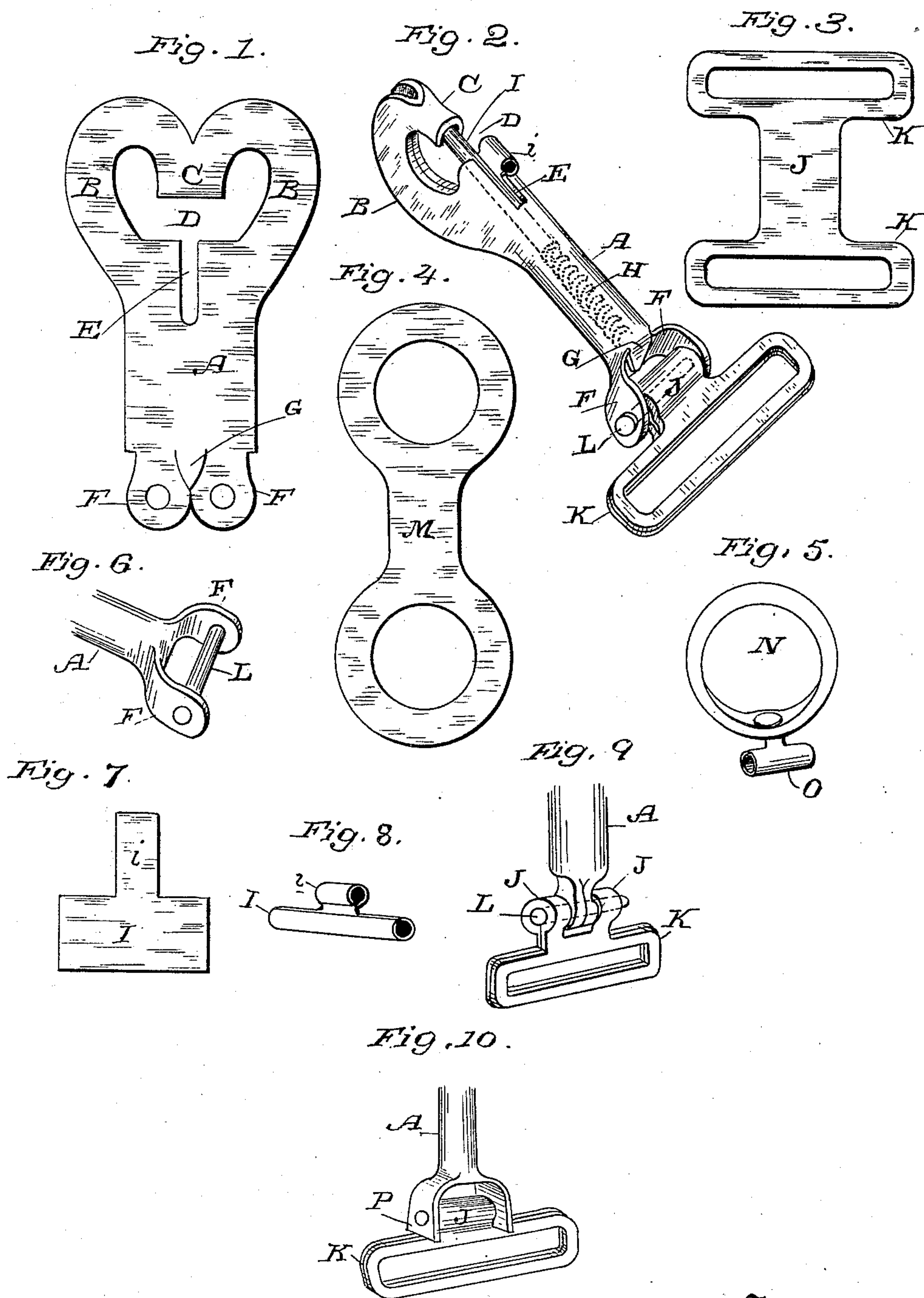


(No Model.)

F. WHITE.
SNAP HOOK.

No. 475,971.

Patented May 31, 1892.



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UNITED STATES PATENT OFFICE.

FRANK WHITE, OF POMONA, CALIFORNIA.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 475,971, dated May 31, 1892.

Application filed August 21, 1891. Serial No. 403,307. (No model.)

To all whom it may concern:

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

My invention relates to snap-hooks; and it consists in the novel construction of the parts hereinafter fully described, and specifically pointed out in the claims.

The object of my invention is to provide a strong, simple, neat, economical, and generally-effective snap-hook.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a view showing the blank from which the main portions of my hook are formed. Fig. 2 is a view of the hook complete. Fig. 3 is a view of the blank from which the link connection is formed. Fig. 4 is a view of the blank from which a ring connection is formed. Fig. 5 is a view of a swivel-ring connection. Fig. 6 is a view of the base of the snap-hook, showing it adapted to receive a strap or rope directly. Fig. 7 is a view of the blank from which the bolt I is formed. Fig. 8 is a view of the completed bolt. Fig. 9 is a modification of the lower end or base of the snap-hook. Fig. 10 is a view showing the link connection stationary.

