

(No Model.)

S. P. THURMAN.
FENCE MACHINE TENSION DEVICE.

No. 567,113.

Patented Sept. 1, 1896.

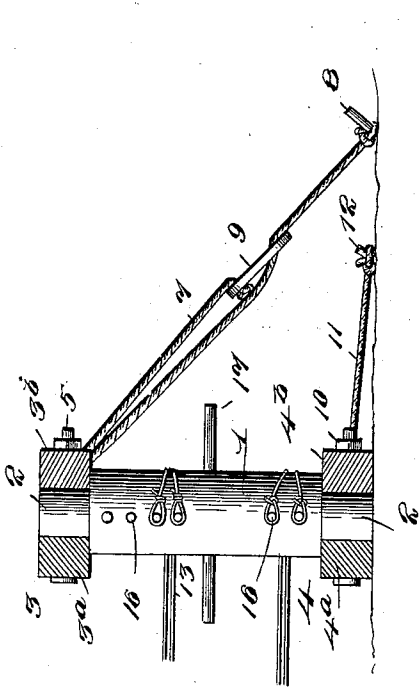


Fig. 2.

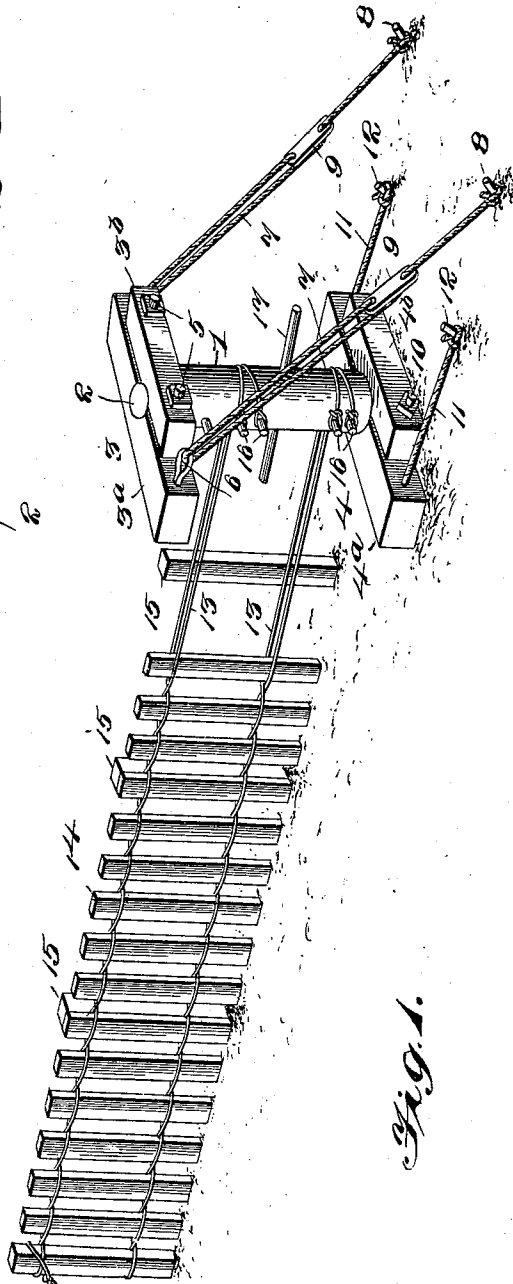


Fig. 1.

Witnesses
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Inventor
Squire P. Thurman,
By his Attorneys.

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UNITED STATES PATENT OFFICE.

SQUIRE P. THURMAN, OF CHAMBERS, KENTUCKY, ASSIGNOR OF ONE-HALF
TO OLIVER C. SHELLMAN, OF SAME PLACE.

FENCE-MACHINE TENSION DEVICE.

SPECIFICATION forming part of Letters Patent No. 567,113, dated September 1, 1896.

Application filed May 27, 1896. Serial No. 593,287. (No model.)

To all whom it may concern:

Be it known that I, SQUIRE P. THURMAN, a citizen of the United States, residing at Chambers, in the county of Hancock and State of Kentucky, have invented a new and useful Wire-Stretcher, of which the following is a specification.

My invention relates to wire-stretchers of that class employed in the construction of wire-and-slat fences and designed to be employed only during the erection of the fence to secure the proper engagement of the slats or pickets by the interwoven or intersecting runners which embrace the slats or pickets.

The objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a wire-stretcher constructed in accordance with my invention arranged in operative relation with a fence in the process of erection. Fig. 2 is a detail side view of the wire-stretcher, showing the clamping-blocks in section.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

The device embodying my invention consists, essentially, of a vertical drum 1, having reduced extremities forming journals 2, which are mounted in registering half-bearings or notches formed in the facing sides of blocks forming upper and lower clamps 3 and 4. The upper clamp comprises a long member or block 3^a and a short member or block 3^b, which is connected with the long member by adjusting devices consisting, in the construction illustrated, of bolts 5, the extremities of the long member extending beyond those of the short member to provide for the attachment, by means of guide-eyes 6, of adjustable guy-ropes 7. These guy-ropes extend rearwardly and downwardly from the upper clamp to resist the forward strain upon the drum and are attached to fixed anchors 8, suitable means for adjusting the guy-ropes being employed, such as clutches 9, each of which is attached at one end to the loose extremity of the guy-rope and is provided at the

other end with an opening through which the body portion of the rope is threaded.

The lower clamp is of a construction similar to the upper clamp and comprises long and short members 4^a and 4^b, connected by adjusting devices consisting of bolts 10, forward movement of the lower clamp being resisted by anchor-ropes 11, attached to anchor-pins 12.

The runners 13 of the fence are arranged in pairs and are crossed backward and forward to form spaces for the reception of the slats or pickets 14, said runners being secured at intervals to the stationary uprights or posts 15. In the drawings only two pairs of runners are illustrated, but it will be understood that a greater number may be employed, if desired, the extremities of the runners being temporarily attached to a drum by means of radial pins or studs 16, with which the surface of the drum is provided, and the lever 17 is arranged transversely in the drum to facilitate turning the same to increase or diminish the tension upon the runners. A plurality of upper studs may be employed, as shown in the drawings, to vary the interval between the lower and the upper runners to suit fences of different heights.

The function of the stretcher set forth in the above description is similar to that of other devices designed for the same purpose, it being understood that the half-bearings or notches in the contiguous faces of the members of the upper and lower clamps are of less depth than one-half the diameter of the reduced extremities or channels of the drum, whereby when the members of a clamp are adjusted toward each other said reduced or journal portions will be clamped and may be secured against rotation to hold the runners at a given tension during the insertion of the slats or pickets. The clamps may be adjusted to cause such a frictional contact with the journals of the drum as to prevent accidental reduction of tension in the runners without preventing the turning of the drum by means of its operating-lever to give further slack, which may be required in the operation of placing the stays or pickets.

The desired equality of tension upon the

upper and lower pairs of runners may be secured by the adjustment of the guy-ropes. For instance, if the tension upon the upper runners is less than that upon the lower runners the tension of the guy-ropes should be increased by moving the adjustable clutches toward the anchor-pins, whereas if the tension of the upper runners exceeds that of the lower runners said guy-ropes should be slackened by moving their clutches in the opposite direction.

From the foregoing description it will be seen that the device is simple and may be manufactured at a small cost and operated by an unskilled person; but in addition thereto it is sufficiently light in weight to be carried without difficulty by the operator to the point required, thus avoiding the necessity of using a team for this purpose.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. A wire-stretcher having an upright drum provided with means for the attachment of the contiguous extremities of fence-runners whereby each runner is wound independently thereon, upper and lower bearing-blocks in which the extremities of the drum are mounted, guy and anchor ropes attached, respectively, to the upper and lower blocks and extending rearwardly therefrom to resist the tension of the runners, means for adjusting the tension of one of said ropes whereby the position of the drum may be

varied to produce the desired relative tension of the runners, and locking devices for securing the drum at the desired rotary adjustment, substantially as specified.

2. A wire-stretcher having a vertical drum provided with means for the attachment of fence-runners, upper and lower blocks each consisting of relatively adjustable members having notches in which the contiguous extremities of the drum are mounted, means for adjusting said blocks to produce the desired frictional contact thereof with the extremities of the drum, guy and anchor ropes attached respectively to the upper and lower blocks, and means for adjusting one of said ropes, substantially as specified.

3. A wire-stretcher having a vertical drum provided with means for the attachment of fence-runners and having reduced extremities, upper and lower clamps each consisting of long front and short rear members connected by adjusting-bolts and provided with registering half-bearings to receive the reduced extremities of the drum, anchor-ropes extending rearwardly from the front member of the lower clamp and fixed at their rear ends, guy-ropes anchored at their lower ends and extending through guides on the front bar of the upper clamp, and means for adjusting the tension of the guy-ropes, substantially as specified.

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

SQUIRE P. THURMAN.

Witnesses:

J. B. FREEMAN,
W. H. LYONS.