

No. 857,444.

PATENTED JUNE 18, 1907.

D. R. CLARK.
WIRE STRETCHER.

APPLICATION FILED MAR. 29, 1907.

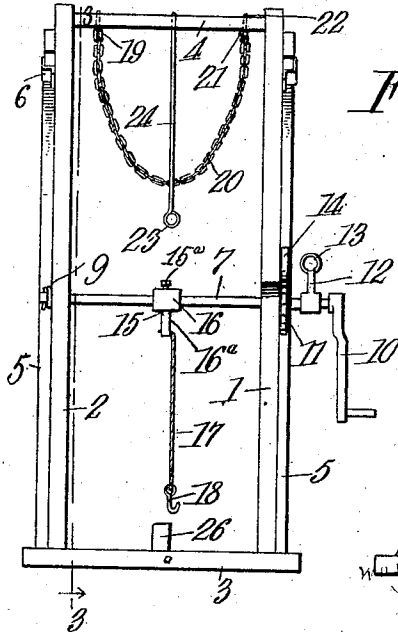


Fig. 1.

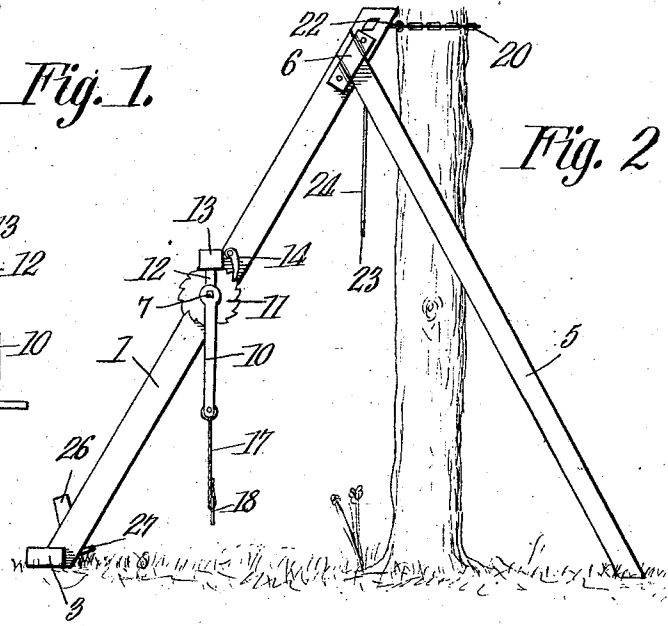


Fig. 2.

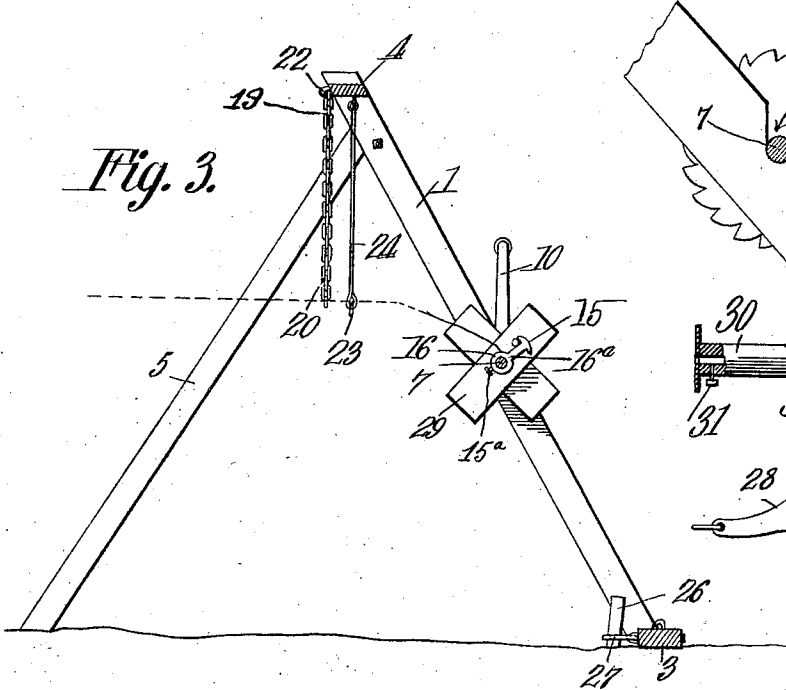


Fig. 3.

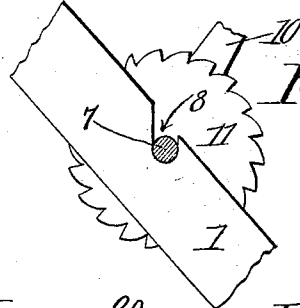


Fig. 4.

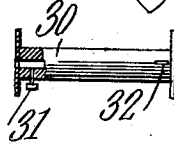


Fig. 6.

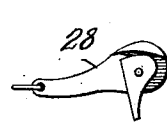


Fig. 5.

WITNESSES:

E. J. Stewart
H. J. Belingworth

Daniel R. Clark, INVENTOR.

By *C. A. Snow & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

DANIEL R. CLARK, OF PURDIN, MISSOURI.

WIRE-STRETCHER.

No. 857,444.

Specification of Letters Patent.

Patented June 18, 1907.

Application filed March 29, 1907. Serial No. 365,390.

