Feb. 7, 1928. 1,658,191

G. J. GRAVNING

LADDER ATTACHMENT

Original Filed Jan. 4. 1926

Fig. 1.

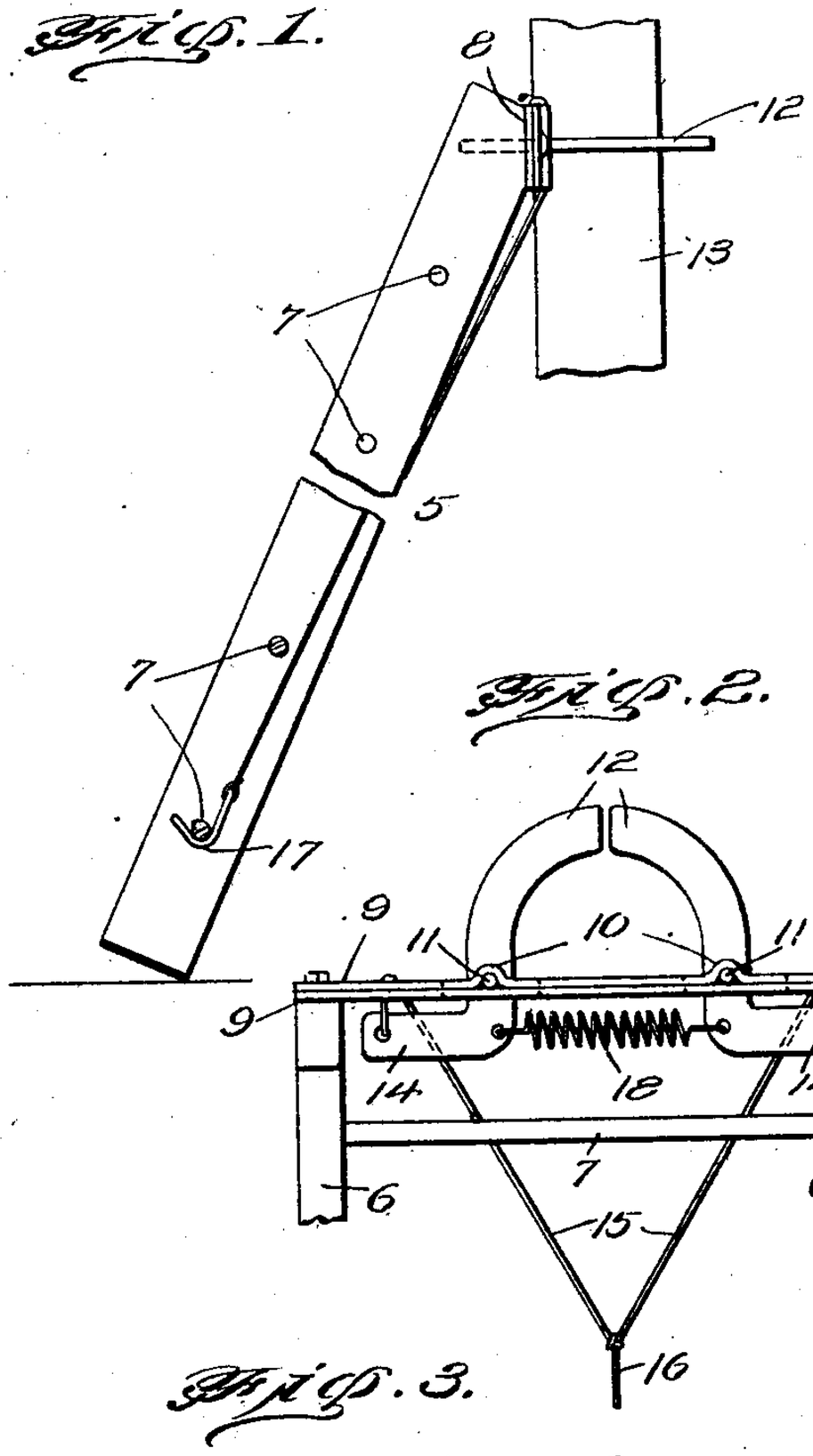


Fig. 2.

