No. 631,925. Patented Aug. 29, 1899.

J. BRADLEY.

EXTENSION LADDER HOOK.

(Application filed June 7, 1899.)

(No Model.)

Fig. 1.

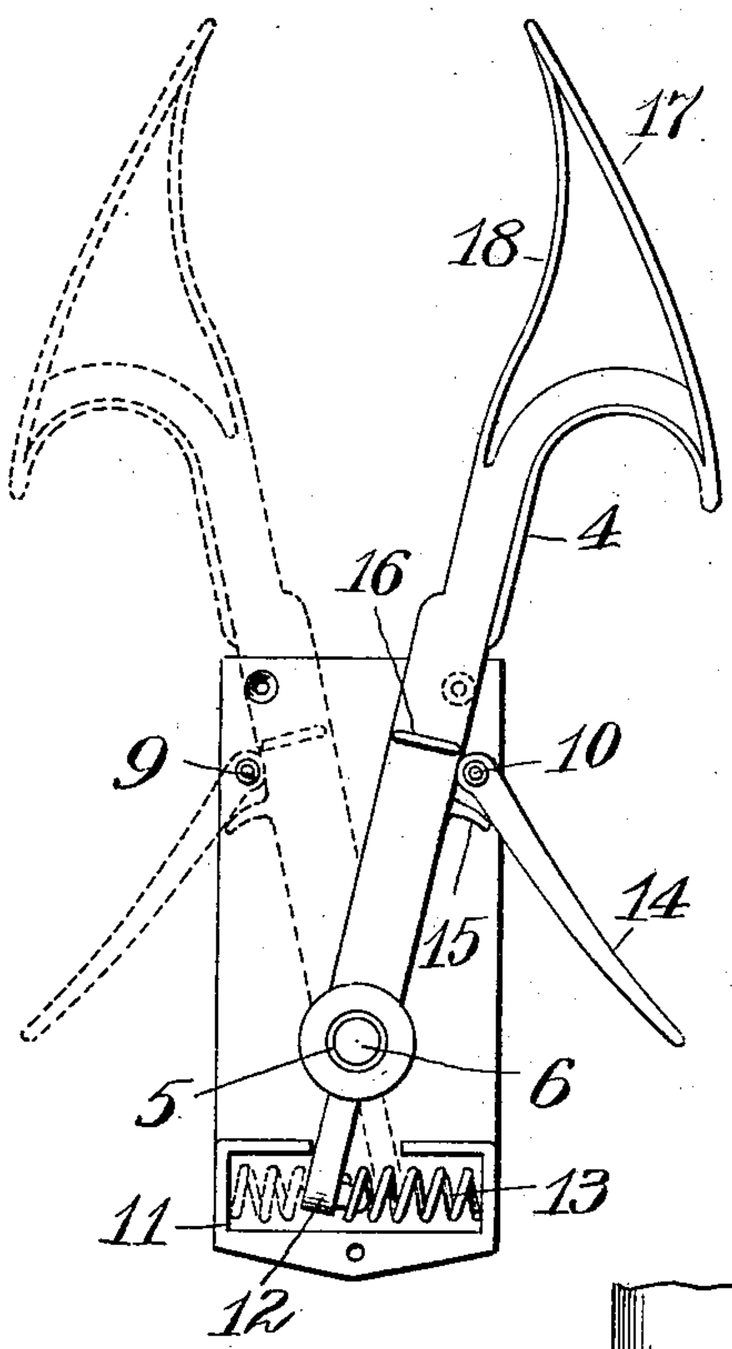


Fig. 2.

