(No Model.)

T. C. HISTED.

FENCE WIRE TIGHTENER.

No. 344,576. Patented June 29, 1886.

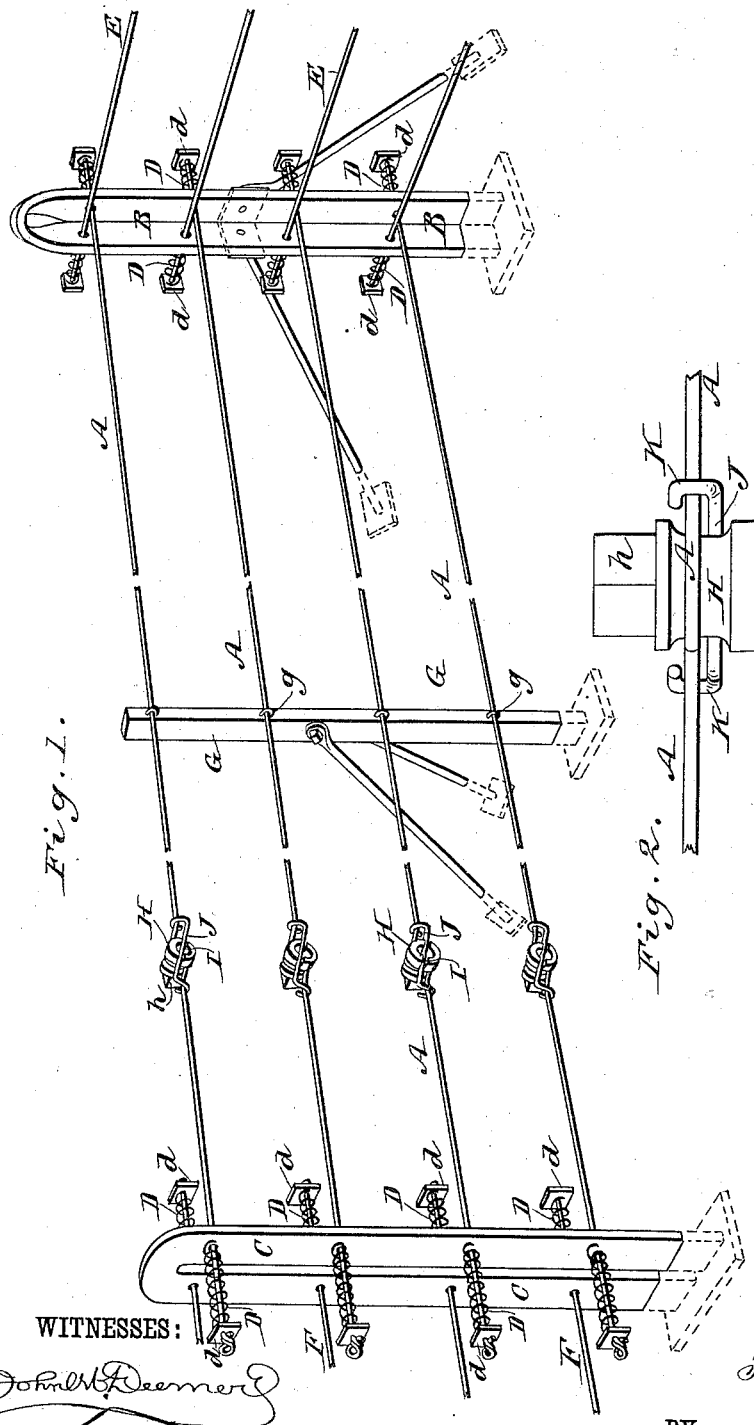

Fig. 1.

Fig. 2.

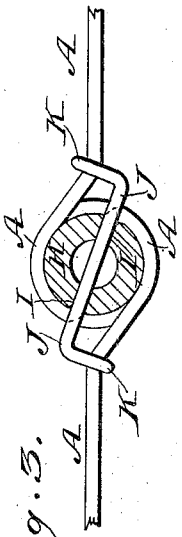

Fig. 3.

