(No Model.)

## A. HUBER. WIRE OR CABLE TIGHTENER.

No. 588,994.

Patented Aug. 31, 1897.

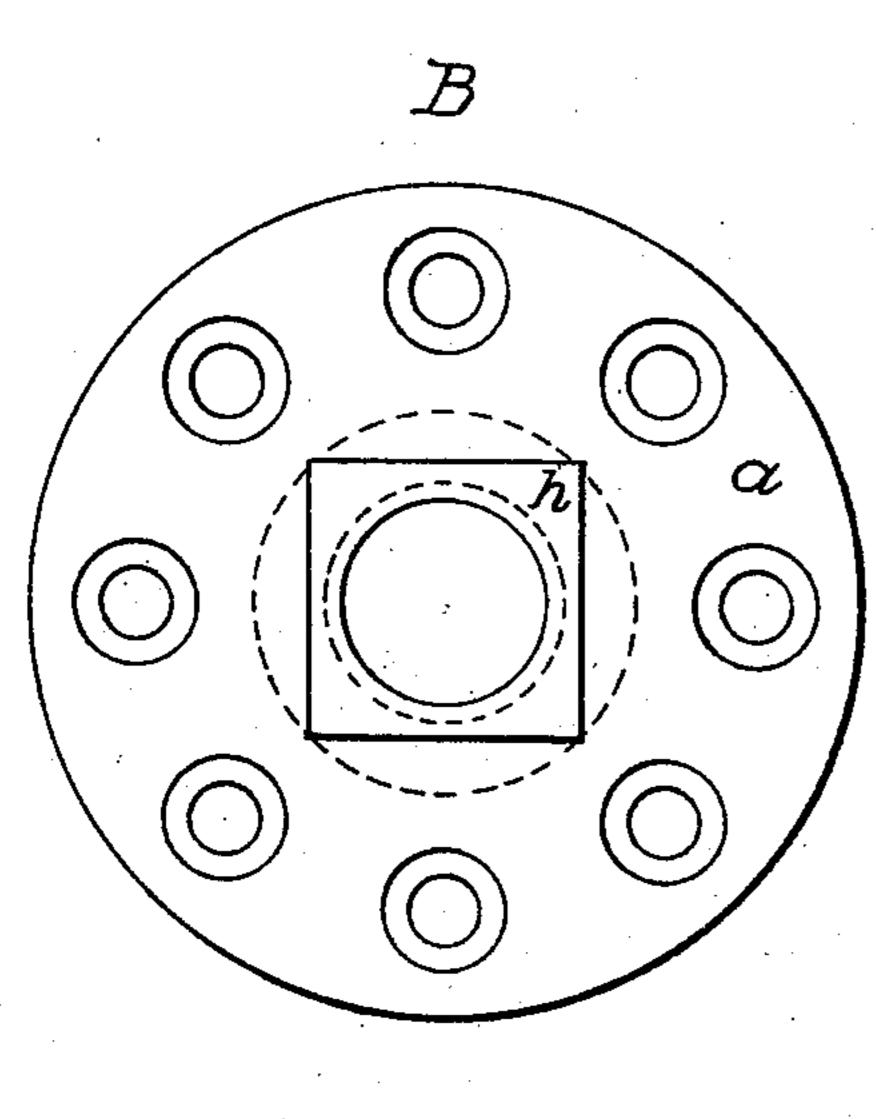
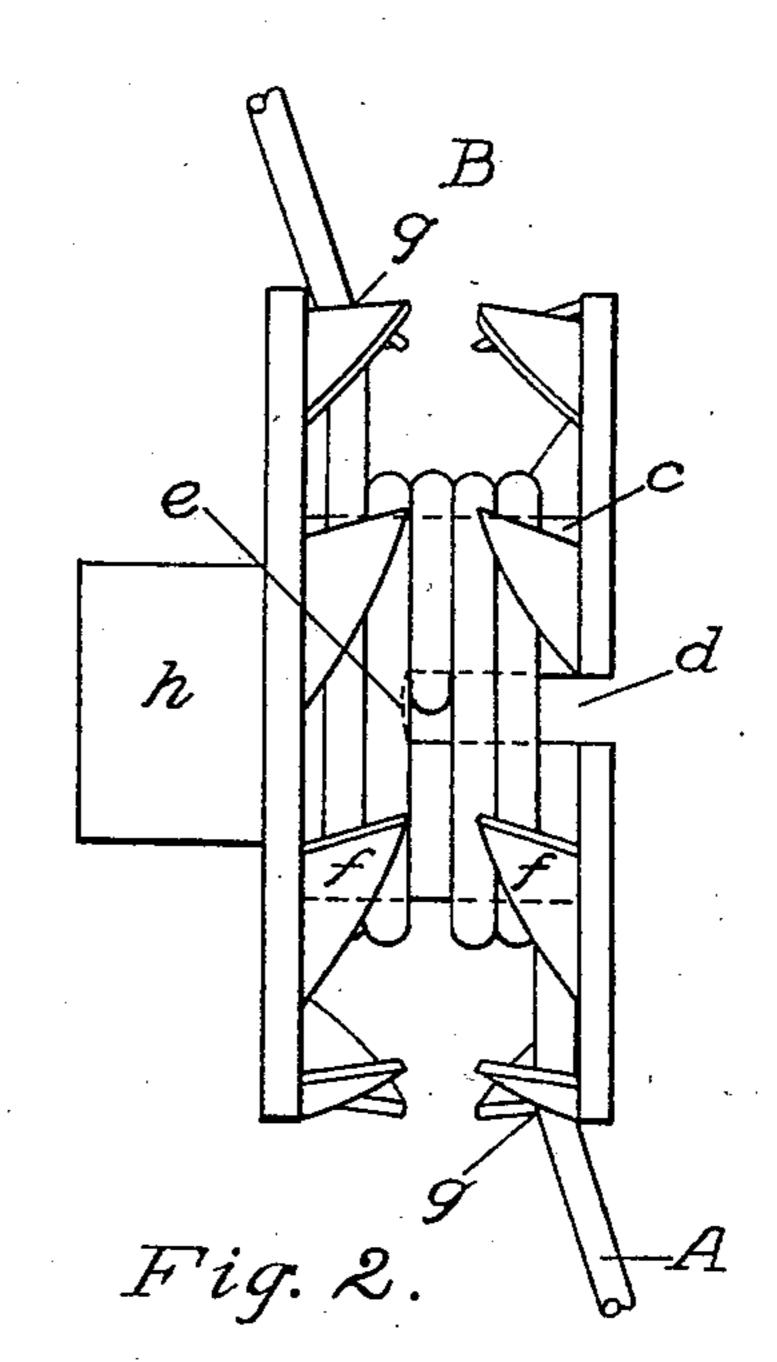


