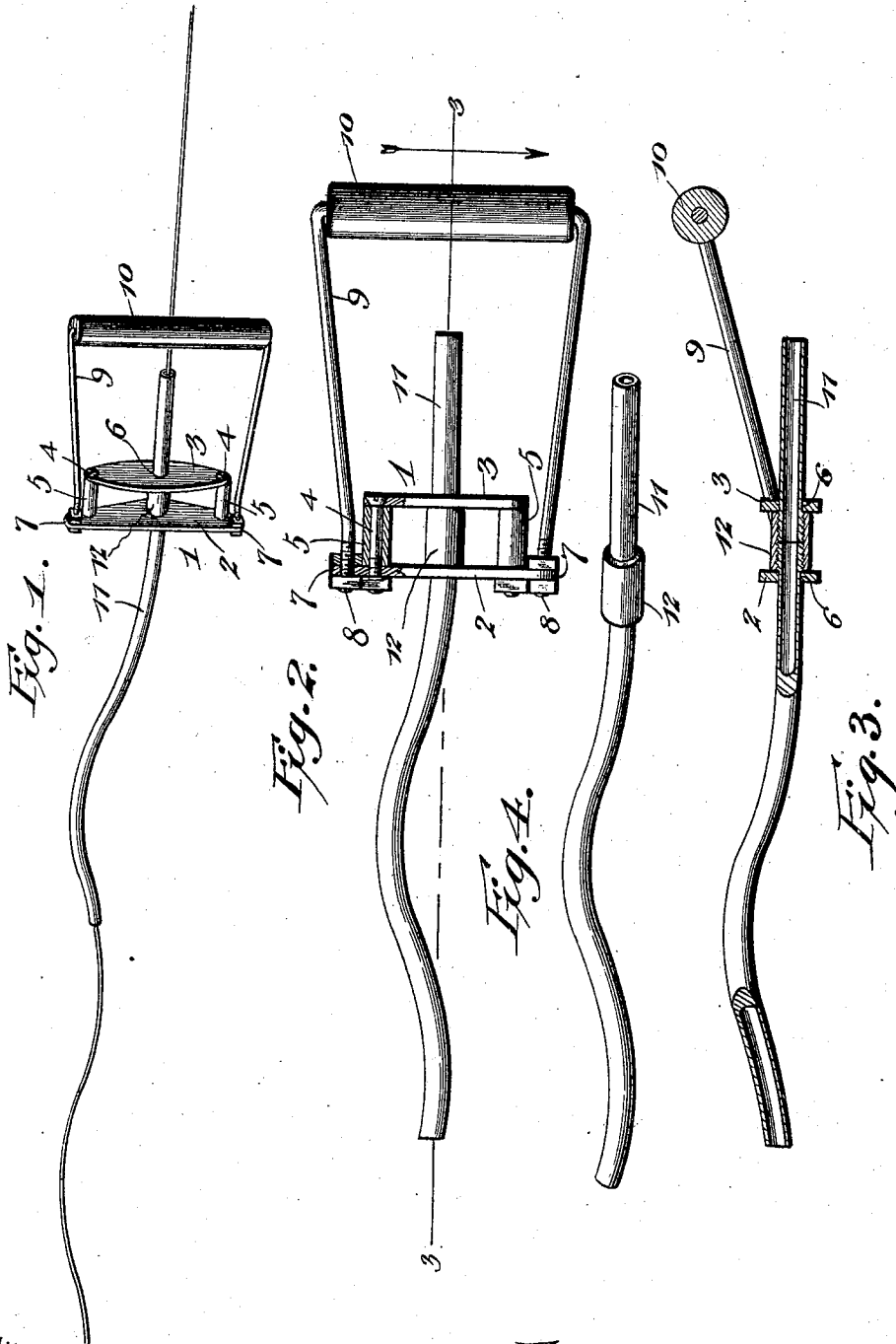


No. 617,353.

Patented Jan. 10, 1899.

E. REDMOND.
WIRE COILING DEVICE.
(Application filed Aug. 23, 1898.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD REDMOND, OF PERRY, MICHIGAN.

WIRE-COILING DEVICE.

SPECIFICATION forming part of Letters Patent No. 617,353, dated January 10, 1899.

Application filed August 23, 1898. Serial No. 689,349. (No model.)

