

G. H. STEELE.

SNAP HOOK.

APPLICATION FILED FEB. 21, 1903.

NO MODEL.

Fig. 1.

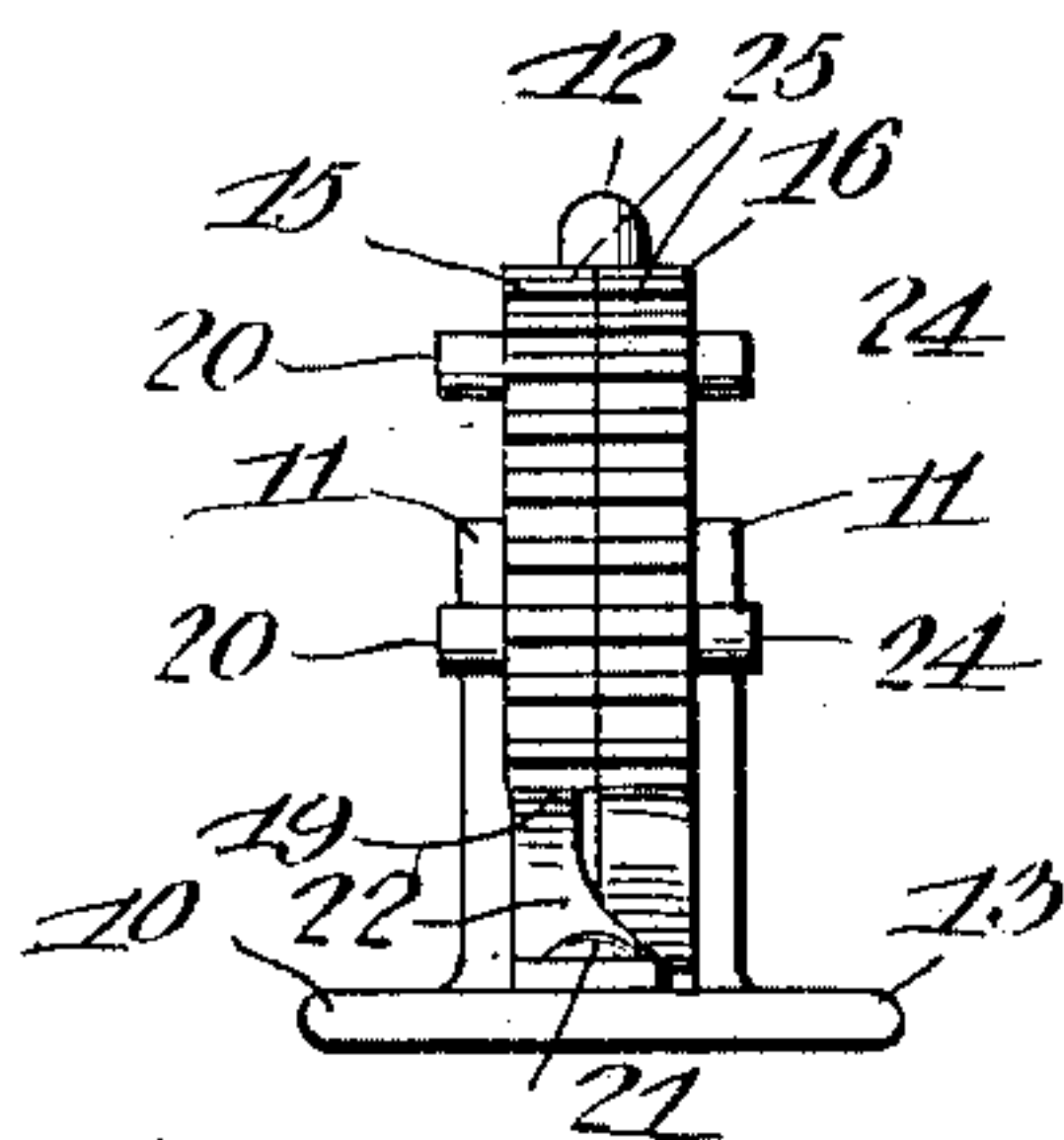
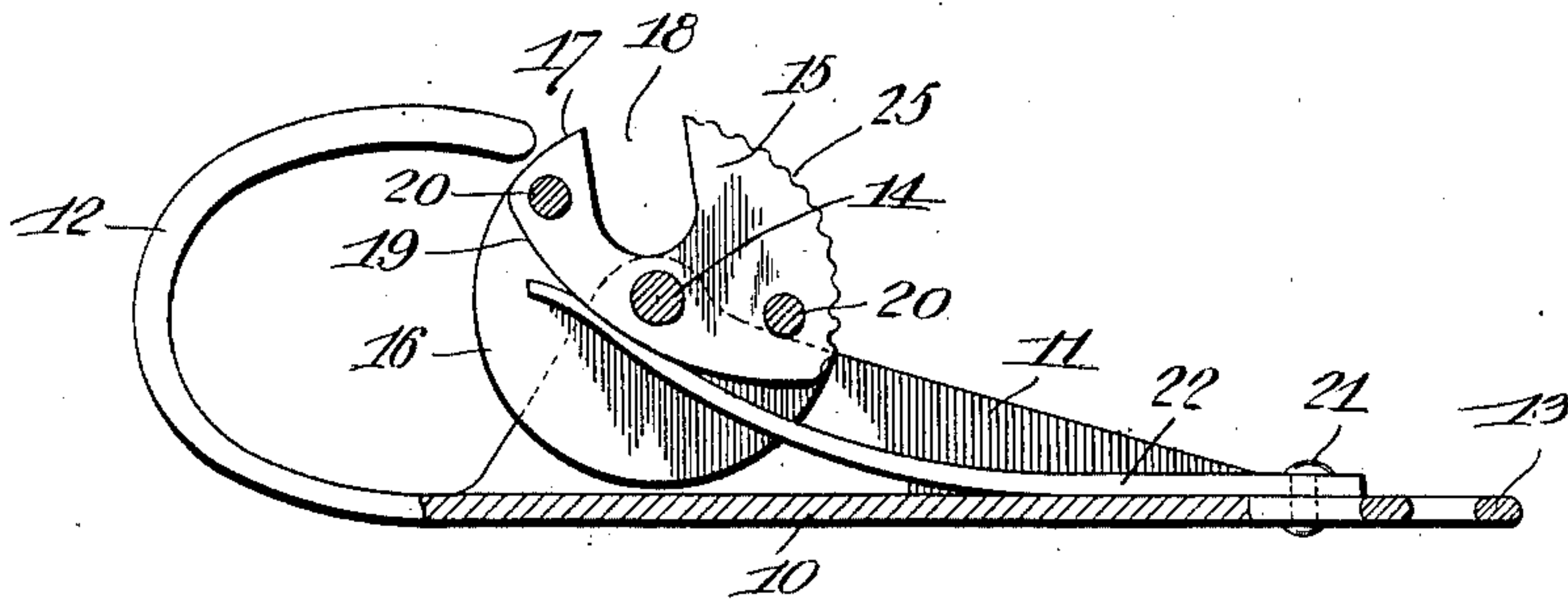


