G. A. ENDICOTT.

WIRE STRETCHING APPLIANCE.

APPLICATION FILED MAY 6, 1909.

940,521.

Patented Nov. 16, 1909.

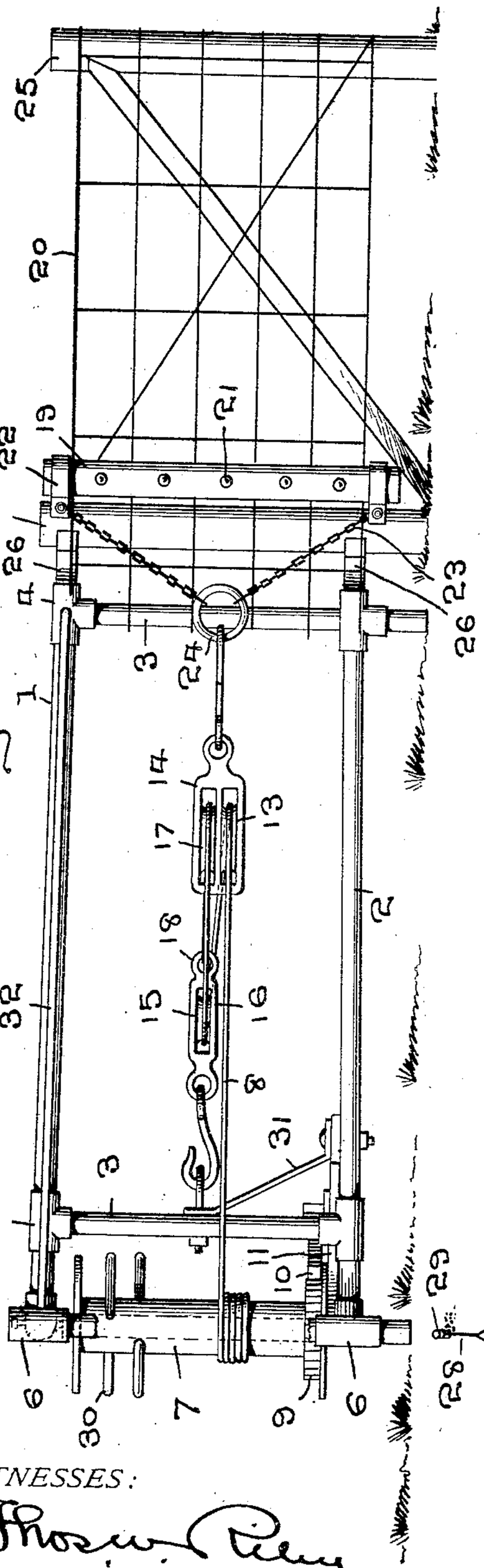

Fig. 1.

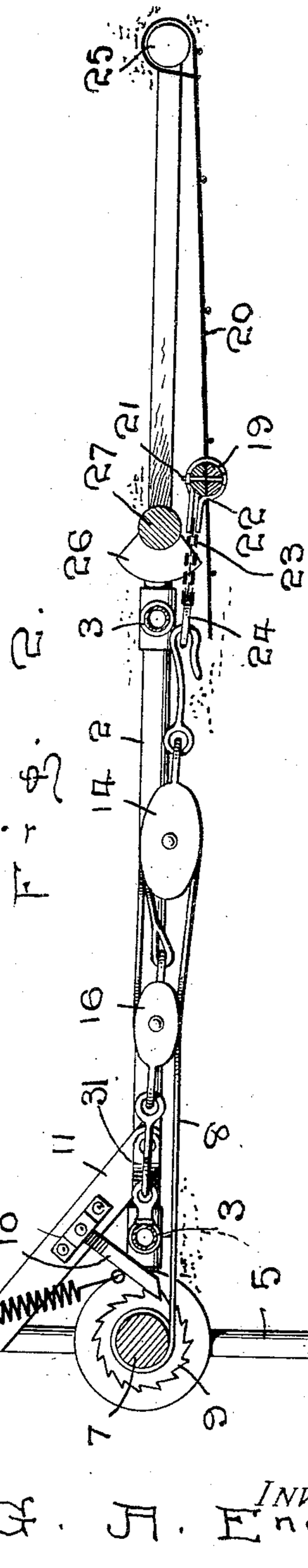

Fig. 2.

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GEORGE A. ENDICOTT, OF SEDALIA, MISSOURI.

WIRE-STRETCHING APPLIANCE.

940,521. Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed May 6, 1909. Serial No. 494,379.

To all whom it may concern:

Be it known that I, GEORGE A. ENDICOTT, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Wire-Stretching Appliances; 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.

My invention relates to new and useful improvements in wire stretching appliances and my object is to provide a device of this class whereby the woven wire or single strands of wire may be stretched along the line of fence.

A further object is to provide means for manually operating the stretching appliance.

A further object is to provide means for holding parts of the device against retrograde movement until such time as the wires can be secured in their stretched condition and a still further object is to provide means for anchoring the stretching device while in use.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claim.