Fig. 1.



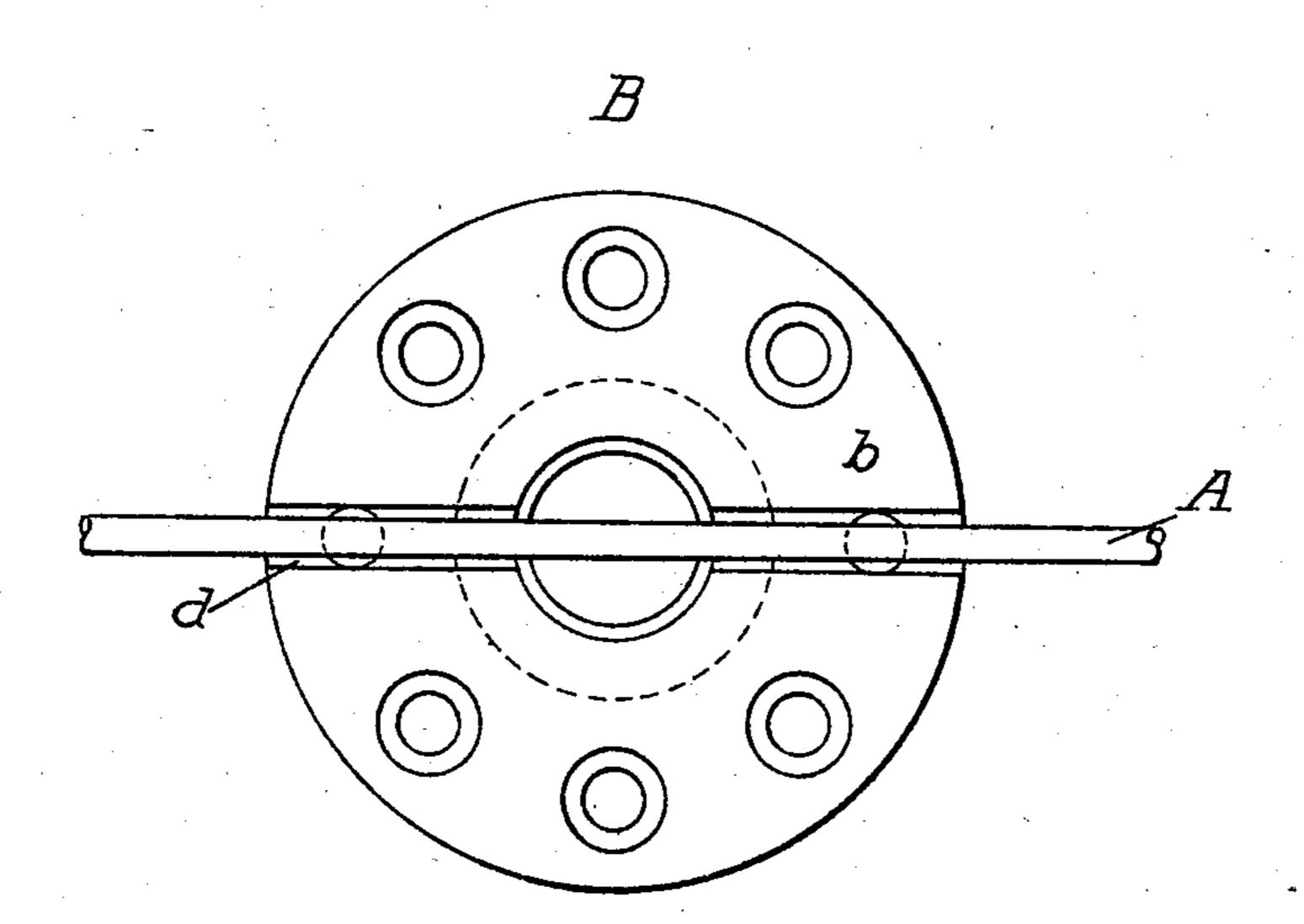


Fig. 3.

Witnesses. Altaminan andrew Kuber Inventor.

By

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## United States Patent Office.

ANDREW HUBER, OF GREENVILLE, OHIO.

## WIRE OR CABLE TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 588,994, dated August 31, 1897.

Application filed July 15, 1897. Serial No. 644,661. (No model.)

To all whom it may concern:

Be it known that I, ANDREW HUBER, a citizen of the United States, residing at Greenville, in the county of Darke and State of Ohio, 5 have invented a new and useful Wire or Cable Ratchet or Tightener, of which the following

is a specification.

My invention relates to improvements in ratchets or tighteners for wire runners or cato bles, the object being to produce a tightener of a durable character which when attached intermediately to a wire runner or cable may be adjusted and locked, thus taking up all slackness and holding the same in position at 15 any desired tension.

It is a further object of my invention to produce such a tightener or ratchet from metal and to provide simple means for attaching the same and holding it in position

20 on the runner or cable.

These and other objects and advantages will more fully appear when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of the ratchet 25 or tightener as it appears from the front and shows the square lug for adjusting or tightening by means of a wrench. Fig. 2 shows the tightener when firmly locked and held in position on the runner or cable and is a per-30 spective view of the same from a position in line with the runner, &c. It shows also the projections for locking and the square lug for attachment of wrench. Fig. 3 represents a rear view of the tightener and shows the slot 35 for the reception of the runner or cable with the same in position for tightening.

Similar letters refer to similar parts through-

out all the views.

Referring by letter to said drawings, A in-40 dicates any ordinary wire runner or cable.

Bindicates my metallic tightener or ratchet, having a front disk a, connected to a rear disk b by a cylinder or axle c. The rear disk b and a portion of the cylinder or axle c are 45 divided diametrically by an aperture or slot d, which aperture may divide the cylinder any desired depth, but preferably to a point one-half the diameter of the runner or cable past the middle, as indicated by e. Around 50 the outer edge of each disk is a series of in- | jecting lugs or stops, the front disk having 100

