

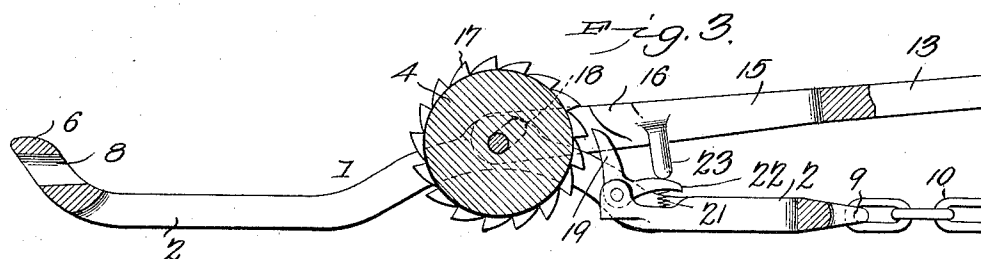
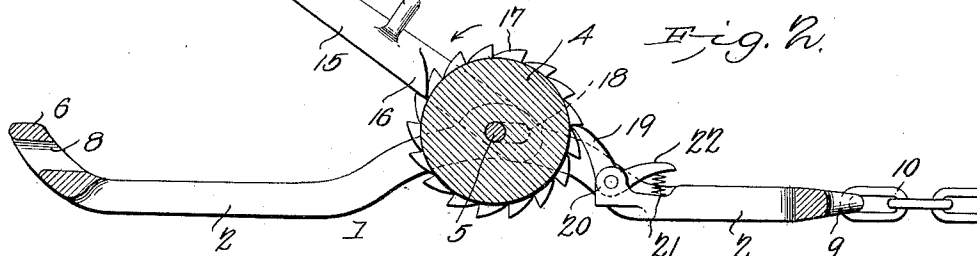
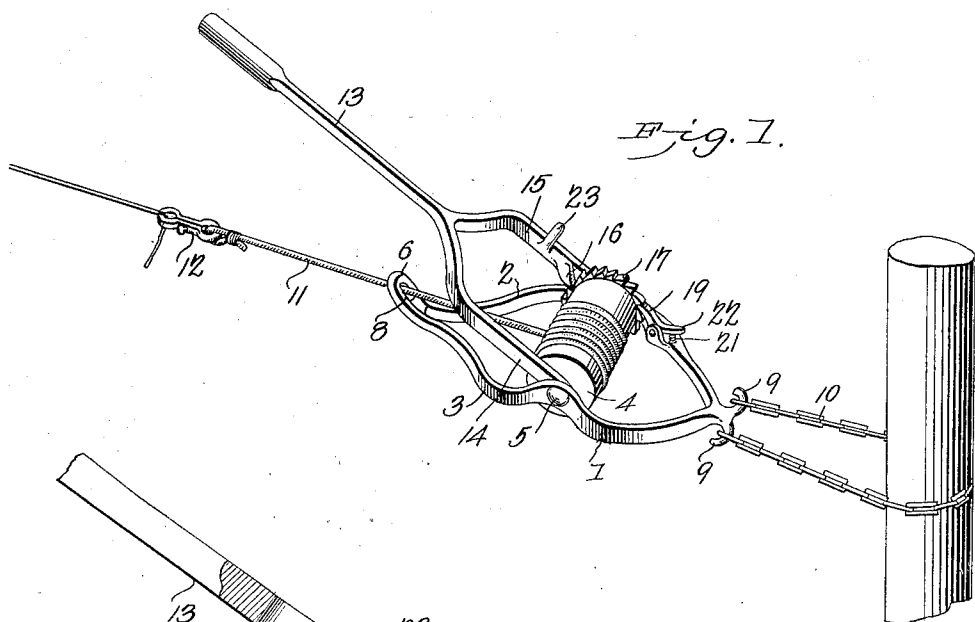
No. 745,013.

PATENTED NOV. 24, 1903.

J. H. HEISEY.
WIRE STRETCHER.

APPLICATION FILED MAR. 19, 1903.

NO MODEL.



Witnesses
E. H. Stewart
D. J. Amore

J. H. Heisey, Inventor.
by *C. A. Knowlton*
Attorneys

UNITED STATES PATENT OFFICE.

JOHN H. HEISEY, OF MONTICELLO, IOWA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 745,013, dated November 24, 1903.

Application filed March 19, 1903. Serial No. 148,609. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. HEISEY, a citizen of the United States, residing at Monticello, in the county of Jones and State of Iowa, have invented a new and useful Wire-Stretcher, of which the following is a specification.

