

(No Model.)

F. & I. F. WHITE.
SNAP HOOK.

No. 527,570.

Patented Oct. 16, 1894.

Fig. 1

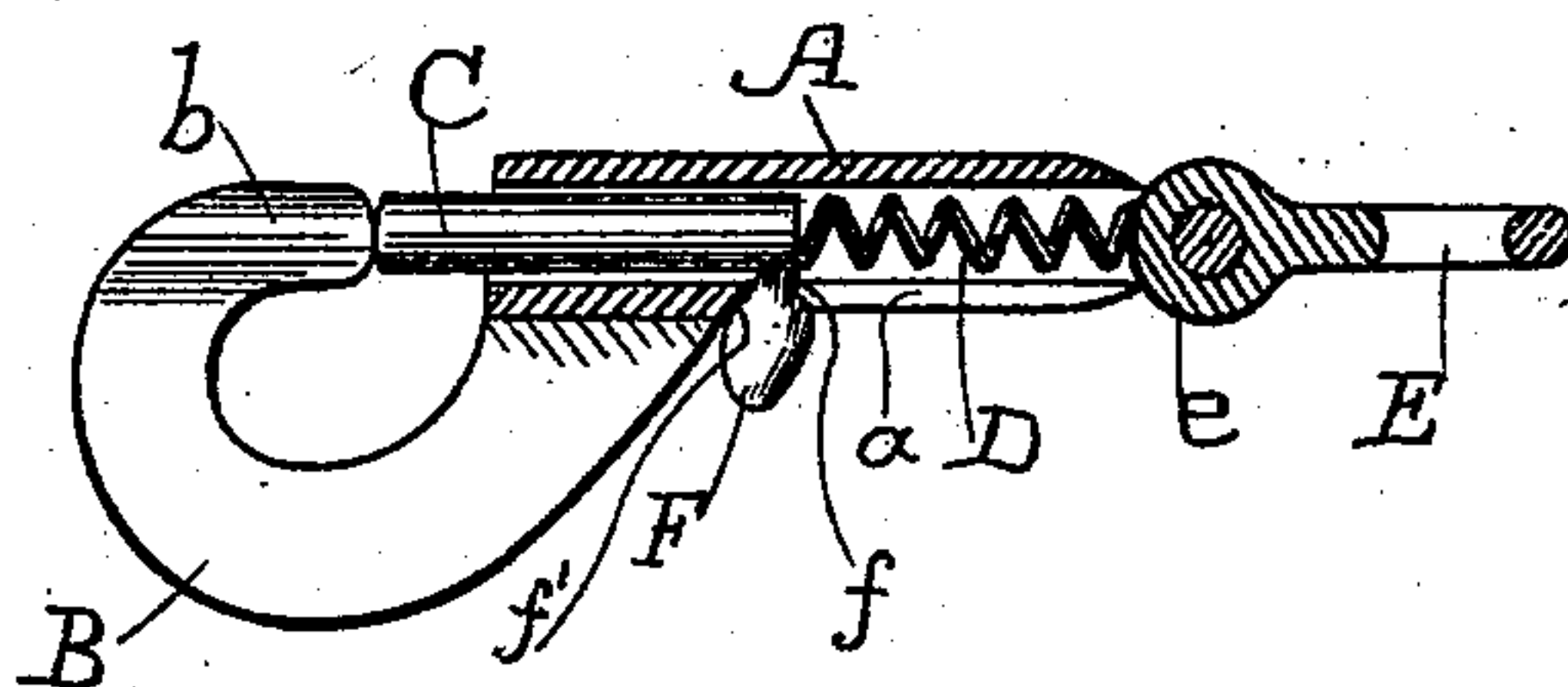


Fig. 2

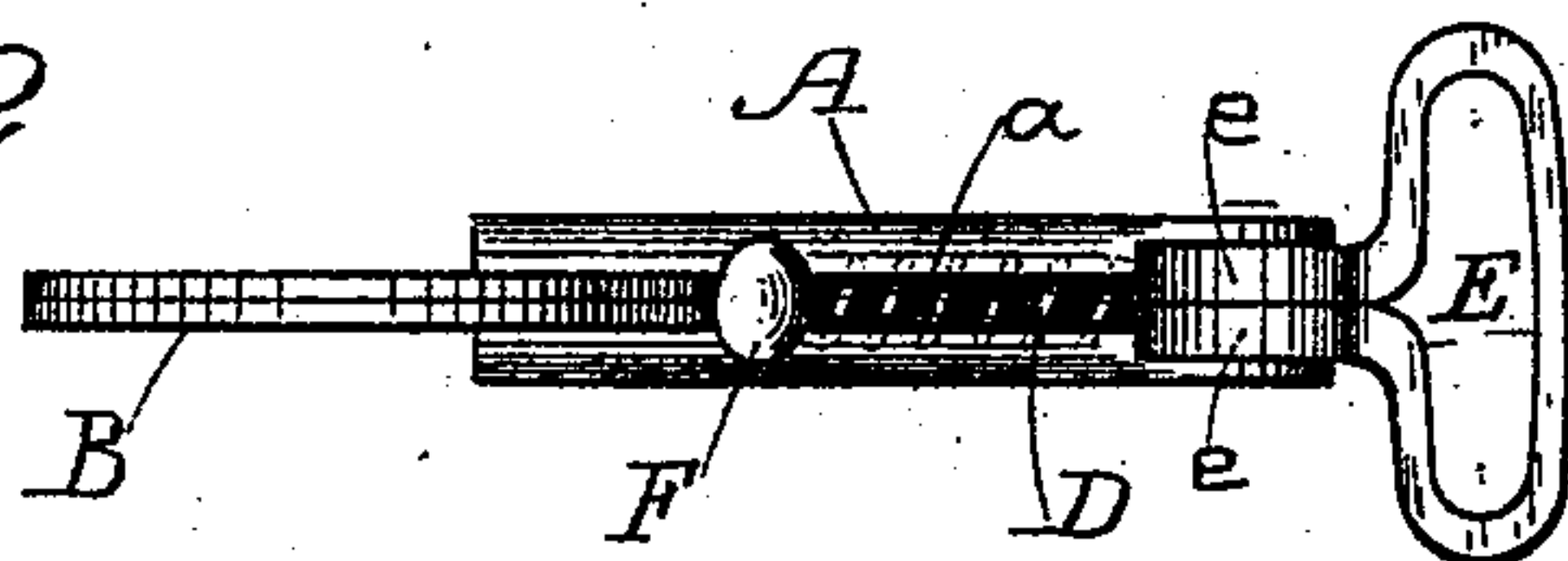


Fig. 3.