ward and backward projecting lugs or stops f, the stops of each disk being separated from those of the other a sufficient distance to permit the runner or cable to pass between them when tightening, the backward incli- 55 nation of the stops permitting the tightener to be turned to the right without obstruction.

The tightener receives the runner or cable in the slot d, is pressed forward until the same rests at e, and is turned to the right by means 60 of a wrench attached to the square lug h until the desired tension is secured. An inwardprojecting lug of each disk is then locked on the runner or cable, as indicated by g g.

While it was my original intention to use 65 this device as a wire-tightener only and primarily for runners of wire fences, it is obvious that the same principles are applicable to a cable, the tighener being attached thereto by the same methods employed in its attach- 70 ment to runners. It is to be observed in this connection that the tightener may be of any desired size and that the cylindrical portion of the same may be cast either solid or hollow. I have thus provided a ratchet or tight-75 ener that may be readily formed from metal and which combines the qualities of lightness and durability. Furthermore, when properly attached to a wire runner or cable the same may be drawn to any desired tension and sag- 80 ging effectually prevented.

Having described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The combination with a wire runner or 85 cable, of a metallic tightener or ratchet, having a front disk a, connected by a cylinder or axle c, to a rear disk b, each disk having around its outer edge a series of inward and backward projecting lugs or stops ff, the rear 90 disk and a portion of the cylinder being divided diametrically by a slot d, with a square lug h in the center of the face side of the front disk, all substantially as set forth.

2. The combination with a wire runner, or 95 cable, of a rotary tightener or ratchet, having a cylinder or axle connecting front and rear disks, each disk having around its outer edge a series of inward and backward proa square lug in the center of its face side, the rear disk and a portion of the cylinder or axle being divided diametrically by an aperture or slot all for the purpose specified.

3. A metallic wire-tightener having two disks connected by an axle or cylinder, each disk having around its outer edge a series of inward and backward projecting lugs or stops,

one disk and a portion of the cylinder being divided diametrically by an aperture or slot, 10 the other having a square lug in the center of its face side, all substantially as described.

ANDREW HUBER.

Witnesses:

S. V. HARTMAN, E. E. CALDERWOOD.