

(No Model.)

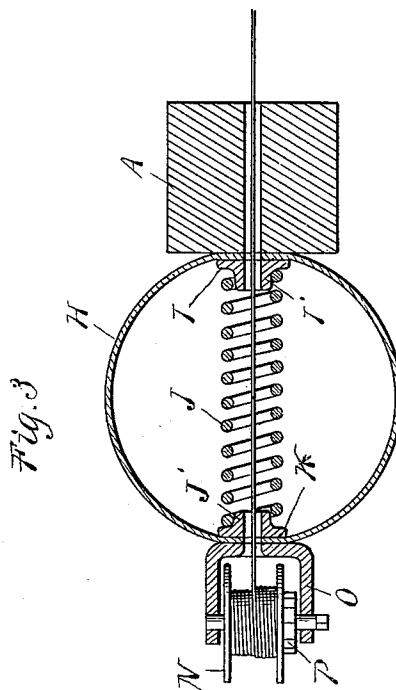
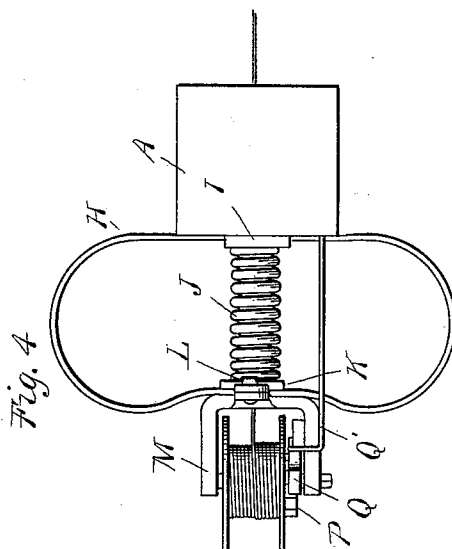
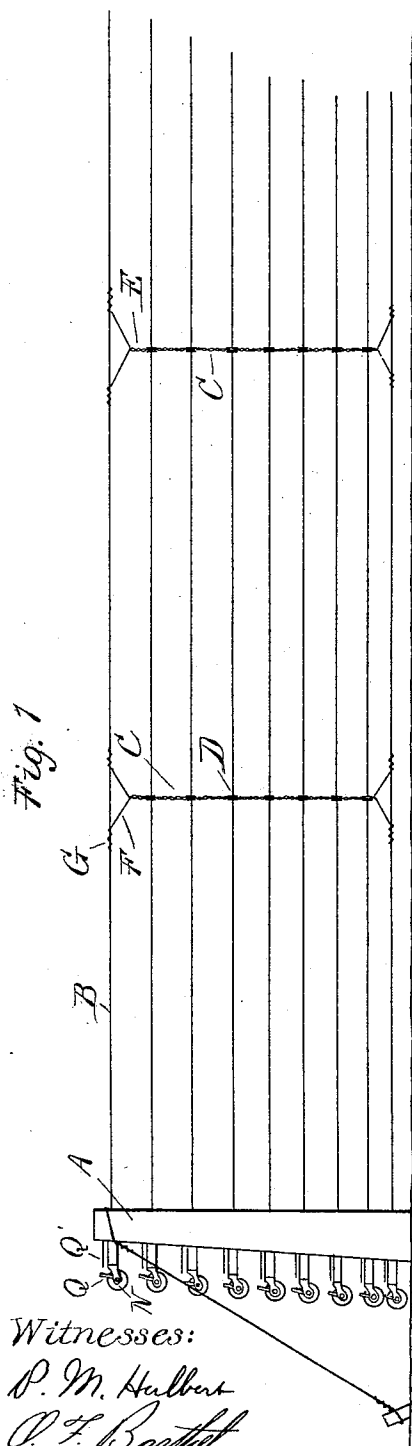
2 Sheets—Sheet 1.

D. D. FRISBIE.

FENCE.

No. 508,297.

Patented Nov. 7, 1893.



Inventor:

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UNITED STATES PATENT OFFICE.

DANIEL D. FRISBIE, OF DETROIT, MICHIGAN.

FENCE.

SPECIFICATION forming part of Letters Patent No. 508,297, dated November 7, 1893.

Application filed July 29, 1893. Serial No. 481,808. (No model.)

To all whom it may concern:

Be it known that I, DANIEL D. FRISBIE, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Fences, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the peculiar construction of a wire fence consisting of a series of wires stretched between posts having suitable tension devices at the ends of each section and intermediate stay wires between the posts.

