

(No Model.)

H. S. PULLMAN.

SNAP HOOK.

No. 275,266.

Patented Apr. 3, 1883.

fig. 1

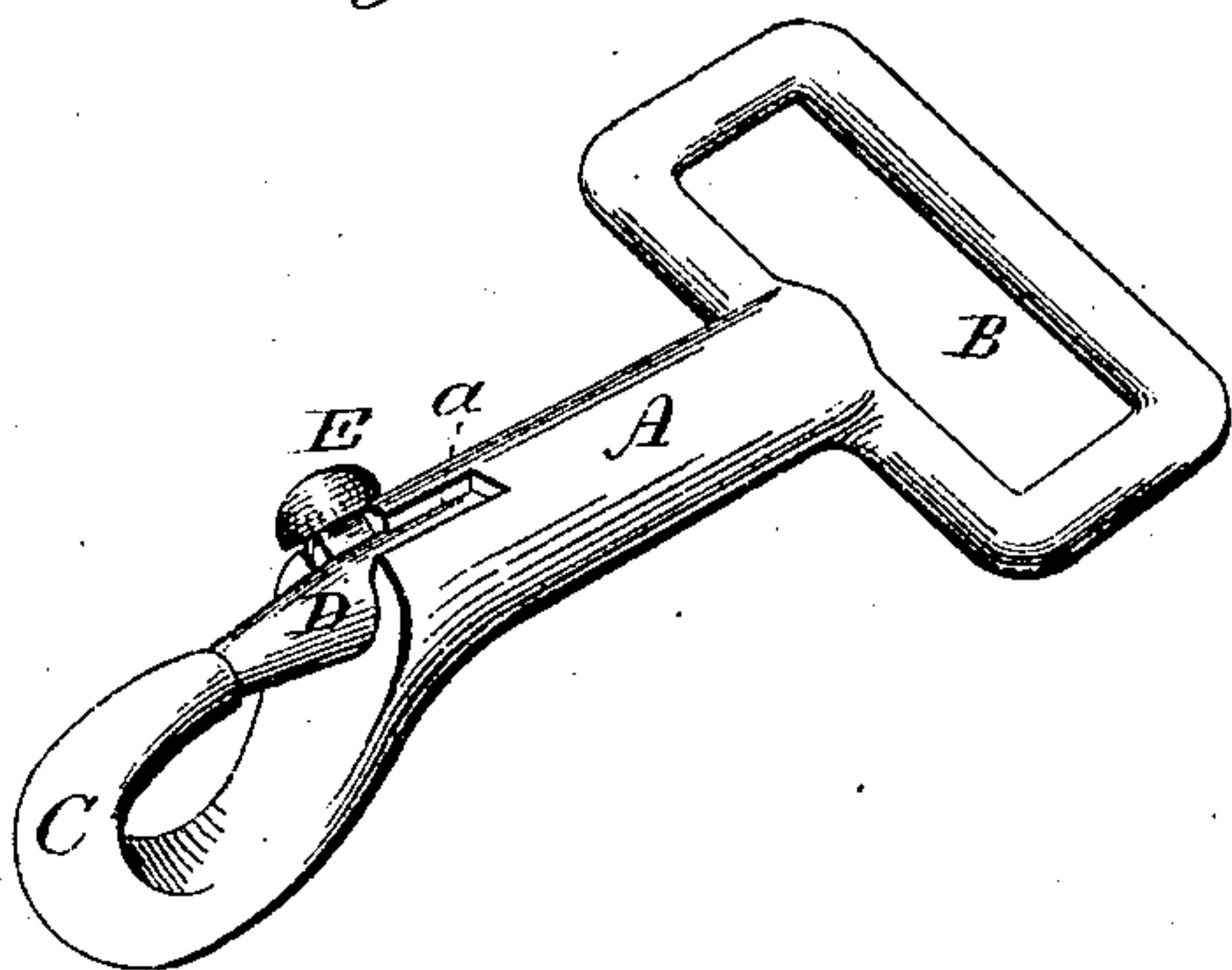


fig. 2

