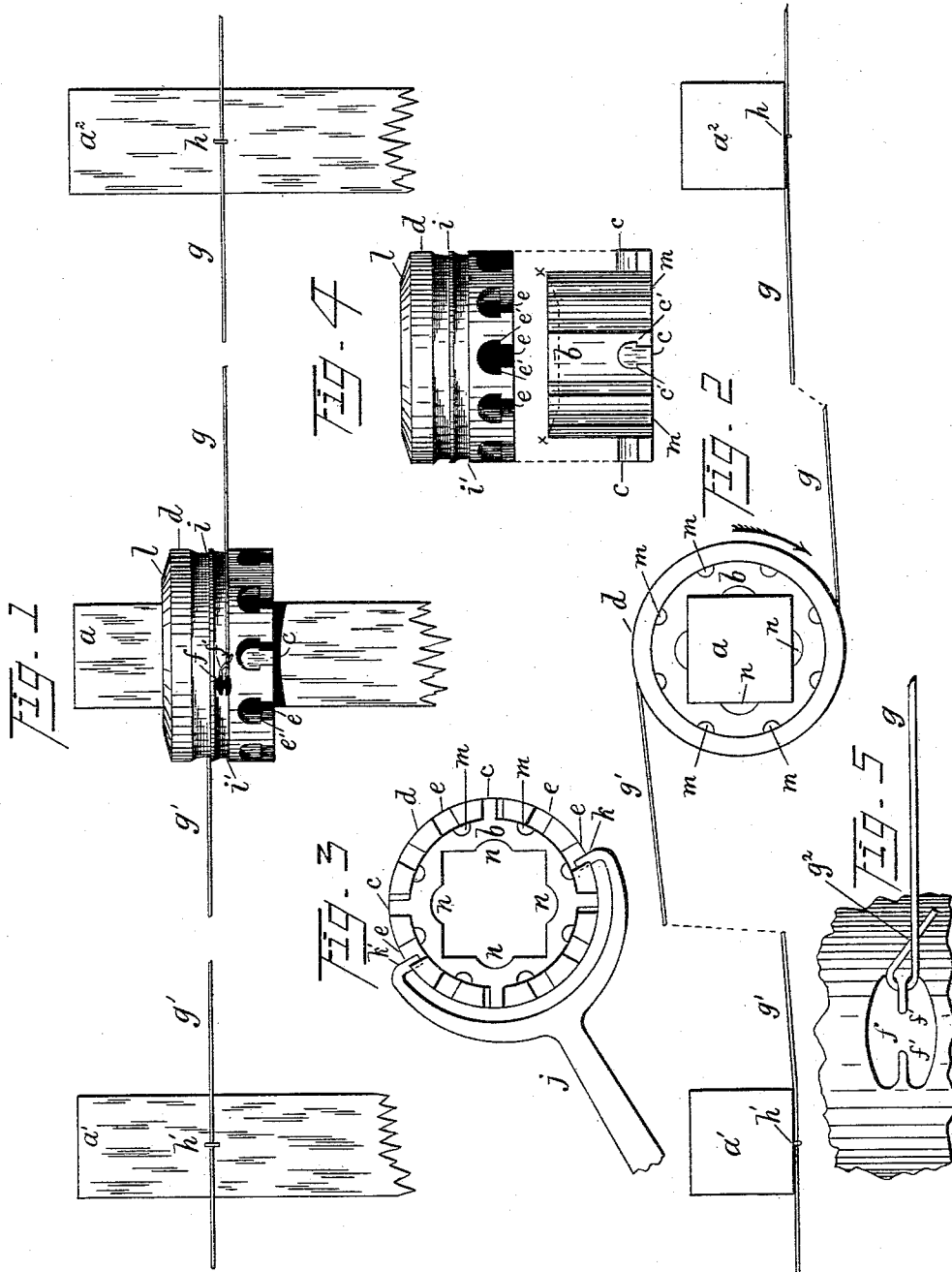


(No Model.)

A. E. KINTNER.
WIRE TENSION DEVICE.

No. 476,655.

Patented June 7, 1892.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ALCUIN E. KINTNER, OF PAINESVILLE, OHIO.

WIRE-TENSION DEVICE.

SPECIFICATION forming part of Letters Patent No. 476,655, dated June 7, 1892.

Application filed February 29, 1892. Serial No. 423,122. (No model.)

To all whom it may concern:

Be it known that I, ALCUIN E. KINTNER, a citizen of the United States, residing at Painesville, in the county of Lake and State of Ohio, have invented a certain new Improved Wire-Tension Device, of which the following is a full, clear, and complete description.

My invention relates to the construction of a device used particularly in connection with wire fences for tightening the wires when they become slack by the action of frost and heat or by any other means. I do not, however, confine the scope of my invention to wire fences, as the invention is valuable wherever it is desired to obtain a wire tension.

