

(No Model.)

H. H. VAN ORMER.
WIRE STRETCHER.

No. 476,338.

Patented June 7, 1892.

Fig. 1.

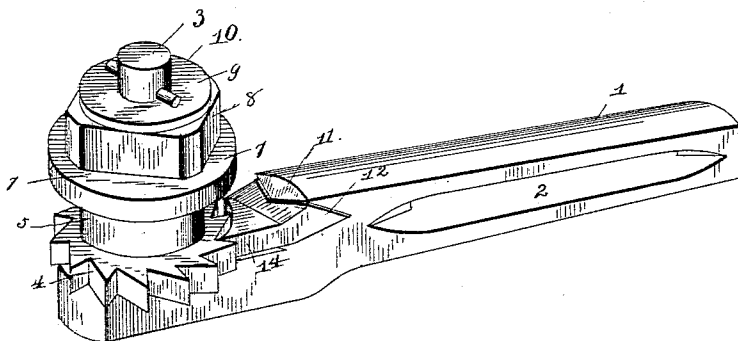


Fig. 2.

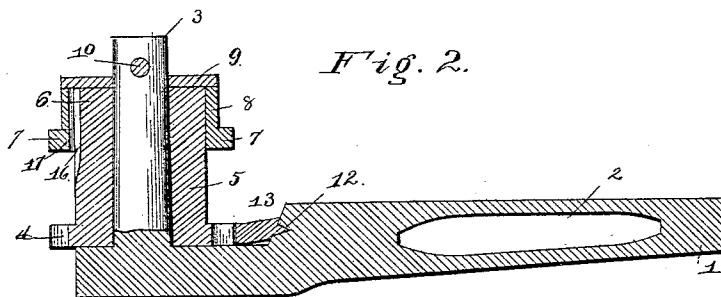


Fig. 3.

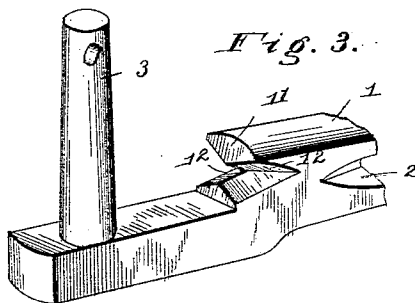


Fig. 5.

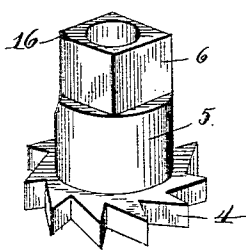
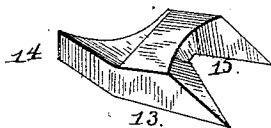


Fig. 4.



Witnesses

Chas. A. Ford
N. H. Riley

Inventor

H. H. Van Ormer.

By *his* Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

HARRY H. VAN ORMER, OF EDWARDSBURG, MICHIGAN.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 476,338, dated June 7, 1892.

Application filed September 25, 1891. Serial No. 406,785. (No model.)

To all whom it may concern:

Be it known that I, HARRY H. VAN ORMER, a citizen of the United States, residing at Edwardsburg, in the county of Cass and State of Michigan, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire-stretchers.

10 The object of the present invention is to simplify and improve the construction of wire-stretchers and to enable the same to be readily operated to maintain the wires of a fence at any desired tension.

15 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.

20 In the drawings, Figure 1 is a perspective view of a wire-stretcher constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a detail perspective view of the bar. Fig. 4 is a similar view of the pawl. Fig. 5 is a detail view of the ratchet removed.

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

1 designates a bar constructed of metal and provided at one end with an opening 2 and having at the opposite end an integral laterally-extending stub-shaft or spindle 3, on which is arranged a ratchet-wheel 4, which has an extended hub 5, having its outer end 35 6 squared and adapted for the reception of a collar 7. The collar 7 has a square opening to receive the squared portion 6 and is provided with a rectangular flange 8, adapted to be engaged by a wrench to turn the ratchet-wheel. The ratchet-wheel and collar are retained on the stub-shaft or spindle by a washer 9 and a bolt 10, passing through a perforation in the outer end of the stub-shaft or spindle. The bar 1 is offset at 11 to form a shoulder, which is provided in opposite sides with inclined recesses 12, having their walls oppositely beveled and being V-shaped in cross-section and adapted for the reception of a pawl 13. The pawl 13 is provided at its 50 outer end with a tooth 14 to engage the ratchet-wheel, and it has a V-shaped recess 15 at

its inner end and is adapted to straddle the recessed portion of the bar 1, and the pawl is beveled on its upper and lower faces at the sides of its recess to conform to the configuration of the bar. By this construction the pawl is securely retained in operative position and is permitted a limited movement to engage and disengage the teeth.

The device is designed to form a permanent attachment to a fence, whereby the wires may be tightened from time to time. A wire to be stretched is wound on the cylindrical portion of the hub of the ratchet-wheel and the end of the wire is inserted in a socket formed by grooves 16 and 17 in the hub of the ratchet-wheel and in the collar. The bar 1 is connected with a post by any suitable means, and by turning the hub with a wrench any tension of the wire may be obtained.

It will readily be seen that the wire-stretcher is simple and comparatively inexpensive in construction and is capable of maintaining a wire at any desired tension.

What I claim is—

1. In a wire-stretcher, the combination of a bar having a spindle and provided with a shoulder, a ratchet-wheel mounted on the spindle and having its hub extended and squared, a collar arranged on the hub, and a pawl straddling the shoulder of the bar and engaging the ratchet-wheel, substantially as described.

2. In a wire-stretcher, the combination of a bar having a spindle and provided with a shoulder having inclined recesses on opposite sides thereof, the walls of the recesses being oppositely beveled, a ratchet-wheel having its hub squared, a collar arranged on the hub, and a pawl provided with a V-shaped recess and straddling the shoulder of the bar and having the upper and lower faces at the sides of the recess beveled and conforming to the configuration of the recesses of the bar, 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.

HARRY H. VAN ORMER.

Witnesses:

F. W. BEAN,
J. D. BEAN.