

(No Model.)

C. B. McDANIEL.
AUTOMATIC TENSION DEVICE FOR WIRE FENCES.

No. 578,086.

Patented Mar. 2, 1897.

Fig. 1.

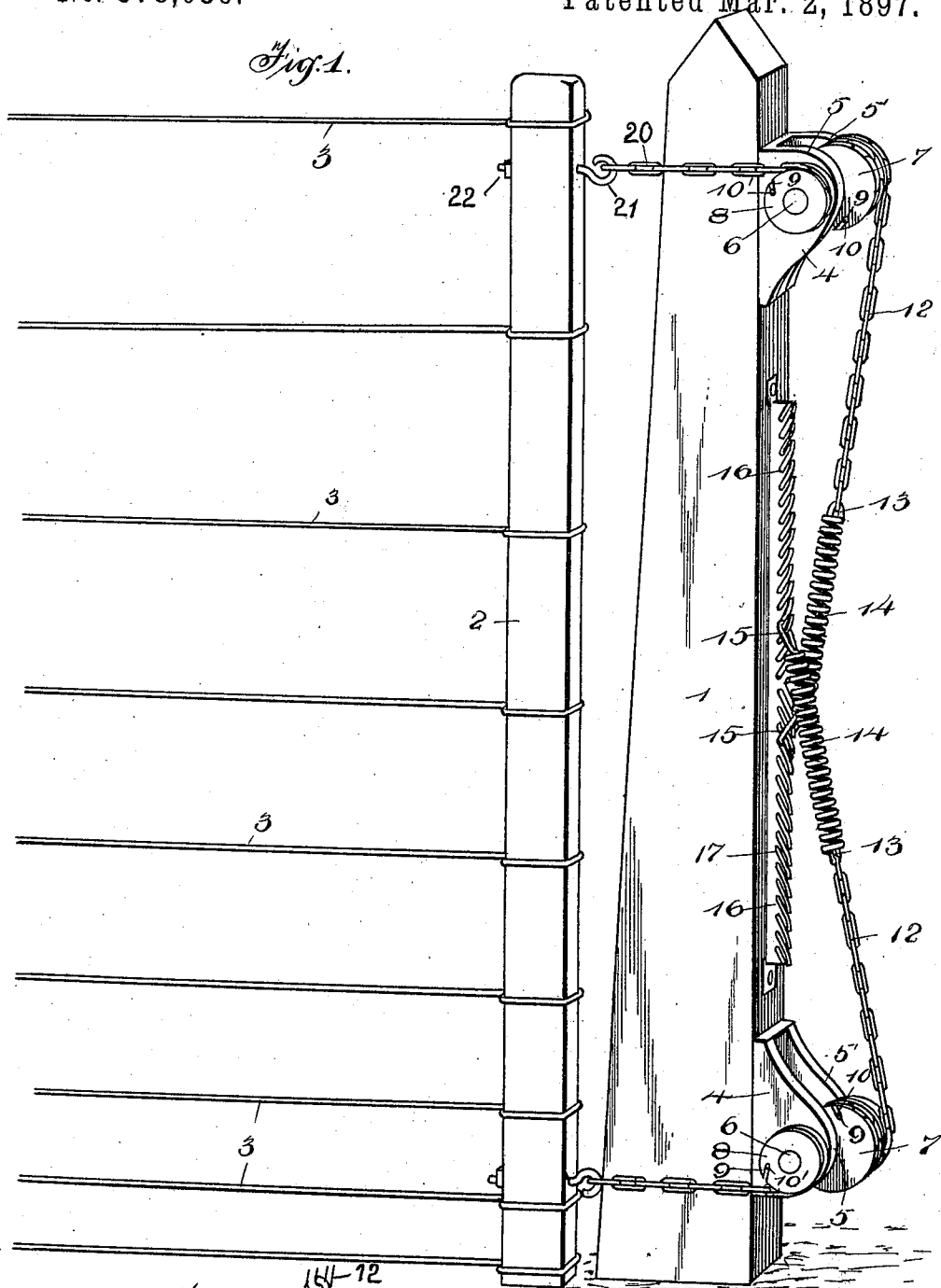
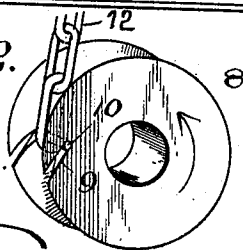


Fig. 2.



Witnesses

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AUTOMATIC TENSION DEVICE FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 578,086, dated March 2, 1897.

Application filed November 28, 1896. Serial No. 613,810. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BENJIMAN McDANIEL, a citizen of the United States, residing at Germantown, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Automatic Tension Devices for Wire Fences; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same.

My invention has relation to improvements in automatic tension devices for wire fences.

The object of the invention is to provide a device of this character which will automatically take up slack and which will also allow for the contraction of the wires, thereby keeping the wires taut at all seasons of the year.

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

In the accompanying drawings, Figure 1 is a perspective view of my improved tension device as applied to the end section of a wire fence, and Fig. 2 is a detail perspective view showing the manner of connecting the end of the chain to the grooved pulley.

1 represents the terminal post of a line of fencing, and 2 is a vertical bar to which the ends of the longitudinal fence-wires 3 are secured.

4 4 denote two brackets secured at the upper and lower ends of the post 1 and which are provided each with a shaft 6, upon which is eccentrically fixed a grooved sheave 7 between the ears 5 of the bracket. The outer end of the shaft 6 is provided with a sheave 8. The flanges of the sheaves 8 are provided with tangential recesses or notches 9.

17 denotes a plate which is secured to the rear edge of the post 1 and is provided with two sets of oppositely-projecting hooks 16.

12 12 denote chains, the outer ends of which are provided with cross-pins 10, which are slipped into the radial recesses 9 of the sheaves 7, whereby the ends are removably secured to said sheaves. The inner ends of these chains are connected to stiff coiled springs 14, which

cross each other and are engaged in the oppositely-projecting hooks of the plate 17.

20 20 denote chains, one end of which is also provided with cross-pins 10' to engage the recesses 9, while the other end is connected to the vertical bar 2 by screw-hooks 21.

The operation of the device is automatic. It will be noticed that in warm weather when the wires of the fence expand the tension of the springs 14 will draw upon the eccentrically-mounted sheaves 7 and partially rotate them. This movement is imparted to the sheaves 8, and the chains 20 are caused to be wound about them, thus tightening the fence-wires. In cold weather the tendency of the wires is to contract, and in order that they may do so without breaking or uprooting the posts the springs 14 will yield and permit of the contraction of the fence-wires.

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

1. An automatic tension device for wire fences, comprising the vertical bar 2, the fixed post 1, the brackets 4, the transverse shafts 6 journaled in said brackets, and provided with a grooved eccentric pulley and the grooved small pulleys, chains 12 secured at one end to the pulley 7 and at the other end to spiral springs adjustably secured to the post, the chains 20, one end of each of which is removably secured to the small pulleys 8 and at the other end to the hooks 21 adjustably secured in said bar 2, substantially as set forth.

2. In an automatic tension device for wire fences, the combination with the post and the bar carrying the fence-wires, of sheaves eccentrically mounted on said post, flexible connections between the sheave and the fence-wire-carrying bar, springs, the inner ends of which are adjustably secured to the posts and the outer ends of which are fastened to a flexible connection secured to the eccentric sheaves, substantially as set forth.

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

CHARLES BENJIMAN McDANIEL.

Witnesses:

FRANK CHRISTINE,
F. A. SCHLENKER.