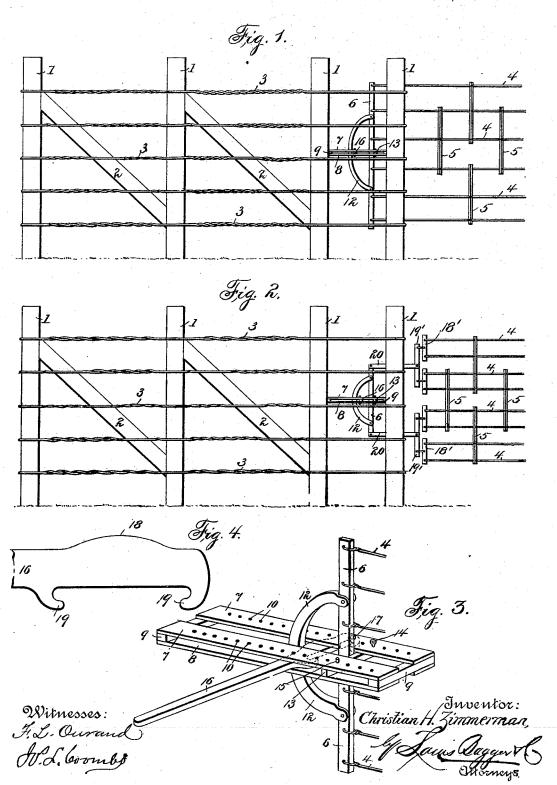
(No Model.)

C. H. ZIMMERMAN. WIRE FENCE STRETCHER.

No. 553,380.

Patented Jan. 21, 1896.



UNITED STATES PATENT OFFICE.

CHRISTIAN H. ZIMMERMAN, OF SHIREMANSTOWN, PENNSYLVANIA.

WIRE-FENCE STRETCHER.

SPECIFICATION forming part of Letters Patent No. 553,380, dated January 21, 1896.

Application filed October 25, 1895. Serial No. 566,891. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN H. ZIMMER-MAN, a citizen of the United States, and a resident of Shiremanstown, in the county of Cumberland and State of Pennsylvania, have invented certain new and useful Improvements in Wire-Fence Stretchers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will 10 enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in 15 stretchers for wire fences, and its object is to provide an improved construction of the same by which the proper tension can be given to the wires and the stretcher so locked in position after the wires are stretched that any 20 undue contraction of the wires in cold weather will break the lock or holding device, so as to release the stretchers and thus prevent any injury to the wires which would be liable to occur from such contraction.

The invention consists in the novel construction and combination of parts hereinaf-

ter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a fence-wire stretcher con-30 structed according to my invention, showing the same as it appears in use. Fig. 2 is a similar view showing a modified construction of the same. Fig. 3 is a detail view of the stretching mechanism, showing the man-35 ner of using the same. Fig. 4 is a detail view of the stretching-lever.

In the said drawings, the reference-numeral 1 designates four posts, which I designate "anchor-posts," the outer ones of which are 40 suitably braced by inclined brace-beams 2. The three outer posts and the brace-beams are also connected together by twisted wires 3, by which the posts are strengthened and braced against the tension of the fence-wires. 45 The wires 3 are also connected with the inner

posts, but not twisted, so as to allow a space therebetween for the stretching mechanism. Referring now to Fig. 1, the numeral 4 designates the fence-wires, which may be of any 50 number desired and which pass through holes in said inner posts. These wires are connected together by stays 5 of any ordinary

or suitable construction and preferably arranged so as to break joints. The ends of the wires 4 are secured to a vertical bar or 55 stretcher 6, which passes and works in a frame consisting of two upper and two lower parallel bars 7 7 and 8 8, connected together by end bars 9. This said frame bears against the anchor-posts 1. The said bars are formed 60

with a number of aligned holes 10.
It will be seen that there is a space between the upper and lower bars 7 and 8, and also a space between the inner edges of said bars, the vertical bar or stretcher 6 working in this 65 latter space, and to said stretcher is secured a curved metal bar 12, which also works in

said space.

The numeral 13 designates a rectangular bar provided with a hole near each end, which 70 is located between the upper and lower bars 7 and 8. A metal pin 14 passes through the hole at one end of this bar and also through aligned holes in the bars 7 and 8, and at the opposite end a wooden or breakable pin 15 75 similarly engages therewith.

The numeral 16 designates a lever for operating the stretcher and 17 are pins forming the fulcrum of the lever. This lever is formed with a curved bearing 18 on one side acting 80 as a cam, and on the other side is formed with two hooks 19, which engage with the pins 17.

The operation is as follows: The horizontal frame is located between the two inner anchor-posts and the fence-wires are secured 85 to the vertical stretcher. One of the pins 17 is then placed in aligned holes in the bars 7 and 8, and one of the hooks 19 of lever 16 is engaged therewith, so that the curved bearing or cam 18 will abut against the curved 90 bar 12. By now forcing the lever backward the bow and stretcher will be correspondingly moved and the fence-wire tightened. The bar 13 is now placed between the bars 7 and 8 and secured in place by the metal and 95 wooden pins. Another pin 17 is now placed in the holes in the horizontal bars and the lever withdrawn and engaged therewith and again forced backward. The bar 12 is then moved up against the stretcher and secured 100 in place by the pins. This operation is repeated until the proper tension is given to the fence-wires.

If the fence-wires should unduly contract

during cold weather, the wooden pin 15 will break and thus relieve the tension and prevent breakage of the fence-wires.

In the modification shown in Fig. 2 the 5 fence-wires, instead of being connected directly with the stretcher, are secured to bars 18', which in turn are connected with bars 19'. These bars 19' are attached to horizontal bars 20, passing through holes in the inner post 1, and are connected with the stretcher. Otherwise the construction is the same as that first above described.

Having thus described my invention, what I claim is—

1. A fence wire stretcher comprising the horizontal bars having a series of holes therein and connected together at the ends, the vertical stretcher and the curved bar secured thereto located between the inner edges of said bars, the bar located between said horizontal bars and the metal and breakable pins for holding said last mentioned bar in place, substantially as described.

2. In a fence wire stretching device, the combination with the anchor posts, the horizontal frame bearing against the anchor posts 1 comprising the upper and lower bars formed with a series of aligned holes and connected together at the ends of the fence wire, the vertical stretcher to which said wires are connected, the curved bar secured thereto, the bar interposed between the upper and lower horizontal bars, having holes at the ends, the pin passing through one of said holes and through aligned holes in the horizontal bars and the breakable pin passing through the hole at the other end and also through holes in the horizontal bars, substantially as described.

In testimony that I claim the foregoing as 40 my own I have hereunto affixed my signature in presence of two witnesses.

CHRISTIAN H. ZIMMERMAN.

Witnesses:

JOHN WEBER, GEORGE DRUY.