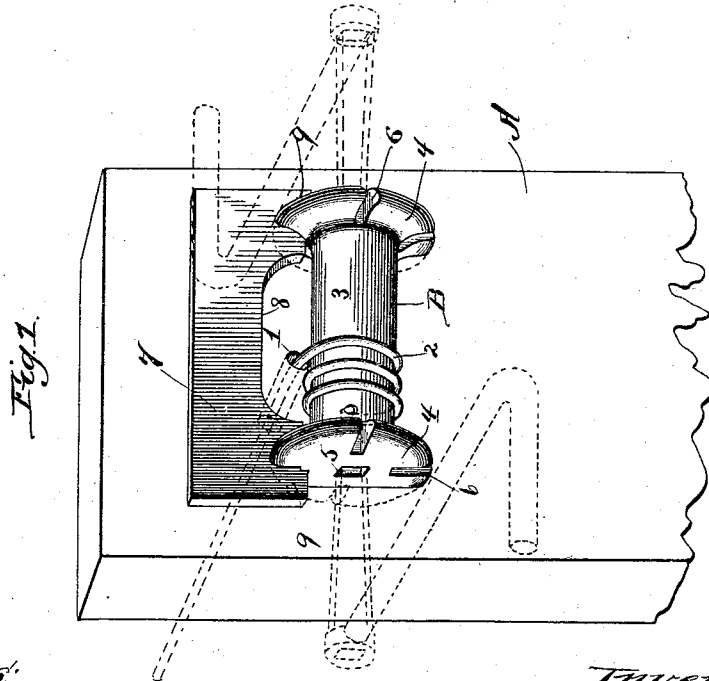
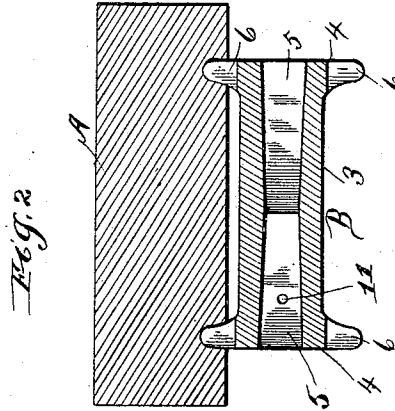
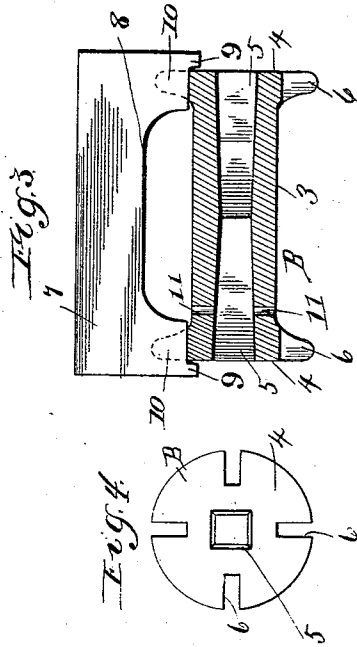


(No Model.)

W. KRAMER.
WIRE FENCE STRETCHER.

No. 479,817.

Patented Aug. 2, 1892.



Witnesses:
O. R. P. R. R.

Inventor:
William Kramer
By John R. Kennedy
att'y.

UNITED STATES PATENT OFFICE.

WILLIAM KRAMER, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
CHARLES OPITZ, OF SAME PLACE.

WIRE-FENCE STRETCHER.

SPECIFICATION forming part of Letters Patent No. 479,817, dated August 2, 1892.

Application filed April 4, 1892. Serial No. 427,640. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KRAMER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wire-Fence Stretchers; and I do hereby 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 appertains to make and use the same.

This invention relates to a novel construction in a device for stretching wire strands in fences that are composed of a series of wire strands strung around a line of fence-posts and tightened at the end of each section by a tension applied to the wire at said point.

