(No Model.)

R. STAUFFER.

WIRE STRETCHER.

No. 538,751. Patented May 7, 1895.

Fig. 1.

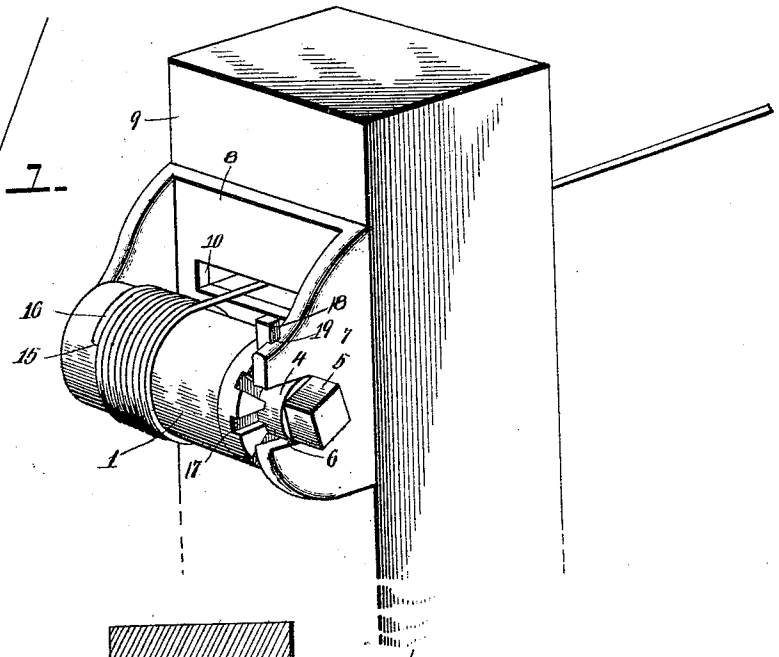


Fig. 2.

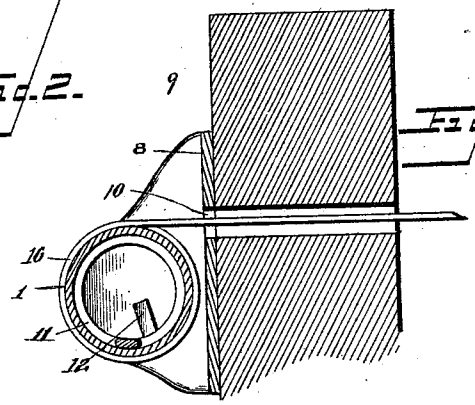


Fig. 3.

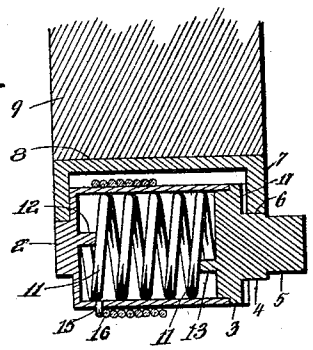
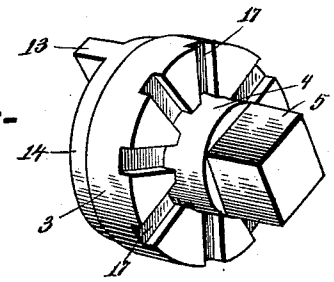


Fig. 4.



Inventor
Rufus Stauffer

Witnesses
Thos. M. Riley
J. F. J. Riley

By his Attorneys.
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

RUFUS STAUFFER, OF FARMERSVILLE, PENNSYLVANIA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 538,751, dated May 7, 1895.

Application filed November 30, 1894. Serial No. 530,415. (No model.)

To all whom it may concern:

Be it known that I, RUFUS STAUFFER, a citizen of the United States, residing at Farmersville, in the county of Lancaster and State of Pennsylvania, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire stretchers.

The object of the present invention is to improve the construction of wire stretchers, and to provide a simple and comparatively inexpensive one, which will enable wires to be readily stretched to the desired tension, and which will yieldingly retain the same to permit wires to expand and contract under varying temperatures, without breaking or varying the tension of the same.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wire-stretcher constructed in accordance with this invention and shown applied to a post. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal sectional view. Fig. 4 is a detail perspective view of the removable end or cap of the hollow drum.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a hollow drum, provided at one end, which is closed, with a journal 2, and having fitting in its other end, which is open, a removable cap or disk 3, having a journal extension 4 terminating in a polygonal wrench receiving portion 5. The journal 2 of the drum, and the journal 4 of the disk or cap 3, are arranged in bearing recesses 6 of sides 7 of a bearing bracket or frame 8, arranged against a fence post 9, and provided with an opening 10.

A spiral spring 11 is disposed within the hollow drum, and has one end bearing against a lug 12 of the closed end of the drum, and its other terminal engages a similar lug 13 of the disk or cap 3, whereby the drum and the disk or cap are yieldingly connected. The disk or cap 3 has an inner reduced portion 14, which fits within the hollow drum, and permits the latter to turn on the disk independently thereof.

The drum is provided with a perforation 15, and is connected with a fence wire 16, to be stretched, and the tension of the fence wire maintains the bearing bracket or frame in position on the fence post, and retains the drum in its bearings.

The fence wire is tightened by rotating the drum by means of a wrench or similar tool, and the disk is provided with a series of ratchet recesses 17 disposed radially, and adapted for the reception of a key 18, which engages a groove 19, of the adjacent side of the bearing bracket or frame. The groove 19 is located at the inner face of the side of the bearing bracket or frame, and after a fence wire has been properly stretched, and the disk locked by means of the key, the drum has a limited independent movement, owing to the spiral spring, which forms a yielding connection between the drum and the disk, to permit a fence wire to expand and contract under varying temperatures.

It will be seen that the wire stretcher is simple and comparatively inexpensive in construction, that it is adapted to be readily applied to any ordinary construction of wire fence, and that it yieldingly retains a fence wire and prevents the same from becoming broken.

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

What I claim is—

1. In a wire stretcher, the combination of a bearing frame or bracket, a hollow drum journaled on one side of the bearing frame or bracket, a disk or cap journaled on the opposite side of the frame or bracket and closing the adjacent end of the drum, a spiral spring disposed within the drum and connected with the same and with the cap or disk, and a ratchet mechanism for locking the disk or cap against rotation, substantially as described.

2. In a wire stretcher, the combination of a bearing bracket, a hollow wire receiving drum journaled on one side of the bracket, a ratchet disk arranged at one end of the drum, and

adapted to be locked against rotation, and a spring yieldingly connecting the ratchet disk and the drum and concealed within the latter, substantially as described.

3. In a wire stretcher, the combination of a bearing bracket, a hollow drum provided at one end with a journal arranged on the bearing bracket, a disk fitting in the other end of the drum and journaled on the adjacent side of the bearing bracket, a spiral spring disposed within the drum, lugs mounted on the drum and on the disk, and engaging the terminals of the spring, and means for locking the disk against rotation, substantially as described.

4. In a wire stretcher, the combination of a bearing bracket, a hollow drum provided at one end with a journal arranged on the bearing bracket, a disk or cap located at the other end of the drum and provided with radial recesses, a spiral spring disposed within the drum and connected with the same and with the disk or cap, and a key fitting in one of the recesses of the disk and engaging the adjacent side of the bearing brackets, substantially as described.

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

RUFUS STAUFFER.

Witnesses:
C. H. OBERHOLTZE,
H. S. STAUFFER.