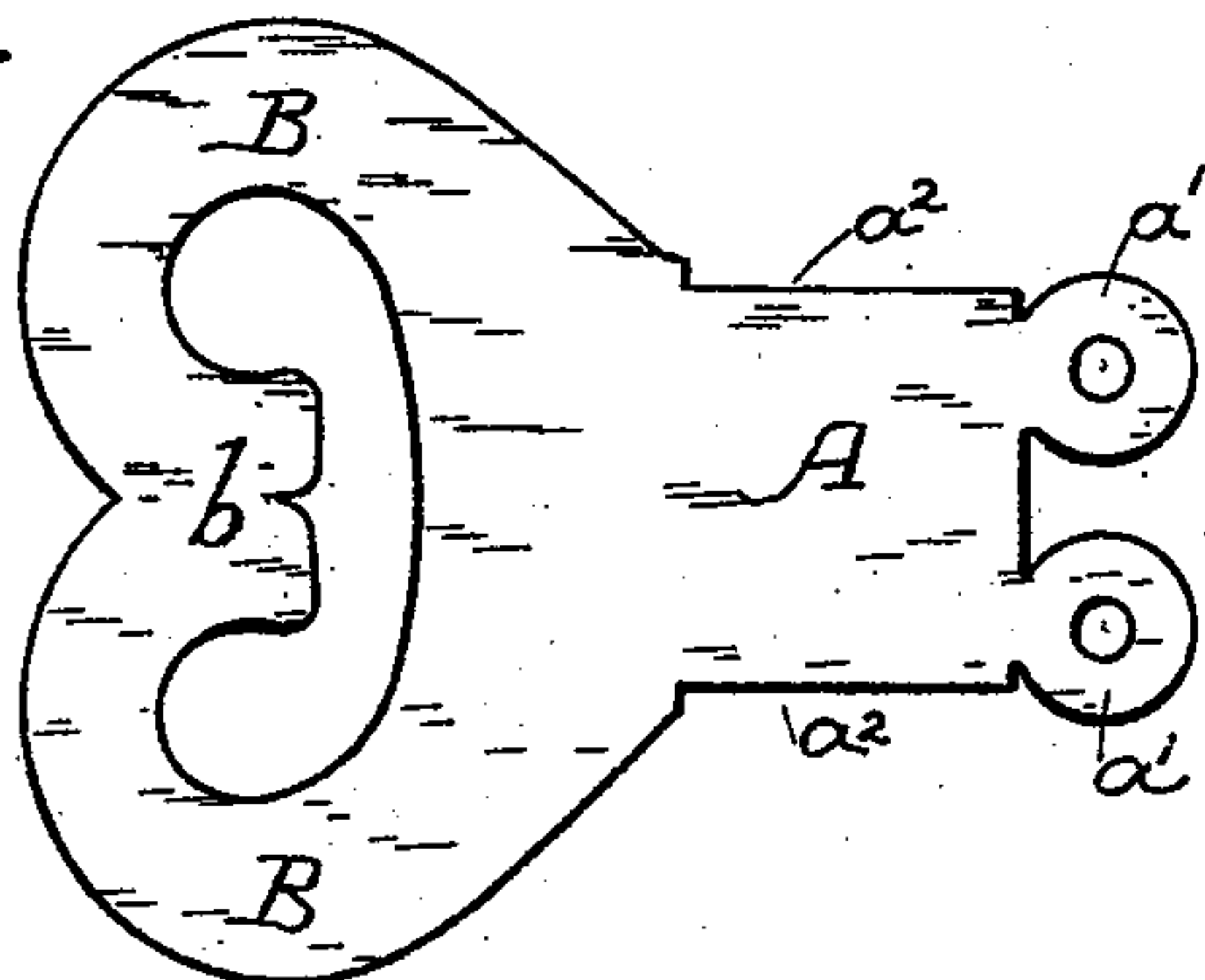
