No. 653,055. Patented July 3, 1900.

C. E. BAKER.

WIRE STRETCHER.

(Application filed Mar. 23, 1900.)

(No Model.) 2 Sheets—Sheet 1.

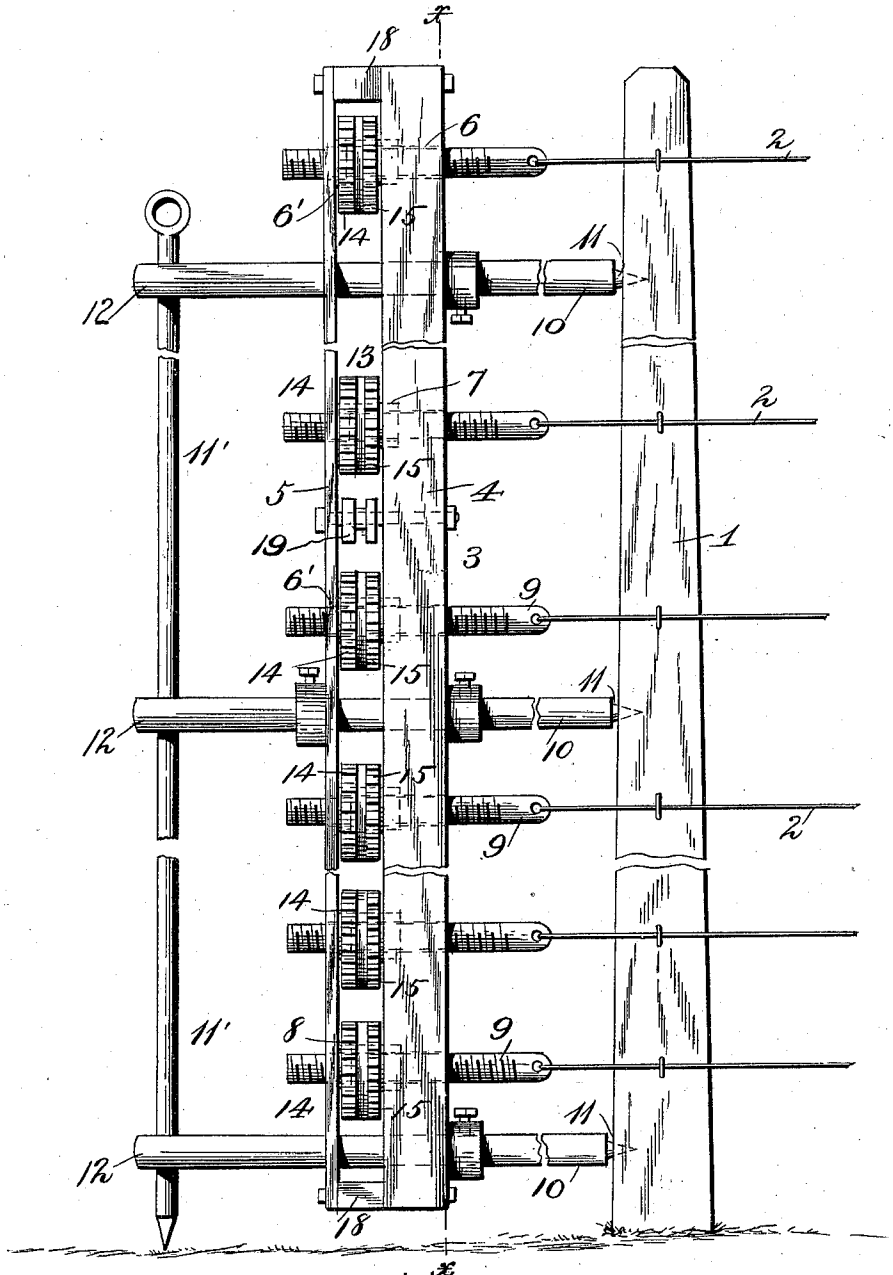


Fig. 1.

WITNESSES:
Franck L. Durand.
[illegible]

INVENTOR:
Charles E. Baker.
BY
A. Bruesch & Co.
ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 653,055. Patented July 3, 1900.

C. E. BAKER.

WIRE STRETCHER.

(Application filed Mar. 23, 1900.)

(No Model.) 2 Sheets—Sheet 2.