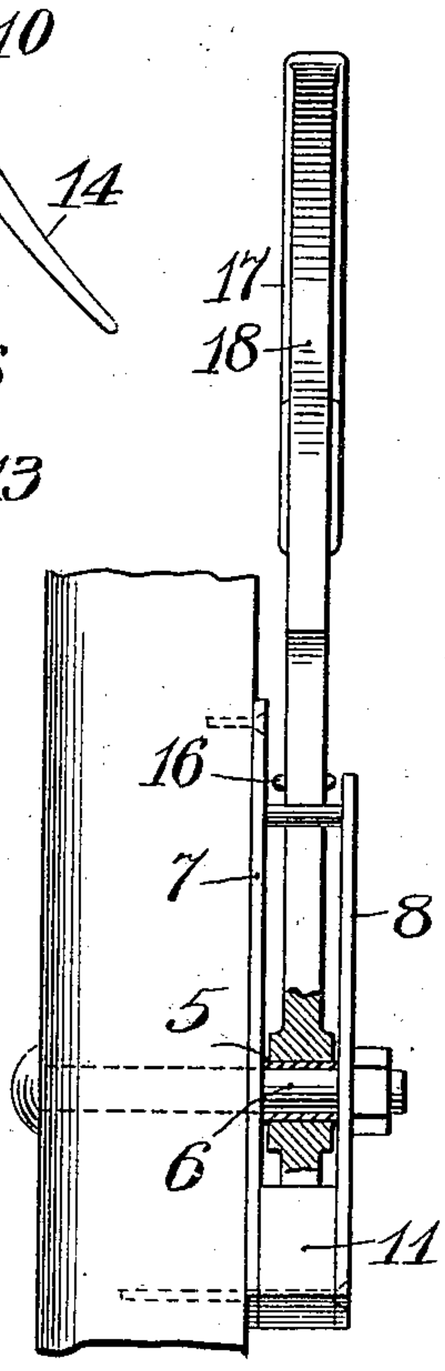
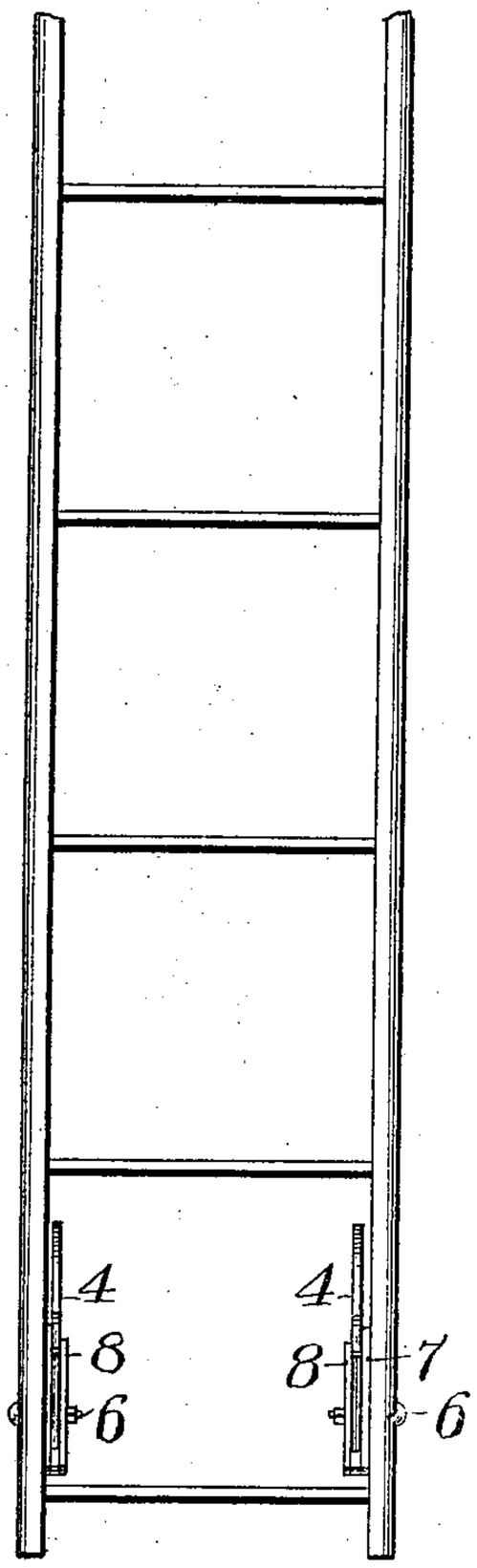


Fig. 3.



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UNITED STATES PATENT OFFICE.

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EXTENSION-LADDER HOOK.

SPECIFICATION forming part of Letters Patent No. 631,925, dated August 29, 1899.

Application filed June 7, 1899. Serial No. 719,679. (No model.)

