

No. 734,380.

PATENTED JULY 21, 1903.

R. R. WADDELL.

SNAP HOOK.

APPLICATION FILED MAR. 4, 1903.

NO MODEL.

FIG. 1.

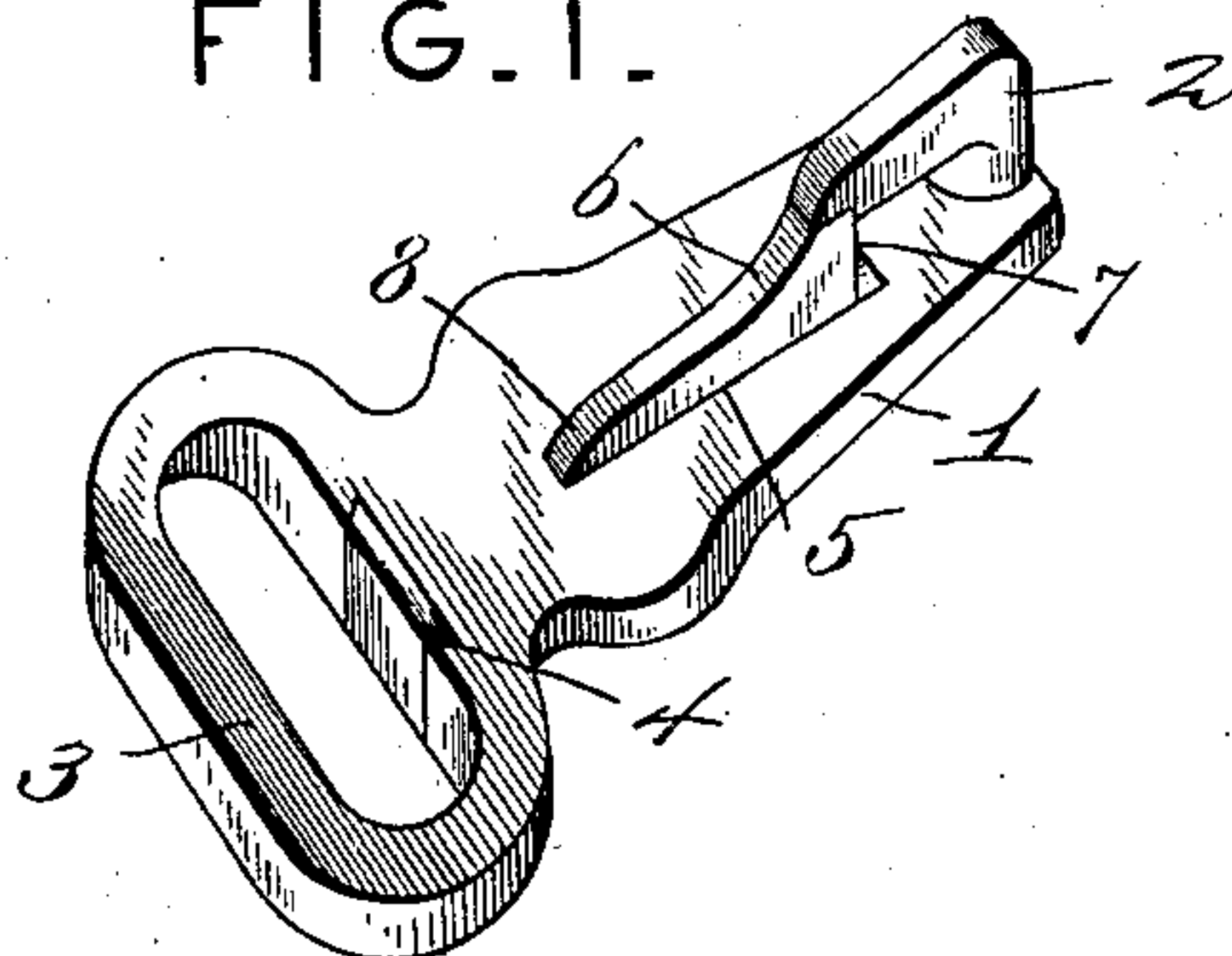


FIG. 2.

