

G. REYNOLDS.

Snap-Hooks.

No. 158,220.

Patented Dec. 29, 1874.

Fig. 1.

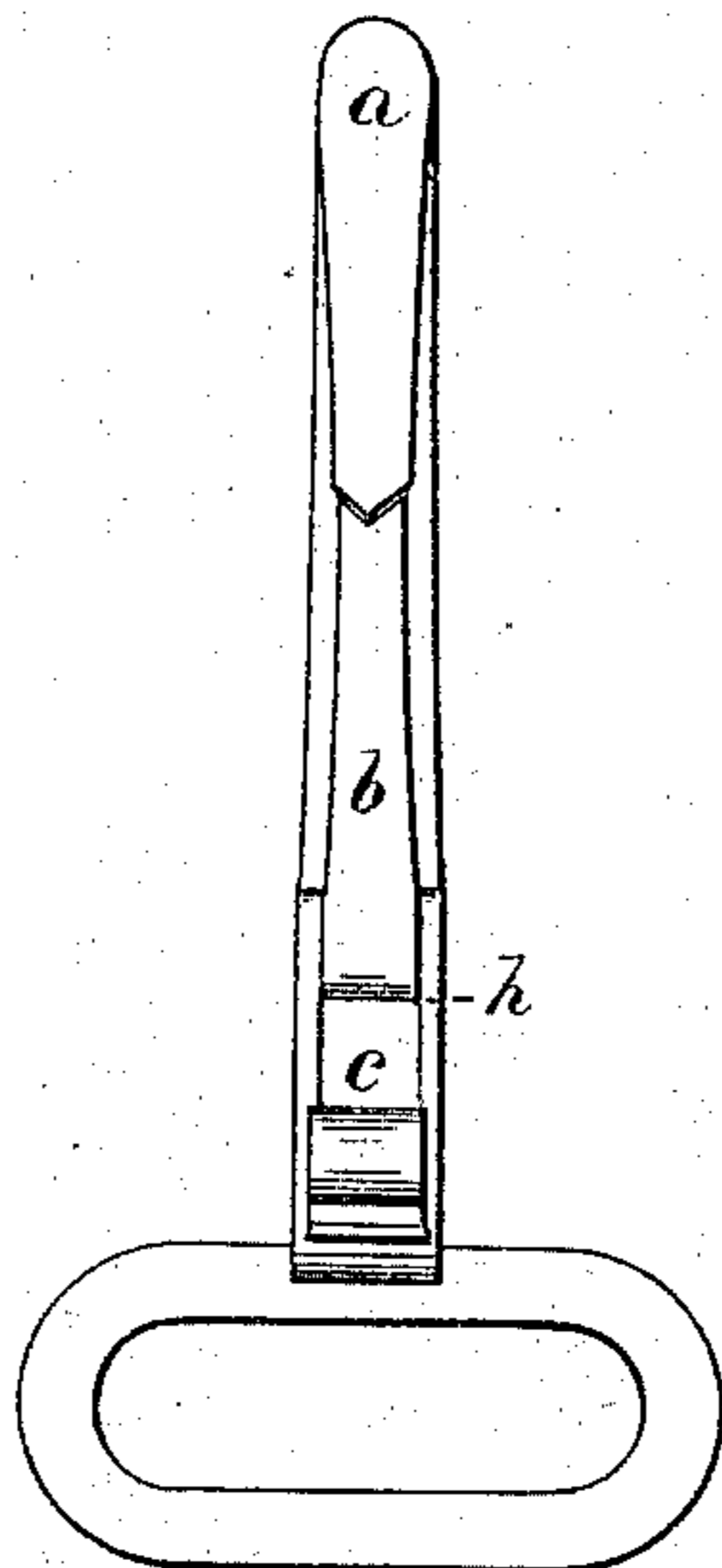


Fig. 2.

