

C. B. ALEXANDER.  
 SLACK ADJUSTER.  
 APPLICATION FILED FEB. 23, 1916.

1,229,855.

Patented June 12, 1917.

FIG. 1.

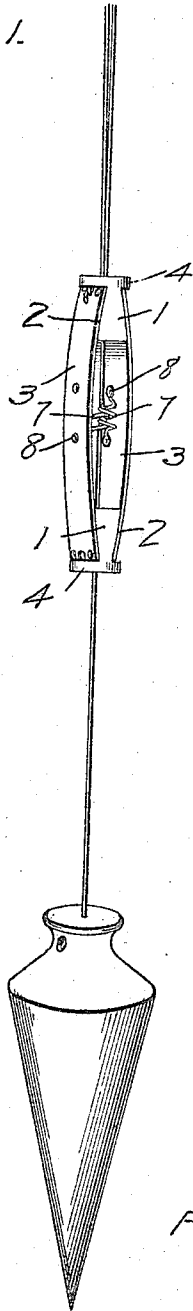


FIG. 2.

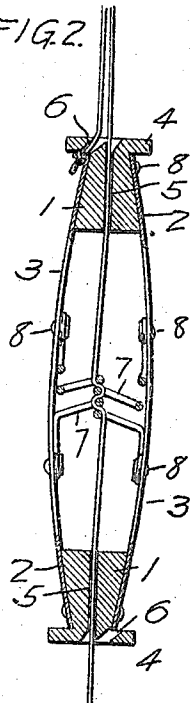


FIG. 5.

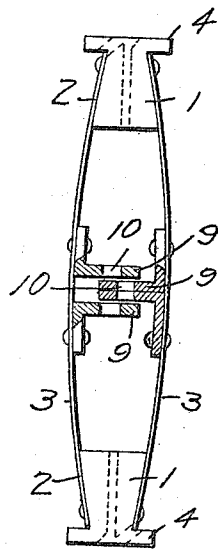


FIG. 4.

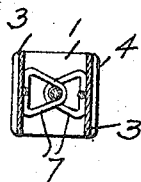


FIG. 3.

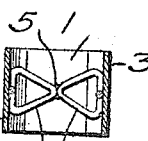
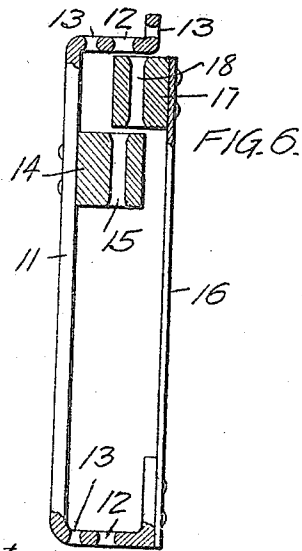


FIG. 7.



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# UNITED STATES PATENT OFFICE.

CLINTON B. ALEXANDER, OF WASHINGTON, DISTRICT OF COLUMBIA.

SLACK-ADJUSTER.

1,229,855.

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Application filed February 23, 1916. Serial No. 79,971.

*To all whom it may concern:*

Be it known that I, CLINTON B. ALEXANDER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Slack-Adjusters, of which the following is a specification.

This invention relates to adjusters and has especial relation to means for adjusting the string of plumb bobs and the like.

The primary object is to provide an adjuster for this purpose by which the plumb bob can be shifted with one hand, leaving the other hand entirely free.

Another object is to provide a device of this character which may be used upon guy ropes, ropes of sail boats or any place in which a quick adjustment of the rope or line is necessary and which will hold said rope or line firmly in its adjusted position.

With this and other objects in view, the invention consists of perforated end members, resilient side members and a plurality of interlocking gripping members carried by said side members, the side members forming a housing to protect the gripping members.

In the drawings:—

Figure 1 is a view of the improved adjuster applied to the string of a plumb bob,

Fig. 2 is an enlarged sectional elevation of the adjuster.

