A. J. VAUGHAN.

Snap-Hook.

No. 161,843. Patented April 6, 1875.

Fig. 1.

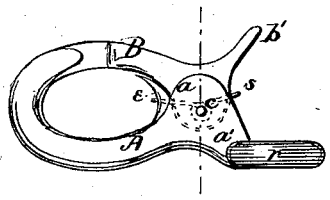


Fig. 2.

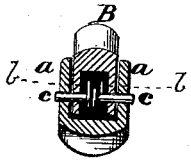
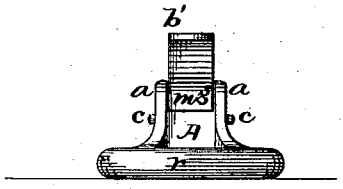


Fig. 3.



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UNITED STATES PATENT OFFICE.

ARTHUR J. VAUGHAN, OF LODI, WISCONSIN.

IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. **161,843**, dated April 6, 1875; application filed March 18, 1875.

To all whom it may concern:

Be it known that I, ARTHUR J. VAUGHAN, of Lodi, in the county of Columbia and State of Wisconsin, have invented certain new and useful Improvements in Snap-Hook; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a side elevation; Fig. 2, a section in line *x x* of Fig. 1, and Fig. 3 a rear elevation.

Similar letters of reference in the accompanying drawings denote the same parts.

The object of this invention is to improve the construction of snap-hooks for harnesses and other similar purposes, in such a manner as to protect the spring from accidental injury, and from the accumulation of ice, snow, dirt, &c., around it, and otherwise to render the hook more convenient and efficient in practical operation.

To these ends the invention consists, first, in the combination of front and rear guards with the cavity or recess in which the spring is arranged; and, secondly, in the details of construction, by which the snap-hook is improved in respect to its general operation.

In the drawings, A B are the two jaws of the hook, constructed and arranged with their points overlapping each other, so that both will take part in sustaining the draft. One of these jaws is provided with two lateral lugs, *a a*, and the other with a chambered projection, *b*, which fits between said lugs. The two jaws are secured together by a rivet, *c*, around which is coiled a spring, *s*, the ends of which project, respectively, through or bear against the two jaws, so as to hold their hooked points firmly together. On the front side of the joint thus formed a strong guard, *e*, rises from the jaw A, so as to cover the joint, protect the spring from injury, and prevent snow, ice, &c., from lodging in the cavity where the spring operates. The guard *e* is curved and rounded so as to present a smooth surface to the parts of the harness with which it comes in contact, and its upper side, as shown in Fig. 1, is adapted to fit closely against the under side of the jaw B, and thus make a close and, as far as possible, tight joint. The rear end of the cavity in which the spring operates is covered and protected by a projection or lip, *m*, attached to the jaw B, and extending across the cavity, so as to completely close it against the admission of snow, &c., on that side.

The location of the spring in the cavity thus protects the spring, and may be made available for the purposes of holding a lubricant. The form of spring is such that no fastening is needed to secure it in place, except the rivet *c*.

The ends of the spring are preferably arranged to project through holes in the parts *e m*, in which case they can be easily inserted, and will act with the proper degree of leverage in holding the jaws closed together.

a' b' are projections, by which the jaws may be easily opened, and one of them may be employed for securing to the snap-hook a suitable ring, by which to attach it to the harness; or the ring may be formed on the snap-hook, making a part thereof, as represented at *r*.

Having thus described my improved snap-hook, I claim as my invention—

In a snap-hook, the jaws A B, provided with the lugs *a a*, chambered or recessed projection *b*, and thumb-piece *b'*, and combined with a coiled spring, *s*, arranged around the pivot in the chamber of the part B, substantially as and for the purpose set forth.

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