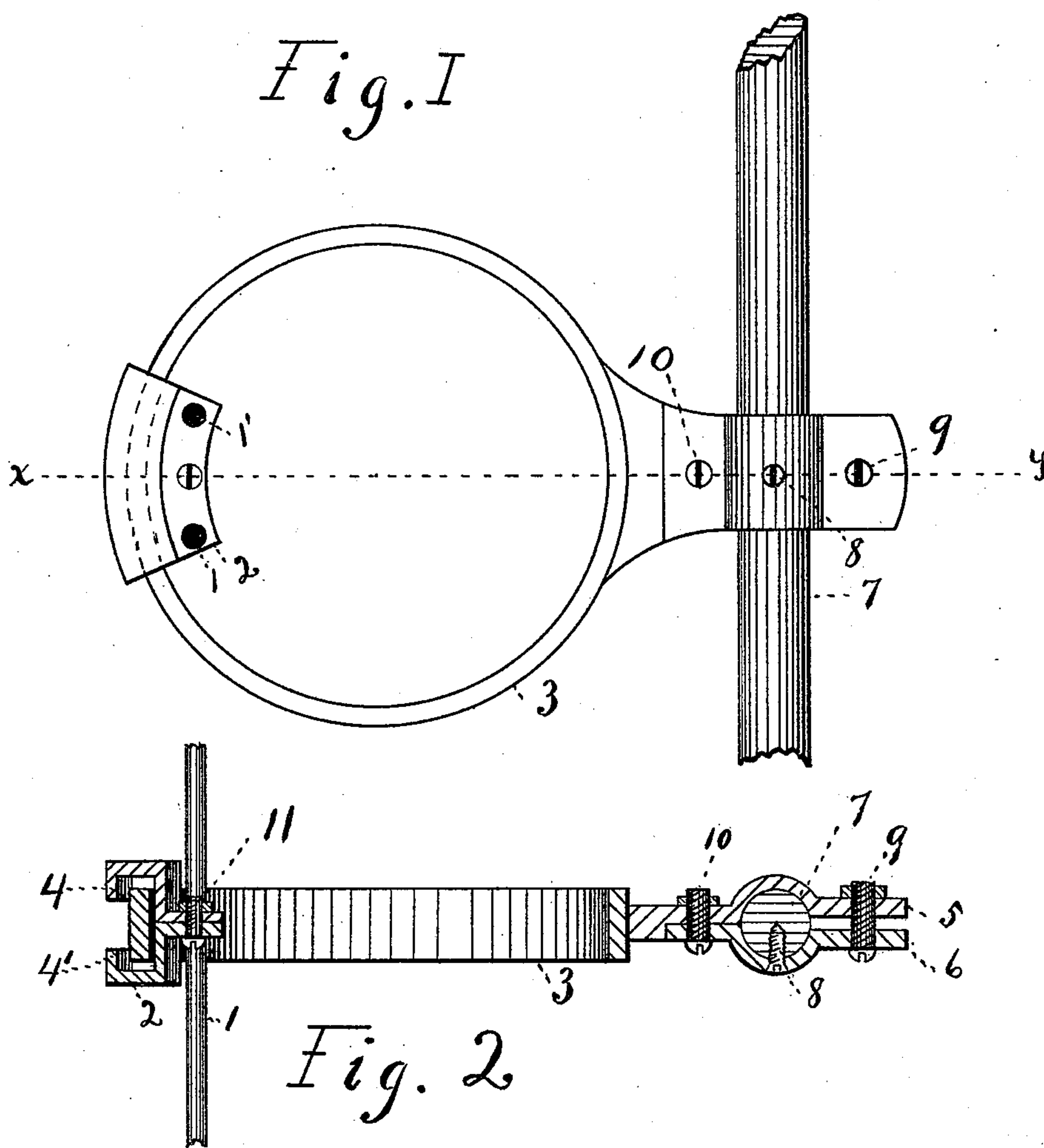


(No Model.)

J. W. MARTIN.  
STRAND TWISTING MACHINE.

No. 438,696.

Patented Oct. 21, 1890.



**WITNESSES:**

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# UNITED STATES PATENT OFFICE.

