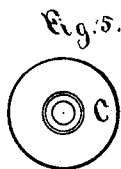
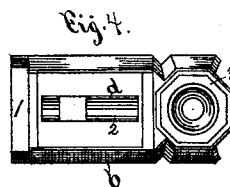
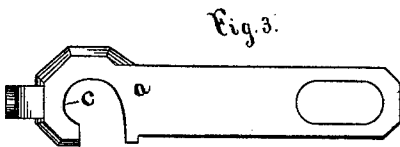
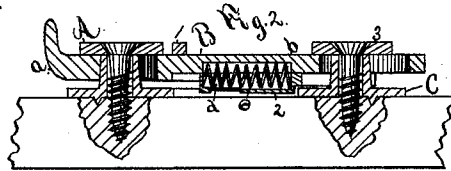
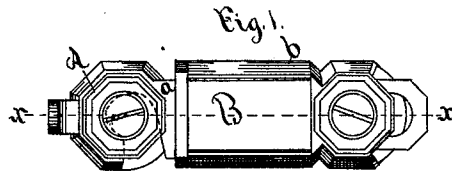


E. J. STEELE.
Shutter-Hook.

No. 213,703.

Patented Mar. 25, 1879.



Witnesses:
W. B. Thomson.
P. J. Marley.

Inventor:
E. J. Steele.
By James Shepard atty.

UNITED STATES PATENT OFFICE.

ELBRIDGE J. STEELE, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN SHUTTER-HOOKS.

Specification forming part of Letters Patent No. **213,703**, dated March 25, 1879; application filed January 30, 1879.

To all whom it may concern:

Be it known that I, ELBRIDGE J. STEELE, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Shutter-Hooks, of which the following is a specification:

My invention has for its object the extension of the hook proper to compensate for shrinkage of the shutters; and the invention consists in the peculiar construction and combination of parts, as hereinafter described.

In the accompanying drawings, Figure 1 is a front elevation of a shutter-hook which embodies my invention. Fig. 2 is a sectional view of the same on line *x x* of Fig. 1; and Figs. 3, 4, and 5 are detached views of parts of the same.

The stud or button A, for engagement with the end of the hook, may be of any ordinary kind. B designates the extension-hook, composed of two parts—to wit, the hook *a* and its frame *b*. The hook *a*, detached from all other parts, is shown in Fig. 3, which is a front elevation of said hook. Instead of making the outer side of the notch *c* in said hook straight, as in ordinary hooks, I prefer to leave a little depression in it, as shown, to embrace the body of the button A. The body or shank of this hook *a* is flat and straight, and also slotted at its inner end. The frame *b* of the extension-hook is, for convenience of casting, made with three bridges or bars, 1, 2, and 3, two of which (1 and 3) are on one side, and one (2) on the other, and all connected together at the sides, so as to form a longitudinal opening through it of a size that will receive and guide the body of the hook *a*, so that the latter may be adjusted longitudinally in said frame. The bridge or bar 3 of the frame *b* is provided with a screw-hole, as shown, and the inside of the bridge 2 is provided with a semicircular recess, *d*, which forms half a spring-chamber, the rear side of the body of the hook *a* having a similar recess, (see Fig. 2,) which forms the other half of the spring-chamber. At the ends of the respective recesses there are shoulders, which form seats for the ends of the spiral spring *e*, and a small hole is left in the bridge 2 at the bottom of

the semicircular recess for the insertion of the spring.

A front elevation of the frame detached from the other parts is shown in Fig. 4.

Fig. 5 shows a front elevation of the pivotal stud C, the same being hollow for receiving a fastening-screw; and the body of the stud is of a size to fit the slot in the inner end of hook *a*, so that the latter may slide on the stud.

The base-plate of the stud C may be provided with one or more small spurs, to enter the wood and prevent the stud from turning when secured to the shutter by a screw.

The parts are cast or otherwise formed separately, after which the shank or body of the hook *a* is slipped endwise into the frame *b*, the spring *e* slipped into the hole in the bridge, the stud C set in the desired place, and the extension-hook placed over it, with the slotted end of *a* embracing the sides of the stud, and the bridge 3 of the case resting on the end thereof, when the fastening-screw is inserted to secure the parts in place. The button A is also attached by a screw or screws. When thus secured, it will be seen that the part *a* is longitudinally adjustable on the parts *b* and C, thereby forming an extension-hook, while the spring, bearing upon the shoulders at the ends of the recesses in the parts *a* and *b*, has a tendency to draw the part *a* into the part *b*.

By this construction two objects are accomplished: first, after the end of the hook is hooked over the body of the button A, it is drawn endwise by the spring, so as to engage the recess in the outer side of the notch *c*, and lock the hook in place to prevent an accidental unfastening of the same; and, second, in case of shrinkage, the hook is self-extensible to compensate therefor.

I am aware that fasteners for the meeting-rails of sashes have been provided with a swinging sweep, having a hook at one end similar in form to the notch *c*, which sweep was in one part only, and was hung by a fixed stud passing through a longitudinal slot in said sweep, so that it could swing thereon, and also move longitudinally. The slot in the sweep was also provided with a spring, located on the opposite side of the stud from the hook, which spring had a constant tendency

to draw the hook toward the stud, which prior device is hereby disclaimed.

I am also aware that hasp-hooks have been made with an extensible hook and a spring, both mounted on the body of the hasp, and I hereby disclaim the same.

I claim as my invention—

1. In a shutter-hook, the combination of the frame *b*, provided with the semicircular recess *d*, the hook *a*, having a corresponding recess, said parts adapted to move longitudinally, one upon the other, and the spring *e*, resting in said recesses, substantially as described, and for the purpose specified.

2. The combination of the hollow pivotal stud *C*, the hollow frame *b*, adapted to be pivoted by a screw to said stud, and the hook *a*, passing through the hollow frame, so as to swing with it, and also slotted at its inner end, so as to embrace the stud *C* and slide longitudinally thereon, substantially as described, and for the purpose specified.

ELBRIDGE J. STEELE.

Witnesses:

JAMES SHEPARD,
WILL B. THOMSON.