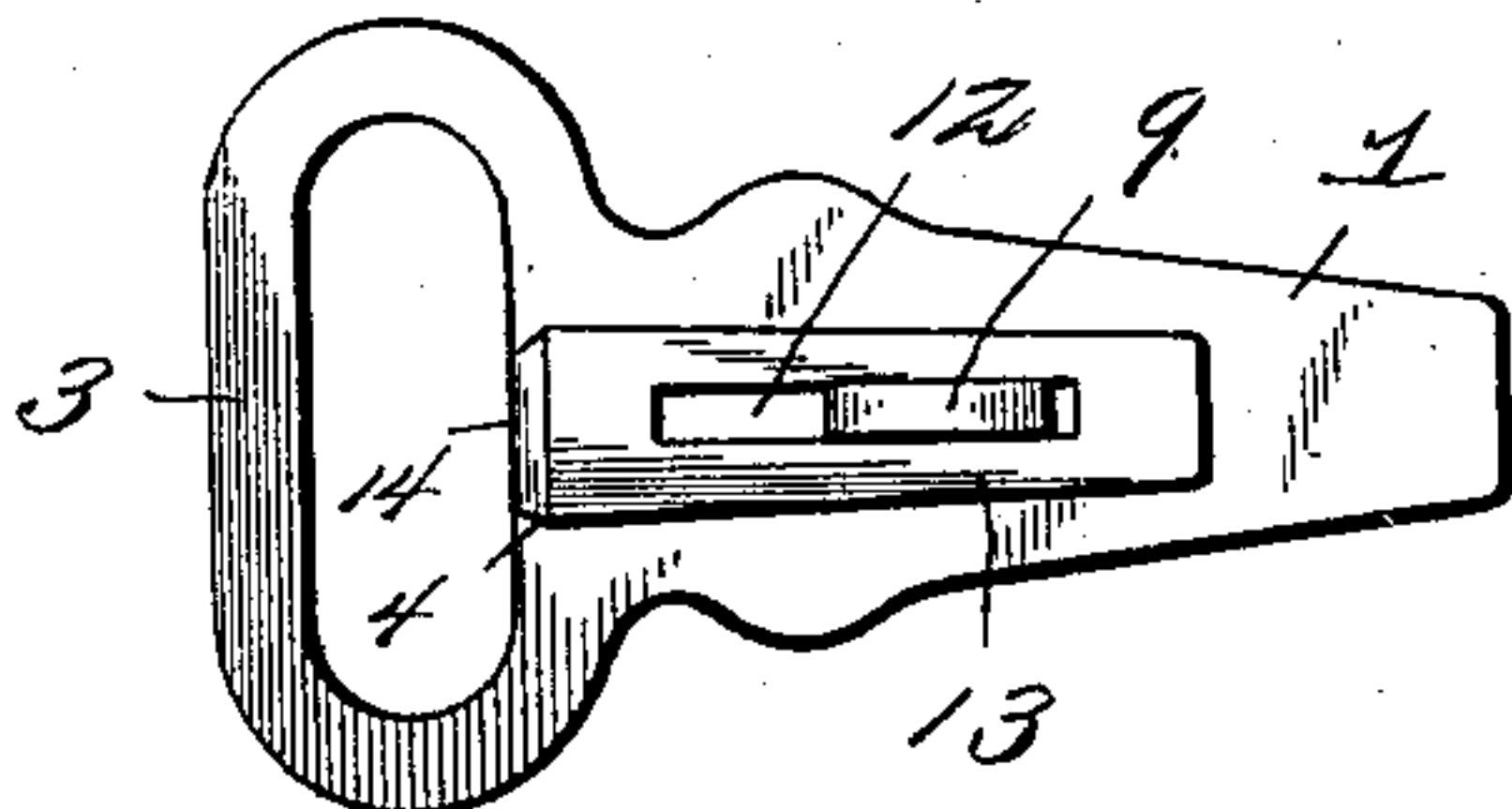


FIG. 6.

