

L. BLESSING.
WIRE TWISTING MACHINE.
APPLICATION FILED APR. 10, 1909.

940,231.

Patented Nov. 16, 1909.

Fig. 1

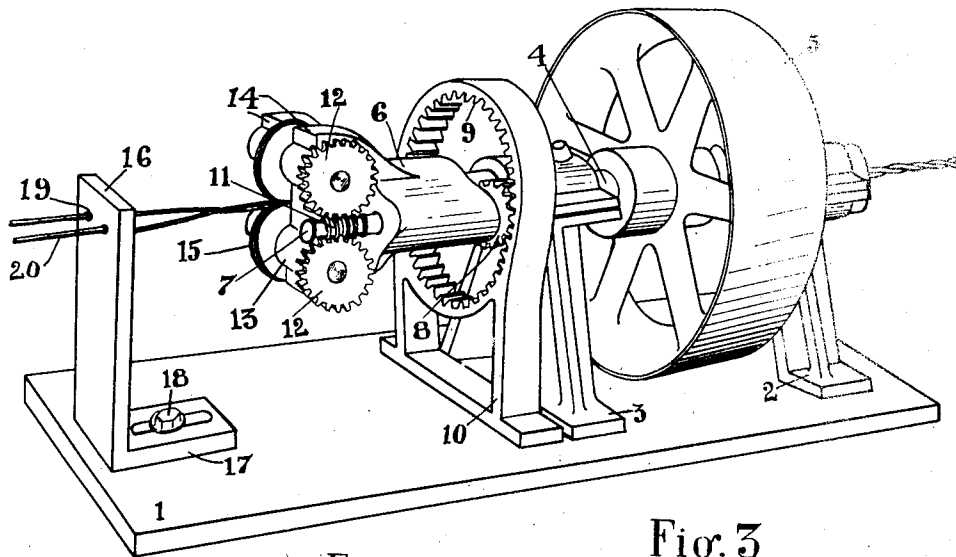


Fig. 2

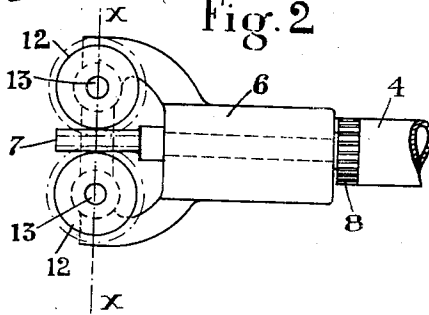
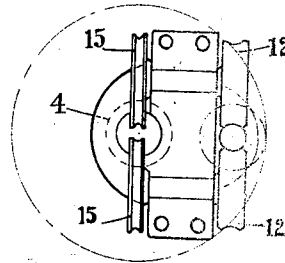


Fig. 3



WITNESSES:

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LOUIS BLESSING, OF JACKSON, MICHIGAN.

WIRE-TWISTING MACHINE.

940,231.

Specification of Letters Patent.

Patented Nov. 16, 1909.

Application filed April 10, 1909. Serial No. 489,237.

To all whom it may concern:

Be it known that I, LOUIS BLESSING, a citizen of the United States of America, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Wire-Twisting Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to wire twisting machines and more especially to a certain arrangement whereby positive action is obtained with great simplicity of construction.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in perspective of a machine embodying the invention; Fig. 2 is a view in detail of a twisting roll head and the rolls; Fig. 3 is a view in section on line *x-x* of Fig. 2.

Referring to the drawings, a flat base 1 has a pair of aligned bearing brackets 2 and 3 in which a main hollow shaft 4 is rotated by a pulley 5 between the bearings or by like suitable means. A twisting roll head 6 is secured on the inner end of the shaft 4 near the bearings 3. A worm shaft 7 is journaled in this roll head parallel to and a short distance from the main shaft. A pinion 8 is secured on the inner end of the worm shaft adjacent the bearing 3 in mesh with a stationary internal gear 9 concentric with the main shaft which is secured to or formed integrally on a suitable upright bracket 10 mounted on the base 1.

A worm 11 on the outer end of the worm shaft meshes with a pair of worm gears 12 which drive roll arbors 13 journaled in a set of bearings 14 on the outer end of the head 6. Rolls 15 with grooved peripheries are carried by these arbors in such position that they feed wire inserted between them through the hollow shaft 4. An angle plate 16 having a slotted foot 17 with clamping cap screw 18 is adjustably secured on the base 1 so as to be moved to or from the feed rolls. Apertures 19 in this plate in substantial axial alinement with the main shaft 4 act as guides through which wire strands indicated at 20 may be drawn and inserted in the rolls.

In operation the gage plate may be moved to or from the feed rolls to make the wire twist tightly or loosely as preferred. The rotating rolls feed the twisted wire through

the shaft and the machine when once adjusted maintaining itself with very little attention or care.

Obviously, changes in the details of construction may be made without departing from the spirit of the invention and I do not care to limit myself to any particular form or arrangement of parts.

What I claim as my invention is:—

1. A wire twisting machine comprising a base, a pair of bearing brackets thereon, a horizontal, hollow main shaft journaled in the brackets, a driving wheel on the shaft between the bearings, a roll head on the shaft, a worm shaft journaled in the head parallel to the main shaft, a pinion secured on the worm shaft, a gear bracket on the base, an internal gear concentric with the main shaft secured in the gear bracket in mesh with the pinion, a pair of parallel roll arbors journaled in the head transverse to the main shaft, worm gears on the arbors in mesh with the worm, a pair of opposed feed rolls on the arbors and an angle gage plate adjustable longitudinally on the base having a pair of guide apertures in substantial alinement with the feed rolls and shaft.

2. A wire twisting machine comprising a base, a pair of bearing brackets thereon, a horizontal, hollow main shaft journaled in the brackets, a driving wheel on the shaft between the bearings, a roll head on the shaft, a worm shaft journaled in the head parallel to the main shaft, a pinion secured on the worm shaft, an upright bracket on the base, an internal gear formed integrally on the bracket concentric with the main shaft in mesh with the worm pinion, a pair of roll arbors journaled in parallel relation in the head transversely to the worm shaft, a worm pinion secured on each arbor in mesh with the worm, a peripherally grooved roll on each arbor, said rolls coacting to force wire through the main shaft, an angle plate in axial alinement with the shaft having a pair of guide apertures opposite the feed rolls, a slotted foot on the plate, and a clamping screw in the base engaging the slotted foot.

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

LOUIS BLESSING.

Witnesses:

EDWARD TAYLOR,
GUSTAV A. HAHN.