JEROME W. MARTIN, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF  
TO WILLIAM J. HOLLIS, OF SAME PLACE.

## STRAND-TWISTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 438,696, dated October 21, 1890.

Application filed April 24, 1890. Serial No. 349,389. (No model.)

*To all whom it may concern:*

Be it known that I, JEROME W. MARTIN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Strand-Twisting Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in strand-twisting machines.

The objects of my invention are to provide a machine for twisting strands of twine or wire in an economical and efficient manner, and to provide a machine that is simple in construction, durable, and not liable to get out of order and capable of doing the required work with a minimum of friction in the working parts. Other advantages are more specifically described hereinafter.

In the accompanying drawings I have illustrated a machine constructed in accordance with the principles of my invention.

Figure 1 represents a side elevation of my invention. Fig. 2 represents a top view in section, taken on the dotted line *xy* in Fig. 1.

Similar numerals of reference indicate similar parts in both figures of the drawings.

A metallic ring 3 is provided with a support 5, having a portion of its surface curved so as to partially encircle the handle 7, which is preferably a round wooden pole. Opposite to the support 5 and attached thereto by means of bolts 9 and 10 is a similarly-curved supplementary support 6. The ring 3 can be raised or lowered and circumferentially adjusted upon the pole 7 and securely clamped thereupon by means of the supports 5 and 6. A set-screw 8, passing through one of the supports and into the handle 7, serves to fix more securely in any desired position the ring 3. Partially encircling the ring 3 is a strand carrier or twister 2, composed of two plates secured together by means of the bolt 11 and provided with openings for the strands 1 and 1'. The strand-carrier is made to work loosely upon the ring 3 and is adapted to revolve with the bolt 11 as a center whenever a curvilinear movement is imparted to the ring 3. The lugs 4 and 4' on the strand-carrier 2 serve as a bearing-surface upon which the outer

surface of the ring 3 may bear in order to produce a rotating movement of the carrier 2, and thus twist the strands 1 and 1'.

Having given the construction of my invention in detail, I will describe now the operation of my invention. Having mounted the ring 3 upon the handle 7 by means of supports 5 and 6 and bolts 9 and 10, it is secured in any desired position by screwing the set-screw 8 into the handle 7. The strand-twister 2, having been previously placed upon the ring 3, is mounted upon the strands 1 and 1', the ends of which on both sides of the strand-twister are securely fastened to posts or other supports, and the strands 1 and 1' are drawn taut by means of any desirable tension device. A pressure now being applied to the lugs 4 and 4' of the strand-twister by means of the ring 3, accompanied with an upward or a downward movement of the ring, will cause the strand-twister 2 to revolve with the bolt 11 as a center of revolution and will twist the strands 1 and 1' in a direction opposite to the movement imparted to the ring 3.

It is obvious that my invention may be employed for a number of uses—such as twisting twine or wire cables for general purposes or twisting wire for fencing. When twisting wire for fencing several sets of wire may be simultaneously twisted by mounting several ring-guides provided with strand-carriers upon the handle 7. In this case a suitable distance between the ring-guides may be obtained, and that distance varied at pleasure in the manner set forth above, describing the mounting of a single ring-guide upon the handle 7.

In the drawings I have shown the strand-twister as being but a small segment of a circle as compared with the size of the ring 3. For ease in operating this proportion of the parts is preferable to a segment of greater length. Care should be observed in construction of the parts, so that the guide-ring 3 should present only its outer surface or external periphery as a bearing for the strand-twister 2. Otherwise the friction between the two will cause the twister to bind or lock on the ring, and thus defeat a proper action between the working parts.

Having thus described my invention, what



I claim, and desire to secure by Letters Patent, is—

1. A strand-twisting machine provided with a strand-twister 2, guide-ring 3, support 5, 5 supplementary support 6, bolts 9 and 10, and handle 7, for the purposes specified, substantially as set forth.

2. A strand-twisting machine provided with a strand-twister 2, having guiding-lugs 4 and

4', ring-guide 3, supports 5 and 6, set-screw 8, 10 bolts 9 and 10, and handle 7, for the purposes specified, substantially as set forth.

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

JEROME W. MARTIN.

Witnesses:

FRANK J. EIGHME,  
JOHN E. LATHAM.