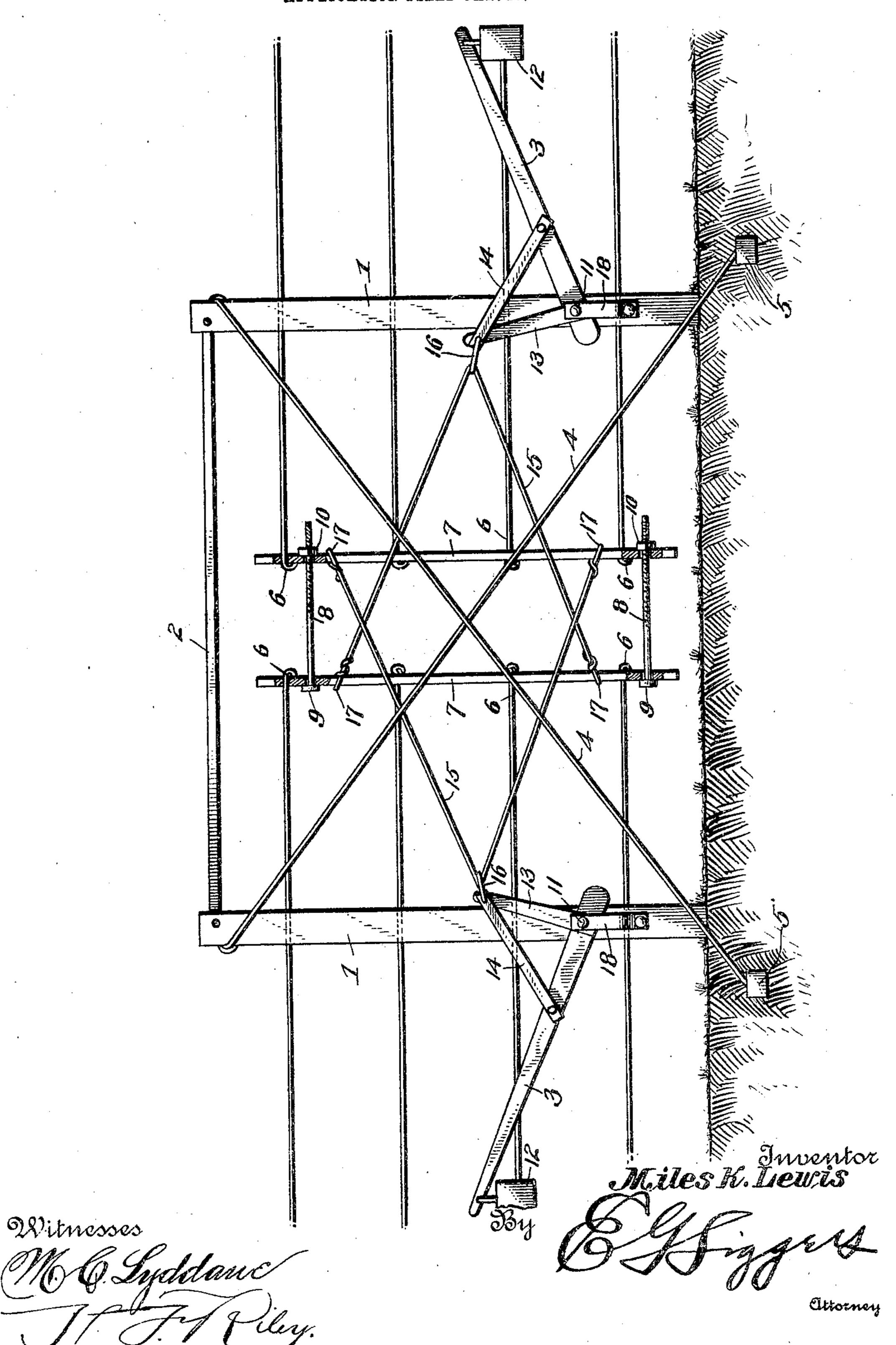
M. K. LEWIS.
WIRE STRETCHER.
APPLICATION FILED JAN. 19, 1905.



UNITED STATES PATENT OFFICE.

MILES K. LEWIS, OF LOMPOC, CALIFORNIA.

WIRE-STRETCHER.

No. 804,144.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed January 19, 1905. Serial No. 241,791.

To all whom it may concern:

Be it known that I, MILES K. LEWIS, a citizen of the United States, residing at Lompoc, in the county of Santa Barbara and State of California, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in

wire-stretchers.

The object of the present invention is to improve the construction of wire-stretchers and to provide a simple and comparatively inexpensive device of great strength and durability capable of simultaneously stretching all of the wires of a fence and of automatically maintaining the wires at a uniform tension and of permitting the same to expand and contract under the varying conditions of the atmosphere and the changes in the temperature without breaking.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit

or sacrificing any of the advantages of the invention.

a portion of a fence provided with a wire-35 stretcher constructed in accordance with this

The figure of the drawing is an elevation of

invention.

