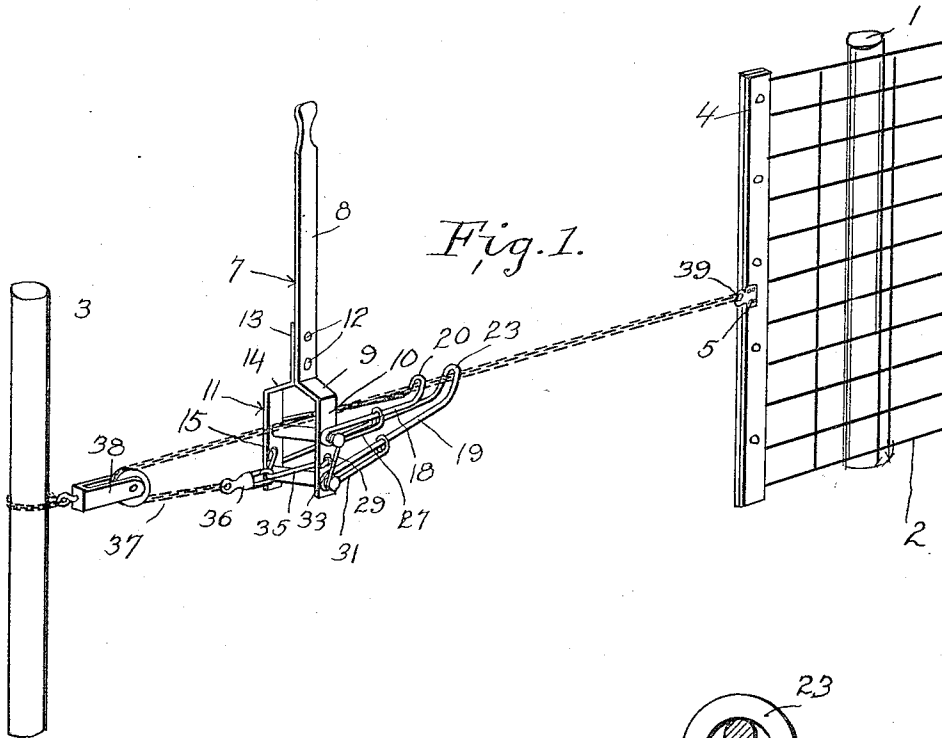
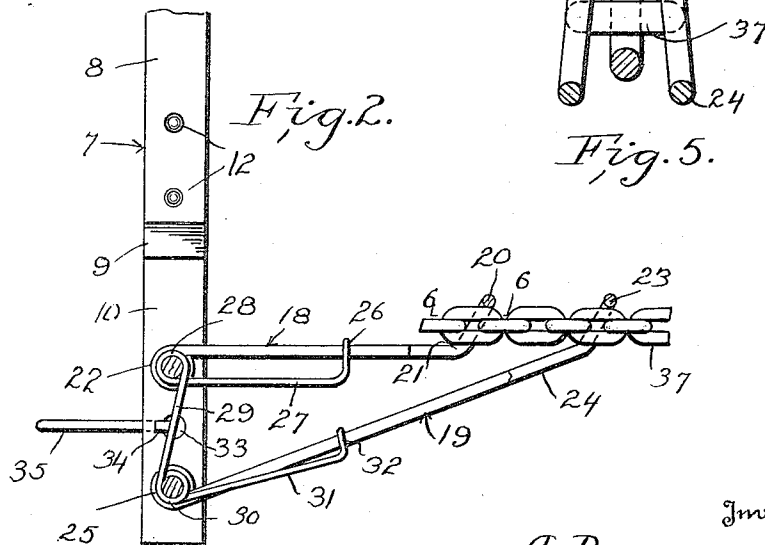


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WIRE STRETCHER.
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1,124,522.

Patented Jan. 12, 1915.