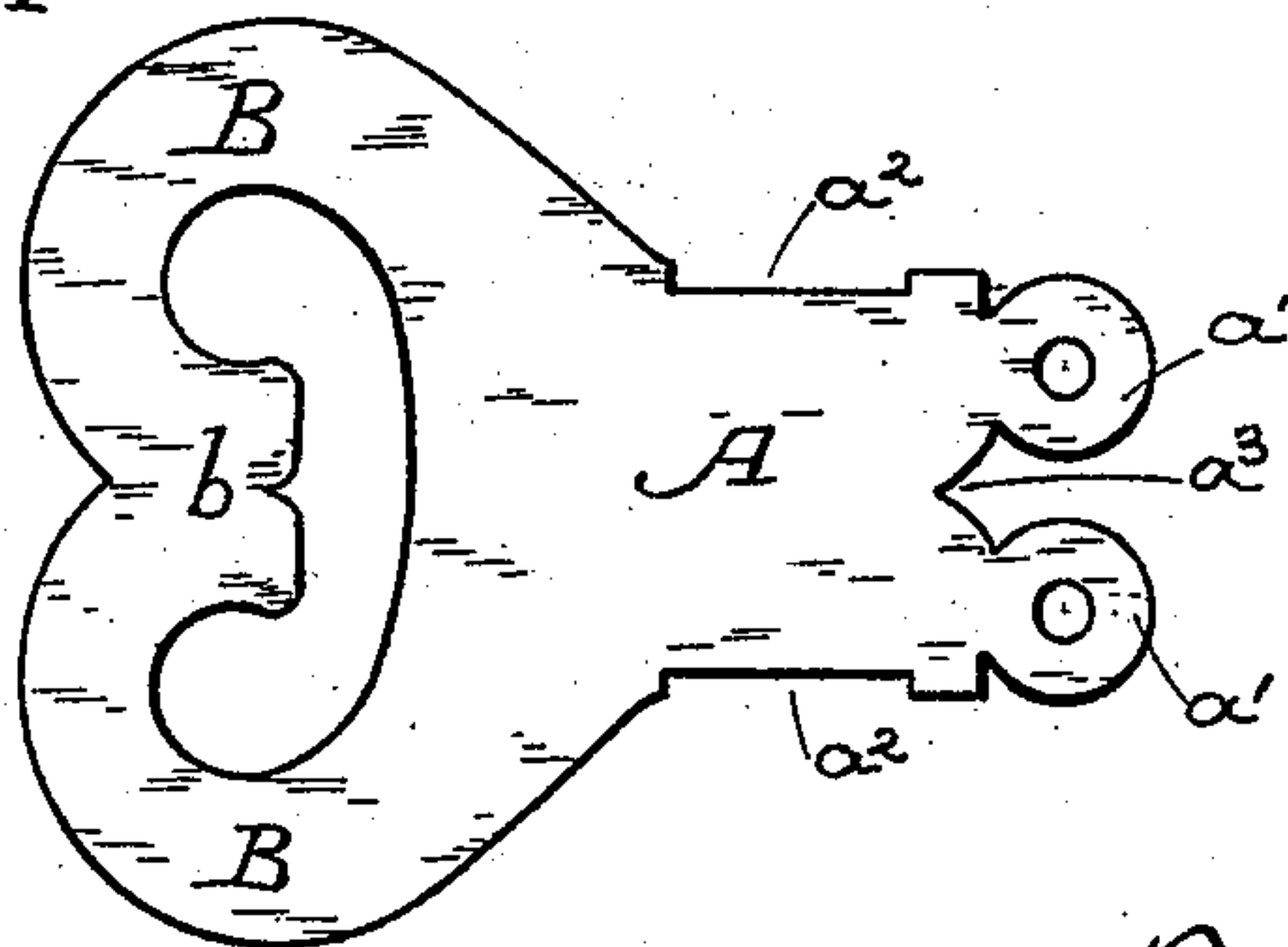


