

(No Model.)

J. L. COX.  
SNAP HOOK.

No. 482,302.

Patented Sept. 6, 1892.

Fig. 1.

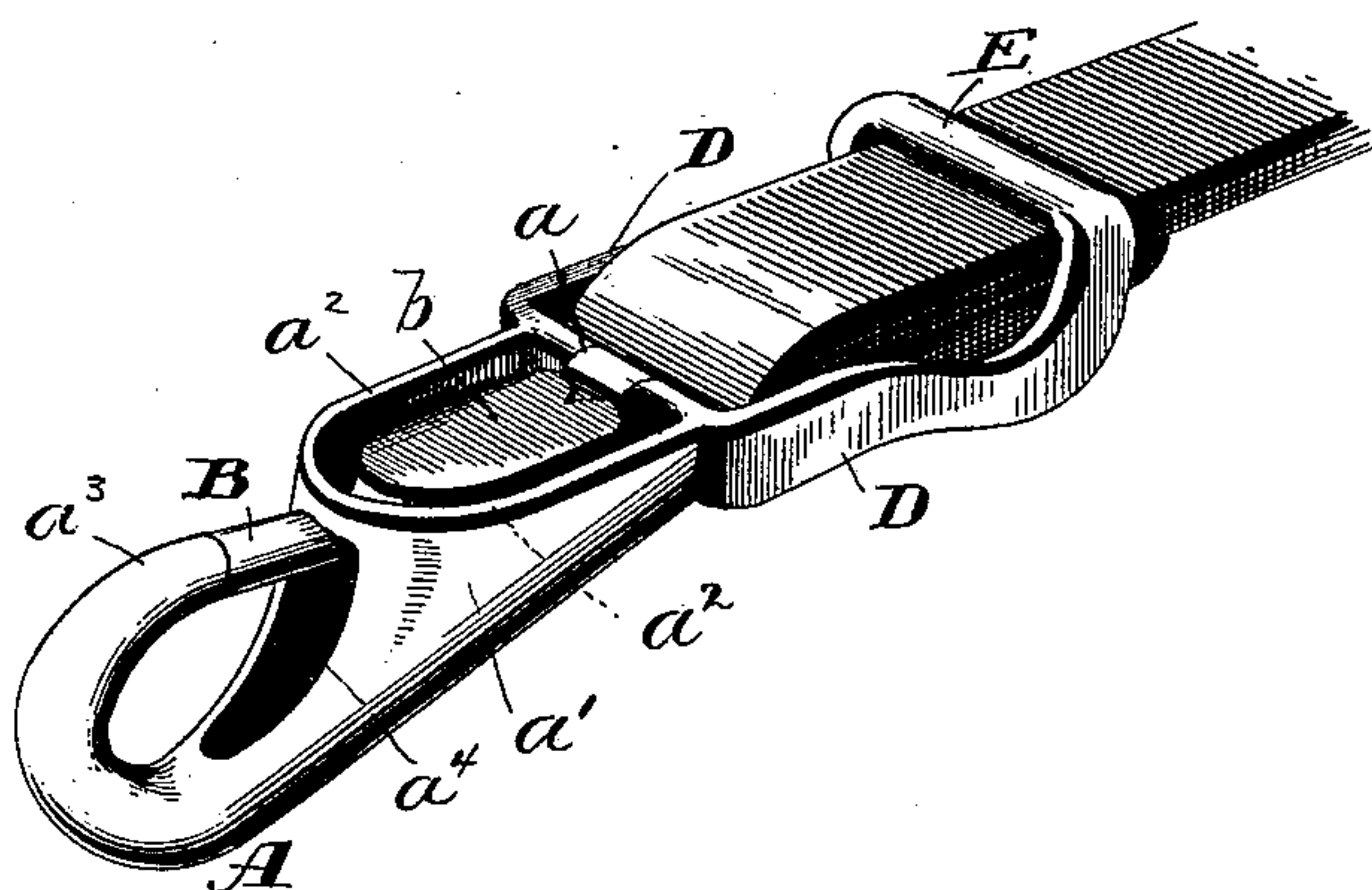
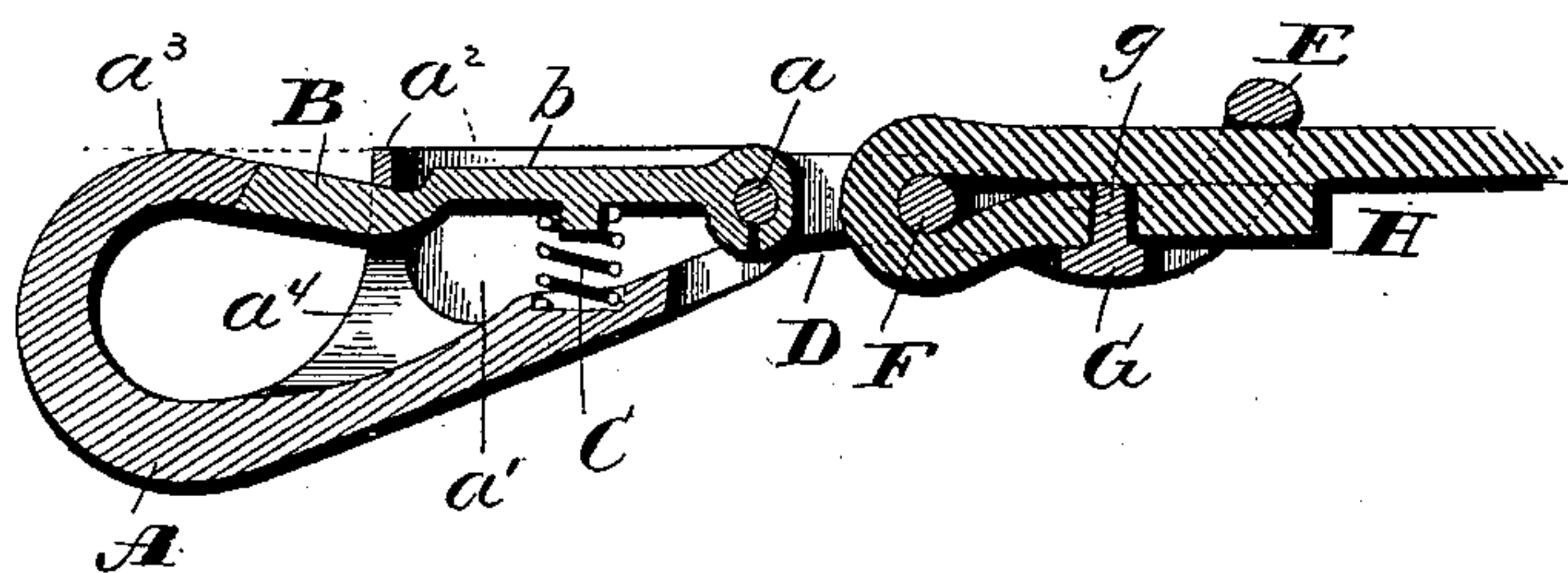