In the accompanying drawings forming part of this application, Figure 1 is a side elevation of my improved wire stretching device as applied to use, parts thereof being broken away, and, Fig. 2 is a longitudinal horizontal sectional view through the machine on the line *a*—*a*.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 and 2 indicate the frame bars of my improved device, which are spaced apart by space bars 3, said bars being secured together in any preferred manner as by means of T-couplings 4. The bars 1 and 2 are attached at one end to cross arms 5, which arms extend at right angles to the bars 1 and 2 and an equal distance to each side thereof, said arms being secured at their outer ends to standards 6, the lower ends of which standards extend below the lower cross arms and rest upon the ground, while the space bar 3 at the opposite ends of the bars 1 and 2 also extends below the frame bar 2 and into engagement with the ground.

Rotatably mounted between the cross arms 5 and engaging the ends of the frame bars 1 and 2 is a drum 7, to which is adapted to be secured one end of a cable 8, and in order to hold said cable in its wound position on the drum, a ratchet 9 is attached to the drum with which coöperates a pawl 10 pivotally mounted on a brace 11, said brace extending from the frame bar 2 to the outer end of the lower cross arm 5 and is secured thereto in any suitable manner, the free end of the pawl 10 being held in engagement with the ratchet 9 by means of a spring 12. The cable 8 extends from the drum 7 around a sheave 13 in a double block 14, thence around a sheave 15 in a single block 16, thence around a sheave 17 in the double block 14 and has its end attached to an eye 18 on the block 16 and by attaching the block 16 to the space bar 3, and block 14 to a stretching bar 19, it will be readily seen that the stretching bar 19 will be moved toward the drum when the cable is wound thereon and that a high degree of tension can be obtained by disposing the cable around the sheaves as shown. The clamping bar 19 is formed of two sections and said sections are placed on opposite sides of the strands of wire 20 and are securely clamped in engagement therewith by means of bolts or the like 21, which are extended laterally through the sections of the bar, the upper and lower ends of the bar being extended above and below the strands of wire and engaged by clips 22, the ends of the clips being in turn secured to chains 23, which chains are attached at their opposite ends to a ring 24 and to this ring is attached the block 14 and as the ring is disposed midway of the height of the strands of wire, said strands will be uniformly stretched when the drum is rotated.

In applying the stretching device to use, one end of the wires 20 is attached to a post 25 and the clamping bar 19 engaged with the wires 20 at a point a convenient distance from the post 25, after which the semi-circular head blocks 26 carried by the ends of the frame bars 1 and 2 are engaged with one of the line posts 27 and the block 14 engaged with the ring 24.

The bars 1 and 2 are extended in line with the path of the posts to which the wires are to be secured and in order to prevent the end of the machine containing the drum from swinging laterally when the drum is rotated to stretch the wire, the standard 6 to which the end of the spring 12 is attached, is engaged by an anchoring wire 28, the op-

posite end of the wire 28 being engaged with a stake 29, which stake is driven into the ground and in this manner, the machine is prevented from pivoting on the post 27 when power is applied to stretch the wire.

In order to readily rotate the drum 7, a plurality of hand levers 30 are attached to the upper portion of the drum, whereby one or more attendants may operate the drum to stretch the wire, the number of the levers being such as to accommodate two or more attendants without interfering with each other.

As considerable strain is directed against the space bar 3, to which the block 16 is attached, a brace arm 31 is attached at its lower end to the frame bar 2 and at its upper end to the space bar 3 at the point of engagement of the block 16 with said space bar, while the strap 32 is connected to the upper cross arm 5, the ends of the strap being secured, respectively, to the upper ends of the standards 6, while the central portion of the strap is extended through the coupling 4 at the upper end of the standard 3, adjacent the ends of the frame bars carrying the head blocks 26, thus forming the strap of one continuous section.

The several parts of the frame of the stretcher are preferably formed of hollow pipes, thereby producing a light construction and at the same time a very strong and durable one and as the various parts of the stretcher are securely braced, it will be readily seen that a high degree of tension may be employed without injury to the parts of the stretcher. It will likewise be seen that a considerable length of the woven wire or strands of wire may be conveniently stretched at one operation and held in its stretched condition until the wire is anchored to the line post. It will also be seen that in view of the simplicity of the device, it can be quickly applied to use and readily moved from place to place.

What I claim is:

A device of the character described, comprising horizontal parallel members, vertical space-bars connected to said horizontal parallel members near their ends, standards, cross arms connecting said horizontal parallel members and said standards, a winding drum arranged in connection with said horizontal parallel members and said cross arms, a brace between one of said cross arms and the lower one of said horizontal parallel members, means for anchoring said arms and standards in position, a strap secured at its ends to the upper ends of said standards respectively and connected centrally to the upper one of said horizontal parallel members at one end thereof, head blocks applied to said horizontal parallel members at one end of the same, a cable connected to said drum, and means adapted for applying the same for the stretching operation.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE A. ENDICOTT.

Witnesses:
W. O. STANLEY,
C. A. WISE.