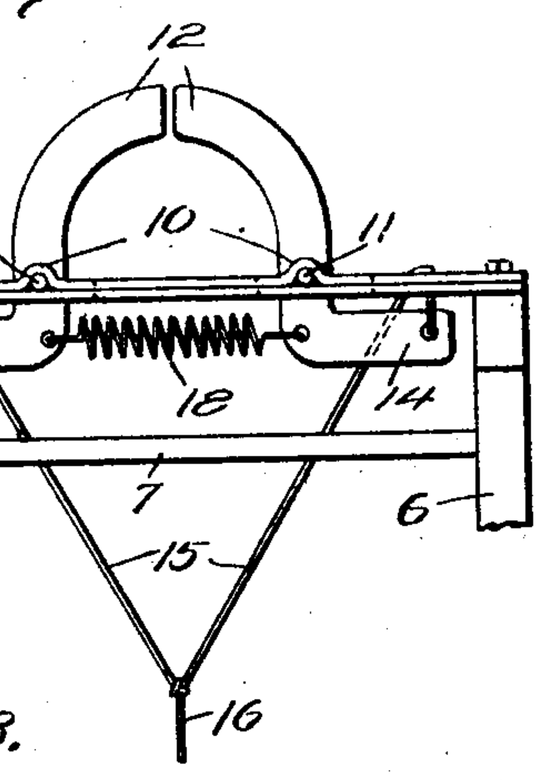
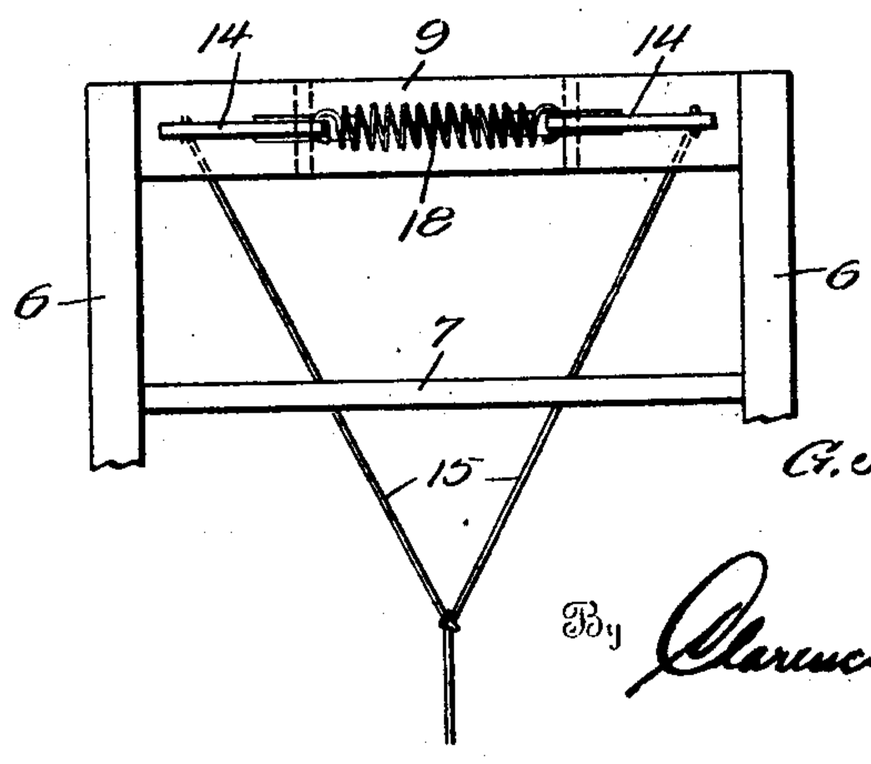


Fig. 3.



