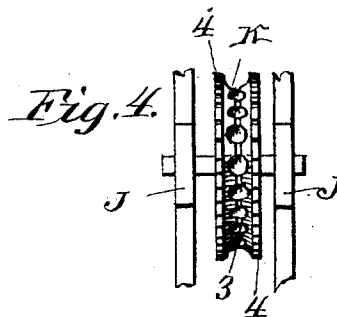
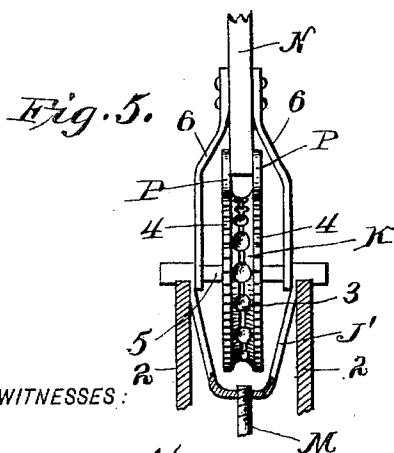
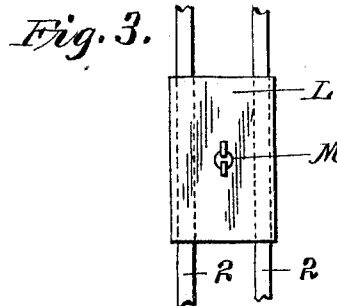
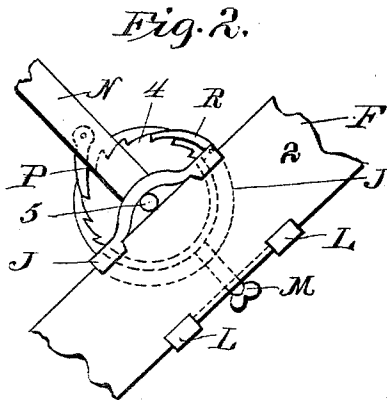
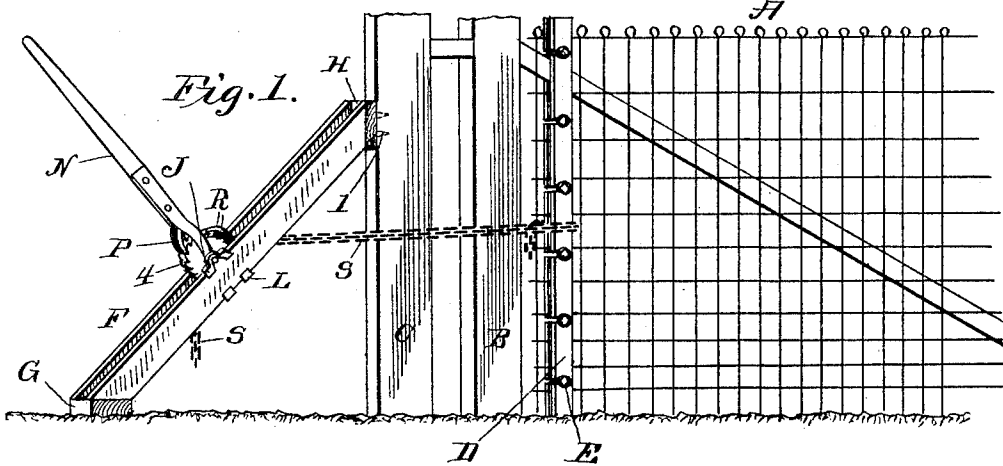


(No Model.)

C. H. SALISBURY.
WIRE FENCE STRETCHER.

No. 586,802.

Patented July 20, 1897.



Joseph B Mudd
for M. Copinhaber

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UNITED STATES PATENT OFFICE.

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WIRE-FENCE STRETCHER.

SPECIFICATION forming part of Letters Patent No. 586,802, dated July 20, 1897.

Application filed May 5, 1897. Serial No. 635,142. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. SALISBURY, a citizen of the United States, residing at De Kalb, in the county of De Kalb and State of Illinois, have invented certain new and useful Improvements in Wire-Fence Stretchers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has reference to wire-fence stretchers, and while applicable to any of the various kinds of wire fence it is especially adapted to drawing into taut and proper form the woven-wire fence, operating uniformly throughout the entire width of the fence.

My invention involves the use of a temporary post seated in the line of the fence and outside of the permanent post. A pair of vertical clamps bolted to the wire portion of the fence from opposite sides of the latter, respectively, are connected by a suitable chain to the tightening mechanism. A stretcher-frame, having its lower end seated on a suitable foot-block and its upper end extending diagonally toward the temporary post and resting against the adjacent surface of the latter, is provided with a metallic cap having engaging points to project slightly into the temporary post to prevent any casual lifting of the stretcher-frame. An adjustable chain-tightening wheel is seated on the stretcher-frame and intermittently rotated by a hand-lever, as hereinafter set forth.

I attain the above purposes by the use of the mechanism described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective of a machine embodying my invention, shown in operation with a section of fence. Fig. 2 is a detail of the chain-tightening ratchet. Fig. 3 is a detail of the lower surface of the stretcher-frame, exhibiting the lower plate which holds the tightening devices. Fig. 4 is a detail of the chain-wheel and its relation to the stretcher-

frame. Fig. 5 is a detail of the chain-wheel in position on the stretcher-frame, the hand-lever and actuating-pawls for operating the same, and also the set-screw for holding the tightening-wheel at any desired point on the stretcher-frame.

