(No Model.)

R. W. JONES.

SNAP HOOK.

No. 358,813. Patented Mar. 1, 1887.

Fig. 1.

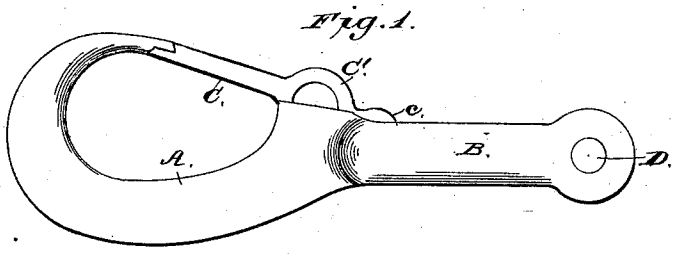


Fig. 2.

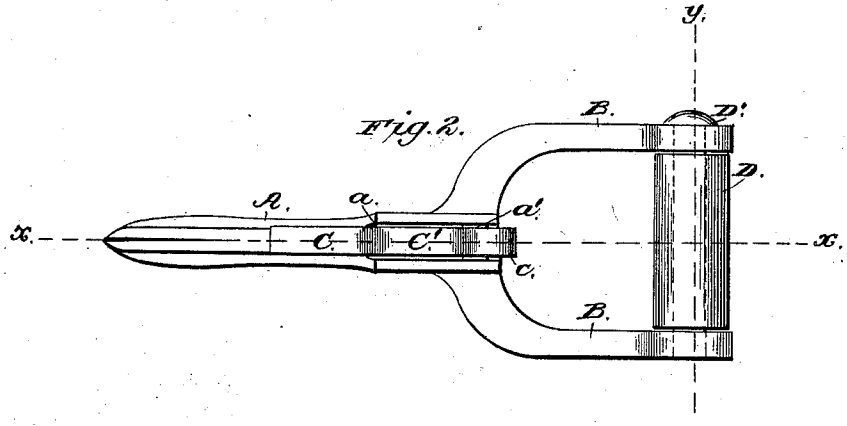


Fig. 3.

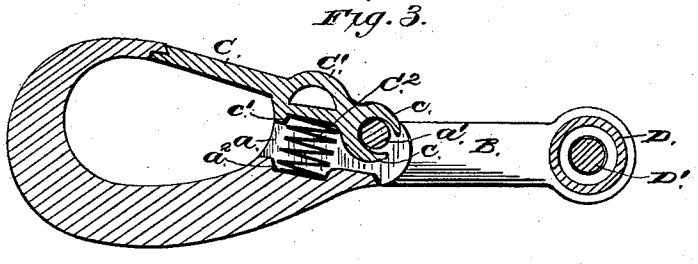
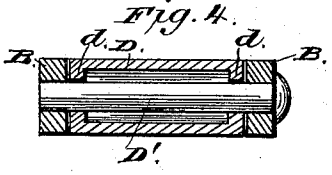


Fig. 4.



Witnesses:

Frank Clayton

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Richard W Jones

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UNITED STATES PATENT OFFICE.

RICHARD W. JONES, OF SYRACUSE, NEW YORK.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 358,813, dated March 1, 1887.

Application filed December 31, 1886. Serial No. 223,079. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. JONES, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to snap-hooks; and it consists in the construction and arrangement of the parts of the same, which will be more fully hereinafter described, and pointed out in the claims.

The object of my invention is to provide a snap-hook having a shank formed of two arms which embrace a hollow anti-friction roller at their outer ends, a suitable rod or pintle passing through the end of the arms and roller, and thereby retained in place.

A further object of my invention is to provide a snap-hook which is simple and effective in its construction and operation, easily handled and readily understood, strong and durable, and cheaply manufactured.

I attain these objects by the form of snap-hook illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a side elevation of my improved snap-hook. Fig. 2 is a top plan view of the same. Fig. 3 is a longitudinal vertical section on the line *x x* of Fig. 2. Fig. 4 is a transverse vertical section on the line *y y* of Fig. 2.

A indicates the hook proper, having a shank formed of two arms, B B, slightly curving outward from the rear portion or body of the said hook. A slot, *a*, is cut through the rear portion of the hook A, and a pivot-bar, *a'*, is cast integral with the rear upper portion and running transversely across said slot. The rear end of a tongue, C, is mounted in said slot *a*, the forward part whereof engages with the upper curved portion of the hook A, as is well understood in the art. The extreme rear end of the said tongue C is formed with circular forks *c*, forming a circular recess, and which are mounted upon the pivot-bar *a'* and have free movement thereon. Adjacent to the forked end of the tongue a bridge, C', is cast, by which the said tongue may be operated, thus affording an easy means whereby the tongue may be disengaged from the hook proper when the hands have become stiffened from cold.

Immediately under the bridge C' a recess, *c'*, is formed, which receives one end of a coiled spring, C^2, the other end of said spring being seated in a recess, a^2, in the lower portion of the slot *a* and directly opposite to the recess *c'*. The spring C^2 has no securing pivots or pins whatever, and no supporting-guards other than the two recesses *c'* and a^2, being retained in position by the projecting walls of said recesses.

Between the ends of the two arms B B of the shank an anti-friction roller, D, is mounted and held therein by a bolt or pintle, D', passing through the said roller and the ears formed with the ends of the arms B. This roller is cast hollow, as seen in Fig. 4, having heads *d d* formed at each end thereof, which in turn form bearing-surfaces for the pintle D'. By this means wear upon the main body of the roller is avoided, the friction between the roller and pintle is greatly reduced, and the roller considerably lightened in its construction, but at the same time being strong and durable and effective in its resistance against the strain brought to bear upon the same.

This snap-hook is preferably adapted for use in connection with a breast-strap, but, if desirable, may be used with any of the other parts of harness, the straps being passed around the roller D and suitably secured thereto.

The general utility, practicability, and convenience of my improved snap-hook is obvious, and need not be referred to herein in detail, it being evident that slight variations in the construction and arrangement of the several parts could be made and substituted for those shown and described without in the least departing from the nature and principle of my invention.

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

1. The combination, with a snap-hook, of a hollow anti-friction roller having bearing-sur-

faces formed in each end thereof, substantially as described.

2. In a snap-hook, the combination, with the hook proper, of a shank formed of arms embracing a hollow anti-friction roller having end bearing surfaces or heads, a tongue mounted in a slot in said hook proper, and having a forked rear end engaging with a pivot-bar cast integral with the hook proper and running transversely across the slot, said tongue also being provided with a bridge and operated entire by a coiled spring under the same, substantially as described.

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

RICHARD W. JONES.

Witnesses:
G. S. HILL,
FRANK CLAYSON.