My invention relates to wire-stretchers, and is designed as an improvement upon the construction illustrated in Patent No. 606,760, granted to me July 5, 1898, and has for its objects to simplify the construction of the device illustrated in said patent and at the same time render the same more efficient in operation.

To these ends the invention comprises the novel details of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional elevation of the same, showing the operating-lever in engagement with the ratchet. Fig. 3 is a similar view illustrating the ratchet released to permit free unwinding of the cable.

Referring to the drawings, 1 indicates a frame composed of suitable metal and having spaced sides 2 3, between which is mounted a transverse drum 4, journaled for rotation upon an axle 5, preferably in the form of a metal bolt extending through the frame, with its ends seated in the respective sides of the same. The sides 2 3 converge from the drum to a point of meeting at a suitable distance therefrom, where they unite to form a head 6, which is perforated, as at 8, for the purpose presently described. The sides of the frame likewise converge from the drum outward to a suitable point of meeting at the side of the drum opposite to the head 6, where they unite and are provided with a pair of integral hooks 9, which receive the links of the opposite ends of an anchoring-chain 10, which in practice will be passed around a post or other suitable stationary object.

11 indicates a cable or the like, which has one end secured to the drum in any suitable manner and its free end passed outward through the perforation 8 and provided with a wire-clamping device 12, which in practice will engage the wire to be stretched, which latter may be placed under tension by wind-

ing the cable on the drum, as in my former patent, and as will be readily understood. The drum is rotated for the purpose of winding the cable by means of a lever 13, which is bifurcated at its inner end to form a pair of arms 14 15, which lie, respectively, at opposite ends of the drum and are journaled upon the axle 5. The arm 15 of the lever has formed integrally upon its inner face a laterally-projecting pawl 16, adapted for engagement with the teeth of a ratchet-disk 17, associated in any suitable manner with the end of the drum, and the arm 15 is slotted at 18 for the reception of the shaft 5 to permit a longitudinal movement of the arm for moving the pawl 16 into and out of engagement with the ratchet-teeth, for the purpose presently explained.

19 indicates a check-pawl pivoted between vertically-disposed ears 20, formed integral and projecting upward from the side 2 of the frame. This pawl is normally held in engagement with the teeth of the ratchet 17 by means of a spring 21, which is seated beneath and presses upwardly upon a substantially horizontal finger 22, which extends rearward from the pawl.

23 indicates a finger which is carried by and projects transversely from the arm 15 of the lever, said finger being adapted when the lever is moved to the position illustrated in Fig. 3 to bear upon the horizontal finger 22 of the check-pawl in order to compress the spring to move the pawl out of engagement with the ratchet 17.

In practice the drum 4 will be rotated from right to left, as indicated by the arrow in Fig. 2, in order to wind the cable 11, and the drum is actuated for this purpose by swinging the lever over to the right, moving its pawl into engagement with the ratchet-teeth, then swinging the lever to the left, moving its pawl out of engagement with the teeth, swinging it back to the right and into engagement with the teeth, and so on, as will be readily understood. When, however, it is desired to release the drum to permit unwinding of the cable, the lever is swung fully to the right, as illustrated in Fig. 3, with its finger 22 bearing upon the horizontal finger of the check-pawl, which action throws the latter and also the pawl 16 out of engagement with the ratchet 17.

From the foregoing it will be seen that I produce a device which as compared with my former construction is of simplified form, while at the same time its efficiency in operation remains unimpaired and the cost of manufacture is materially decreased, and in attaining these ends it is to be understood that I do not limit myself to the precise details herein shown and described inasmuch as minor changes in the same and the assembly of the parts may be made without departing from the spirit of the invention.

Having thus described my invention, what I claim is—

15 In a wire-stretcher, the combination with a frame, of a drum mounted for rotation therein, a ratchet associated with the drum, a cable carried by the drum and provided with a wire-engaging device, a drum-operating lever
20 having its end bifurcated to form arms, said

arms being journaled on the axle of the drum and one of them provided with a slot to receive the axle, an integral pawl formed on the slotted arm and adapted to be moved into and out of engagement with the teeth of the ratchet, a check-pawl for engaging said teeth to prevent backward rotation of the drum, said pawl having a spring-pressed finger for holding the pawl in engagement with the teeth, and a finger carried by the arm of the lever and adapted to engage the finger of the pawl for throwing the latter out of engagement with the ratchet. 25 30

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses. 35

JOHN H. HEISEY.

Witnesses:

H. S. RICHARDSON,
H. M. CARPENTER.