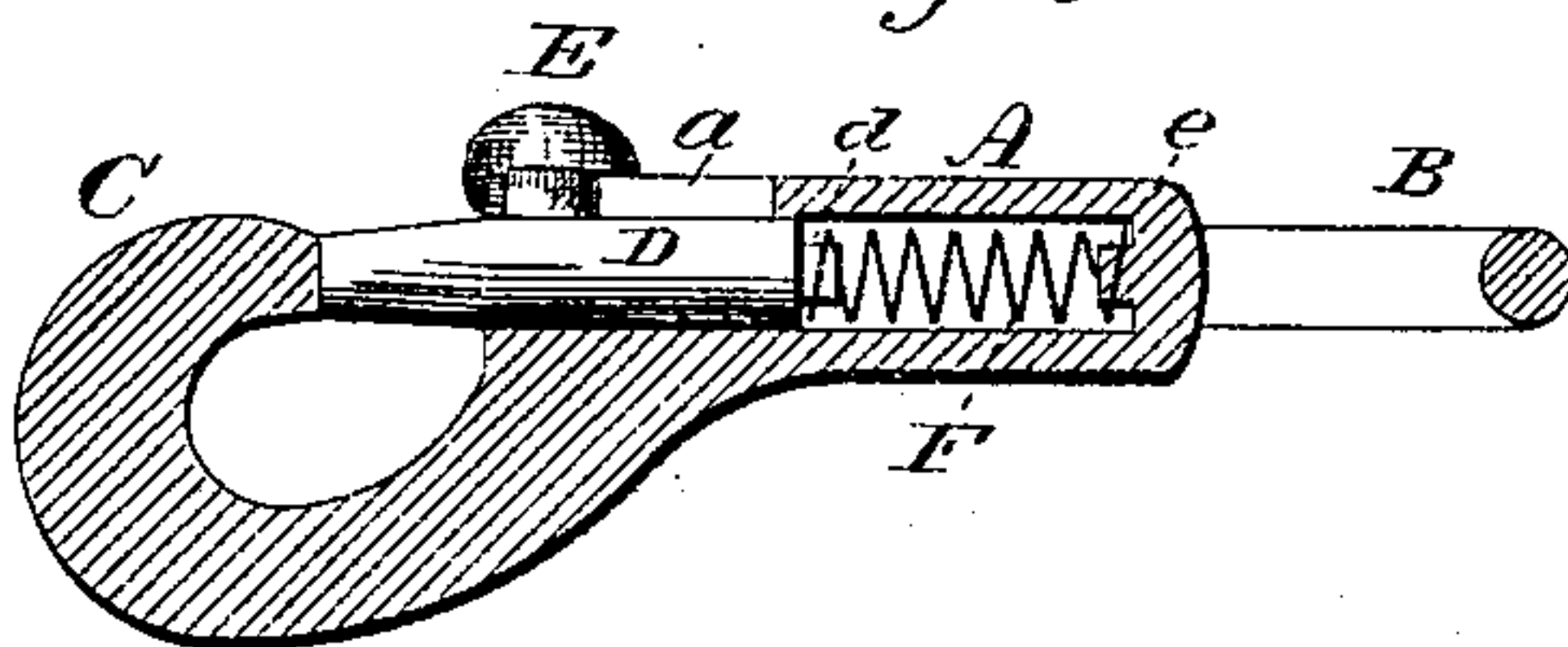


fig. 3

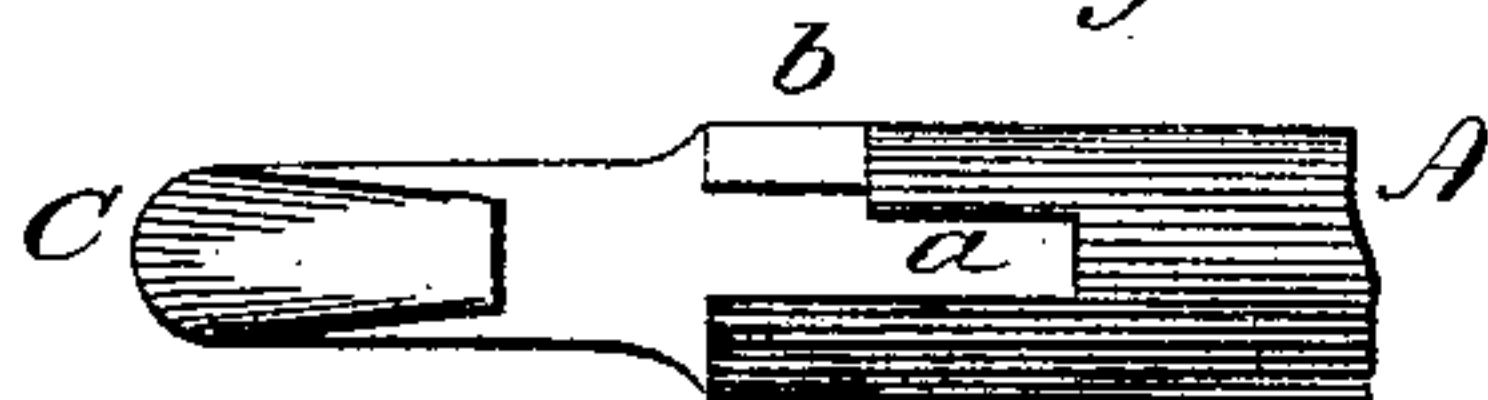


fig. 4

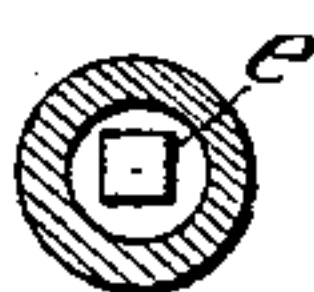


fig. 5



fig. 6



Witnesses.

