung freely in an outward direction, as shown in Fig. 3, thereby opening the seat 10 and permitting the escape of the ring or other device contained therein.

The following advantages secured by the structure may be set forth. In the first place it will be evident that a novel structure of a simple nature is obtained for connecting two elements and that this structure constitutes an efficient lock which is not liable to accidental operation, as the operating end 18 of the dog is practically within the body of the device. The two elements or parts connected by the structure may, however, be readily released, even when the same are under strain. It is believed that this advantage will be appreciated, for with the ordinary snap-hook now in general use the stationary rearwardly-turned hook often prevents the release of a ring or other device held thereby when there is strain applied to the parts. For instance, where when an animal falls it is often necessary to remove the harness and as the hooks cannot be disengaged because of the strain thereupon it therefore sometimes becomes necessary to cut the straps. It will be apparent that this would not be necessary in the case of the present devices, as the hooks will swing freely outwardly when released. The invention, however, is not limited to use on harness, for it will be apparent that it may be employed for many purposes.

From the foregoing it is thought that the

construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

10 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a safety-hook, the combination with a body having means at one end for attachment
15 to a strap or like device and a tongue projecting beyond its other end, forming with said end a seat, of an outwardly-swinging retaining-hook pivoted upon the body and having an offset substantially straight bill that
20 extends transversely of the body across the seat and at substantially right angles to the longitudinal axis of the body, said bill having its free end coacting with the tongue, and means carried by the body for normally holding the hook with its bill across the seat, said
25 means releasing the hook to permit the outward swinging movement of the bill out of line with the seat.

2. In a safety-hook, the combination with a
30 body having means at one end for attachment to a strap or like device, and a tongue projecting beyond its other end, forming with said end a seat, of an outwardly-swinging retaining-hook pivoted upon the body in rear of the
35 tongue, said hook projecting beyond the body in spaced relation to the tongue and having an offset bill that extends across the seat and coacts with the free end of the tongue, and means movably mounted on the body and en-
40 gaging the tongue to normally hold the bill across the seat.

3. In a safety-hook, the combination with a body having an eye at one end and a tongue projecting longitudinally from one of the cor-
45 ners at the opposite end, of an outwardly-swinging retaining-hook pivoted between its ends to the other corner at said end of the body and in rear of the free end of the tongue, said hook having an offset bill that extends
50 across the seat and coacts with the free end of the tongue, and means movably mounted

on the body and engaging the rear end of the tongue in rear of its pivot to normally hold the bill across the seat.

4. In a safety-hook, the combination with a
55 body having means at one end for the attachment of a strap or similar device and comprising spaced members, said members having at the opposite end and at one corner tongue-sections projecting longitudinally be-
60 yond the body, of an outwardly-swinging retaining-hook pivoted to and between the members of the body at the other corner thereof in rear of the tongue-sections, said hook having a longitudinally-disposed portion provided
65 with an offset bill the free end of which fits between the tongue-sections, a dog pivoted between its ends to and between the body members, one end of said dog engaging the inner portion of the hook to prevent the out-
70 ward-swinging movement of the bill thereof, the other end of said dog constituting an actuating device, and a spring secured to the body and located between the members there-
75 of, said spring engaging the dog to normally hold it in operative position with respect to the hook.

5. In a safety-hook, the combination with a body comprising spaced members having a tongue projecting longitudinally from one
80 end of the same, of a hook pivoted between its ends to and between the body members, said hook projecting from the end of the body having the tongue and being provided with an offset bill that coacts with the tongue, and
85 a locking-dog pivoted between its ends to and between the body members, one end of said dog being normally located in the path of movement of the rear end of the hook in rear of its pivot and thereby preventing the out-
90 ward-swinging movement of the offset bill of said hook away from the tongue, the other end of said dog constituting an actuating device for the same.

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

FRANK SHERKEL, JR.

Witnesses:

ESSIE FILLIAN,
JOHN W. DUNCAN.