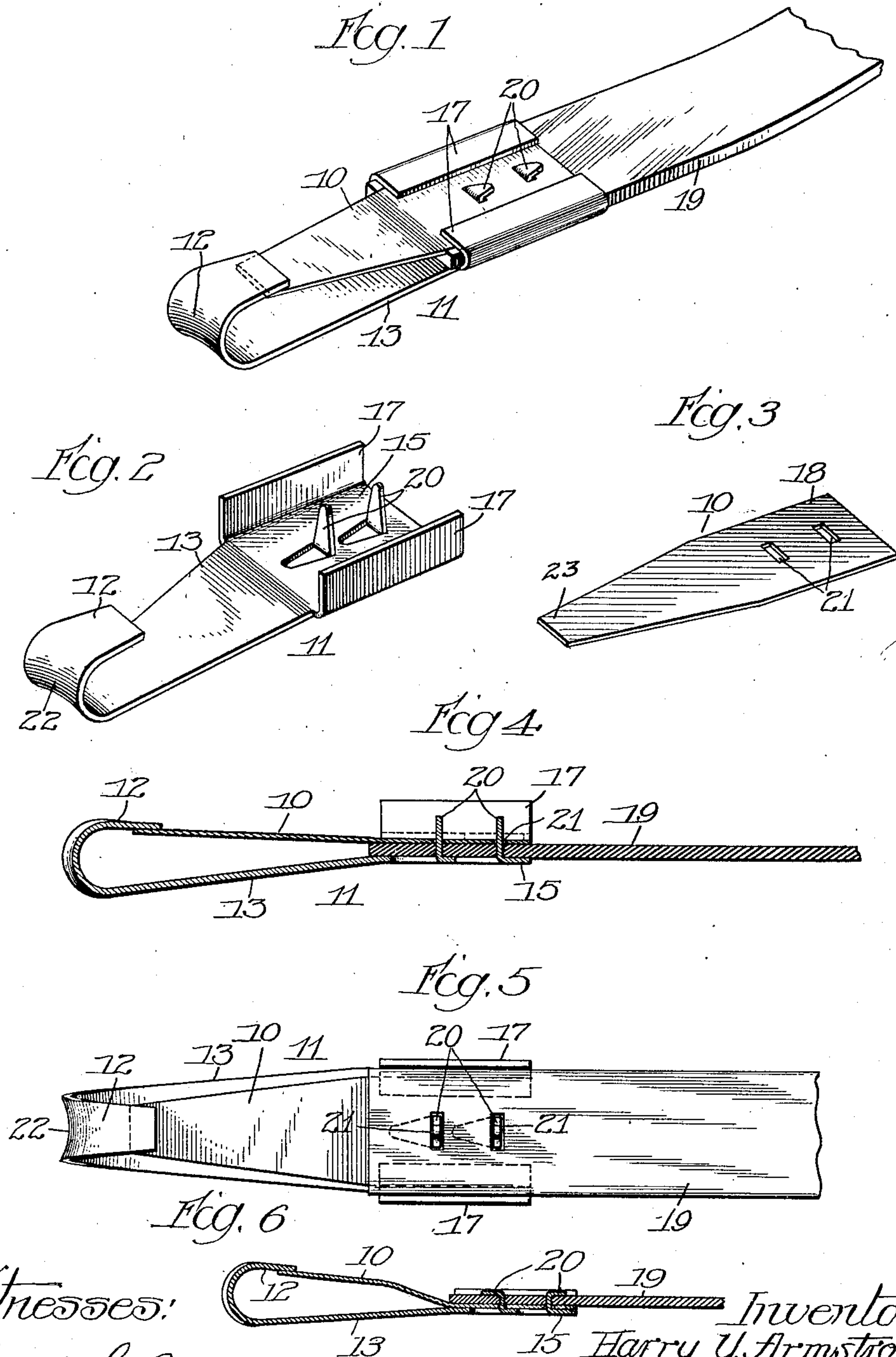


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 SNAP.  
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998,943.

Patented July 25, 1911.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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SNAP.

998,943.

Specification of Letters Patent.

Patented July 25, 1911.

Application filed March 12, 1909. Serial No. 482,916.

*To all whom it may concern:*

Be it known that I, HARRY Y. ARMSTRONG, a citizen of the United States, and a resident of Elgin, in the county of Elgin and State of Illinois, have invented certain new and useful Improvements in Snaps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a novel snap-hook more especially intended for use in connection with harness but adapted for many other uses.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claim.

The object of the invention is to provide an exceedingly simple and efficient snap-hook which may be made at small cost and which may be readily and quickly attached to a strap or other part to which it is intended to be permanently connected.

A further object of the invention is to provide a snap-hook the parts of which may be made of sheet metal and which may be constructed entirely by stamping or swaging operations and which is arranged to be attached to a strap or other part without the use of rivets or other separate fastening means.