Fig. 2.

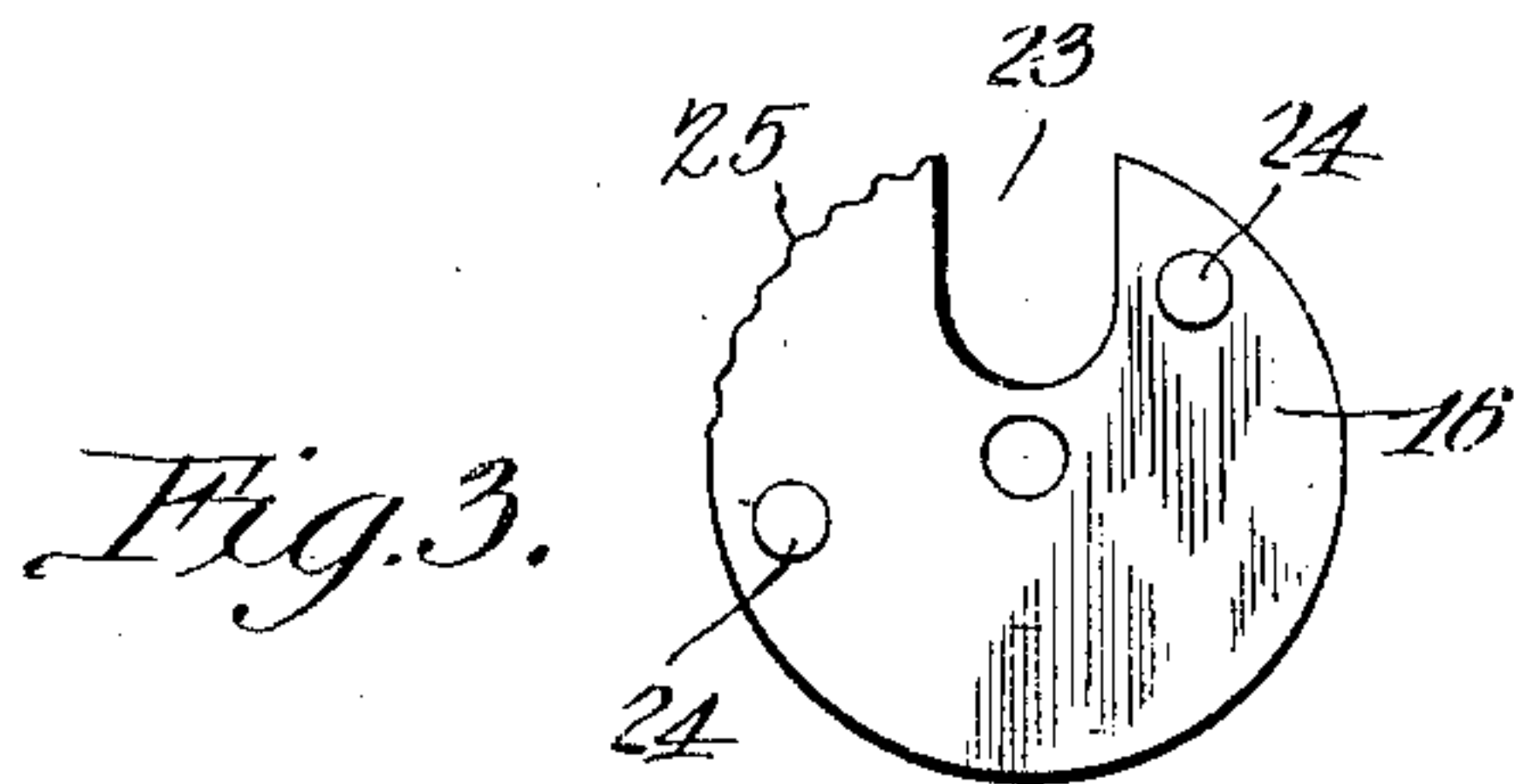


Fig. 3.