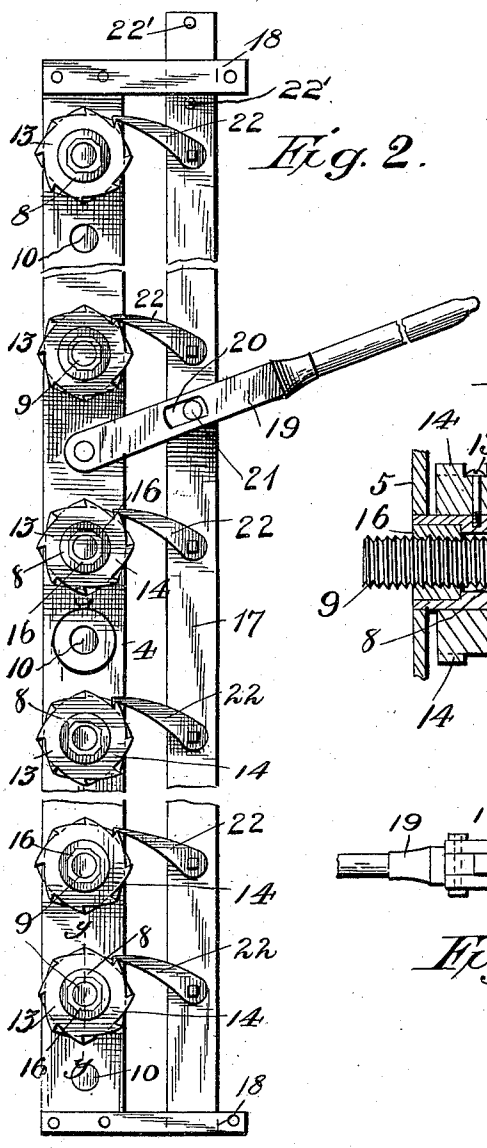


Fig. 2.

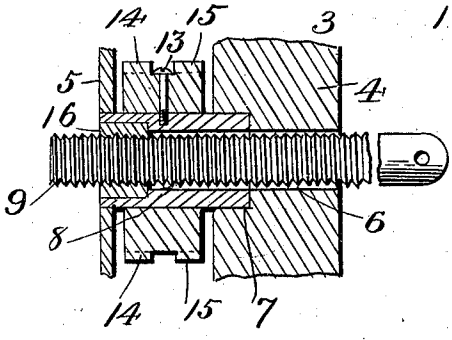


Fig. 5.

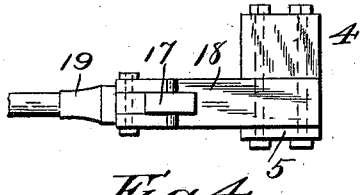


Fig. 4.

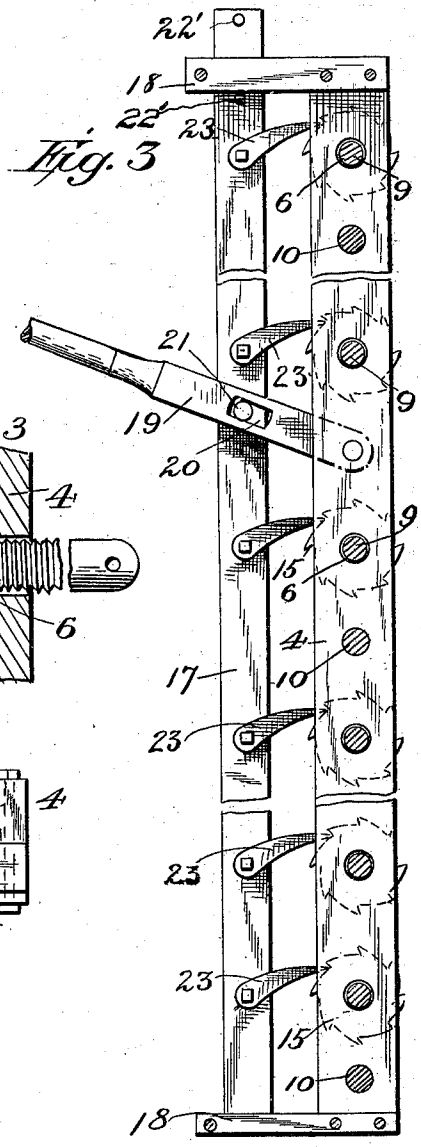


Fig. 3.