A still further object of the invention is to provide an improved snap-hook, the parts of which are arranged to be fastened to a strap or other part by the same means which fasten the parts of the snap together.

Other objects of the invention will appear from the following description.

As shown in the drawings:—Figure 1 is a perspective view of my improved snap-hook showing the manner of attaching it to a strap. Fig. 2 is a perspective view of the hook member of the snap-hook. Fig. 3 is a perspective view of the tongue member. Fig. 4 is a longitudinal sectional view of the snap-hook and the strap to which it is attached, with the parts of the snap-hook partly fixed to the strap. Fig. 5 is a plan view thereof of the parts shown in Fig. 4. Fig. 6 is a longitudinal sectional view of a modification.

The snap-hook is made of two parts, one forming a tongue member 10 and the other a hook member 11. The said hook member

comprises a hook 12, a shank 13, and a flat attaching plate 15. The said hook member, as a whole, is made of a single piece of sheet metal, one end of which constitutes the attaching plate 15 and the other end of which is tapered and turned backwardly at its terminal to constitute the hook 12. The attaching plate 15 is provided at its side margin with flanges 17, 17 between which is received the base 18 of the tongue member together with the end of the strap 19 to which the snap-hook is permanently attached. Said strap and tongue member are clamped to the base-plate by bending or folding said flanges inwardly over the same. The base of said tongue member is made wide enough to enter beneath the flanges of the attaching plate; the tongue converging toward its end 23 to properly engage the inner face of the backwardly turned terminal of the hook 12. The tongue member consists of a piece of spring metal, such as thin steel, so that its free end is adapted to yield or bend, and the parts are so arranged that said free end presses normally against the hook 12. The attaching plate 15 is provided with prongs 20, 20, made integral with and struck up from the body of the said plate. Said prongs extend through the strap 19 and through apertures 21 in the wider part or base of the tongue member; the ends of the prongs being clenched over the tongue member. The hook 12 is transversely rounded or concaved, as shown at 22, in order to give stiffness and strength to the said hook, to prevent it being straightened out under the strain coming thereon in use.

The tongue member 10 is made from a piece of flat, sheet metal and is flat or straight, while the shank portion 13 of the hook member is bent at an angle to the attaching plate, so as to bring the end of the hook 12 in position for contact therewith of the outer end of the straight tongue member.

In assembling the device and attaching it to the strap 19 or like part, the strap is punched to provide holes to pass over the prongs 20 and the strap is laid flat on the attaching plate between the flanges 17, 17 thereof. Thereafter the tongue member is placed with the apertures 21 over the prongs 20 and with its smaller end beneath the hook 12. Thereafter the free ends of the prongs are clenched over the tongue member in the manner shown in Fig. 1, and the side flanges 17 of the attaching plate are bent inwardly



over the margins of the tongue and strap, so as to clamp the same firmly to the attaching plate. This is the construction shown in Figs. 1 to 5, inclusive. In the construction shown in Fig. 6, the tongue 10 is applied against the attaching plate and the strap fits over the tongue and is clamped thereto by the lugs 20 and flanges 17. In both cases the flanges are folded around and engage both the tongue and the strap, so as to firmly clamp the same to the attaching plate. As shown in said Fig. 6, the tongue member is bent to bring its free end into proper position for engaging the hook, and for this reason the construction shown in said Fig. 6, while embracing some of the principal features of my invention, is not so advantageous as that shown in Figs. 1 to 5.

The hook member, made of the shape shown and described, is adapted to be easily and cheaply made from sheet metal, by stamping and swaging, requiring only a few operations for its construction, while the tongue member may be stamped from flat sheet metal by a single operation. The operation of assembling the parts may be easily performed, requiring only the bending down of the prongs and side flanges after the parts have been placed together. The connection between the parts of the snap and the strap, afforded by the construction described, is exceedingly strong, rigid and durable.

The construction of the snap may be varied within the scope of the invention and the same is not intended to be limited to the specific features illustrated except as hereinafter made the subject of specific claims.

I claim as my invention:—

The combination with a strap, of a snap-hook consisting of a hook member made of a single piece of sheet metal and embracing a hook portion, a shank portion and a flat attaching plate provided at its side margins with flanges and between said flanges with an integral prong to engage the strap and a tongue member consisting of a single piece of spring sheet metal having a wide base portion provided with an aperture for said prong and adapted to enter between said flanges on the attaching plate, said flanges being folded over the side margins of the said base portion of the tongue member and over the side margins of said strap into clamping engagement with said tongue member and strap.

In testimony, that I claim the foregoing as my invention I affix my signature in the presence of two witnesses, this 5th day of March A. D. 1909.

HARRY YARRINGTON ARMSTRONG.

Witnesses:

WILLIAM L. HALL,  
GEORGE R. WILKINS.