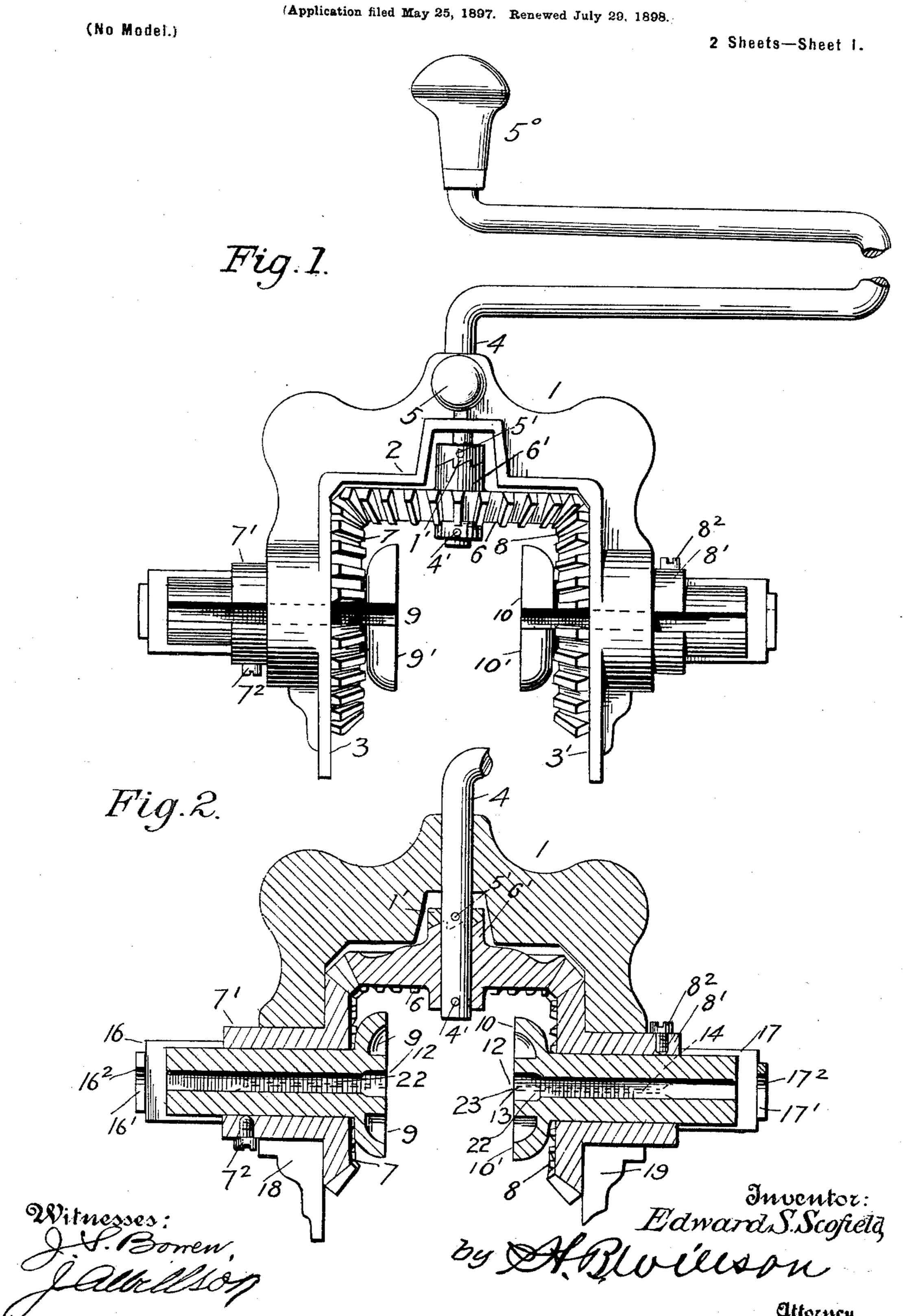
E. S. SCOFIELD. WIRE FENCE MACHINE.



Patented Feb. 14, 1899.