To all whom it may concern:

Be it known that I, DANIEL R. CLARK, a citizen of the United States, residing at Purdin, in the county of Linn and State of Missouri, have invented a new and useful Wire-Stretcher, of which the following is a specification.

This invention relates to a machine for stretching and winding wire strands, woven wire rope, and for other purposes; the object of the invention being to provide a simple, convenient and easily assembled device for stretching and spooling all kinds of wire; for stretching woven wire of all kinds; and to serve generally as a windlass; and with these and other objects in view the invention consists of the construction, combination and arrangement of parts hereinafter described and definitely claimed.

In the accompanying drawing: Figure 1 is an elevation of the machine as viewed from the front. Fig. 2 is an elevation of the machine as seen from one side. Fig. 3 is a vertical sectional view on the line 3—3 of Fig. 1, looking in the direction of the arrow. Figs. 4 and 5 are views of certain detail parts of the mechanism. Fig. 6 is a view of a sleeve used with the machine on certain occasions.

Similar numerals of reference indicate the same parts in all the figures.

The frame of the machine is made of two side members 1 and 2 separated a suitable distance from each other and connected at the bottom by a cross timber 3 and at the top by a cross bar 4. Two legs 5 fitted into sockets 6 at the top of the side members extend downwardly at an angle to the ground to support the frame in an inclined position as shown.

About midway the height of the frame, or at any other point found more desirable, is a horizontal cross shaft 7, one end of which turns in a circular bearing made in the frame member 2. The other end is journaled in a vertical slot 8 in the frame member 1 (see Fig. 4). A washer or collar 9 on the outer end of the shaft 7 prevents it from being withdrawn through the bearing in the frame member 2. The opposite end of the shaft carries a removable crank 10, between which, and the frame member 1, on the shaft, is a ratchet wheel 11 and a fixed arm 12 extending radially from the shaft and provided with a sleeve 13 in which may be fitted a bar for turning the shaft when more power is re-

quired than can be furnished by the crank 10. A dog or pawl 14 of well known type engages the ratchet wheel 11.

Slidably mounted on the shaft 7 between the two frame members is a double hook 15 comprising a sleeve 16 through which the shaft passes, and a short arm 16^a carrying two hooks on its end. The double hook is held on the shaft 7 by a bolt 15^a threaded into the sleeve 16. A short rope or cable 17 having an ordinary hook 18 at one end is attached by its other end to the double hook; the attachment may be, for instance, in the form of a loop on the rope engaging the double hook.

Secured at one end 19 to the top bar 4 of the frame near one of the side members 1—2 is a chain 20, the opposite end 21 of the chain hanging free. A catch 22 on the top bar 4 near the other frame member offers a suitable detachable connection for the free end 21 of the chain. Depending from the center of the bar 4 is a ring 23 supported by a rod or light chain 24, through which ring a strand of wire passes and by which it is guided while being spooled.

When the apparatus is to be set up and operated, the legs 5 are fitted in their sockets 6 to hold the frame upright in its normal position. The shaft 7, if disconnected, is put in place by inserting the end 25 in the bearing opening of side member 2 and seating the other end in the slot 8. The washer 9 is then placed on the end of the shaft and held in place by a pin or other means. If the work to be performed is that of stretching wire or the like where a horizontal strain is required, it will be necessary to secure the frame against movement. For this purpose the frame is placed against a tree or post and the chain 20 passed around it, drawn tight and fastened to the detachable connection 22. A stake 26 is then driven into the ground, if the machine be out of doors, within a ring 27 fastened to the bottom cross timber 3. The machine is now ready for operation.

Woven wire is stretched with this machine by fastening the wire in a suitable clamp and then connecting the clamp to the hook 18 and turning the crank, or by using a bar in the sleeve 13, winding the rope around the shaft 7. When fence and other wire is to be stretched, a wire clamp 28, Fig. 5, is attached to the hook 18. Wire is spooled by mounting a reel 29 on the shaft 7 before placing the shaft in the frame. The double hook 15,

after removing the rope or cable 17 therefrom, engages a pin or other projection on the reel and rotates the latter when the shaft is turned. The wire to be spooled is threaded
5 through the ring 23 which swings to accommodate the wire as it is laid on the reel.

When a chain is to be wound on the shaft 7 it is advisable to place a flanged sleeve 30, (see Fig. 6) on the shaft, fastening it by a set
10 screw 31. The chain may be fastened to the staple 32 on the sleeve.

Having thus described the invention what is claimed is:—

1. In a machine of the character described,
15 the combination of a main frame, detachable legs thereon, a windlass removably mounted in said frame, and means at opposite ends of said frame by which it may be securely fastened against movement.

20 2. In a machine of the character described, the combination of a main frame comprising two side members and a top and bottom con-

necting bar, detachable legs fitted into sockets on said side members, a shaft removably mounted in said frame, a hand crank on said
25 shaft and a fixed arm also on the shaft having a sleeve on its outer end.

3. In a machine of the character described, the combination of a main frame comprising
30 two side members and a top and bottom cross bar, detachable legs attached to said side members, a shaft mounted to rotate in said frame, a fastening chain attached to the top bar for securing the upper end of said frame to a post or tree and a ring on the
35 lower bar for staking it to the ground.

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

DANIEL R. CLARK.

Witnesses:

E. H. SEHROCK,
A. H. THORNE.