The invention further consists in the peculiar construction of the tension devices, whereby I am enabled to obtain perfect independence of all the wires in relation to each other with an automatic releasing device preventing possibility of breakage of the wire by contraction in cold weather; further in the peculiar construction of the stay, and further in the peculiar construction, arrangement and combination of the various parts.

In the drawings, Figure 1 is a side elevation of a fence embodying my invention. Fig. 2 is an enlarged perspective view of the end or tension post showing one of the tension devices as in use. Fig. 3 is a horizontal section through such device in its normal position. Fig. 4 is a top view showing the device under tension. Fig. 5 is a detail view showing the ratchet and pawl device. Fig. 6 is a perspective view of the top of the stay illustrating its construction.

A is the end post, and suitable intermediate posts, not shown, are used to support the fence wires B. These wires are connected at suitable intervals by stays C. These stays consist of two wires *a, b*, twisted together with grooved ferrules D twisted therein at such points as to permit of stringing the fence wires (intermediate between the top and bottom wire) therethrough. The stays at the top and bottom have the twisted portion E extending but a few twists above the upper ferrule when they are separated to form the diagonal braces F; their outer ends being twisted as shown at G around the top and bottom. This gives me a structure in which the top and bottom wires are secured tightly together by a stay which is braced and pro-

vided with eyelets or ferrules through which the main fence wires may freely move without danger of being bound or clamped.

The end post A is suitably apertured to allow the wires to pass centrally therethrough, and each wire at its outer end connects to a suitable tension device. This tension device consists of a hoop shaped spring H secured to the fence by means of a bracket I. This bracket on its inner face is provided with a circular boss I' over which is engaged one end of a coil spring J, which is of a length equal substantially to the diameter of the spring H. At its other end the spring engages over a boss J' on a clamping plate K. This clamping plate embraces the inner face of the spring H and is provided with ears at its ends through which pass bolts L which pass also through apertures in the complementary ears on a spool bracket M which is thus secured to the outer edge of the hoop. The hoop, clamping plates and bracket are provided with apertures in line to permit the wire to pass centrally therethrough and through the spring J, being secured at the outer end upon a spool N, the shaft of which is journaled in the ends of the arms O of the bracket M. The outer end of the shaft is provided with a suitable squared portion by means of which the spool may be turned to put the necessary tension on the wire. At the end of the spool is a ratchet wheel P with which a spring pawl P' engages to hold the spool in its adjusted position. This pawl is provided with a tripping arm Q which is adapted to strike the pin Q' on the posts when the tension of the wire is sufficiently great to compress the springs J and H beyond the desired length, thereby releasing the pawl and allowing the wire to unwind and the springs to expand correspondingly.

The use of the two springs H and J not only gives me an excellent tension device but the spring H forms a convenient means for supporting the spool bracket at the outer end of the spring J.

What I claim as my invention is—

1. In a wire fence the combination with the fence wires, of the end posts having apertures to admit the passage of the wires, and a tension device consisting of an endless spring having one side secured to the outer side of

one of the end posts and its opposite side carrying a tension spool, substantially as described.

2. In a wire fence a stay C consisting of two
5 wires twisted together, grooved ferrule D
twisted into the stay and through which the
fence wires pass, the twisted section E at top
and bottom of the stay, the inclined brace
portions F of the stay wires, having their
10 ends twisted about the top and bottom fence
wires, substantially as described.

3. In a wire fence, the combination of the
fence wires, the end post A apertured to admit
the passage therethrough of such wires,
15 and a tension device comprising a hoop
shaped spring bearing at one side against the
post and at the other side carrying a tension
spool and an interposed coil spring, substantially
as described.

4. In a wire fence, the combination of the
20 fence wires, the end post, and a tension device
comprising the hoop shaped spring H secured
to the post, the coil spring J extending
diametrically across said hoop spring in line
25 with the fence wires, the bracket M clamped
at the outer edge of the hoop spring, the spool
N journaled therein and ratchet and pawl de-

vices having a tripping arm and the pin Q' adapted to trip said pawl, the parts arranged and operated substantially as and for the purpose described. 30

5. In a wire fence the combination with the fence wires of the end posts having apertures to admit the passage of the wires, a tension device consisting of an endless spring having 35 one side secured to the outer side of one of the end posts and its opposite side carrying a tension spool, means for locking the tension spool and a trip on the end post for unlocking said spool, substantially as described. 40

6. In a wire fence, the combination with the fence wires, of the end posts having apertures to admit the passage of the wires, a spring tension device secured to the end posts, a 45 spool carried by said tension device, means for locking the spool against rotation, and a trip on the post for unlocking the spool, substantially as described.

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

DANIEL D. FRISBIE.

Witnesses:

N. L. LINDOP,
JAMES WHITTEMORE.