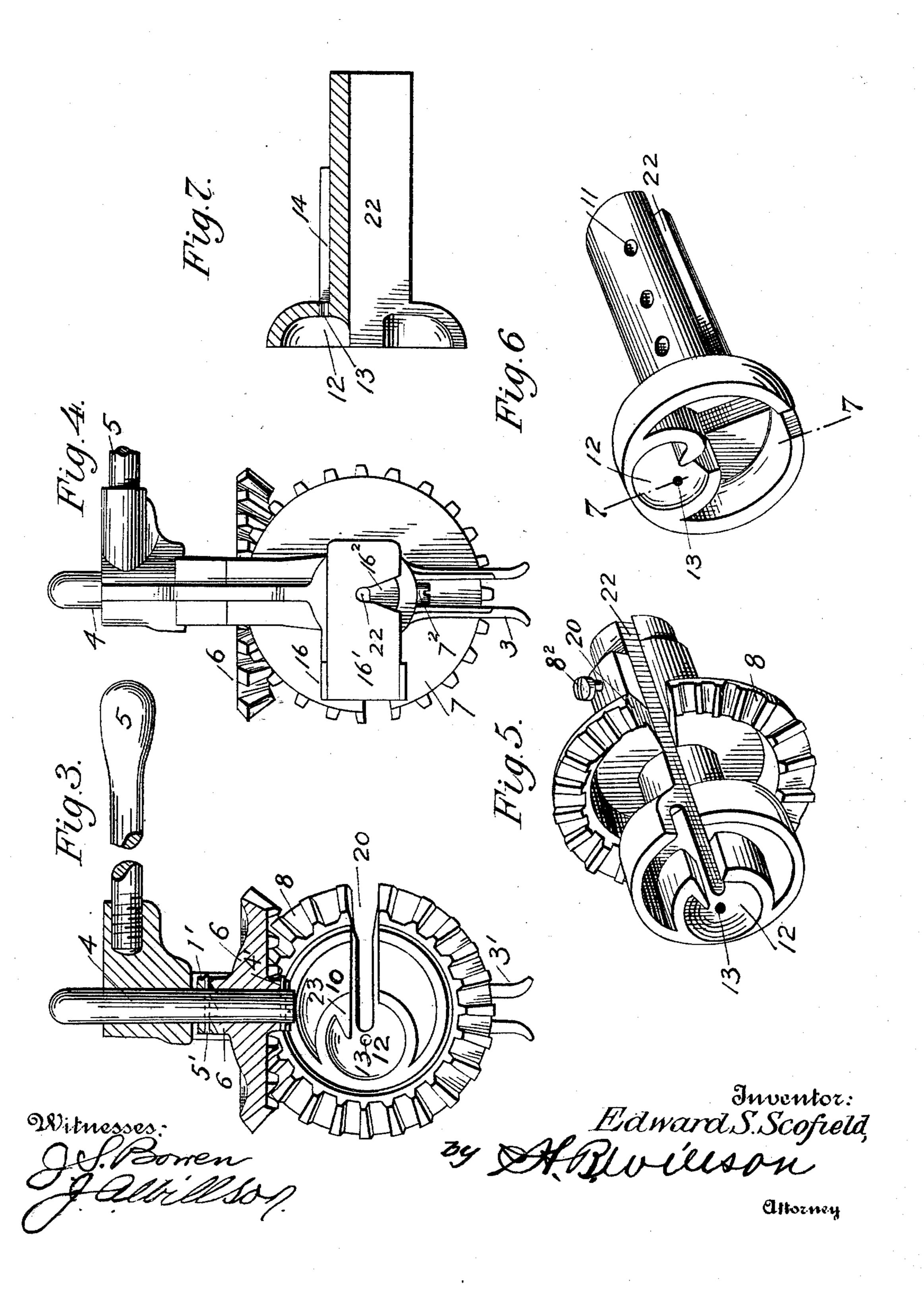
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WIRE FENCE MACHINE.

(Application filed May 25, 1897. Renewed July 29, 1898.)

(No Model.)

2 Sheets-Sheet 2.



United States Patent Office.

EDWARD STUART SCOFIELD, OF RIDGEWAY, NEW YORK.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 619,355, dated February 14, 1899.

Application filed May 25, 1897. Renewed July 29, 1898. Serial No. 687, 214. (No model.)

To all whom it may concern:

Be it known that I, EDWARD STUART Sco-FIELD, a citizen of the United States, residing at Ridgeway, in the county of Orleans and 5 State of New York, have invented certain new and useful Improvements in Fence-Machines; and I do 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.

My invention has relation to improvements in hand-machines for securing vertical stays or pickets to the horizontal wires of a wire fence; and the object is to provide a simple, economical, and effective device for this purpose.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully

20 described, and particularly pointed out in the claims.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a top plan view of my improved wire-fence machine. Fig. 2 is a horizontal section of the same. Fig. 3 is a transverse section. Fig. 4 is an end view of the same. Fig. 5 is a detail perspective view of one of the adjustable twister-disks and its socket-sleeve. Fig. 6 is a perspective view of the twister-disk detached from its socket-sleeve. Fig. 7 is a longitudinal section on the line 77, Fig. 6.