Similar letters and figures refer to similar parts throughout the several views.

As before stated, my invention is adapted to any type of wire fence, but in this application is exhibited only as applied to a fence composed of horizontal runners and vertical slats interconnected at their points of intersection.

A is a section of said fence.

B is the permanent post, across the face of which the fence A is to be drawn and to which the said fence is to be attached, when sufficiently drawn, by suitable staples.

C is a temporary post set near the post B and in the line of the fence to receive the pressure from the stretcher and is used to avoid the automatic lifting of the permanent post B where such stretcher is used directly in contact with said permanent post.

D D are a pair of vertical clamps placed, respectively, on each side of the wire fence and near the end of the latter and tightly clamped upon said fence by a vertical series of transverse bolts E, which pass through both of said clamps and the interposed wire-web A.

The stretcher-frame F consists of two parallel pieces set edgewise and seated at their lower ends upon the foot-board G, which extends laterally from the base of said frame a sufficient distance to prevent the stretcher-frame from canting laterally when the strain is put on.

The base of the stretcher-frame is placed a short distance from the bottom of post C and in the line of the fence, and said frame extends diagonally upward and is provided at its upper end with a metallic cap H, having on its outer face projections 1, adapted to enter the surface of post C and prevent the frame F from slipping thereon. A metallic frame J, having a circular central base J' projected downwardly between plates 2 2, Fig. 2, is placed on the upper surface of the

two parallel plates 2 2, constituting the stretcher-frame F. The chain-winding wheel K, having a grooved periphery and chain-grasping recesses 3, is suitably journaled in the frame J between the plates 2 and on the upper edge of the latter. On the edges of the periphery of wheel K there are formed ratchet-teeth 4. Across the lower surface of the plates 2 and directly opposite to the plates J is seated the plate L. A set-screw M, Fig. 5, is seated in plate L in position to engage a conforming threaded opening in the base J' of plate J, by means of which the plates J and L are adjusted to and fro on frame F.

Wire fences are of different widths, and it is essential to have the means of varying the position of the tightening-wheel K up and down the stretcher-frame F. This is accomplished by the use of the plate L on the under side of the frame F, optionally connected to the frame J through the medium of the set-screw M. By loosening said set-screw the plate L and the plate J, carrying the wheel K, can be moved to any position on the frame F, and by retightening said set-screw the wheel K is rigidly held in its new position.

A hand-lever N is fulcrumed at its lower end on the axle 5 of the wheel K, through the bifurcations 6, formed on the lower end of said lever and seated at their lower extremities on said axle 5 outside of the set-screws M, respectively. Independent pawls P, pivotally attached to the lever N at the top of said bifurcations, at their lower ends engage the ratchet-teeth 4, formed on each side of the wheel K, and with each oscillation of said lever intermittently rotate said wheel. A retaining-pawl R, seated on the frame J, prevents the retrogression of the wheel K.

The chain S is suitably attached around the vertical clamps D, fastened, as aforesaid, to the wire fence A. The opposite end of said chain is passed between the plates 2 2 and over the wheel K. The links of said chain automatically engage the recesses 3, formed in the base of the peripheral groove of the wheel K. By the successive oscillations of the lever N the chain S is gradually drawn over the wheel K and the fence A thereby straightened and stretched until the wires thereof can be fastened by staples to the face of post B without releasing the said tightening mechanism.

What I claim as my invention, and desire

to secure by Letters Patent of the United States, is—

1. The combination of the clamps D, suitably attached to the fence A, stretcher-frame F, temporary post C, wheel K provided with ratchet-teeth 4 and chain-recesses 3, pawl R, lever N provided with pawls P, seated on the axle of wheel K, and chain S, substantially as shown and for the purpose described.

2. In a wire-fence stretcher, the combination of vertical clamps D, suitably attached to the fence, temporary post C seated in the line of the latter, diagonally-seated stretcher-frame F provided with laterally-elongated foot-block G and with head-block H, provided with attaching-points 1 and adapted to engage the adjacent side of the temporary post C, frame J seated on frame F, wheel K pivotally seated in frame J and provided with ratchet-teeth 4 and chain-recesses 3, plate L seated on the lower surface of the frame F and oppositely to frame J and set-screw M, adjustably connecting plates J and L, pawl R, hand-lever N seated on the axle 5 of wheel K and provided with engaging pawls P adapted to actuate the wheel K, and chain S fastened at one end to the central portion of the clamps D and the links thereof adapted to successively engage the recesses 3 on wheel K substantially as shown and for the purpose described.

3. In a wire-fence stretcher, the combination of a vertical clamp D adapted to be attached to the fence, a temporary post C, a stretcher-frame F seated diagonally in the line of the fence against the temporary post C, plates J and L seated on frame F, the set-screw M, uniting said plates and adapted to hold the latter at any point on said frame F, a chain-wheel K journaled in said frame J and carried thereby and having peripheral recesses 3, chain S connecting said clamp D with wheel K and adapted to engage the peripheral recesses 3 of the latter, the lever N and actuating and retaining pawls P and R, substantially as shown and for the purpose described.

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

CHARLES H. SALISBURY.

Witnesses:

JACOB HAISH,
B. S. WHITE.