

No. 676,981.

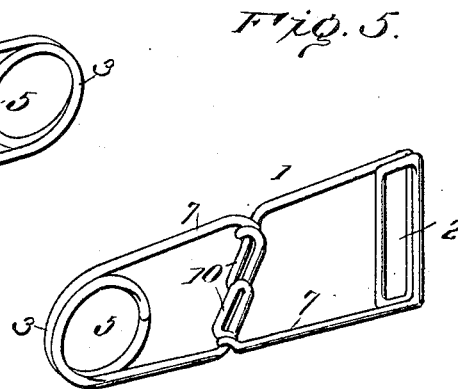
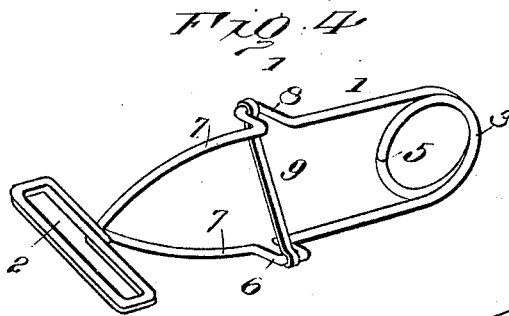
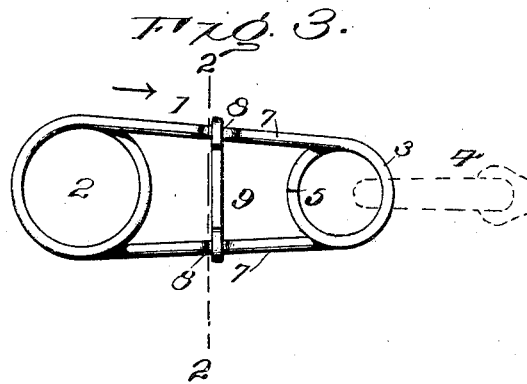
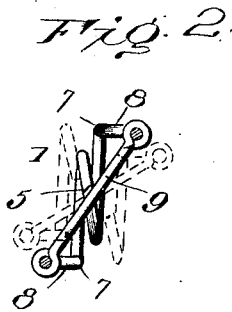
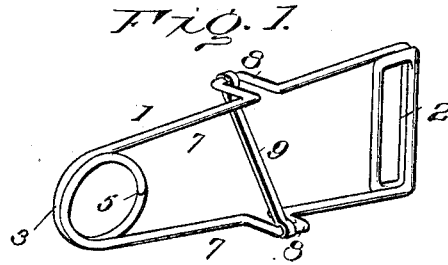
Patented June 25, 1901.

J. F. ELLSWORTH.

SNAP HOOK.

(Application filed Jan. 7, 1901.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 676,981, dated June 25, 1901.

Application filed January 7, 1901. Serial No. 42,421. (No model.)

*To all whom it may concern:*

Be it known that I, JONATHAN F. ELLSWORTH, a citizen of the United States, residing at Hyannis, in the county of Grant and State of Nebraska, have invented new and useful Improvements in Snap - Hooks, of which the following is a specification.

The invention relates to snap-hooks, and has for its object to increase their security and efficiency in operation and also to adapt them for more speedy and convenient connection with rings or like devices.

The invention consists in the construction herein described and pointed out.

In the accompanying drawings, Figure 1 is a perspective of the improved snap-hook. Fig. 2 is a transverse section on line 2 2 of Fig. 3 looking toward the right. Fig. 3 is a side elevation, a connected ring being indicated by broken lines. Figs. 4 and 5 are perspectives of modifications.

Numeral 1 denotes a so-called "snap-hook" formed of a single piece of wire bent to produce a strap-receiving part 2 and having its ends bent and overlapped, as shown, to form a split or open ring 3 for the reception of a closed strap-ring 4 or the like. The part 2 is normally closed, the extreme ends 5 of the wire being contiguous, as indicated. Preferably the ring 3 and part 2 are made of unequal size, as usual, and connected by side wires 7, of usual form, except that they are provided with short open loops or bends 8, extending oppositely from the two side wires, as represented. The outer portions of said bends are joined by a transverse obliquely-disposed bar 9, the main purpose of which is to cause the side wires 7 to move in planes angularly situated with respect to each other in order to move the wire ends 5 obliquely apart, as indicated by full and broken lines in Fig. 2.

As heretofore constructed when snap-hooks of the same general character have been compressed the side wires have approached each other in one and the same plane, with the effect to spread the wire ends 5 of rings, such as 3, in one plane and without an oblique movement, such as denoted by the broken lines in said Fig. 2. The effect of the improvement in operation is to spread the two parts of the ring 3, whereby it is effi-

ciently opened to receive a harness-ring 4 or the like, and this lateral opening is effected without special manipulation, it being only necessary to compress or squeeze the hook without a separate effort to produce the side-wise movement of the wires necessary for the desired result, that result being insured by the transverse bar 9, connected as set forth. It is proposed to use in some cases overlapping loops 10, one connected to each side wire and disposed substantially as indicated in Fig. 5, so that when the side wires are pressed toward each other the loops will ride one upon the other and open laterally the parts of ring 3, as in the construction first-above described.

As shown in Fig. 4, the side wires may be twisted together adjacent to the strap-receiving part, which latter may be circular, as shown in Fig. 3, or oblong, as in other figures, it not being material that any part should be of true ring or circular form. For clearness in Fig. 4 the part 2 is shown disposed transversely to the general plane of the article; but such arrangement is not essential and will not ordinarily be preferred.

The improvement is not limited to the particular shape and size of the parts provided for making connection with other devices, and though use with reins, straps, halters, and other parts of harness is primarily contemplated changes may be made in these particulars, provided the substantial principles of operation and construction are preserved.

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

1. The snap-hook comprising a split ring and a halter-receiving part connected by side wires, said ring opening on compression of the hook, and a device situated intermediate the side wires to cause the lateral separation of the parts of the open ring by such compression of the hook, said device comprising a transverse loop in each wire connected to its fellow by a bar.

2. The snap-hook comprising a split ring and a halter-receiving part connected by side wires, said ring opening on compression of the hook, and a device situated intermediate said ring and part and also intermediate the side wires and extending transversely of the

same to cause the lateral separation of the parts of the open ring by such compression of the hook.

3. The snap-hook comprising a split ring  
5 and a halter-receiving part connected by side wires, said ring opening on compression of the hook, and a device situated intermediate said ring and part and also intermediate the side wires and extending transversely of the

same to cause the lateral separation of the 10 parts of the open ring by such compression of the hook, said device comprising a loop in each side wire.

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