Referring to the drawing, 1 1 designate posts or uprights spaced apart and connected near their upper ends by a horizontal top bar 40 2, which is interposed between the posts or uprights and which prevents the same from being drawn inward toward each other. The posts or uprights, which constitute a supporting-frame for levers 3, are braced by op-45 positely-disposed diagonally-arranged wires 4, crossing each other at or near the center of the supporting-frame and secured at their upper ends to the posts or uprights by staples or any other suitable means and connected at 50 their lower ends to suitable anchors 5, which may consist of a block of stone or other suitable material embedded in the ground.

The wire-stretcher is arranged at a point between the ends of a fence, and the adjacent ends 6 of the fence-wires are connected to vertical stretcher-bars 7, which may be con-

structed of either wood or metal and which are arranged parallel with each other at the center of the supporting-frame.

When the stretcher-bars are constructed of 60 wood, the fence - wires may be stapled to them, and when constructed of metal, as illustrated in the accompanying drawing, the ends of the fence-wire may be passed through suitable perforations of the stretcher - bars 65 and be secured to the same in any suitable manner.

The vertical stretcher-bars are connected by rods or bolts 8, which limit the outward movement of the same. The rods or 70 bolts pass loosely through openings of the stretcher-bars and are arranged horizontally at the upper and lower ends thereof and are provided with suitable means for engaging the stretcher-bars. These means preferably 75 consist of heads 9 and nuts 10. The nuts are arranged on threaded portions of the rods or bolts and are capable of adjustment After the wires have been placed under a uniform tension by any suitable means they are 80 stretched to the desired tension by means of the levers 3, which are fulcrumed on the posts or uprights by means of bolts 11 or other suitable pivots. The levers, which extend outwardly and upwardly from the posts or up- 85 rights, are provided at their outer ends with weights 12, which may be of any desired size and character. The levers are provided at their inner ends with angularly-disposed upwardly-extending arms 13, which are sup- 90 ported by braces 14 and which are connected by substantially V-shaped wires 15 with the stretcher-bars. The V-shaped wires, which diverge from the arms 13 of the levers, are connected with the same by suitable links 95 16, and they cross each other between the stretcher-bars. The ends 17 of the wires 15 are secured to the stretcher-bars preferably by being passed through or around the same and twisted, as shown; but any other suitable 100 means may be employed for this purpose. Each lever is connected with the stretcherbar at the opposite side of the device, so that the weights will operate to draw the stretcherbars toward each other, and thereby simul- 105 taneously stretch all the wires of the fence, and by varying the size of the weights the fence-wires may be held at any desired tension, and they will be automatically maintained thereat. The levers will also permit 110 the fence-wires to expand and contract with the changes of temperature, and they will

maintain the wires taut and at the same time prevent them from breaking. The pivots 11 of the levers are supported by suitable braces 18, consisting of bars or straps secured to the posts or uprights beneath the pivots 11.

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

Letters Patent, is—

1. A wire-stretcher, comprising a support designed to be located between the ends of a fence, stretcher-bars adapted to be connected with the fence-wires, and opposite levers fulcrumed on the support and connected with the stretcher-bars.

2. A wire-stretcher, comprising a support designed to be located between the ends of a fence, stretcher-bars spaced apart and adapted to have the fence-wires attached to them, means for limiting the outward movement of the stretcher-bars, said means permitting a free inward movement of the said bars, and levers fulcrumed on the support and connected with the stretcher-bars.

3. A wire-stretcher, comprising a support designed to be located between the ends of a fence, spaced stretcher-bars adapted to be connected with the fence-wires, rods loosely connecting the stretcher-bars and provided with means for limiting the outward movement of the same, and levers connected with

the stretcher-bars.

4. A wire-stretcher, comprising a support designed to be located between the ends of a fence, spaced stretcher-bars adapted to be connected with the fence-wires and located at opposite sides of the center of the support,

weighted levers mounted on the support at opposite sides of the stretcher - bars, and means for connecting each lever with the stretcher-bars at the opposite side of the sup- 40

port.

5. A wire-stretcher, comprising a support provided with opposite uprights and provided with bracing means, vertical stretcherbars located between the uprights, weighted 45 levers fulcrumed on the uprights, and substantially V-shaped connecting means extending from the levers to the stretcherbars and connecting each lever with the stretcherbars at the opposite side of the support.

6. A wire-stretcher, comprising opposite uprights, vertical stretcher-bars located between the uprights, weighted levers fulcrumed on the uprights and having angularly-disposed arms, V-shaped wires connecting the arms of the levers with the stretcherbars, and means for loosely connecting the stretcher-bars for limiting their outward movement.

7. A wire-stretcher, comprising a pair of 60 spaced stretcher-bars designed to be located between the ends of a fence and adapted to be separately connected with the fence-wires, and opposite levers each connected with one of the stretcher-bars.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

MILES K. LEWIS.

Witnesses:

JAMES B. DEAN, F. S. LEWIS.