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UNITED STATES PATENT OFFICE.

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LADDER ATTACHMENT.

Application filed January 4, 1926, Serial No. 79,119. Renewed June 9, 1927.

This invention relates generally to ladders, and has more particular reference to an attachment therefor, whereby the ladder may be secured against tilting movement while in use.

The primary object of the invention resides in the provision of means associated with a ladder at its upper end in order that the same may be supported against a telegraph pole or other support so that the same will not tilt or slip from the support while one is climbing or resting upon the same.

A further and important object of the invention is to provide an attachment of this character that may be readily associated with ladders in a ready and efficient manner.

With the foregoing and other objects in view as the nature of the invention will be better understood, the same comprises the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing, and claimed.

In the drawing, wherein like reference characters indicate corresponding parts throughout the several views:

Figure 1 is a fragmentary view partly in section, and partly in side elevation of a ladder equipped with my novel attachment.

Figure 2 is a top plan view thereof, and

Figure 3 is an inner side elevation of the ladder with which is associated my invention.

Now having particular reference to the drawing, the ladder indicated generally at 5 constitutes the provision of a pair of usual standards 6—6 between which are disposed the rungs or steps 7.

At the upper ends of the standards, the same are formed at their inner sides with beveled portions 8—8 to which are suitably secured at their opposite ends a pair of contacting cross strips 9—9 which function in one instance as the upper rung of the ladder.

The outer one of the cross strips 9—9 is formed with a pair of spaced corrugations 10 within which are rotatably disposed pins 11—11 that carry intermediate their ends curved fingers 12—12 in opposed relation and that are adapted to surround a supporting post 13 for the ladder, as more clearly shown in Figure 1. The strips 9—9 are formed with suitable slots through which extend said fingers and in order that they may be swung toward or away from each other upon their pivots. The inner ends of these fingers are provided with outwardly extending ears 14—14 to which are connected the ends of cables 15—15 which ends extend forwardly from said ears and pass through openings in the strips 9—9 and then extend downwardly in a single strand 16 which is provided at its lower end with a suitable hook 17.

The outer ends of the curved fingers 12—12 are normally maintained in a position away from each other by a contractile spring 18 in order that the strips forming the upper rungs of the ladder may be engaged with the post 13. After the ladder has been properly positioned, the single strand 16 is drawn downwardly and the hook 17 engaged beneath a predetermined one of the rungs which will maintain the fingers around the post in the position shown in Figures 1 and 2 against the tension of the aforementioned spring 18.

It will thus be seen that when the ladder is properly positioned with respect to a post, and the fingers 12—12 engage around the post, the ladder will be prevented from slipping or wobbling and thus save the party climbing the ladder or resting thereon from grave injury which usually results in use of ladders of this character.

Even though I have herein shown and described the preferred embodiment of the invention with which I am familiar, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the appended claims.

Having thus described the invention, what I claim as new is:—

1. A ladder attachment of the class described comprising a cross member adapted to be connected to the upper end portions of the side members of the ladder, substantially right angular brackets pivotally mounted upon said cross member, said brackets including curved gripping fingers to engage a support, and having inner end portions disposed in parallelism with the cross member, spring means connected with said inner end portions, and means connected with the free ends of said inner end portions for maintaining said fingers in gripping position.

2. A ladder attachment of the class described comprising a cross member embodying a pair of metal strips arranged in contact with each other and adapted to be connected at their outer ends with the side mem-

bers of the ladder, the central portions of said strips being provided with slots and one of said members being bent on opposite sides of its slots to provide bearings, a pair of right angular brackets including curved portions extending through said slots, and provided with pivot pintles mounted in said bearings, the inner end portions of the brackets being disposed at right angles to the curved portions and in parallelism with said cross member, a coiled spring connected at its ends to the inner end portions of the brackets, and flexible elements connected with the free ends of the inner end portions.

In testimony whereof I affix my signature.

GILBERT J. GRAVNING.