To all whom it may concern:

Be it known that I, EDWARD REDMOND, a citizen of the United States, residing at Perry, in the county of Shiawassee and State of Michigan, have invented a new and useful Wire-Coiling Machine, of which the following is a specification.

This invention relates to wire-coiling machines; and it has for its object to provide a simplified form of machine of this character designed particularly as a hand-tool for placing a coil of long pitch in the line-wires of wire fencing, thus producing "spring-wires" which will compensate for contraction and expansion without distorting, loosening, or breaking the fencing.

While the machine is specially designed as a tool for coiling the line-wires of wire fencing, either before the same are used or as they are being stretched up, still it will be understood that the machine is capable of general use to provide for coiling wires for any purpose.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts, hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a perspective view of a wire-coiling machine constructed in accordance with this invention and shown in an operative position. Fig. 2 is a plan view of the machine, partly in section. Fig. 3 is a longitudinal sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail in perspective of the revoluble coil-forming tube.

Referring to the accompanying drawings, the numeral 1 designates the small skeleton frame of the machine, essentially comprising a pair of spaced parallel bearing-plates 2 and 3, arranged somewhat closely together and rigidly connected at or near their ends by the connecting-bolts 4, having fitted thereon the spacing-sleeves 5, which provide for holding the two bearing-plates spaced apart. The said parallel bearing-plates 2 and 3 are provided centrally between their ends with the alined bearing-openings 6, and one of said bearing-plates (designated by the numeral 2) is provided with terminal extensions 7, to

which are bolted the bolt ends or terminals 8 of an inverted-U-shaped handle-bail 9, on the cross-arm of which is fitted the cylindrical hand-grasp 10, which affords a convenient grip for the hand of the operator, so that the machine can be readily pulled or drawn along the wire being coiled. The inverted-U-shaped handle-bail 9 extends a distance beyond the skeleton frame 1 and is deflected laterally at an acute angle therefrom, so as to dispose the hand-grasp at one side of the line of the wire, whereby the hand of the operator will be entirely out of the way of the wire along which the machine is pulled.

The frame 1 forms a bearing-support for the revoluble coil-forming tube 11, the inner end portion of which tube projects through and is journaled in the alined bearing-openings 6 of the plates 2 and 3, and between said plates the said revoluble tube is provided with an exterior collar 12, which holds the same for rotation within the frame and prevents longitudinal displacement thereof. The revoluble coil-forming tube is elongated, and the greater portion of said tube, which lies beyond the bearing-frame, is provided in the direction of its length with a spiral twist, which conforms in curvature and pitch to the coil to be produced in the wire.

In operating the machine as a coiling-tool for fence-wires the wire is strung through the coil-forming tube, and by grasping the handle-bail the machine is pulled or drawn along the wire. In this forward movement of the machine or tool the coil-forming tube will revolve on its axis and cause the wire to be bent into a long-pitch symmetrical coil corresponding to the spiral twist or curvature of the tube itself, the rotation of said tube causing the same to always follow the coil which it produces, so that there is no possibility whatever of the coil being pulled out of the wire after having been once placed therein.

The essential features of the herein-described machine are obviously capable of general application for coiling wire for any purpose, and it will be understood that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a wire-coiling machine, a frame, and
5 a revoluble coil-forming tube having a straight
portion loosely journaled in the frame, and
provided in the direction of its length, and
beyond the frame, with a spiral twist or cur-
vature, substantially as set forth.
- 10 2. In a wire-coiling machine, a frame hav-
ing bearings therein, and a handle, and a rev-
oluble coil-forming tube arranged in the bear-
ings of the frame and having a spiral twist or
curvature in the direction of its length, sub-
15 stantially as set forth.
3. A portable wire-coiling machine, com-
prising a skeleton frame having spaced par-

allel bearing-plates provided with bearing-
openings therein, and an offstanding handle-
bail, and a revoluble coil-forming tube jour- 20
naled in the bearing-openings of the frame
and provided with an exterior collar arranged
between the bearing-plates, said tube having
its greater portion, lying beyond the bearing-
frame, provided with a spiral twist or curva- 25
ture in the direction of its length, substan-
tially as set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

EDWARD REDMOND.

Witnesses:

HARLOW GREEN,
C. M. SPALDING.