

(No Model.)

J. B. CLEAVELAND.
WIRE STRETCHER AND TENSION DEVICE.

No. 475,383.

Patented May 24, 1892.

Fig. 3.

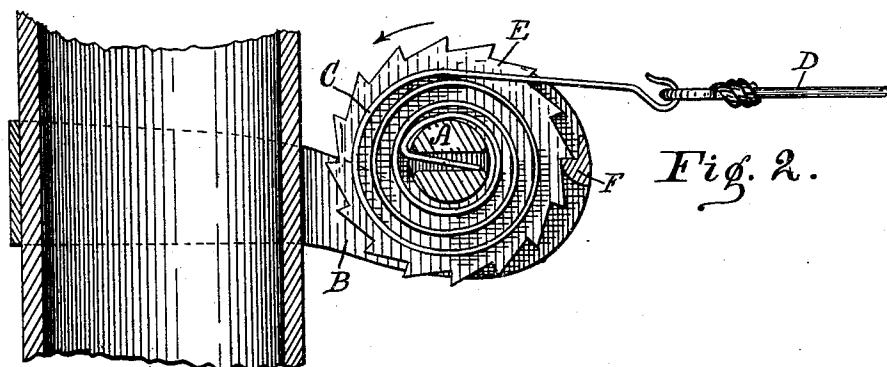
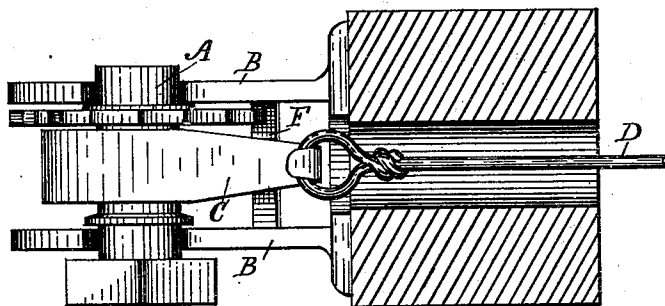


Fig. 2.

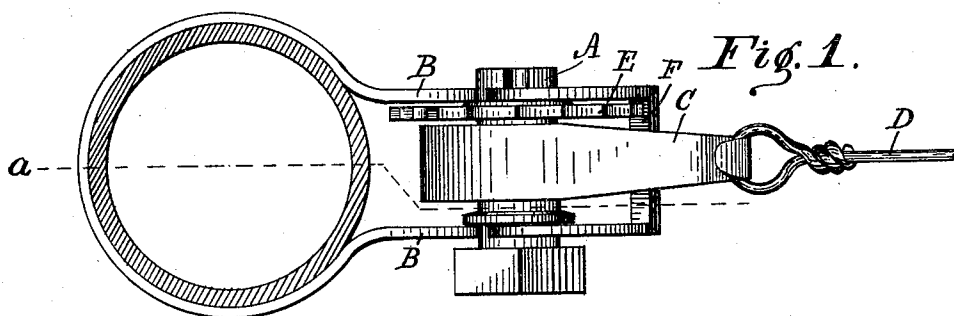


Fig. 1.

Witnesses:

V. M. Hood.
O. H. Castle

Inventor:

John B. Cleaveland

By W. P. Hood
Atty.

UNITED STATES PATENT OFFICE.

JOHN B. CLEAVELAND, OF INDIANAPOLIS, INDIANA.

WIRE-STRETCHER AND TENSION DEVICE.

SPECIFICATION forming part of Letters Patent No. 475,383, dated May 24, 1892.

Application filed March 12, 1891. Serial No. 384,712. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. CLEAVELAND, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Wire-Stretchers and Tension Devices, of which the following is a specification.

My invention relates to the combination, with a windlass of a wire-stretcher for fence-wires, of an automatic tension device, whereby the wire is held taut without danger of breaking under varying temperatures.

The accompanying drawings illustrate my invention, which consists in interposing between the end of the fence-wire and a windlass of a wire-stretcher of ordinary construction a coiled spring adapted to be attached to the fence-wire and to be wound upon the windlass, and to thereby hold the wire with a yielding tension, as hereinafter set forth.

Figure 1 is a plan of my improvement as applied to a windlass which is mounted upon a hollow cylindrical metallic fence-post. Fig. 2 represents a vertical longitudinal section at a, Fig. 1. Fig. 3 represents a plan showing the windlass mounted on a wooden post.

A is the windlass mounted on the supporting-brackets B B, which are adapted to be secured to the post.

C is a coiled spring, secured at one end to the windlass and adapted at the free end to be secured to the fence-wire D.

In operation, the fence-wire having been secured at one end to a distant fence-post and at the other end to the spring C, the windlass is turned in the direction indicated by the arrow, Fig. 2, and the spring is thereby put in tension, thus drawing the wire toward the windlass and winding it upon the coiled spring, if it is necessary, to give the wire sufficient tension. The windlass, being mounted in open or slotted bearings, is prevented from turning backward by the ratchet-wheel E, which engages the fixed bar F. The wire is thus held taut with a yielding tension, which takes up the expansion of the wire when heated and allows it to contract when cooled without danger of breaking.

I am aware that it is not new to provide for the expansion and contraction of the wire by connecting the wire to a fixed object by means of a spring, and do not claim such a construction broadly.

I claim as my invention—

The combination of a windlass mounted in bearings upon a fence-post, a coiled spring mounted upon said windlass and arranged to be wound thereon and thereby put in tension, and a fence-wire secured to the free end of said spring, all substantially as and for the purpose set forth.

JOHN B. CLEAVELAND.

Witnesses:

H. P. HOOD,
V. M. HOOD.