The blank shown in Fig. 1 is made of a single piece of metal, preferably of sheet-steel. When bent in the longitudinal center, it forms a snap-hook, as shown in Fig. 2. The similar parts of these two figures are easily recognizable, A being the part in the blank which forms the barrel A of the hook, B forming the head, C the nose of the hook, the opening D the mouth, the slot E the guide for the thumb-piece of the bolt, the perforated ends F the ears for the attachment of the link or ring, and the flange or lip G the abutment or base for the lower end of the spring H, the upper end of which bears upon and controls the bolt I, which is seated in the hollow or cavity of the barrel. This blank, it will be seen, is a simple one, can be readily stamped out, and easily bent into form. Thus from a single piece of bendable metal are formed the barrel, head, nose, mouth, bolt-guide, spring-base, and link-ears of a snap-hook.

A point of advantage is to be observed in the manner of forming the nose, which, as will be seen from Fig. 2, is solid on its front from its point back to its bend. This gives it a good appearance and prevents anything from catching upon it. Similarly the front of the barrel is solid and smooth. The flange or lip G forms the abutment for the base of the spring by simply bending it across the open lower end of the hollow body, as seen in Fig. 2.

In Fig. 3 is shown the blank from which the link connection of the snap-hook is formed. This blank, which is also of sheet-steel, is to be bent in the transverse center. Then the shank or stem portion J forms the eye-piece J of Fig. 2, and the oblong slotted ends K form the oblong link K of said Fig. 2. The link is fitted to the snap-hook by means of a pivot bolt or pin L, which passes through the perforated ears of the hook and through the intervening eye-piece of the link. If a ring be desired instead of an oblong link, such ring can be formed from the metal blank M (shown in Fig. 4) by bending it in the line of its transverse center; or a swivel ring or link N may be used, as shown in Fig. 5, by fitting it over the button-shaped shank of an eye-piece O, formed from a suitable metal blank; or, as shown in Fig. 6, there may be no link or ring at all, but simply the bolt or pin L, adapted to receive the eye-piece of a strap or rope or chain.

Fig. 7 shows the metal-blank from which the bolt I of the snap-hook is formed. The portion marked I of this blank is bent into substantially circular form in its longitudinal center to form the bolt-body, while the portion i is bent transversely upon itself to form the thumb-piece i, which projects from and slides in the slot E of the barrel of the hook. This bending of the blank of Fig. 7 results in the bolt shown in Fig. 8 and also shown in position in Fig. 2.

Fig. 9 shows a modification of the lower end of the snap-hook. In this case the ears are brought close together and the ring or link is pivoted upon the projecting ends of the pin or bolt outside of the ears. The abutment lip or flange is substantially the same as before or may be omitted. If the pivotal motion of the link of Fig. 2 be not desired, the ends of the ears may be flattened to allow

the link to rest solidly against them, as shown at P in Fig. 10.

It is plain that instead of the bolt I, formed from the blank of Fig. 7, a cast, malleable, or other form of bolt may be used in my snap-hook, and also that with my said hook I may use a cast, malleable, or other form of link or ring connection.

I may briefly describe the advantages of my snap-hook to be increased strength, simplicity, lightness, neatness, and economy in manufacture, the facility with which any sand or dirt may escape from the tubular bolt I, instead of being retained to impede the action of the spring, and the saving of wear on the leather or rope by means of the pivotal link or ring.

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

1. A blank for a snap-hook, formed of a single piece of bendable metal made with a portion A to form the barrel of the hook, a portion B with part C to form the head and nose of the hook, said portion being provided with an opening D and a downwardly-extending slot E, which form the mouth and the guide for the thumb-piece of the bolt, respectively, and the perforated portion F, forming the end ears of the hook, substantially as herein described.

2. A blank for a snap-hook, formed of a single piece of bendable metal, made with a portion A to form the barrel of the hook, a

portion B with part C to form the head and nose of the hook, said portion being provided with an opening D and a downwardly-extending slot E, which form the mouth and the guide for the thumb-piece of the bolt, respectively, the perforated portion F, forming the end ears of the hook, and the flange or lip between said end portions, forming the abutment for the base of the spring, substantially as herein described.

3. A snap-hook consisting of a single piece of metal folded upon itself to form the integral slotted barrel and head and nose portions of the hook and perforated end ears, and a bolt formed from a single blank or piece of bendable metal having the body portion I and thumb-piece *i* at right angles thereto.

4. A snap-hook consisting of a single piece or blank of metal bent upon itself to form the slotted barrel, head, nose, mouth, guide-slots, perforated end ears, and flange or lip forming an abutment, a sliding spring-controlled bolt of bendable metal, and a ring or link attachment formed of a single blank of metal bent upon itself and adapted to be attached to the ears of the barrel, substantially as herein described.

In witness whereof I have hereunto set my hand.

FRANK WHITE.

Witnesses:

EDWIN E. COLE,
E. H. BECKET.