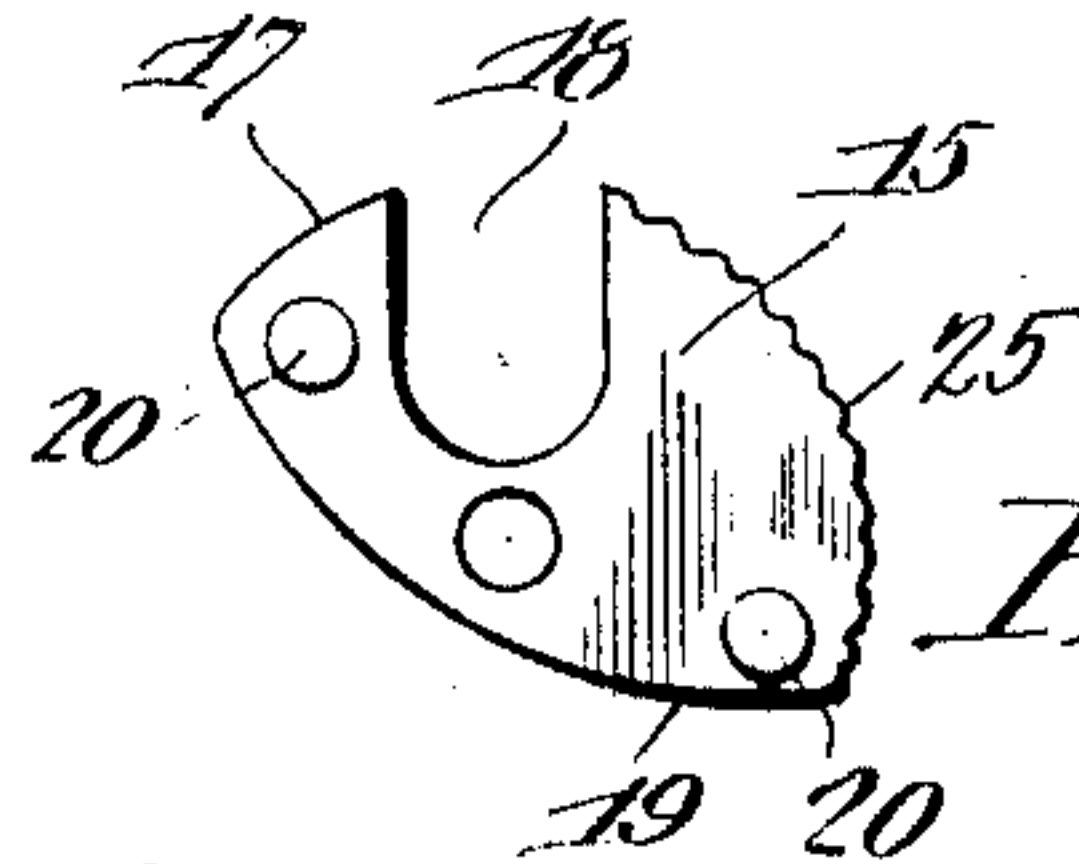


Fig. 4.