WITNESSES:

Franck L. Ouzand.

J. Tibbillson

INVENTOR,

Charles E. Baker.

BY

A. Bruiers & Co.

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES E. BAKER, OF BLOOMDALE, OHIO.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 653,055, dated July 3, 1900.

Application filed March 23, 1900. Serial No. 9,920. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BAKER, a citizen of the United States, residing at Bloomdale, in the county of Wood and State of Ohio, have invented certain new and useful Improvements in Wire-Stretchers; 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 appertains to make and use the same.

The invention relates to wire-stretchers.

The object of the invention is to provide a simple, durable, and inexpensive machine of this character by means of which the longitudinal fence-wires may be tightened simultaneously or independently, as may be desired.

With this object in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully set forth.

In the accompanying drawings, in which I have illustrated the preferred embodiment of my invention, Figure 1 is a side elevation showing my improved wire-tightener as it appears when in operation. Fig. 2 is a front elevation of the same with the front supporting-bar removed. Fig. 3 is a transverse sectional view on the line *x x*, Fig. 1. Fig. 4 is a top plan view. Fig. 5 is a transverse sectional view.

In the accompanying drawings, 1 denotes the fence-post, and 2 the longitudinal wires thereof.

3 denotes the supporting frame or standard of my invention, and preferably consists of two bars 4 and 5, bolted together at their upper and lower ends and being spaced apart by slotted arms 18.

6 and 6′ denote registering holes formed, respectively, in the bars 4 and 5. The hole 6 is enlarged to form a socket 7, which receives the end of a collar or bushing 8, the opposite end of which is journaled in the aperture 6′.

9 denotes the tightening-screws, each of which extends through the alined apertures of the bars 4 and 5 and each of which is provided at its inner end with means for attachment to the free ends of the fence-wires.

10 denotes one or more spikes which pass through the standard and have pointed ends 11, adapted to be driven into the fence-post to hold the machine in position. Two or more of these bars are formed on their outer ends with eyes 12, which receive a stake 11′, adapted to be driven into the ground and support the machine in a vertical position preparatory to being engaged with the fence-post.

13 denotes ratchet-wheels fixed to the bushings 8 and having two sets of oppositely-disposed ratchet-teeth 14 and 15. The forward end of each of these bushings is provided with a polygonal socket, into which is set a nut 16, engaged with the screws 9.

17 denotes a reciprocatory rod supported in the slotted arms 18, secured at the upper and lower ends of the standard.

19 denotes an operating-lever pivoted to the standard and having a slot 20, through which projects a pin 21, extending laterally from the reciprocatory bar 17. 22′ denotes stop-pins carried by said bar and adapted to successively engage the upper arm 18 in the vertical movement of the bar and limit the stroke thereof.

22 and 23 denote pawls, the former adapted to engage the ratchet-teeth 14 in tightening the wire and the latter adapted to engage the ratchet-teeth 15 when it is desired to loosen the wire and relieve it of undue strain.

The operation of the invention is as follows: After the machine has been set in the position shown in Fig. 1 and attached to the fence-post by driving the spikes 10 into the post the longitudinal wires to be stretched are engaged with the inner ends of the screws. The pawls 23 are disengaged from their ratchets 15 and the pawls 22 engaged with their ratchets 14. Now by reciprocating the lever 19 the pawls engaging their respective ratchet-wheels will rotate the same in the same direction, thus tightening up the wires. It is thus evident that all of the wires of the fence may be tightened simultaneously, and if occasion requires one or more of the wires may be tightened, while the remaining wires may be permitted to stand. If when tightening up a series of wires simultaneously it be discovered that one or more of the wires have been tightened to too great an extent, the pawls 22 are disengaged from their ratchets and the pawls 23 are engaged with the ratchets that operate the screws that have tightened

the wires to too great an extent, and by reciprocating the lever the wires may be slightly loosened to correspond with the other wires.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what I desire to secure by Letters Patent is—

In a wire-stretcher, the combination with a standard provided with screws, ratchet-wheels journaled in said standard, nuts rotated by said ratchet-wheels to move the screws longitudinally, a reciprocatory bar provided with pawls to engage said ratchet-wheels, and a lever connected to said standard and to the reciprocatory bar to reciprocate the latter, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES E. BAKER.

Witnesses:
E. D. BLOOM,
W. E. VAN EMAN.