That the invention may be seen and fully understood by others, reference will be had to the following specification and annexed drawings, in which—

Figure 1 illustrates a section of wire fence with the improved device as attached to one of the posts thereof. Fig. 2 is a plan view of Fig. 1. Figs. 3 and 4 are views of detached parts of the device hereinafter fully explained, and Fig. 5 is an enlarged detail view showing the means of attaching the wire.

Like letters of reference designate like parts in the drawings and specification.

In the following specification and accompanying drawings I refer to my device only as used in connection with wire fences; but it will readily be seen that the device may be applied in any case requiring wire tension, and the operation remains the same.

It is well known to all familiar with wire fences that in the winter the wire will be taut from the contraction caused by the cold; but when the weather becomes warm the heat will make the wire expand or stretch, thus causing said wire to sag between the posts, and thereby destroying the utility of the fence. I overcome this objection by the use of a device constructed and operating as follows:

A post *a*, preferably square or polygonal, is placed in the line of the fence at every fifty rods, more or less, as the case may require, or at the discretion of the builder. On the post *a* I attach my device. A collar or drum *b*, Figs. 2, 3, and 4, is made rigid on the post *a* at the desired place, as shown in Fig. 1. Extending out from the lower part of the drum

b are one or more lugs *c*, substantially of the form shown in Figs. 1 and 4, having the shoulders *c'* on each side thereof. A sleeve *d* surrounds the collar or drum *b*. Said sleeve is provided around its lower edge with a series of notches *e*. The notches are made of the form shown, so as to pass freely over the lugs *c*, when by a partial turn the shoulders *c'* will engage with the shoulders *e'* of the notches *e*, the object of which is hereinafter fully explained. In the sleeve are two eyes, one of which is shown at *f*, Fig. 1, and enlarged in Fig. 5. These eyes are provided with the lugs *f'*. One terminal of a piece of wire *g* (say fifty rods long, for example) is made fast to a post by any known means and strung through staples *h* on the other posts *a'*, terminating at the other end in a bend around one of the lugs *f'*, as shown in Figs. 1 and 5, the end passing under the wire, as shown at *g'*. Another wire *g'* is fastened in like manner to the other side of the sleeve *d* and is strung through the staples *h'* and made fast to a post a certain distance in the opposite direction. The wires each rest on an annular shoulder *i* and *i'* around the sleeve *d*.

In the operation of the device a wrench *j* is used. The wrench *j* spans the sleeve *d*, its ends *k* and *k'* entering two of the notches *e* in said sleeve. By a partial turn of the sleeve *d* in direction of arrow in Fig. 2 the shoulder *c'* becomes disengaged from the shoulder *e'* and the sleeve *d* can be raised clear of the lugs *c* and turned in the same direction a sufficient distance to cause the wire to become taut, when the sleeve is pressed down over the collar *b*, the lugs *c* registering with the notches *e*. When the wrench *j* is released from the sleeve *d*, the lateral strain of the wires *g* and *g'* on said sleeve will cause the shoulders *c'* and *e'* to engage and thereby lock the device. The strain also holds the wire secure at its attachment to the lug *f'*, owing to said wire crossing itself and binding at *g'*, Fig. 5, the strain on said sleeve being so great that it is impossible to move the sleeve without the aid of a wrench. If it is desired to slacken the wire, the revolution of the sleeve *d* is simply reversed. The sleeve *d* may have a flange *l* around the top thereof forming a covering to prevent rain or snow entering between the sleeve *d* and drum

b. In case said flange is used, it is preferable to have the drum dished, as indicated by dotted lines *x*, Fig. 4. The water will then pass down between the drum *b* and the post *a*, to which there is no objection. The outer circumference of the drum may be smooth. It may have grooves *m* running vertically, as shown in Figs. 2 and 4, or it may be corrugated, as found most desirable in the practical working of the device, the purpose of the grooves or corrugations being to facilitate the passage of rain or snow. The grooves *n*, Figs. 2 and 3, are preferably used in the drum next to the sides of the post *a* for the same purpose.

15 What I claim, and desire to secure by Letters Patent, is—

1. A wire-tension device consisting of a collar or drum rigidly secured to a post and provided with shouldered lugs, a sleeve encircling said drum, having in its lower edge shouldered notches corresponding to said lugs, and means for attaching the wire to said sleeve, substantially as set forth.

2. In a wire-tension device, a sleeve having an annular shoulder, shouldered notches in its lower edge, and means for attaching wires

thereto, in combination with a collar rigidly secured to a post and provided with lugs arranged to register with the notches in the sleeve, substantially as described.

3. In a wire-tension device, the combination, with a drum rigidly secured to a post having its outer surface channeled and provided with extended lugs, of a surrounding sleeve having eyes with lugs therein for attaching the wires and notches that register with the lugs on the drum, substantially as set forth.

4. In a wire-tension device, the combination, with a post, of a drum secured thereto, dished at the top, and having projecting lugs, a sleeve surrounding said drum, having notches and eyes, as described, and provided with a flange extending inwardly over the top of the drum, and wires attached to the sleeve, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

ALCUIN E. KINTNER.

Witnesses:

W. H. BURRIDGE,

F. A. CUTTER.