Fig. 4



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UNITED STATES PATENT OFFICE.

FRANK WHITE AND IRA F. WHITE, OF POMONA, CALIFORNIA.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 527,570, dated October 16, 1894.

Application filed November 28, 1893. Serial No. 492,281. (No model.)

To all whom it may concern:

Be it known that we, FRANK WHITE and IRA F. WHITE, citizens of the United States, residing at Pomona, county of Los Angeles, State of California, have invented an Improvement in Snap-Hooks; and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to the general class of snap hooks, in which the hook-head is guarded by means of a spring-controlled sliding bolt seated in the barrel body of the device, and our invention consists primarily in a snap hook having an elongated slot in its back, in which the neck of the bolt-controlling knob fits and plays, whereby the bolt is operated and controlled from the back of the barrel or body of the device instead of from the front as heretofore.

It also consists in a sliding bolt for the snap hook having its knob at the rear extremity instead of at a point intermediate, as heretofore.

It also consists in a snap hook having a barrel or body with a hook-head springing from the back of the forward extremity thereof, and a bolt seated within the barrel and having its controlling knob which projects through a slot in the back of the barrel formed with a head, the under surface of which is conical or beveled to enable it to fit closely and accurately to the angle of the springing hook-head.

It also consists in the peculiar and novel shape of a blank, in cases where the whole hook is constructed of a single piece of bendable metal, and in various details of construction which we shall hereinafter fully describe and specifically claim.

The objects of these several improvements will appear in the course of the following description.

Referring to the accompanying drawings for a more complete explanation of our invention,—Figure 1 is a longitudinal vertical section of our snap hook, the hook-head and bolt being in elevation. Fig. 2 is a back view of same. Fig. 3 is a blank from which the main portion of the device is formed. Fig. 4 is a slightly modified blank.

A is the body or barrel of a snap hook having springing from the back of its forward

extremity the hook-head B, with its back-turned nose *b*. Within the barrel is seated the sliding bolt C controlled by a spring D. In the rear extremity of the barrel is the loop or eye E.