Fig. 3 is a cross section of the adjuster in a relaxed position.

Fig. 4 is a similar section with the side members compressed,

Fig. 5 is a view of a modified form,

Fig. 6 is a view of a further modification, and

Fig. 7 is a view of still another modification.

Referring to the drawings, like characters of reference designate corresponding parts throughout the several views.

In the practical embodiment of the invention, the adjuster is composed of end members 1 provided with inclined sides 2 to which are secured preferably flat spring side members 3. The inclined sides of the end members 1 extend to almost the entire length, leaving a flanged portion 4.

The heads 1 are provided with longitudinal openings 5 for the passage of a string, cord or rope as the case may be. An inclined opening 6 formed in the heads and communicating with the opening 5 is for the

purpose of securing the string end, as will be apparent from Fig. 2 of the drawings.

The side members 3 may be formed of any resilient material and securely attached to the heads 1 by any preferred means. These members 3 carry the gripping members 7 and as seen in Fig. 2 these members are composed of wire forming a plurality of substantially triangularly shaped convolutions. The members 7 are secured between the side members 3 which forms substantially a casing and prevents bothersome entanglement of the string. They are preferably secured to the side members by means of rivets 8.

It will be noted by reference to the drawings that the gripping members are so positioned as to cause the string to be distorted out of a direct line by the several intersections of the gripping members so that a perfect grip is obtained. By reason of the triangular formation of these members, a positive grip is obtained upon strings or cords of varying diameters. This will be apparent from Fig. 4 of the drawings.

In the modification shown in Fig. 5, the gripping members are made of a plurality of interlocking projections 9 provided with preferably triangular shaped openings 10.

The modification shown in Fig. 6 is composed of a single piece of bent metal 11, having openings 12 and 13 therein. A projection 14 is secured to the part 11 and is provided with an opening 15. A spring member 16, carrying a lug 17 and having an opening 18, provides the interlocking gripping members.

In Fig. 7 the adjuster is shown made from a single piece of bent wire, the openings for the string and the gripping members 19 being formed integrally with the ends and resilient sides.

In the use of the device as a plummet adjuster on a transit the cord is run through the opening 6 and knotted as shown in Fig. 2, then upward to the transit, then threaded through the adjuster and secured to the bob. In general use as a slack adjuster an immovable object takes the place of the transit, and a movable object replaces the bob.

For convenience, each of the end members may have openings 5 and 6 and 12 and 13 which enables the string to be secured to either end.

Various other forms of the invention may suggest themselves, as, for example, the adjuster may be made with spring sides of great strength for gripping heavy cables, in which case a cam lever may be provided to aid in compressing the sides to release the cable.

Other changes may be made in the form and proportion of the invention as may fall within the scope of the appended claims.

Having thus described my invention, I claim:—

1. A reversible line adjuster comprising end members each provided with a longitudinal opening and a second opening adjacent thereto, spring side members attached to the end members and provided with complemental gripping members, one end of the line being adapted to be fastened in the second opening and the other adapted to pass through the longitudinal opening and the gripping members.

2. A reversible line adjuster comprising end members each provided with a longitudinal opening and a second opening adjacent thereto, spring side members attached to the end members and provided with a plurality of opposed complemental

gripping members, one end of the line being adapted to be fastened in the second opening and the other adapted to pass through the longitudinal opening and the gripping members.

3. A reversible line adjuster comprising end members each provided with a longitudinal opening and a second opening adjacent thereto, spring side members attached to the end members and provided with complemental gripping members, said gripping members being adapted to interlock and are formed with angular shaped openings whereby they are adapted to grip lines of different diameter, one end of the line being adapted to be fastened in the second opening and the other adapted to pass through the longitudinal opening and the gripping member.

4. A line adjuster comprising end members having a longitudinal opening therein, spring side members attached to said end members and a plurality of opposed interlocking gripping members carried by said side members intermediate their ends.

In testimony whereof I affix my signature.

CLINTON B. ALEXANDER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."