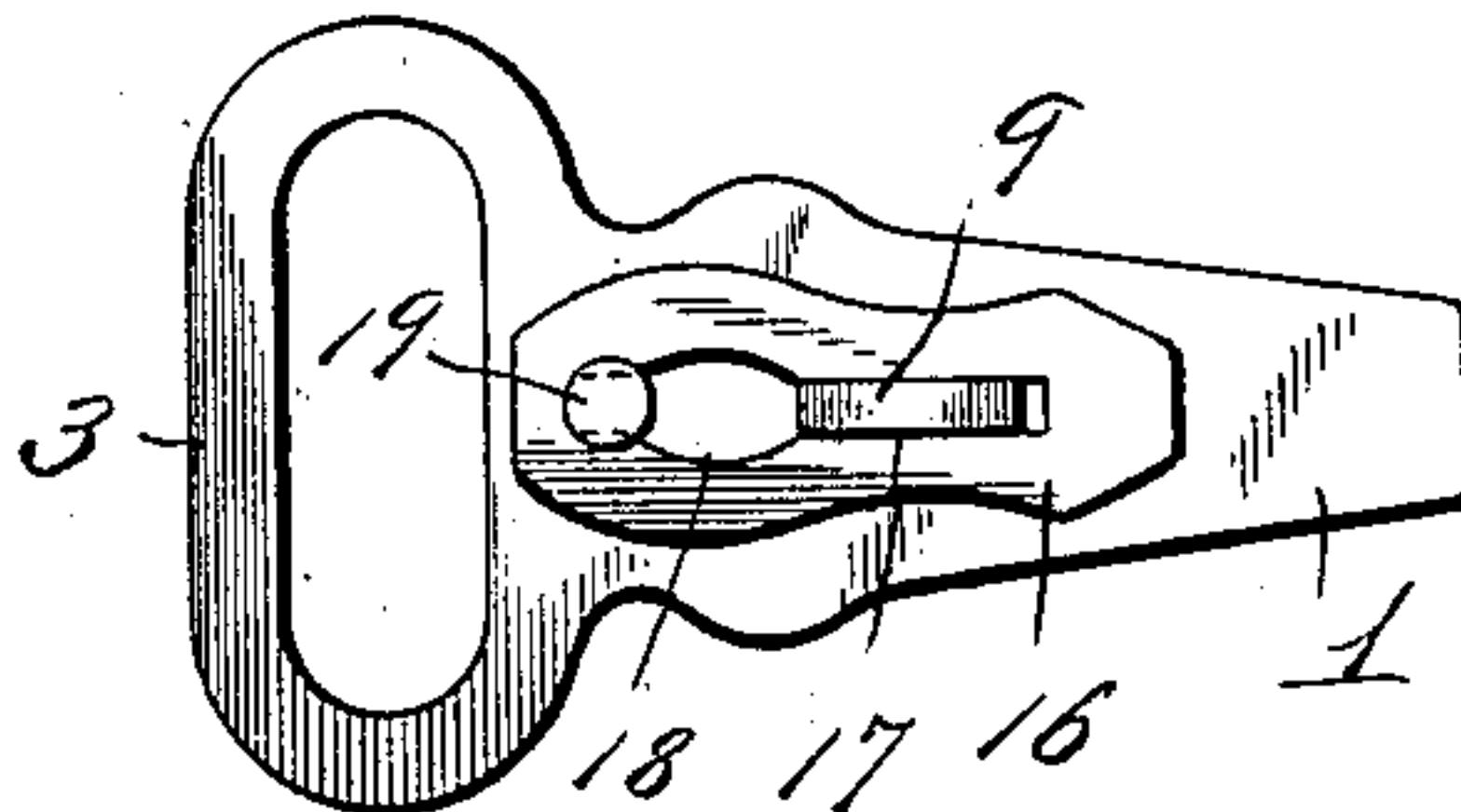


FIG. 3.