The object of this invention is to provide a wire-stretcher of novel, simple, and efficient construction.

My invention consists in the features of construction and combinations of parts hereinafter fully described and specifically claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of the upper end portion of a fence-post with the wire-stretcher in place thereon constructed in accordance with my invention. Fig. 2 is a cross-sectional view of the post and stretcher. Fig. 3 is a vertical longitudinal sectional view of the stretcher and holding-plate. Fig. 4 is an end elevation of the stretcher.

Referring to said drawings, A indicates a fence-post having an opening 1 extending therethrough, through which the wire strand 2 passes.

My improved stretcher B consists of a spindle 3, having the disks 4 at each end thereof. In the ends of said spindle 3 are made the openings 5 to receive the ends of suitable cranks, (shown in dotted lines,) by means of which said spindle and disks can be turned. Each of the said disks is provided with a series of radial cuts or slots 6 to receive the holding-plate 7. The slots 6 in the said disks are arranged in alignment with each other, so that said holding-plate can enter one slot in each disk at the same time. The said holding-plate 7 is provided between its ends with a cut-away portion 8, which forms at the ends of said plate two lugs 10, that are adapted to

enter the cuts or slots 6 in the disks 4, while said cut-away portion 8 permits the passage of the wire between said plate and the spindle 3. Each of said lugs 10 is provided at its outer end with a toe 9, so arranged that when the lugs 10 are located within the cuts or slots said toes will embrace the ends of the spindle, as shown in Fig. 3, to prevent the endwise movement of said holding-plate upon said spindle or within said slots.

In operation the post is suitably recessed or gouged out, so that a portion of each of the disks 4 will enter the same, as shown in Figs. 1 and 2. The wire 2 is then passed through the opening 1 of the post and may be conveniently secured to the spindle 3 by passing the end of the wire into the perforation 11 in said spindle. The spindle is then turned by means of the cranks until the wire strand 2 is suitably tightened and one of the slots 6 in each of said disks is adjacent to the face of the post, whereupon the holding-plate 7 is dropped into said slots. The tension of the cranks upon the spindle can then be released, while the tension of the wire 2 upon the spindle will hold the holding-plate 7 firmly against the post, and said holding-plate will prevent the revolution of said spindle, so that the wire will be held under tension.

It is obvious that the wire strand can be tightened or loosened at any time with very little trouble and that the wire-stretcher above described forms a simple, inexpensive, and efficient device for this purpose.

I claim as my invention—

1. A wire-stretcher comprising a spindle 3, provided at its end with openings 5, adapted to receive a suitable winding-tool, disks 4 at the ends of said spindle provided with radial cuts or slots 6, and a holding-plate 7, adapted to enter said radial cuts or slots 6, substantially as described.

2. A wire-stretcher comprising a spindle 3, provided at its end with openings 5, adapted to receive a suitable winding-tool, disks 4 at the ends of said spindle provided with radial cuts or slots 6, and a holding-plate 7, provided with a cut-away portion 8 and end lugs 10, said end lugs 10 being adapted to enter said radial cuts or slots 6, substantially as described.

3. A wire-stretcher comprising a spindle 3,

provided at its end with openings 5, adapted to receive a suitable winding-tool, disks 4 at the ends of said spindle provided with radial cuts or slots 6, and a holding-plate 7, adapted 5 to enter said radial cuts or slots 6 and provided with toes 9, located to embrace the ends of said spindle, substantially as described.

4. A wire-stretcher comprising a spindle 3, provided at its end with openings 5, adapted 10 to receive a suitable winding-tool, disks 4 at the ends of said spindle provided with radial cuts or slots 6, and a holding-plate 7, provided

with a cut-away portion 8 and end lugs 10, having toes 9, said lugs being adapted to enter said slots and said toes being located to embrace the ends of said spindle, substantially 15 as described.

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

WILLIAM KRAMER.

Witnesses:

HARRY COBB KENNEDY,
OTTO LUEBKERT.