Fig. 2.



Witnesses  
C. J. Williamson  
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# UNITED STATES PATENT OFFICE.

JAMES L. COX, OF MOORE'S SALT WORKS, OHIO.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 482,302, dated September 6, 1892.

Application filed December 14, 1891. Serial No. 415,002. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES L. COX, a citizen of the United States, residing at Moore's Salt Works, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Snap-Hooks; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

As heretofore constructed the tongues of snap-hooks have been so arranged as to be liable to accidental movement from the hook portion, and thus enable the ring or other part in engagement with the hook to become disengaged, such accidental movement being caused, for instance, by the striking of the tongue against the manger or hitching-rack or other place to which the horse might be secured through the medium of the hook.

To remedy this serious defect, which of course frequently results in the liberation of the horse, is the principal object of my invention.

Other objects and advantages are also had in view, as will hereinafter appear.

To these ends and to such others as the invention may pertain the same consists in the snap-hook having the peculiar construction and arrangement of parts, as hereinafter specified, and shown in the drawings, in which—

Figure 1 is a perspective view of a hook constructed in accordance with my invention, and Fig. 2 a longitudinal section.

In the drawings, A and B designate, respectively, the body or hook portion and the tongue of my improved hook, the tongue being pivoted at *a* to the former. Said tongue adjacent to its pivot has the wide flattened portion *b* for convenient engagement by the thumb to enable it to be easily depressed against the stress of the spring C to open the hook. Completely inclosing or surrounding the portion *b*, except on its outer side, is a hollow enlargement or swell *a'*, whose outer edge *a<sup>2</sup>* occupies a plane beyond that of the outer or exposed face of the portion *b*, so that an object larger than the latter cannot come in contact with it, but will strike against the edge *a<sup>2</sup>* of

the swell *a'*. Thus accidental swinging or moving of the tongue, as by a horse rubbing or striking the hook against his manger or other structure, is prevented. The forward wall of the swell *a'* is perforated by an elongated slot 2<sup>3</sup>, through which projects the hook-engaging portion of the tongue B. Said portion is straight and occupies a plane within the outer edge *a<sup>2</sup>* of said swell and the outer edge *a<sup>3</sup>* of the hook, so that the swell, together with the latter, also serves to prevent its being struck in the manner above indicated. The spring C is situated within the swell *a'*, having one end seated in a socket therein and its other end engaged by a teat or lug on the inner side of the portion *b* of the tongue. Said spring is thus completely housed and protected from damage. The pivot *a* of the tongue is formed in the rear wall of the swell or enlargement *a'*.

The manner in which I secure my hook to its strap is as follows: Extending from the rear portion of the swell *a'* on each side are two parallel bars D and D, whose outer ends are curved and connected by a transverse bar E. Between the latter and the hook are two other bars F and G, the latter being between the bars E and F and having on one of its faces a stud or lug *g*. Through said bars E, F, and G a strap H is interlaced, being first passed between the bars F and G and having an opening in its end placed over the stud *g*, and then carried around the bar F, and thence between the inner face of the bar E and its previously-placed end. It will thus operate to keep the latter in place on the stud on the bar G, as the space between said end and the bar E is but equal to the thickness of the strap. Importance is attached to the front cross portion *a<sup>2x</sup>* of the swell *a'*, beneath which the tongue B is confined, as it limits the outward movement of the tongue and relieves the pivot of strain and danger of breaking.

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

1. In combination with a hook having a hollow enlargement or swell, the tongue pivoted to the rear wall of the latter, being in part surrounded or inclosed by the same, with a straight portion extending through a slot in its front wall and beneath a cross portion

thereof and having all of its surface within the plane of the outer edge of said swell, and a spring contained in the latter, engaging the inner side of the tongue, and thus being completely housed, substantially as shown and described.

2. The hook described, consisting of the body portion formed with hollow enlargement, with slot at its forward end, and a hook, the tongue pivoted at the rear of said enlargement and having flat upper face below the upper edge of the enlargement, and a portion

extended through the said slot and confined beneath a front cross portion of the wall of the enlargement, and a compression-spring within the enlargement beneath the tongue between its pivot and outer end, substantially as described.

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

JAMES I. COX.

Witnesses:

H. W. WALKER,  
C. H. KIRK.