WITNESSES:

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THADDEUS CONSTANTINE HISTED, OF CHERRY VALE, KANSAS.

FENCE-WIRE TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 344,576, dated June 29, 1886.

Application filed December 28, 1885. Serial No. 186,878. (No model.)

To all whom it may concern:

Be it known that I, THADDEUS CONSTANTINE HISTED, of Cherry Vale, in the county of Montgomery and State of Kansas, have invented new and useful Improvements in Fence-Wire Tighteners, of which the following is a full, clear, and exact description.

The invention relates to tighteners for the wires of fences, and has for its object to provide simple, effective, and inexpensive devices whereby undue slackness of the fence-wires may be taken up at any time, and the wires will always be free to expand and contract by changes in temperature.

The invention consists in certain novel features of construction and combinations of parts of the fence-wire tighteners, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a corner-section of a fence with my improved wire-tighteners applied thereto. Fig. 2 is an enlarged plan view of one of the wire stretching or tightening rollers and its clamp as applied to the wire; and Fig. 3 is a view taken at right angles to Fig. 2, and with the wire-tightening roller in section.

The fence-wires A are passed freely through holes in the end posts, B C, of one section of the fence, and project far enough through the posts to receive spiral springs D, between the posts and head plates or buttons *d*, fixed to the ends of the wires. The springs tend by their expansion to stretch or tighten the wires between the posts, and at the same time allow expansion or contraction of the wires by changes in temperature. The post B is a corner-post, and receives the ends of wires E, ranging at right angles to wires A, and provided like them with buttons *d* and springs D, and for like purposes. Wires F, also having buttons *d* and springs D, are held in post C. The wires E F extend to posts (not shown) set at the ends of sections of the fence, where they will have buttons *d* and springs D.

The posts of each section of the fence will be set at any preferred distance apart—from forty to one hundred and sixty rods—and as many intermediate posts, G, having staples *g* or other supports, through which the wires may pass freely, will be set between the end posts, B C, of each section, as the length of the section may require.

Upon each wire of each section of the fence I place a tension-roller, H, preferably made of cast metal and hollow, and with a squared boss or hub, *h*, at one side, to which a wrench or other tool may be applied for turning the roller. In its end, opposite its hub *h*, the roller H is provided with a diametrical slot, I, to receive the fence-wire, and when the roller is turned, when on the wire, the wire will be wound on the roller more or less to take up undue slack of the wire, and after the wire is tightened by and on the roller a clamp, J, will be slipped at its straight central portion into the slot I of roller H, outside of the wire, and the oppositely-bent end hooks, K K, formed at opposite ends of the clamp, will be hooked over the wire at opposite sides of the roller to prevent the roller's turning backward, and consequently releasing the slack of the wire which has been wound on the roller. The corners of the roller H, at the slot I, over which the wire draws when the roller is turned, are rounded to prevent cutting of the wire. (See Fig. 3.)

It is obvious that by the aid of the expanding springs D, at opposite ends of the fence-wire sections, and the tightening and clamping device H J, the fence-wires may accommodate themselves to changes in temperature, and undue slackness of the wires may be taken up at any time; hence the fence may, with very little attention, be kept in good condition as long as the wires last.

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

1. In fence-wire tighteners, the combination, with posts, a wire supported thereby, and springs acting to stretch the wire between the posts, substantially as specified, of a roller, H, having a diametrical slot, I, in which the

wire rests, and a clamp, J, adapted to slot I, and having end hooks, K K, engaging the wire when it is wound on the roller, substantially as herein set forth.

2. The combination, with a fence-wire, as A, of a roller, H, having a diametrical slot, I, in which the wire rests, and a clamp, J, entered into slot I, and having end hooks, K K, engaging the wire when it is wound on the roller, substantially as herein set forth.

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Witnesses:
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