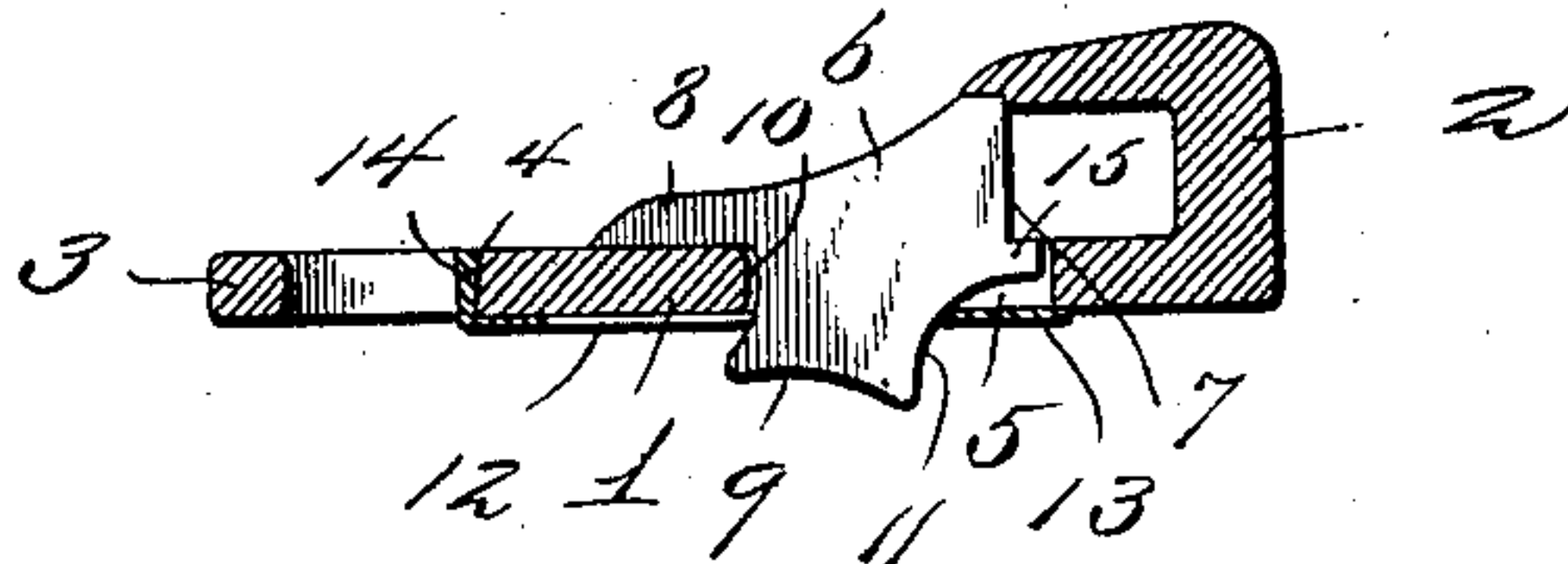


FIG. 4.

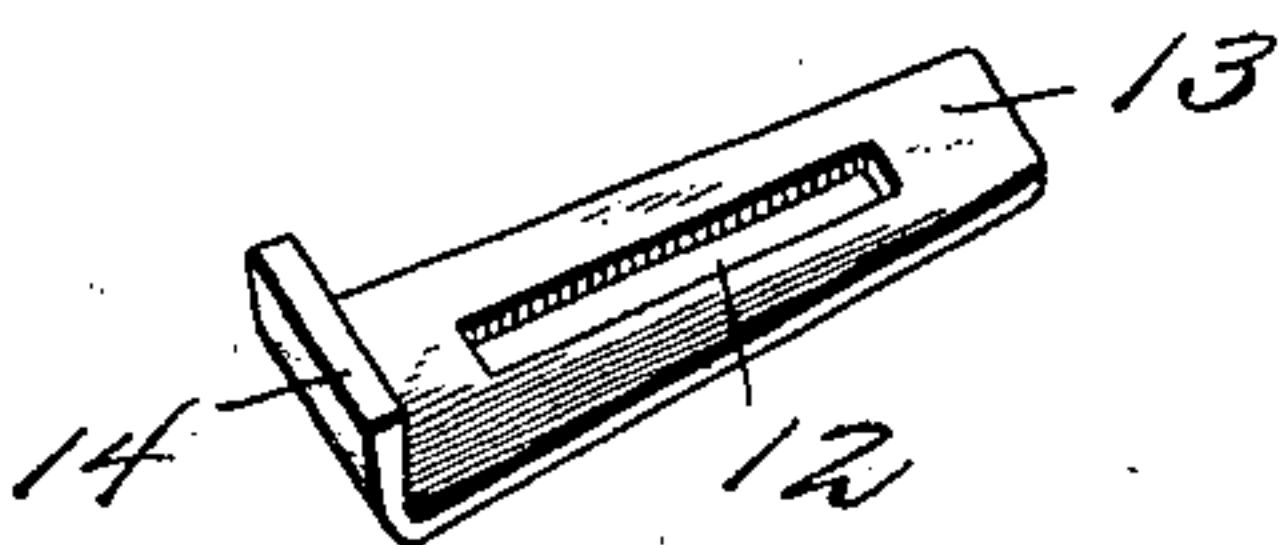


FIG. 5.

