J. H. FORSHEE.

WIRE STRETCHER.

APPLICATION FILED NOV. 18, 1909.

956,328. Patented Apr. 26, 1910.

Fig. 1.

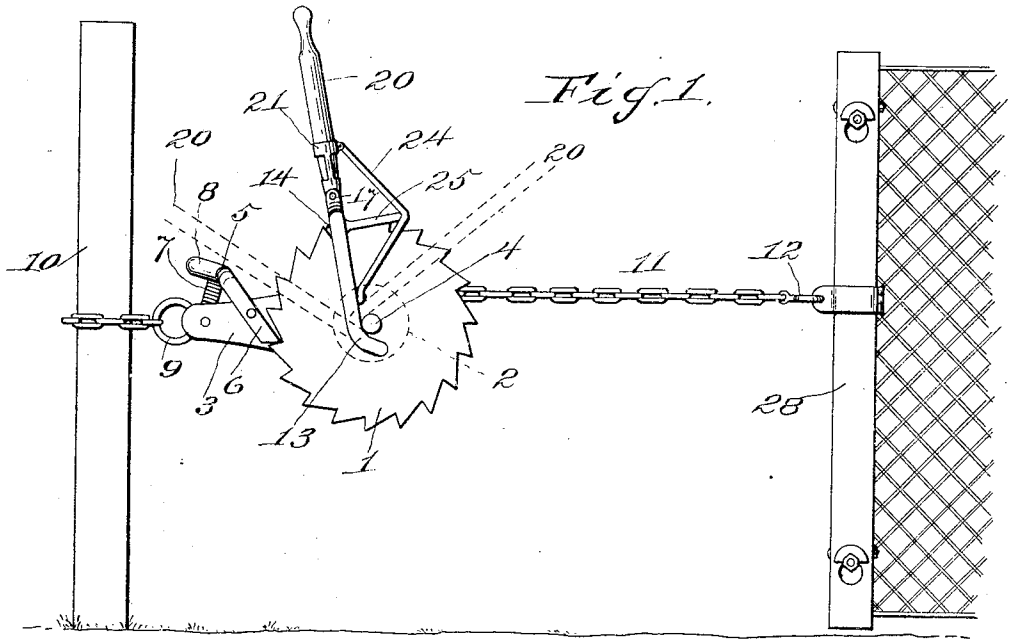


Fig. 2.

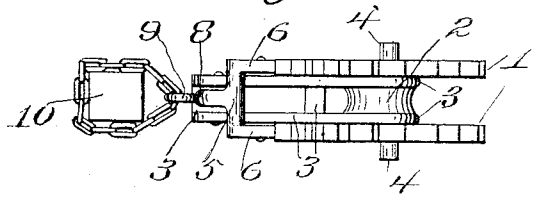
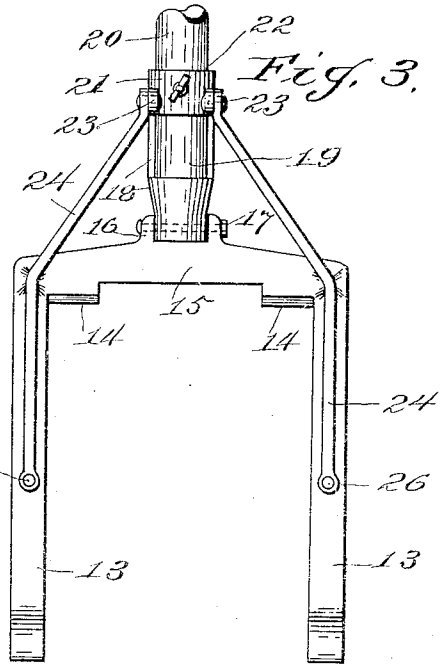


Fig. 3.



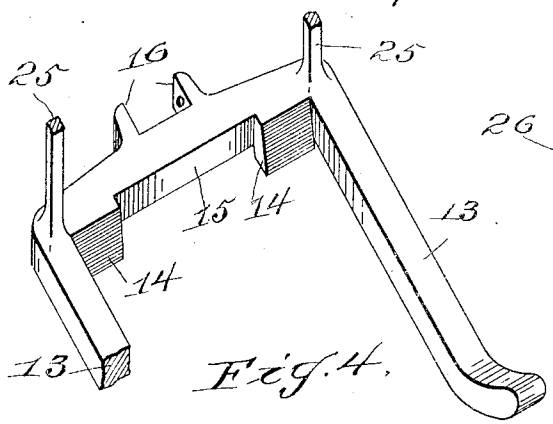


Fig. 4.

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UNITED STATES PATENT OFFICE.