2 SHEETS-SHEET 1.



Witnesses

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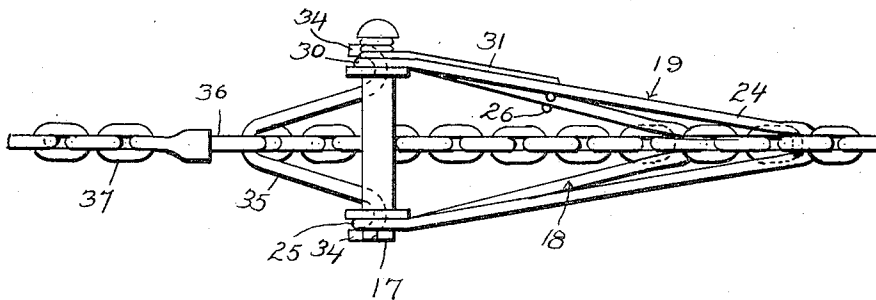
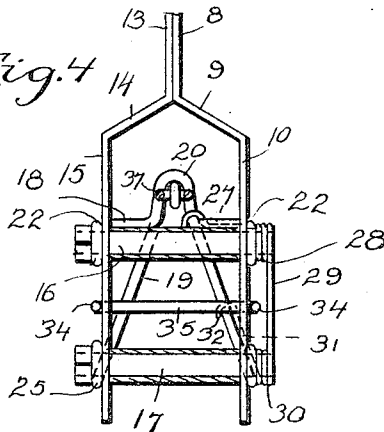
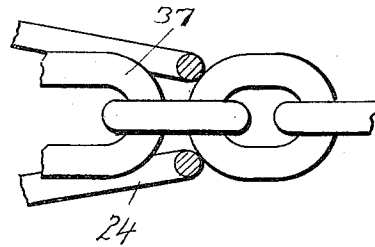
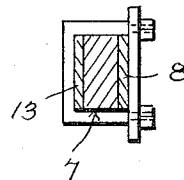
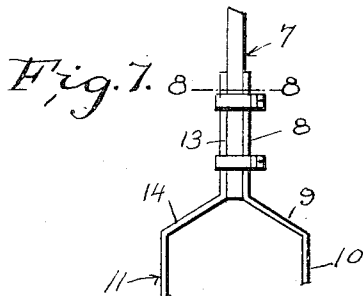
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

ALFRED RASMUSSEN, OF ST. PAUL, MINNESOTA.

WIRE-STRETCHER.

1,124,522.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALFRED RASMUSSEN, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Wire-Stretchers; and I do hereby 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.

This invention relates to new and useful improvements in wire fence stretchers, and has for its principal object to provide a device by means of which fence wires may be easily and quickly tightened.

Another object of the invention is to provide a device of the above character which may be easily and cheaply constructed and quickly adjusted to operative position without inconveniencing the user.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts which will be more fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a fence showing the improved stretcher in position thereon, Fig. 2 is an enlarged longitudinal sectional view of a wire stretcher constructed in accordance with this invention to clearly illustrate the action of the spring, Fig. 3 is a bottom plan view of a wire stretcher constructed in accordance with this invention, Fig. 4 is a transverse sectional view of a wire stretcher constructed in accordance with this invention, Fig. 5 is an enlarged detail sectional view of the chain and the chain engaging member which is carried by the wire stretcher, Fig. 6 is an enlarged sectional view taken on line 6—6 of Fig. 2, Fig. 7 is a detail view of a modified form showing the means of holding a wooden handle in place, and Fig. 8 is a transverse detail sectional view taken on line 8—8 of Fig. 7.

Referring now to the drawings by characters of reference, the numeral 1 designates a fence post to which the fence indicated generally by the numeral 2, is secured. A second post indicated by the numeral 3, is spaced from the first mentioned post and is adapted to act as the anchor to which this

improved device is adapted to be secured. A suitable fence wire clamp 4 is adapted to be secured to the end of the fence 2 and is provided with any suitable connection as at 5 to which the free end of the operating chain of the herein described wire stretcher is adapted to be secured.