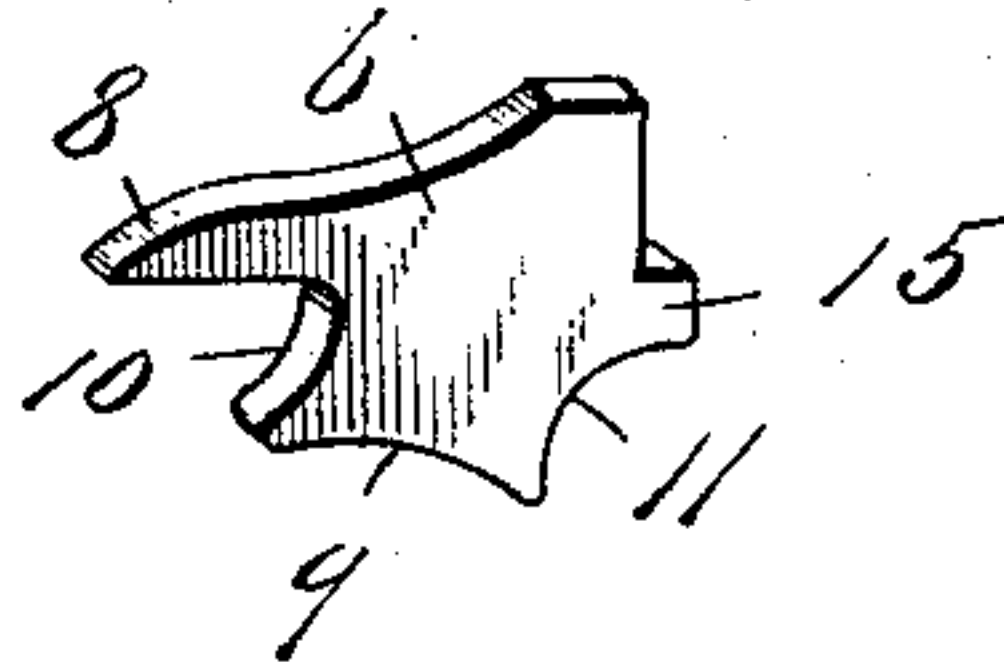
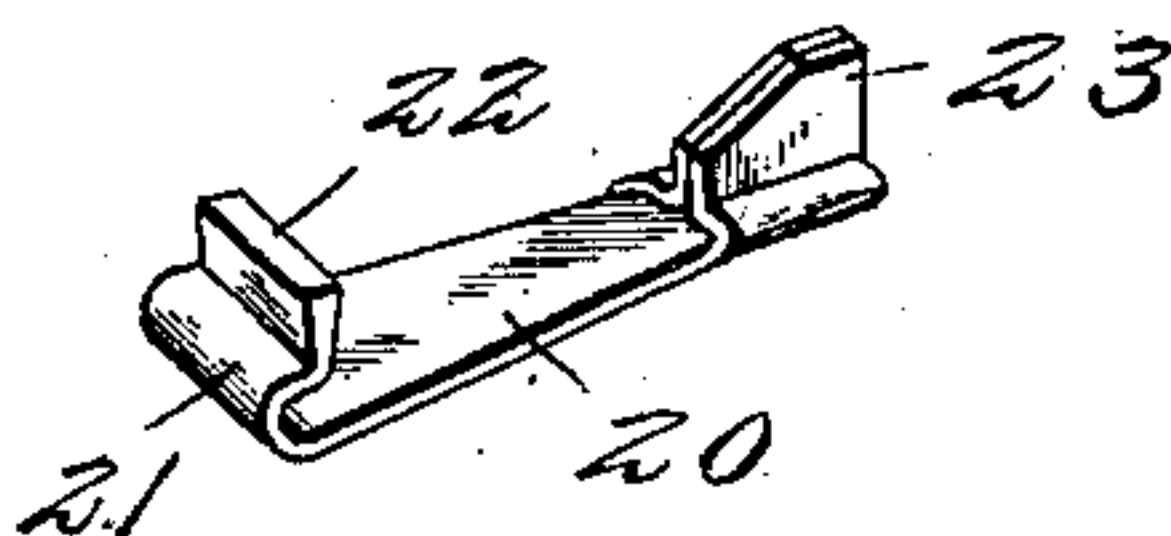


FIG. 7.



Inventor

Robert R. Waddell.

Witnesses

Harry L. Amer

Hubert D. Lawson

By

Victor J. Evans

Attorney



# UNITED STATES PATENT OFFICE.

ROBERT R. WADDELL, OF CINCINNATI, OHIO.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 734,380, dated July 21, 1903.

Application filed March 4, 1903. Serial No. 146,190. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT R. WADDELL, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in Snap-Hooks, of which the following is a specification.

