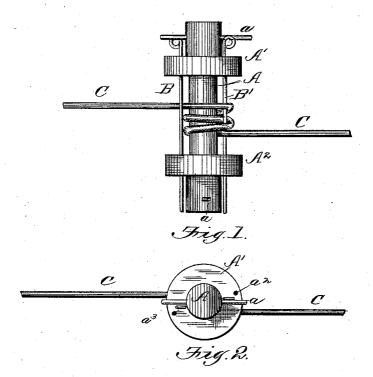
(No Model.)

A. A. ATWOOD.

WIRE TIGHTENER.

No. 290,384.

Patented Dec. 18, 1883.



WITNESSES

Um S Duvall W Jernhard INVENTOR

All altoood

per EdsenBris,

Attorneys.

UNITED STATES PATENT OFFICE.

ADELBERT ALONZO ATWOOD, OF SHENANDOAH, IOWA.

WIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 290,384, dated December 18, 1883. Application filed June 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, ADELBERT A. ATWOOD, a citizen of the United States, residing at Shenandoah, in the county of Page and State of Iowa, have invented certain new and useful Improvements in Wire-Tighteners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it 10 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in wire-fence tighteners, having for its object simplicity, durability, and effectiveness; and the invention consists in the combination and arrangement of parts, as hereinafter more fully

20 set forth and claimed.

Figure 1 is a side elevation of my invention in position for use. Fig. 2 is a top or plan

view thereof.

Referring to the drawings, in which like 25 letters of reference denote like parts, A is a spindle provided with collars A' A2 near its upper and lower ends. Pins B B' are passed through apertures in the collars A' A2, and are adapted to hold the wire C under tension af-30 ter it has been wound around the spindle. a are pins or bars which are passed through apertures at each end of the spindle A, and are for the purpose of enabling the spindle to be turned.

I attach importance to the extension of the spindle beyond the collars, and to providing the perforated ends thereof with the pins a, which pass through the spindle at right angles to each other, and enable the operator to 40 use his hands alternately in tightening the wire, one hand holding the twister while the other gives it about one-quarter of a turn. The collars A' A2 are provided with apertures |

near their outer edge, through which the securing-pins are passed when the wire is wound 45

around the spindle more than once.

The operation of my invention is as follows: The pins B B' are withdrawn from the collar A², which will permit the wire to be passed between the pin B' and the spindle, after which 50 said pin is pushed back into collar A2. The device is now turned until the slack in the wire is taken up, when the second pin is placed in position, thereby preventing the wire from unwinding.

The invention can readily be seen and ap-

preciated.

Changes in the form, proportion, and number of the parts composing my invention can be made without departing from the princi- 60. ple or sacrificing the advantages thereof.

I am aware that a wire-twister having perforated disks to receive a securing-pin and a spindle adapted to receive the square eye of a crank, the opposite end of the spindle and its 65 disk having a saw-kert to permit the insertion. therein of the wire to be tightened, is not new, and no claim is herein made to such a device.

Having thus fully described my invention, what I claim, and desire to secure by Letters 70

Patent, is

In a wire-tightener, a spindle whose ends project beyond perforated collars spaced apart thereon, and have holes to receive pins which pass through said spindle substantially at right 75 angles to each other for turning the tightener, in combination with said perforated collars and with securing pins, as and for the purpose set forth.

In testimony whereof I affix my signature in 80 presence of two witnesses.

ADELBERT ALONZO ATWOOD.

GEO. E. TROTTER. FRED ROCKAFELLOW.