Independently of any particular construction of the snap hook, that is to say, whether it be made of cast metal, or of bendable metal fashioned to form, or whether it be made in any other manner, our first improvement lies in the provision of the elongated slot *a* in the back of the barrel, said slot extending from the rear base of the hook-head to the rear of the barrel, or as here shown, to the ears *e* of the loop, which said ears form the rear abutment for the spring D. Through this back slot projects the neck *f* of the knob F which is secured to the sliding bolt, and by which the latter is retracted and relieved. This neck slides in the slot whereby upon the movement of the knob the bolt may be operated.

Heretofore, in all snap hooks of which we have any knowledge, the slot provided for the passage of the neck of the bolt-controlling knob has invariably been located on the front of the barrel, instead of upon the back as we have formed it.

The advantages of the rear slot may be thus stated:—There is economy in the cost of manufacture, but principally there is a greatly increased safety flowing from this back position of the bolt knob. Lying closely, as it does, to the rear base of the hook-head, it is removed from any object which would be likely to catch the knob and draw back the bolt, which is a constant danger with snap hooks in which the knob is on the front of the barrel; but, by our construction, any such interfering object will slip or glance over the knob without affecting it or drawing the bolt; also there is a resulting advantage from the fact that there being no slot on the front or top of the barrel that part of the bolt which is in the barrel, when the bolt is at rest, is thoroughly and completely incased and has a smoother sliding surface.

Our second improvement lies in the attachment of the knob F to the rear extremity of the bolt, instead of at or near the middle thereof as is common. By this construction less space is required behind the bolt as a

chamber for the bolt to slide in, when compressing the spring.

The next improvement lies in the conical or beveled shape of the under portion or surface of the knob F, as is shown at f' . This inclination or bevel provides for the knob lying close up to and fitting accurately the angle of the hook-head so that it is not likely to be disturbed. This knob yet presents a suitable surface or point for the thumb or fingers to act upon. The shape of the knob, upon its upper portion, may be round or oval, or otherwise as may be preferred.

Though the foregoing improvements are applicable to any snap-hook, no matter how made, we have found by experience that in the practical construction of the hook, it is preferably made from a blank of bendable metal. This blank we have shown in Fig. 3 in which the portion from which the barrel is formed is designated by A, the portion from which the hook-head is formed by B, and the nose of the hook-head by b , and the portion which forms the loop receiving lugs is lettered a' . In the sides of the portion A are cut out portions a^2 which form, as will be readily seen, the slot a in the back of the barrel when the blank is bent up.

In a previous patent granted to Frank White, one of the above named applicants, and numbered 475,971, dated May 31, 1892, a snap hook is shown formed from a blank of bendable metal. In that blank there is a recess extending into the body portion from the front, and which formed a knob slot on the front of the barrel. This we have dispensed with, leaving the front of the barrel continuous and unbroken, and in order to form our knob slot in the back of the barrel, we have cut out the sides of the body portion, as shown at a^2 , and as heretofore mentioned. This cut out portion may extend to the rear lugs a' which form the receiver for

the loop ears, or it may be included between shoulders, as is shown in the blank of Fig. 4, but in either case these cut away portions form the slot in the back of the barrel.

We prefer the form shown in Fig. 3 as the cost of manufacture is much less, allowing us to easily insert the bolt and spring after the body is completely formed.

Any kind of loop or eye may be used in connection with our improved snap hook, either a round or a swiveled eye as may be preferred.

In case we should make the snap hook from the blank shown in Fig. 4 we would make a small recess in the middle of the rear extremity of the body portion as is shown at a^3 which, when the blank is bent into form will serve as an outlet for sand, &c.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

An improved snap hook consisting of a blank adapted to be bent into shape, having a front portion to form the hook-head and nose thereof, a rear portion to form the lugs for the end of the loop, and an intervening body portion the side portions of which are cut out to form an elongated slot in the back of the body, and having also a recess in its back central portion as an outlet for sand, a slidable bolt adapted to be seated in said barrel having a knob with beveled under portions to project through the slot formed by the cut out sides of the body portion, and a loop or eye on the rear extremity of the barrel portion, substantially as herein described.

In witness whereof we have hereunto set our hands.

FRANK WHITE.
IRA F. WHITE.

Witnesses:

SAML. MCKEE,
FRANK J. MURPHY.