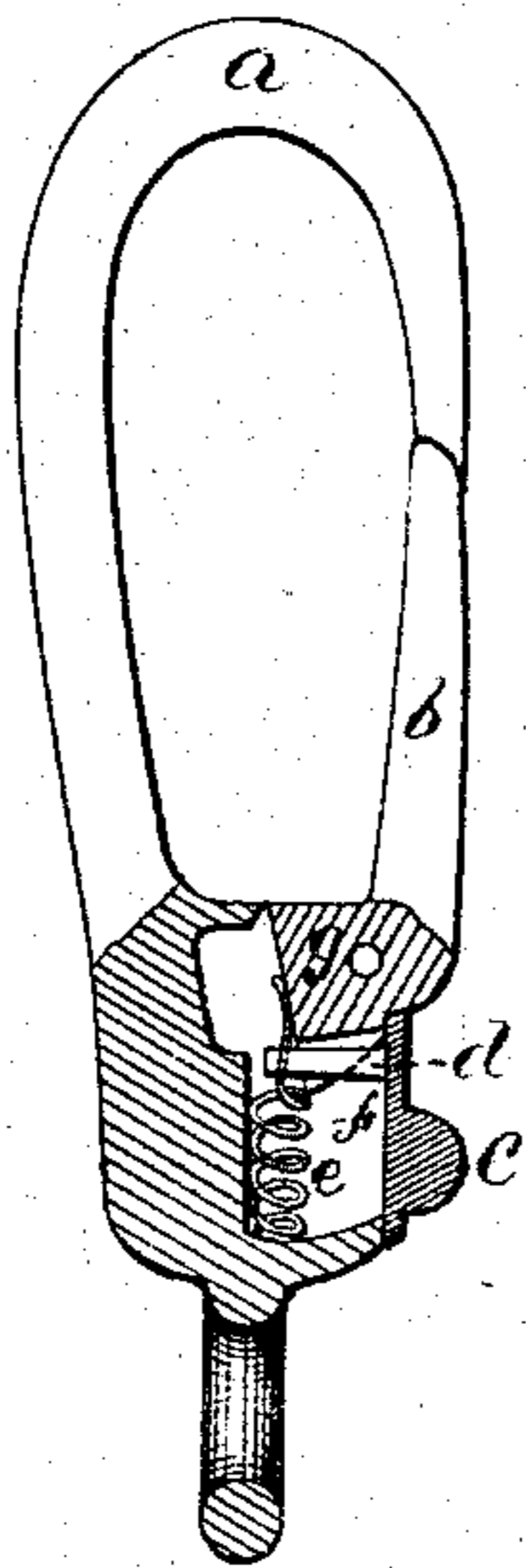
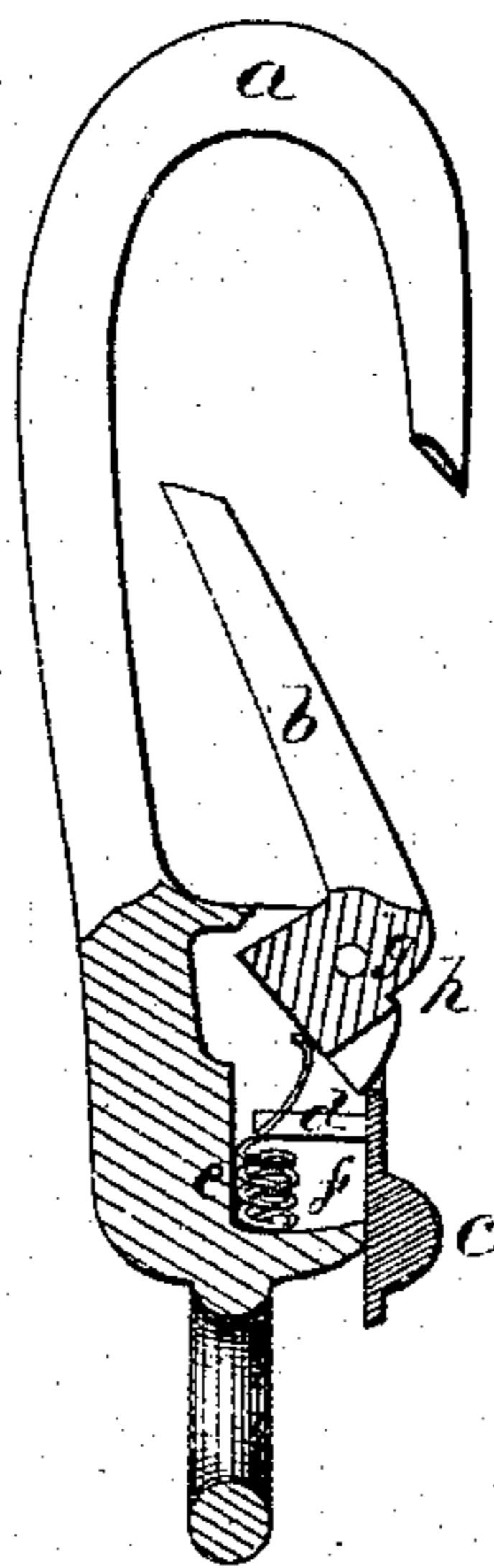