My invention relates to new and useful improvements in snap-hooks; and its object is to provide a simple and inexpensive device of this character which does not require the use of pivot-pins, screws, or other similar securing devices.

The invention consists in providing a hook the body of which is slotted to receive a latch which is arranged therein and is held normally in contact with the end of a hook by means of a spring-plate, which serves to support and prevent displacement of the latch.

The invention also consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view of my improved snap-hook. Fig. 2 is a bottom plan view thereof. Fig. 3 is a central longitudinal section. Fig. 4 is a detail view of the spring of said hook. Fig. 5 is a detail view of the latch. Fig. 6 is a bottom plan view of the hook with a modified form of spring, and Fig. 7 is a detail view of a modified form of latch.

Referring to the figures by numerals of reference, 1 is the body of the snap-hook, having an inwardly-turned hook 2 integral with one end thereof, and at the other end of said body is formed an eye 3, having a dovetailed groove 4 in the inner wall thereof. A slot 5 is formed longitudinally within body 1 and receives a latch 6, which has its upper edge inclined and one end 7 of which normally extends under and contacts with the end of the hook 2. An arm 8 extends from the other end of the latch and rests upon and is supported by the body 1. An extension 9 is arranged upon the lower edge of the latch, and the ends thereof are concaved, as shown at 10 and 11, the end 10 being so shaped as to receive one of the end walls of the slot 5. The extension 9 projects through a slot 12, which

is formed within a spring-plate 13, and an extension 14 projects from one end of this plate at an angle thereto and is adapted to fit within the dovetailed groove 4 and be secured therein by swaging. It will be understood that the spring-plate will hold the latch at all times in contact with the end of the hook 2. An ear 15 is formed at the end of the latch nearest hook 2 and is adapted to bear downward upon the spring-plate when said latch is depressed.

In operation when the inclined face of the latch is brought into contact with a link or any other similar object said latch is depressed and forces spring-plate 13 downward until the inner end 7 of the latch is passed and released, when said spring will return the latch to normal position. During the movement of the latch within the slot the concaved end 10 of extension 9 bears upon the adjacent end wall of the slot 5, and the opposite concaved end of said extension bears upon the end of slot 12, and thereby reduces friction and wear to a minimum. It will be seen that with this construction of snap-hook it is unnecessary to employ any securing means—such as rivets, pivot-pins, &c.—for holding the parts together.

In Fig. 6 I have shown a snap-hook provided with a modified form of spring. This spring comprises a strip 16, having a longitudinally-extending slot 17 therein, which is provided intermediate its ends with an enlarged portion 18. A lug 19 is formed upon the lower surface of the body 1 of this modified form of hook, and the head thereof is adapted to be inserted through the enlarged portion 18 of the slot, and when the spring is drawn longitudinally thereon said head will overlap the sides of the slot, as shown in said Fig. 6.

In lieu of the construction above described the latch and spring may be formed integral, as shown in Fig. 7. By referring to said figure it will be seen that this modified form comprises a spring 20, which is bent upon itself at one end, as shown at 21, to form a bow-spring and is provided with an extension 22, adapted to be secured within the dovetailed groove 4 in the manner described in relation to the device illustrated in Fig. 1. Laterally-extending ears are formed integral



with the other end of the plate 20 and are adapted to be bent upward and pressed together to form a latch 23, which is preferably provided with a beveled end, as illustrated.

5 In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any  
10 of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

15 1. In a snap-hook, the combination with a longitudinally-slotted body having a hook at one end, and an eye at the other end thereof; of a longitudinally-slotted spring-plate secured to the body, a latch extending through  
20 the slots in the body and plate and normally contacting with the end of the hook, and an arm to the latch bearing upon the body.

2. In a snap-hook, the combination with a

body having a longitudinally-extending slot therein, and a hook at one end of the body; 25 of a slotted spring-plate secured to the body, a latch extending through the slots in the body and plate and having concaved ends bearing upon opposite ends of the slots, respectively. 30

3. In a snap-hook, the combination with a body having a longitudinally-extending slot therein, and a hook at one end of the slot; of a slotted spring-plate secured to the body, a latch normally contacting with the end of the 35 hook, an extension thereto projecting through the slots and having concaved ends bearing upon opposite ends of the slots in the body and plate, respectively, and an arm to the latch bearing upon the body. 40

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT R. WADDELL.

Witnesses:

WALTER R. WADDELL,

THOS. H. BINGHAM.