

D. W. MARSHALL.
WIRE TWISTING DEVICE.
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981,444.

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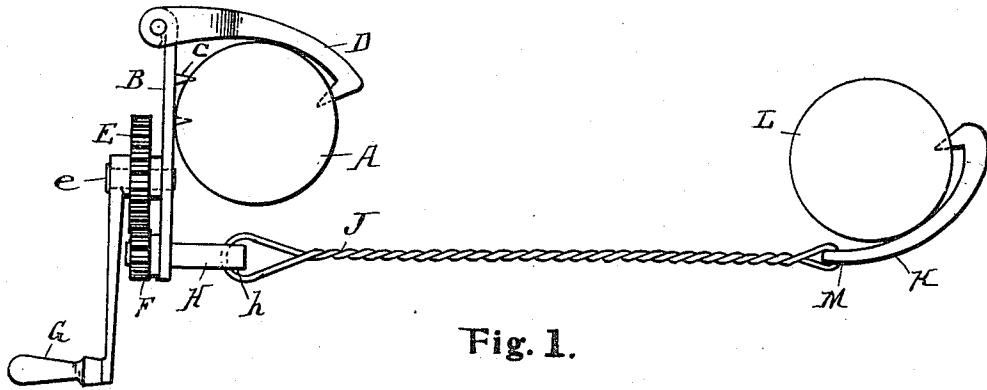


Fig. 1.

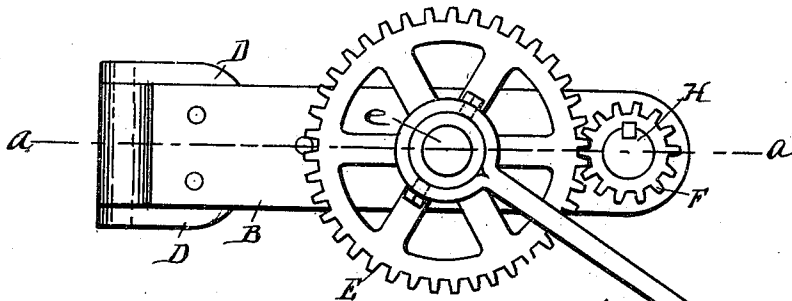


Fig. 2.

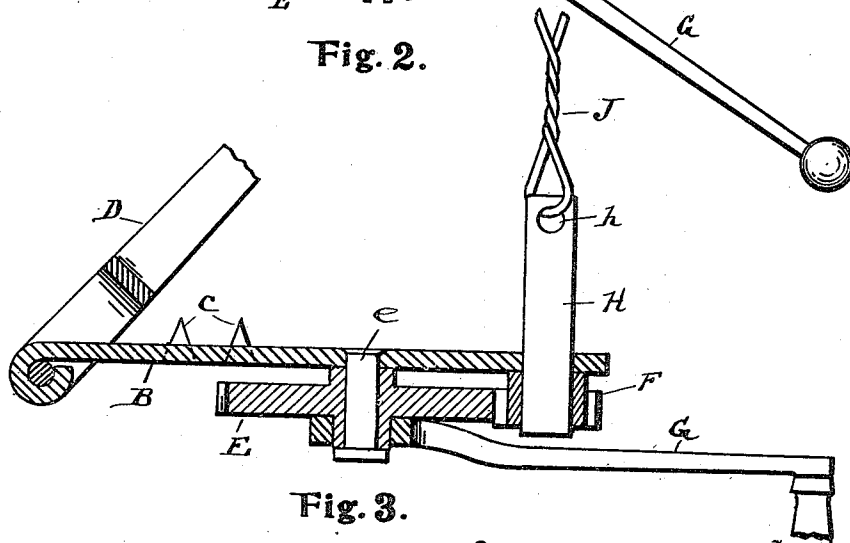


Fig. 3.

Witnesses

O. B. Baenziger
C. C. Jennings

David W. Marshall
Parker H. Burton
Inventor
Attorney

UNITED STATES PATENT OFFICE.