To all whom it may concern:

Be it known that I, JOHN BRADLEY, a subject of the Queen of Great Britain, and a resident of New York, in the county of New York and State of New York, have invented a certain new and useful Extension-Ladder Hook, of which the following is a specification.

This invention relates to hooks for extension-ladders, and has for its object the construction of a hook for this purpose in a manner such that the parts thereof may be readily reversible in order that they may be applied to either side of the ladder.

A further object is to construct a ladder-hook that shall be cheaply constructed and durable and one which will be positive in its operation.

With this end in view the invention consists in the formation, construction, and combination of parts, as hereinafter fully described and set forth and claimed.

In the accompanying drawings, which form a part of this specification, Figure 1 shows a face view of the improved hook, the face-plate being removed and the position of the parts when reversed being shown in dotted lines. Fig. 2 represents an edge view of the hook as applied to a ladder. Fig. 3 shows the extension portion of a ladder equipped with the improved hooks, their position showing the reversal of the casing.

The hook 4 is pivoted upon a sleeve, as 5, through which is passed a bolt, as 6, which bolt extends through the side of the ladder and through the casing for the hook, as clearly indicated in Fig. 2. This casing consists of a back plate 7 and a front plate 8, which are held at the proper distance from one another by the shouldered pins 9 and 10, the spring-housing 11, and the collar 5, which, in addition for this latter purpose, acts as a distance-piece as well and prevents the casing from being drawn down by the bolt 6 in a manner to cause the hook 4 to bind. At the lower end of the hook a projection, as 12, extends into the spring-housing and has a lug upon its end, over which the end of the spring 13 is placed. A tongue, as 14, is constructed with an eye at its inner end, by means of which it is pivoted upon either of the studs 9 or 10. Upon the hook, at a point below said studs, there is a projection 15, against which the tongue rests and which holds said tongue out in the path of the rungs of the ladder. Beads, as shown at 16, may be formed upon the sides of the hook to give it stability within the casing and to provide limited friction-surfaces between the hook and casing.

The hook 4 is provided with an upwardly-extending and recurved shoe 17 for engagement with the rungs of the ladder as the extension portion is elevated, and this shoe is braced by the strut 18. In addition to the bolt 6 for securing the hook to the ladder screws are passed through the upper edge of the back plate 7, as indicated, and another screw through the lower end of both front plate and back plate, as clearly indicated in Fig. 2.

As will be noted from Fig. 1, the hook 4 may be reversed within the casing by simply turning it over from the full-line position to the dotted-line position and shifting the spring 13 into the dotted position, as indicated, when the tongue 14 may be removed from stud 10 and placed upon stud 9. In making the parts thus reversible, the necessity for constructing right-hand and left-hand hooks and casings is avoided, which makes a saving in the manufacture of the article, since the same parts will serve on both right and left sides of the ladder.

In Fig. 1 the parts of the hook are shown in the position occupied by them when the ladder is being extended. When the extension portion is being taken down the tongue 14 will catch on the first rung below it and close the opening of hook 4 in the manner usual in hooks of this sort, whereby the hook will be prevented from catching the rung as the extension portion is lowered.

The invention claimed is—

1. A ladder-hook consisting of a reversible casing, a hook as 4, pivoted therein and reversible upon its pivot, a tongue as 14, and a stud at either side of the casing upon which the tongue may be pivoted, a spring-housing at one end of the casing into which extends the projection on the hook 4, and a spiral spring within said housing engaging with said

projection in a manner to hold the upper end of the hook in the path of the rungs of the ladder.

2. The ladder-hook consisting of a casing formed by the plates 7, 8, the shoulder-posts 9 and 10, and a spring-housing, the sleeve 5, upon which the hook 4, is pivoted, the bolt 6, passing through the sleeve and the casing and side of the ladder, the tongue 14, adapted to be pivoted upon either of the posts 9 or 10, the hook 4, being provided with a lug as 15, for holding the tongue in operable position, and the spring 13, located in the housing and adapted to hold the hook and tongue in working position.

Signed at New York, in the county of New York and State of New York, this 2d day of June, A. D. 1899.

JOHN BRADLEY.

Witnesses:
WM. H. CAPEL,
D. H. DECKER.