The herein described wire stretcher preferably comprises the lever designated generally by the numeral 7, to which the resilient arm and operating chain are operatively connected. This lever 7 comprises the handle portion 8, which is provided at one end with the angular extension 9 which is again bent as at 10 and extends parallel with the portion 8 as clearly shown in the drawings. A cooperating member, designated generally by the numeral 11, is riveted or otherwise secured as at 12 to the handle portion 8 and comprises the element 13 having the angular extension 14 formed at the lower end thereof which terminates in the angular extension 15 which in turn extends parallel with relation to the element 10, and forms a bifurcated portion at the lower end of the lever 7. A pair of bolts 16 and 17 extend across the bifurcated portion at spaced intervals and are arranged to form the pivotal connections for the chain engaging elements which will be more fully described hereinafter. Each of these bolts is provided with a nut by means of which the tension on the arms or chain engaging elements may be adjusted. The chain engaging elements above referred to, are designated by the numerals 18 and 19 which are placed in vertical alinement as clearly shown in the drawings. The chain engaging element 18 is preferably of less length than the element 19 and comprises the U-shaped member 20, the arms of which diverge and are bent angularly as at 21. The free ends of the angular extension 21 terminate in loops 22 which are arranged to surround the bolt 16 when the device is in place. The chain engaging member 19 comprises the U-shaped member 23, the arms of which diverge as illustrated and terminate at their free ends in the angular extensions 24 which terminate at their free ends in the loops 25. These loops 25 are arranged to surround the bolt 17, and thereby pivotally secure the U-shaped member in position on the bifurcated portion of the lever 7. The springs

by means of which the arms are actuated, are formed of a continuous piece of wire, one end of which is provided with the hook 26 which is provided with the angular extension 27 as shown in Fig. 2. This angular extension 27 projects toward the pivotal connection of the chain engaging element 18 and terminates in the series of loops 28 which are arranged to form a coil spring 10 by means of which the free end of the element 18 is actuated. The end of the series of loops 28 opposite the extension 27 is extended as at 29. The free end of the extension 29 terminates in the series of loops 15 30 which surround the bolt 17 and form the resilient element for the arm 31 by a continuation thereof. This arm 31 terminates at its free end in the hook 32 which is adapted to engage one of the arms of the member 20 19 to force the same downwardly as clearly shown in the drawings.

Intermediate the bolts 16 and 17 are provided the apertures 33 into which the angular extensions 34 of the V-shaped member 25 35 are adapted to extend. A suitable snap hook 36 is arranged to engage the bight portion of the V-shaped member 35 and has secured thereto the chain 37 which passes over the anchor sheave 38 and back through the 30 upper terminal of the bifurcated portion of the lever 7 and the uppermost bolt, from which the chain passes beneath the bight portion of the elements 18 and 19 and is connected to the member 5 as at 39.

It will be apparent from the foregoing that in use the anchor sheave 38 is secured to the anchor post 3 in any suitable manner. The free end of the chain 37 is then passed through the sheave 38 and back as illustrated in Fig. 1 beneath the bight portions 40 of the U-shaped members 20 and 23. The free end is then secured as illustrated at 39 to the connection 5 and it will be evident that upon operating the lever, the bight portions 45 20 and 23 of the members 18 and 19 will alternately engage the links of the chain thereby causing the chain to be drawn through the sheave 38 and thus tightening

the fence wire upon which the device is being used.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that such changes may be made in the combination and arrangement of parts as will 55 fall within the spirit and scope of the invention as claimed.

Having thus described my invention, I claim:

A fence wire stretcher including a lever, 60 a bifurcated end formed on the lever, a pair of spaced bolts extending transversely through the bifurcated end of the lever, a chain secured to the lever between the bolts, a sheave carried by the chain and adapted to 65 be secured to an anchor post of a fence, a pair of U-shaped members having divergent arms, the bight portions of the U-shaped members being bent upwardly with relation to the horizontal axis of the U-shaped mem- 70 bers, angular extensions formed at the free ends of the arms of the U-shaped members, loops formed at the free ends of the angular extensions, said loops being adapted to surround the bolts and pivotally secure the 75 U-shaped members in place on the bifurcated end of the lever, a spring, said spring comprising a hooked arm, a loop formed at the rear end of the hooked arm, an extension at the end of the loop, said loop surrounding 80 the uppermost bolt, a loop formed at the end of the extension, the last mentioned loop surrounding the lowermost bolt, and a forward extension on the last mentioned loop, said forward extension terminating in a hook mem- 85 ber, the hook member being arranged to engage the arms of the U-shaped members and hold the same normally in engagement with the links of a chain when the device is in use.

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

ALFRED RASMUSSEN.

Witnesses:

H. J. WEST,

E. J. INNERT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."