DAVID W. MARSHALL, OF SARNIA, ONTARIO, CANADA.

WIRE-TWISTING DEVICE.

981,444.

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To all whom it may concern:

Be it known that I, DAVID W. MARSHALL, a subject of the King of Great Britain, residing at Sarnia, county of Lambton, Province of Ontario, Dominion of Canada, have invented a certain new and useful Improvement in Wire-Twisting Devices, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to tools for twisting wire.

It has for its object an improved tool adapted to be used for producing the twisted wire that is used in pole line construction, the twisted wire being used mainly as a guy wire to brace or tie the poles of a line of poles in their proper upright position.

In the drawings:—Figure 1 is a plan view of the tool showing the wire in the process of twisting. Fig. 2 is a side elevation of the twisting part of the device. Fig. 3 is a sectional view of the twisting part of the device on the line *a—*a** of Fig. 2.

The device consists of a twisting head or frame adapted to be secured to any suitable object, as for example, one of the posts that has been already erected in the construction of a pole line. In connection with this is used a hook adapted to be secured temporarily to a distant post; the wire to be twisted is strung between the hook and the twisting head, and the desired amount of twist is given to it, after which it is removed from the tool and applied to its place of ultimate use. The removal is effected generally by cutting the wire from the hook and either disengaging it from the twisting head or cutting it, as may be most convenient.

K indicates the hook, which may be of any size and shape suitable to be attached quickly to any object. It is provided with an eye M through which the wire J to be twisted is run and doubled on itself to make a double strand of a length sufficient to produce the finished twisted wire.

The twisting head consists of a body member B provided with a hook D pivoted to one end thereof, and with prongs, spurs or points *c* which are of any number suitable for the desired security, and which project from that side of the body on which the body of the hook D lies. Upon the body B

is secured a stud bearing for a gear wheel E, and through the body of the twisting head nearer its end than the stud *c* is a rotatable shaft H, provided with a pinion F that meshes with the gear E, which terminates with an eye *h* at its free end. A crank and handle G are secured to the hub of the gear E, and by means of this the gear and pinion may be turned for the purpose of twisting the wire G.

In use, the wire to be twisted is run through the eye M of the hook K, the hook K is made secure to any suitable object, as pole L. A sufficient quantity of wire for the desired purpose is drawn through the eye M, the ends brought together and pass from opposite directions through the eye *h* of the shaft or spindle H. The free ends of the wire are brought back and secured against escape from the eye *h*. The body of the twisting head is placed against any suitable holding device, as a pole A, and the spurs *c*, or some of them, driven in until the body is held against slipping or twisting around the sustaining post. The hook D is then brought against the post and forced into it sufficiently to hold the head with the requisite amount of security, after which the twisting progresses by turning the handle G. It is, of course, necessary for the operator to provide for the shortening of the wire by giving to the untwisted wire suitable slack, so that the finally twisted wire is of the desired length.

What I claim is:—

1. In a wire twisting device, in combination with a base member, an anchorage hook pivoted at one end thereof, whereby the same may be removably attached to a post, a pair of shafts rotatably journaled in said base member adjacent the opposite end thereof from the point of pivoting of the anchorage hook, one of said shafts being pierced at one end for the engagement of a wire there-through, intermeshing gear wheels mounted on said shafts, and a crank for actuating the same, whereby rotative movement may be communicated to a loop of wire passed through the pierced end of one of the shafts, substantially as described.

2. A wire twisting device, having in combination with a base member, a shaft having a pierced end journaled therein, a second shaft provided with an actuating crank journaled in said base member, a pair of gear wheels carried by said shafts in intermesh-

ing position with respect to one another, whereby said pierced shaft and a loop of wire engaging therethrough may be positively rotated, and an anchorage hook piv-
5 oted to the opposite end of said base member from that adjacent to which said shafts are located, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses.

DAVID W. MARSHALL.

Witnesses:

CHARLES F. BURTON,
VIRGINIA C. SPRATT.