No. 658,716. Patented Sept. 25, 1900.

C. N. RICHARDSON & E. A. WHITAKER.

SAFETY HOOK FOR FIREMEN'S LADDERS.

(Application filed July 21, 1900.)

(No Model.)

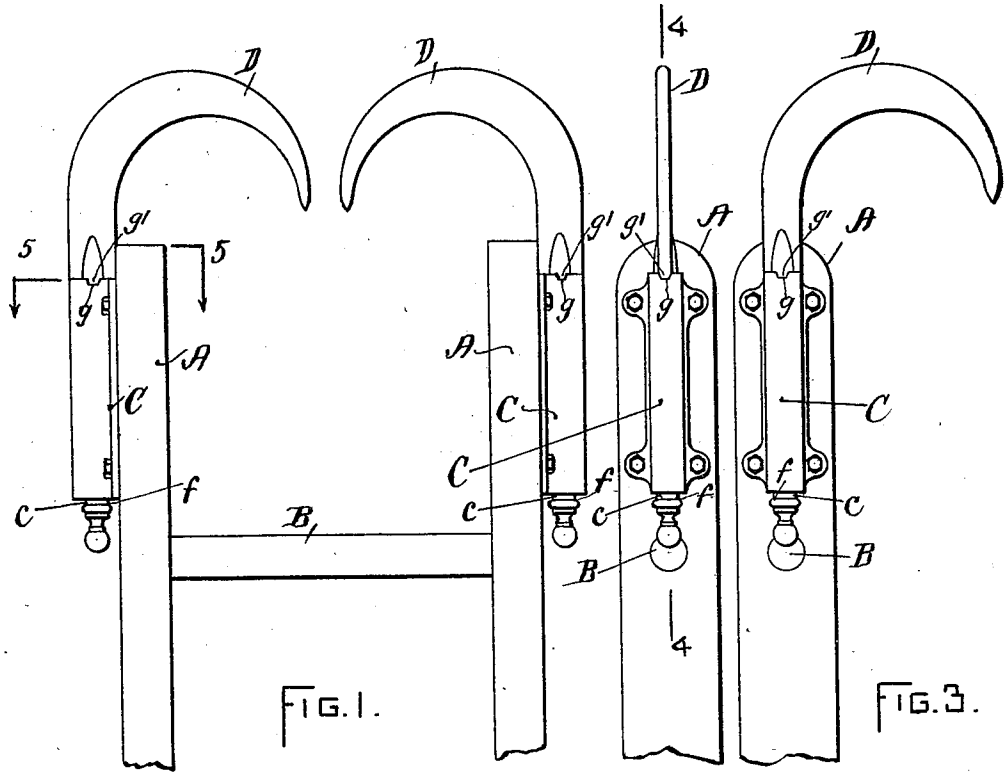


FIG. 1. FIG. 3.

FIG. 2.

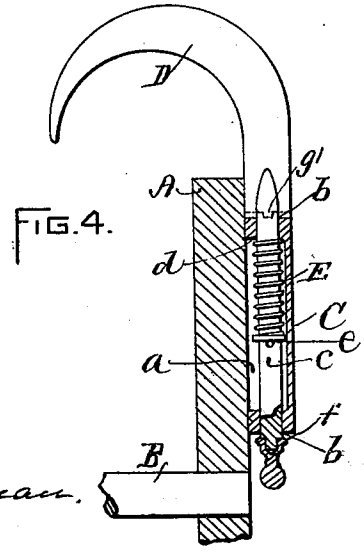


FIG. 4.

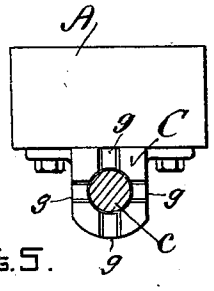


FIG. 5.

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SAFETY-HOOK FOR FIREMEN'S LADDERS.

SPECIFICATION forming part of Letters Patent No. 658,716, dated September 25, 1900.

Application filed July 21, 1900. Serial No. 24,433. (No model.)

To all whom it may concern:

Be it known that we, CHARLES N. RICHARDSON and EDGAR A. WHITAKER, citizens of the United States, and residents of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Safety-Hooks for Firemen's Ladders, of which the following is a specification.

This invention consists in the improved construction and arrangement of the parts whereby the hook may be turned to different positions and locked therein, as hereinafter fully set forth.

In the accompanying drawings, Figure 1 represents a front view of the upper end of a ladder provided with our improved safety-hooks, the said hooks being turned inwardly. Fig. 2 represents an edge view of the upper end of the ladder with the hook turned inwardly, as in Fig. 1. Fig. 3 represents the hook when turned to a position at right angles to that shown in Fig. 1. Fig. 4 represents a section taken in the line 4 4 of Fig. 2, and Fig. 5 represents an enlarged section taken in the line 5 5 of Fig. 1.

In the drawings, A A represent the upper ends of the side bars of a ladder, and B the upper cross-rung of the ladder, and to the outer sides of the side bars A A are secured the brackets C C, which are each provided with the recess *a* and the perforations *b b*, in which the shank *c* of the hook D is loosely held. Upon the shank *c* of the hook D is placed a spiral spring E, which is held between the shoulder *d* of the bracket C and the pin and washer *e*, and the lower end of the shank *c* is provided with a shoulder *f*, which serves to limit the upward movement of the hook. The upper end of the bracket C is provided with the diametrically-opposite notches *g g g g*, by means of which the hook D may be locked in positions at right angles to each other, the said hook D being made with the corresponding projections *g' g'*, adapted to engage with the said notches, as shown in Figs. 1 and 2, and when the hooks D D are turned inward and locked, as shown in Figs. 1 and 2, the ladder is in proper condition for transportation, and by pulling outward upon the hook D against the reverse inward action of the spring E, so as to withdraw the projections *g' g'* from the notches *g g*, and turning the same to engagement at right angles with the former notches, as shown in Fig. 3, the hooks of the ladder will be prepared for use upon the building.

We claim as our invention—

The combination of the bracket-piece provided at its upper end with the notches arranged at right angles to each other, with the hook having its shank loosely held in the bracket and adapted for turning movement, the spring for causing the locking engagement of the hook with the said notches, and the limiting-shoulder for the upward movement of the hook, substantially as described.

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