1 represents a rectangular frame comprising a longitudinal yoke 2 and the right-angular arms 3 3′, arranged parallel with each other and formed integal with said yoke. 4 represents the driving-shaft, journaled in said 40 yoke and formed with an operating crankhandle 5°, similar in configuration to a carpenter's brace.

5 represents a rigid handle fixed in the yoke 2 to act as a support and also as a support in adjusting the machine ready to receive the

running wires.

6 represents a miter-gear fixed on the inner end of the shaft 4, which meshes with two corresponding miter-gears 7 and 8, formed 50 with integral sleeves 7' and 8', journaled in the angular arms 3 and 3' and adapted to be rotated in opposite directions by said gear 6.

The miter-gear 6 is fixed to the inner end of the shaft 4 by a removable pin 4', and the outer face of the miter-wheel hub is formed 55 with a clutch 6', which engages a corresponding clutch 1', fixed on the shaft 4 by a pin 5'.

When the machine is to be used in confined quarters where there would not be room to turn the crank-handle, the pin 4' is removed 60

and the handle operated as a ratchet.

9 and 10 represent the twister-disks, formed with the integral cylindrical shafts journaled in the sleeves 7' 8' and adjustably secured in place by the set-screws 7² 8², extending 65 through said sleeves and into one of a longitudinal series of threaded orifices 11 in said shafts, and by means of this adjustment the oppositely-disposed and parallel faces 9' 10' of the twister-disks may be brought closer 70 together or separated farther apart to conform to the width of the pickets or vertical stays which are to be secured to the horizontal fence-wires.

Each of the twister-disks is formed with a 75 circular concave recess 12, eccentrically arranged with reference to the axis of the disk, and from the center of its depression or bottom an orifice 13 extends transversely through the disks and communicates with a longitu-80 dinal groove 14, formed in the twister-shaft.

16 17 represent integral longitudinal brackets extending in opposite directions from the parallel arms 3 3', and their outer ends are turned inwardly at a right angle to the twister-85 shafts to form guides 16' 17', provided with slots 16² 17² to receive the longitudinal fencewire.

19 19 represent alined slots in the outer ends of the arms 3 3', and corresponding ra- 90 dial slots 20 20 are formed in the miter-gears 7 and 8, which form a continuation of the slots in their sleeves 7' 8'.

The twister-disks 9 10 are also provided with radial slots which communicate with the 95 alined slots 22 22 in the twister-shafts, and 23 23 represent short slots formed in the walls of the recesses 12 12, which connect said recesses with the slots in the faces of the twister-disks proper, and they serve to force the 100 wind-up close and snug to the sides of the picket or stay and also to crowd the free ends of the tie-wire close to and wrap it snugly around the horizontal wire.

619,355

In operating the machine the twister-disks are first adjusted to correspond to the width of the pickets or vertical stay-wires to be fixed to the longitudinal horizontal wires com-5 prising the fence. The shaft 4 is then rotated by its crank-handle until the slots in the miter-gears 7 8 and the twister-disks 9 10 are alined with the corresponding slots in the arms 3 3' and the retaining-slots in the guides 10 16' 17'. This also brings the orifices 13 13 in the twister-disks and the grooves 14 14 in their shafts into alinement. A picket or vertical stay-wire is then placed in position against the horizontal fence-wire and the ma-15 chine adjusted so as to encompass the picket or stay-wire and also receive the fence-wire through the alined slots in the miter-gears. A short binder or tie wire is now passed longitudinally through the grooves in the twister-2c shafts, so as to extend parallel with the fencewire and on the opposite side of the picket or stay-wire, and the miter-gear 6 rotated by means of the shaft 4 and the handle 5°, which twists the free ends of the tie-wire around the 25 fence, making a compact close coil on the fence-wire on each side of the picket or staywire and firmly and rigidly binding the same to the fence-wire.

Although I have specifically described the construction and relative arrangement of the

several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. A wire-fence machine comprising a frame, a twisting mechanism substantially as 40 described, mounted in said frame, the integral longitudinal brackets 16, 17, extending in opposite directions from said frame and having their outer ends turned at a right angle to the twister-shafts to form the guides 16', 45 17' provided with the slots 16², 17², as and for the purpose set forth.

2. A wire-fence machine comprising the frame 1, the shaft 4, the miter-gear 6 secured to said shaft by the removable pin 4' and provided with the clutch 6' and the clutch 1' fixed to said shaft 4 by the pin 5', as and for the

purpose set forth.

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

EDWARD STUART SCOFIELD.

Witnesses:

C. S. SCOFIELD, E. G. HUNT.