Fig. 3.



Witnesses,

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by Theo. G. Ellis, Attorney

UNITED STATES PATENT OFFICE.

GEORGE REYNOLDS, OF UNIONVILLE, CONNECTICUT.

IMPROVEMENT IN SNAP-HOOKS.

Specification forming part of Letters Patent No. **158,220**, dated December 29, 1874; application filed October 5, 1874.

To all whom it may concern:

Be it known that I, GEORGE REYNOLDS, of Unionville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Snap-Hooks; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention consists in a snap-hook, the tongue of which remains locked when in use, so that it cannot be accidentally moved out of place, but is released and drawn inward by drawing back a bolt, which, when released again, closes the tongue.

In the accompanying drawing, Figure 1 is a top view of my improved snap-hook. Fig. 2 is a side view, closed or in its ordinary position, with one side of the rear part removed to show the interior mechanism. Fig. 3 is a side view, open, with the bolt drawn back, also with one side removed, as in Fig. 2.

a is the hook. *b* is the tongue. *c* is a bolt sliding in a dovetailed or other groove between the sides and over a recess in the rear part of the hook at *f*. *d* is a pin attached to the sliding bolt *c*, and reaching down into the recess *f*. When the hook is closed, as in Fig. 2, this pin passes through a slot in the rear of the tongue *b*, as shown in the sectional part of Fig. 2. *e* is a spring, the body of which is spiral, but which has its forward end carried out under the rear end of the tongue *b*, and back of its pivot *g*, so as to act upward on this part. The rear end of the tongue *b* has a square notch at *h*, into which the bolt *c* locks when the tongue is closed, and prevents its

opening until the bolt is drawn back. Below this notch the rear end of the tongue is curved or inclined in such a manner that it is acted upon by the end of the bolt *c* in closing, with a positive motion to force it downward until the end of the bolt reaches the notch *h*, when it locks the tongue.

The operation of my invention is as follows: To open the hook, the thumb is placed upon the knob of the bolt *c*, and draws it back. The pin *d* presses upon the spiral part of the spring *e*, and forces it back, while the forward end presses upward upon the rear end of the tongue *b*, and opens it. To close the hook, the thumb is removed, when the spiral part of the spring *e* throws the bolt forward, and this, acting upon the inclined rear end of the tongue, presses down the weaker forward end of the spring, and closes the hook, and, when closed, locks it.

What I claim as my invention is—

1. The combination of the tongue *b* and the locking-bolt *c* with a spring, arranged to press forward upon the locking bolt and upward upon the rear end of the tongue, substantially as and for the purpose herein described.

2. The combination of the forward-pressing bolt *c*, pintle *d*, and spring *e*, with the inclined and notched rear end of the tongue *b*, substantially as and for the purpose herein described.

3. In a snap-hook, a duplex spring adapted to release its pressure upon the tongue when the catch or locking-slide is withdrawn, and to automatically close both tongue and catch when the latter is released, substantially as described.

GEORGE REYNOLDS.

Witnesses:

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