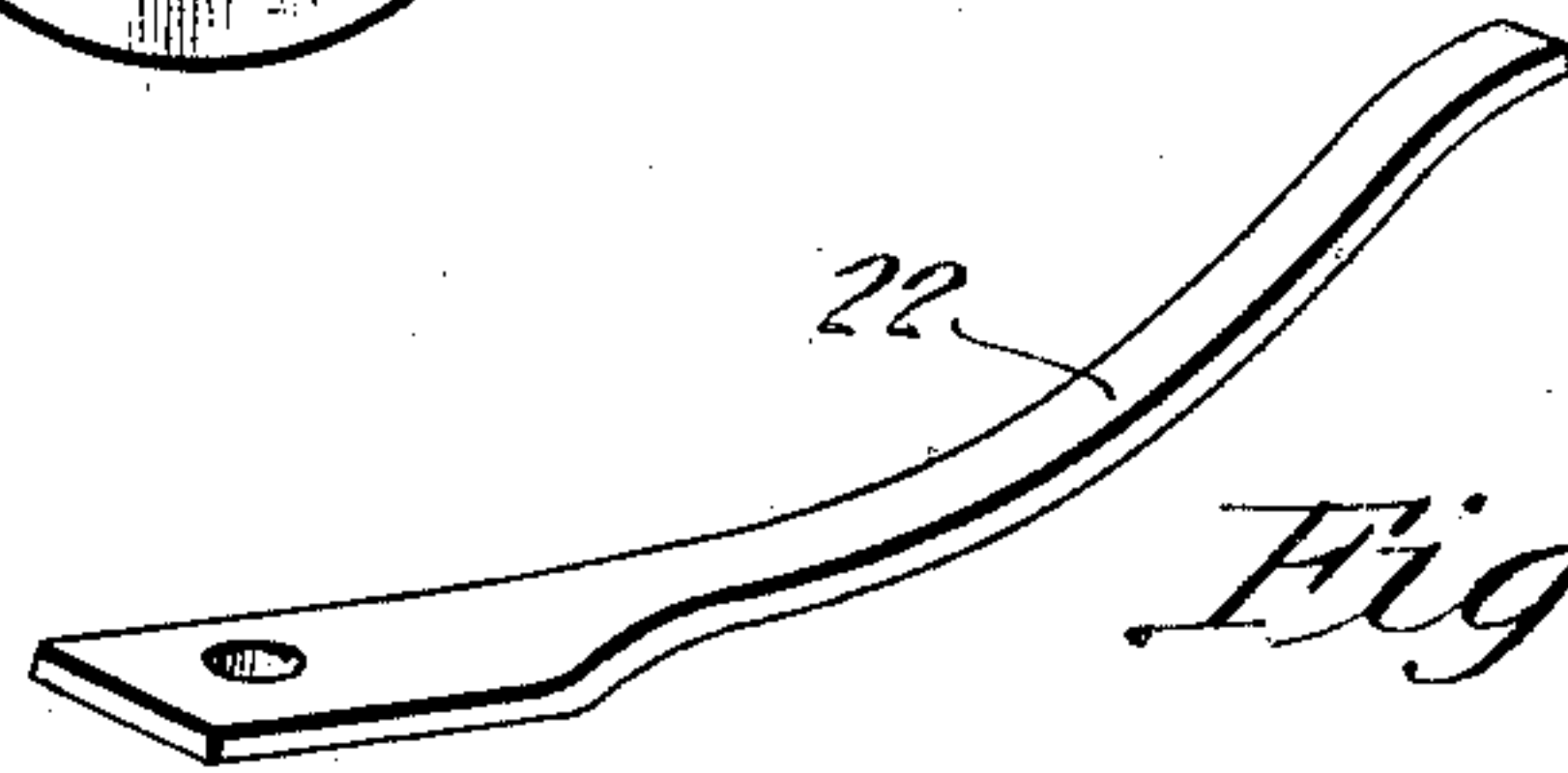


Fig. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE H. STEELE, OF SPEARVILLE, KANSAS.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 737,790, dated September 1, 1903.

Application filed February 21, 1903. Serial No. 144,510. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. STEELE, a citizen of the United States, residing at Spearville, in the county of Ford and State of Kansas, have invented a new and useful Snap-Hook, of which the following is a specification.

My invention relates to snap-hooks, and more particularly to that type ordinarily used in connection with harness and like appliances.

It has for its object the provision of such a device which shall be secure and durable.

In the accompanying drawings, Figure 1 shows a side elevation of one embodiment of my invention, parts being broken away. Fig. 2 is an end elevation thereof looking from the right of Fig. 1. Figs. 3 and 4 are side elevations of the spring-actuated disk and the loose disk, respectively; and Fig. 5 is a detail view of the spring.

Similar characters indicate like parts throughout the several figures of the drawings.

The numeral 10 designates the body of the hook; from which extend opposite flanges 11 11, a curved portion or beak 12, constituting the hook proper, and a loop or eye 13 for securing the device to a strap or the like. Across the body, between the upper extremities of the flanges, extends a stud 14, preferably riveted therein, upon which stud are rotatably mounted two plates 15 and 16, substantially occupying the full width between the flanges and having their upper edges in close proximity to the end of the beak. The plate 15 has its edge 17 of circular contour, and in this portion is a recess 18. The opposite edge of the plate is flattened at 19, but preferably curved. Pins or projections 20 20 extend from the outside of the plate near the junctures of the edges 17 and 19. Secured to the body, conveniently by a rivet 21 just below the flanges, is a flat or leaf spring 22, extending between the flanges, preferably occupying the full width at its lower portion, but narrowing at the rear of the disk 15 to substantially the thickness thereof. This spring exerts its force against the flattened edge 19 of the plate to hold it normally with the lower pin 20 in contact with the flange, which causes the recess to occupy a position just outside the end of the hook.