John H. Shumway
John D. Earle

Herbert S. Pullman
Inventor
By *att'y*
John D. Earle

UNITED STATES PATENT OFFICE.

HERBERT S. PULLMAN, OF ROCKVILLE, ASSIGNOR TO SARGENT & CO., OF
NEW HAVEN, CONNECTICUT.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 275,266, dated April 3, 1883.

Application filed February 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, HERBERT S. PULLMAN, of Rockville, in the county of Tolland and State of Connecticut, have invented a new
5 Improvement in Snap-Hooks; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same,
10 and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view; Fig. 2, a longitudinal central section; Fig. 3, a top view of the body, the bolt removed; Fig. 4, a transverse section through the body; Fig. 5, a perspective view of the bolt removed; Fig. 6, a perspective view of the spring.

This invention relates to an improvement in that class of snap-hooks in which a bolt is arranged to slide longitudinally toward and from the point of the hook, and so as to close or open the mouth of the hook, the object of the invention being to lock the bolt when in the closed position; and the invention consists in the arrangement of the bolt in a longitudinal
25 guide, combined with a spring acting upon said bolt to force it toward the point of the hook, and also to impart to it a partial rotation, whereby such partial rotation will bring the bolt into a locked position, as more fully
30 hereinafter described.

A represents the body of the hook, which is made tubular, and constructed at one end with an eye, B, or other device for attachment, and with a hook, C, at the opposite end. Within the tubular body A the bolt D is arranged, and from the bolt a thumb-piece, E, extends outward, and works through a longitudinal slot, *a*, in the body of the hook. In
40 the body, in rear of the bolt, is a spring, F. So far the bolt is the common and well-known construction.

At the forward end of the slot *a* a transverse notch or shoulder, *b*, is formed, and in a position relative to the thumb-piece E, so that
45 when the bolt is in its closed position the thumb-piece E may turn into the notch *b*, or forward of that shoulder, and when so turned it is out of line with the slot, and hence cannot be moved to the rear until the bolt be

turned to bring the thumb-piece into line with the slot.

To make the turning of the bolt into its locking position automatic, I connect the spring at one end with the body, and at the other
55 with the bolt, first giving to the spring one or more turns, so that it will act upon the bolt as a torsion-spring, tending to turn the bolt toward the notch *b*, and so that when the bolt stands in its closed position the spring
60 will force the thumb-piece E into the notch *b* and hold it there until the thumb be applied to return it into line with the slot. The spring therefore acts not only to force the bolt forward to close the mouth, but also to turn the
65 bolt into its locked position.

To connect the spring with the bolt and with the body as cheaply as possible, I construct the bolt with an angular projection, *d*, at its inner end, and at the rear end of the cavity of
70 the body make a corresponding inward projection, *e*, of angular shape, and then bend the two ends of the spring into corresponding shape, as at *f*; but it may be otherwise connected.

I claim—

1. In a snap-hook, the tubular body A, constructed at its forward end with a hook, C, and with a longitudinal slot, *a*, opening into the body, and a transverse notch or shoulder
80 from said slot, combined with a bolt and spring arranged within the tubular body, the said bolt provided with a thumb-piece extending through said slot, and so as to work longitudinally therein, the said thumb-piece arranged to turn into said notch when in its closed position, substantially as described.

2. The combination of the tubular body, provided at one end with a hook, a longitudinal slot opening into the body, and a transverse notch or shoulder from the said slot,
90 with a bolt arranged to slide in said body, a spring within the body, one end attached to the body and the other to the bolt, whereby the spring imparts to the bolt both forward and rotary movement, the said bolt provided with a thumb-piece to work through said slot and be turned by the action of said spring into said notch or shoulder, substantially as described.

3. The combination of the tubular body A, 100

constructed with a hook at one end, a longitudinal slot opening into the body, and a transverse notch or shoulder from said slot, a bolt arranged to slide in the body, and provided with a thumb-piece to work in said slot and into said notch, a spring within said body, the bolt constructed with an angular rearward projection, and the body with a corresponding angular forward projection, the spring bent at its two ends to correspond to said projections, and whereby the ends of said springs are firmly connected, respectively, to said body and bolt, substantially as described.

HERBERT S. PULLMAN.

Witnesses:

WM. S. COOKE,
A. S. LYHNE.