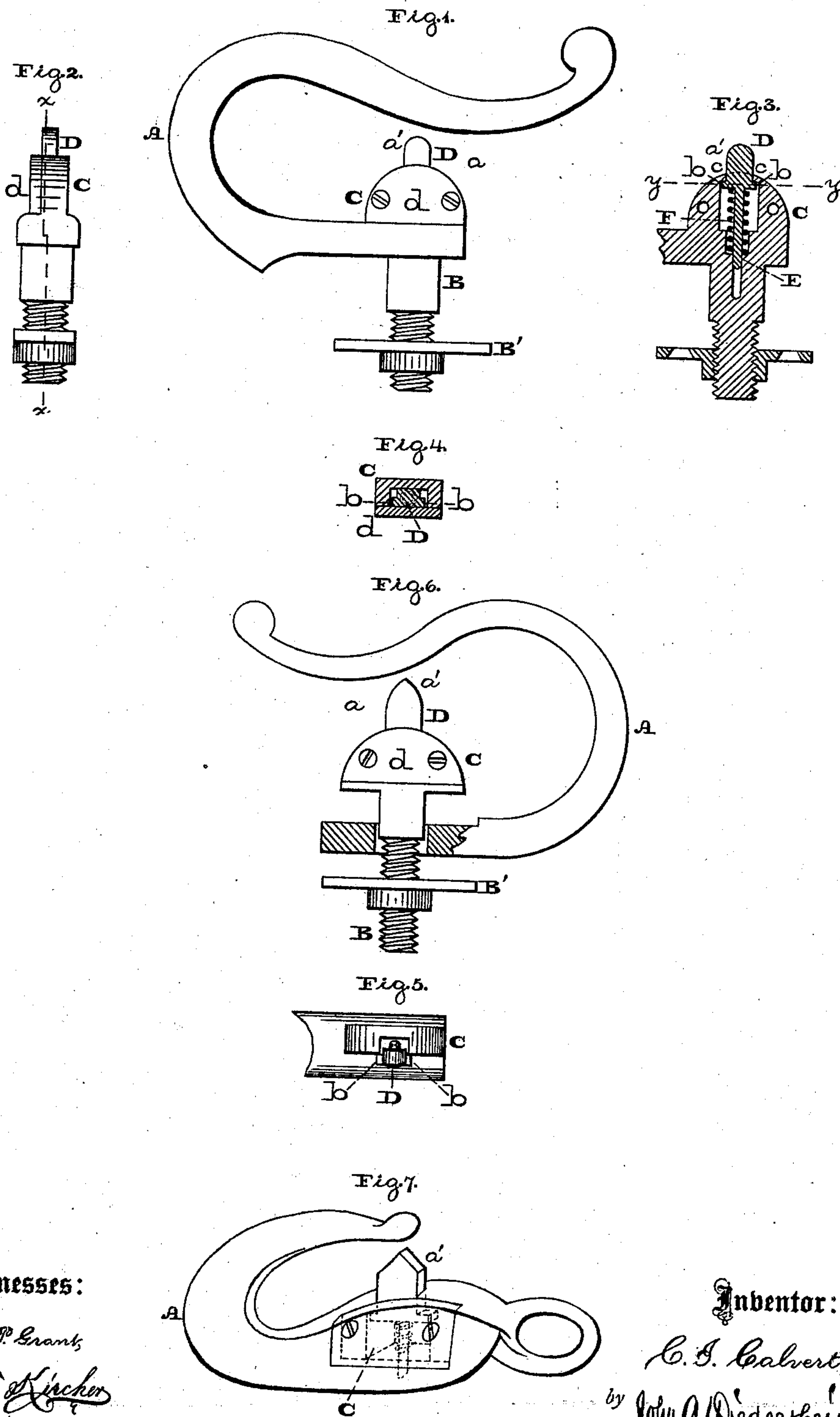


C. I. CALVERT.  
Rein-Hook.

No. 214,488.

Patented April 22, 1879.



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN REIN-HOOKS.

Specification forming part of Letters Patent No. **214,488**, dated April 22, 1879; application filed January 25, 1879.

*To all whom it may concern:*

Be it known that I, CALLENDER I. CALVERT, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Rein-Hooks, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the rein-hook embodying my invention. Fig. 2 is an end view of a portion of the same. Fig. 3 is a vertical section in line *x x*, Fig. 2. Fig. 4 is a horizontal section in line *y y*, Fig. 3. Fig. 5 is a top view of a detached portion. Fig. 6 is a side elevation, partly sectional, of a modification. Fig. 7 is a perspective view of another modification.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to a rein-hook provided with a yielding tongue, which projects into the space of the neck of the same, so as to partly close the neck and prevent accidental or improper displacement of the rein, without, however, interfering with its removal when desired or required. The tongue is guided and supported so as to move uniformly and resist strain, and provision is made for conveniently and easily applying the same.

I will first describe a rein-hook embodying my invention, and afterward point out in the claim the features which I regard as novel.

Referring to the drawings, A represents a rein or terret hook, and B B' the fastening-bolt and nut thereof. Formed with the lower end of the hook is a box, C, extending vertically, and having fitted to its upper end a tongue, D, which projects into the space of the neck *a* of the hook, and is beveled, rounded, or pointed, as at *a'*.

E represents a stem, which is secured to or formed with the tongue D, and projects downwardly therefrom into the box C and an opening in the lower end of the hook, and, if desired, into an opening in the bolt B.

Surrounding the stem E is a spring, F, which bears against the tongue D and a

proper portion of the lower end of the hook or box C for holding said tongue in its normal elevated position.

In order to prevent upward displacement of the tongue, shoulders *b b* project laterally from the base of the tongue, and flanges *c c* project inwardly from the upper end of the box C, so as to overhang said shoulders *b* and form stops for the tongue.

When the rein is to be applied to or removed from the hook, it is drawn firmly against the tongue D, and, owing to the nature of the top *a'* of said tongue, it is pressed down, thus entering the box C and opening the space of the neck *a*, whereby the rein passes the tongue and enters or leaves the hook, after which the tongue returns to its normal or elevated position due to the action of the spring F.

When the rein is on the hook, the mere shaking or shifting of the portion of the same in contact therewith, whether occasioned by the gait of the animal or throwing up of his head, is not sufficient to depress the tongue D, wherefore the rein is reliably connected to the hook, and remains thereon, unless purposely and properly withdrawn.

Owing to the length of the stem E, it is essential in some cases to insert the tongue from the side of the box C. For this purpose the shoulders *b b* occupy only a portion of the base of the tongue. One wall or plate, *d*, of the box is removed, the stem E inserted in its opening, and the unshouldered part of the base entered between the faces of the overhanging flanges *c*. (See Fig. 5.) The tongue is depressed, and when the upper faces of the shoulders *b* clear the lower or inner faces of the flanges *c* the tongue drops into position, the shoulders coming under the flanges, after which the plate *d* is secured, and the parts are operative.

It will also be seen that the tongue, in its movement, has two of its vertical sides in contact with the inner walls of the box C, whereby it is continually supported and braced, so as to resist or endure strain at all times; and



it is furthermore guided by the stem E, thus sliding uniformly, and possessing increased strength.

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

The hook A, in combination with the box C, centrally recessed, and formed with overhanging flanges *c c* at the mouth of the recess, the spring-tongue D, with projecting shoul-

ders *b*, occupying only a portion of the base thereof, and the stem E, the said box being provided with the side plate, *d*, and the above-described parts being constructed and combined for operation as specified.

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Witnesses:

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