The plate 16 is preferably of circular form, extending back into the space left by the narrowing of the spring, and is provided with a peripheral recess 23 and pins 24 24 similar to those in the companion plate. These pins are so situated that when the lower one is in contact with the flange and in substantial alinement with that in the plate 15 the recesses 23 and 18 will also be in alinement. The upper pins of both plates serve by contact with the top of the flange to limit the movement of the recesses, so that they may assume positions just inside the beak of the hook. A portion of the edges of both plates extending from points in proximity to the lower pins to the lower edges of the recesses 18 and 23 are milled at 25 to furnish a suitable engaging surface.

In use it will be seen that the recess 18 will be normally situated in position ready to receive a ring or other element which is to be engaged by the hook. To introduce such element, it is only necessary for the person employing the device to rotate the plate 16 by the thumb of the hand holding the hook until the lower pin contacts with the flange and the recesses 18 and 23 are in alinement. This being done, the plates are rotated together by simultaneous pressure upon their milled edges until the ring is within the hook, whereupon the plates are released and will assume their normal positions with the recess outside the hook. Evidently accidental disengagement is practically impossible, since the recess 18 must be moved back against the tension of the spring upon its plate into alinement with the recess 23 before release of the engaged element can occur. Moreover, in the movement of the device in use the recess 23 also becomes turned outside the hook, rendering it necessary that both recesses be caused to enter the hook before the ring can be received thereby.

In addition to the great security of my improved snap it is exceedingly durable, since there is no portion liable to break except the spring, and this is thoroughly protected by the flanges. If the spring does become broken by continual use, it may be readily replaced.

Having thus described my invention, I claim—

1. A snap-hook comprising a body having

a hooked portion, a plurality of plates carried by the body and each provided with a recess, and a spring for normally maintaining one of said recesses outside the hooked portion.

5 2. A snap-hook comprising a body having a hooked portion, a plurality of plates carried by the body and each provided with a recess, and a projection upon each plate for limiting its movement.

10 3. A snap-hook comprising a body having a hooked portion, a plurality of plates carried by the body and each provided with a recess, a projection on each plate for limiting its movement, and means for normally maintain-
15 ing one of said recesses outside the hooked portion.

4. A snap-hook comprising a body having a hooked portion, a plurality of plates carried by the body and each provided with a recess,
20 and a plurality of projections upon the plates for limiting their movement in opposite directions.

5. A snap-hook comprising a body having a hooked portion and opposite flanges, a pair
25 of plates rotatably mounted between the flanges and each provided with a recess, and a spring coacting with one of the plates and serving to maintain its recess normally outside the hooked portion.

30 6. A snap-hook comprising a body having

a hooked portion and opposite flanges, a pair of plates rotatably mounted between the flanges and each provided with a recess, a spring coacting with one of the plates and serving to maintain its recess normally outside the hooked portion, and pairs of oppositely-situated pins carried by each plate. 35

7. A snap-hook comprising a body having a hooked portion and opposite flanges, a circular plate, and a plate having one portion
40 of its edge of circular contour and another portion flattened, said plates being each provided with a recess and rotatably mounted between the flanges, and a spring coöperating with the flattened portion of the second
45 plate to normally maintain the recess outside the hooked portion.

8. A snap-hook comprising a body having a hooked portion, a plurality of movable members carried by the body, each of said mem-
50 bers being provided with a recess, and yielding means for holding one of the members in an adjusted position.

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

GEORGE H. STEELE.

Witnesses:

JOHN F. DAVIS,

HARDIN W. DORSETT.