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WIRE-STRETCHER.

956,328. Specification of Letters Patent. Patented Apr. 26, 1910.

Application filed November 18, 1909. Serial No. 528,813.

To all whom it may concern:

Be it known that I, JAMES H. FORSHEE, a citizen of the United States, residing at Marianna, in the county of Lee and State of Arkansas, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification.

This invention relates to a device for stretching wire, and pertains especially to a portable hand device for stretching woven and other wire in constructing wire fences, running telegraph, telephone wire, cables, rope, and the like.

The object of the invention is to provide a portable hand device of such novel and peculiar construction and arrangement of parts, as will afford simple and expeditious operation in its practical application.

A further object of the invention is to provide in a wire stretcher, special means for operating ratchet wheels which revolve a winding drum, such means comprising a peculiar lever applied to the ratchet wheels only in a winding and stretching operation, said lever being separable and independent of the drum and its wheels and having a detachable handle.

A still further object of the invention is to provide a wire clamping device of special, novel and peculiar construction and arrangement of parts, which will afford simple operation and quick adjustment in clamping woven wire during the stretching of the same for constructing fences.

Other objects, advantages and improved results are attainable in the practical application of the invention.

In the accompanying drawings forming part of this application: Figure 1 is an elevation showing the application of the invention, the dotted lines showing the movement of the lever. Fig. 2 is a top view of the winding device with the lever removed. Fig. 3 is an elevation of the winding lever showing the handle secured thereto and partly broken away. Fig. 4 is a detail perspective view of the lever with the handle socket and braces removed.

The ratchet wheels 1 revolve a drum 2, mounted in one end of a frame 3, with the drum spindles 4 journaled in the said frame ends and protruding beyond the outer face of the wheels, which are secured to the spindles. The purpose or object of such protruding ends will hereinafter be fully described. A pawl 5 has arms 6 pivoted to the sides of the frame and is controlled by a spring 7 for holding the wheels against backward revolution, and the pawl is provided with a hand-piece 8 for raising the pawl arms out of engagement with the wheel teeth, if desired. The other end of the frame 3 is provided with a ring 9 or other suitable means for attaching it to a post 10, or other suitable fixed object. A suitable chain 11 or wire cable has one end attached to the drum 2, and its other end has a hook 12 for connecting it with a clamp comprising clamping members 28.

The hand operated lever being one of the essential features of the invention it will now be described in detail. Such lever comprises a pair of arms 13 which straddle the ratchet wheels and have curved ends adapted to fit under the protruding ends of the drum spindles; a lip 14 is projected inwardly from each arm 13 and extends downwardly from the cross-head 15 of the lever, for the purpose of engaging the teeth of the said wheels; the cross-head 15 has ears 16 between which is secured, by a suitable bolt or pin 17, one end of a handle socket 18, into which is inserted the end 19 of a handle 20, the round portion of the handle fitting in a collar 21 at the other end of the socket 18, where it is secured by a set-screw 22. The collar 21 has ears 23, to which are secured one end of brace-rods 24, which extend over posts 25 projecting at right angles from the cross-head, and the other end of the rods 24 are secured to the arms 13 at 26. This construction and arrangement bridges the handle to the lever-arms 13, so that the action on the cross-head by the operation of the handle is not made entirely at the point of its connection, or ears 16, with the cross-head. When the lever is operated to revolve the wheels in a winding operation, the lips engage the teeth of the wheels during the fulcrum movement of the lever on the protruding drum-spindles. This is separate and independent of the winding device and may be placed and removed as desired.

It is obvious that the device may be operated at any desired angle or in any position required of it; that the ratchet lever may be applied in various positions for turning the drum; and that the size, shape

and material of the parts may be varied as desired or as occasion may demand.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a wire fence stretcher, the combination, with a revoluble drum, ratchet wheels secured to the drum, and a spindle projecting from each side of the drum, of means for operating the drum comprising a lever having a cross-head which straddles the drum and the ratchet wheels, a pair of arms projecting from the cross-head and hooking under the spindles which extend beyond the ratchet wheels, a pair of lips depending from said cross-head and meshing with said wheels, a handle socket, and means for detachably connecting the socket with the cross-head.

2. The combination, with a drum, a spindle projecting from each side of the drum, and pawl and ratchet wheel mechanism for stretching fence wire, of means for operating such mechanism comprising a cross-head which straddles the drum and ratchet wheels, arms projecting from the cross-head and hooking under the said spindles which extend beyond the ratchet wheels, a handle, a handle socket coupled to the cross-head, and braces projecting from the cross-head to the arms and to the socket.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JAMES H. FORSHEE.

Witnesses:

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W. R. ENGLAND.