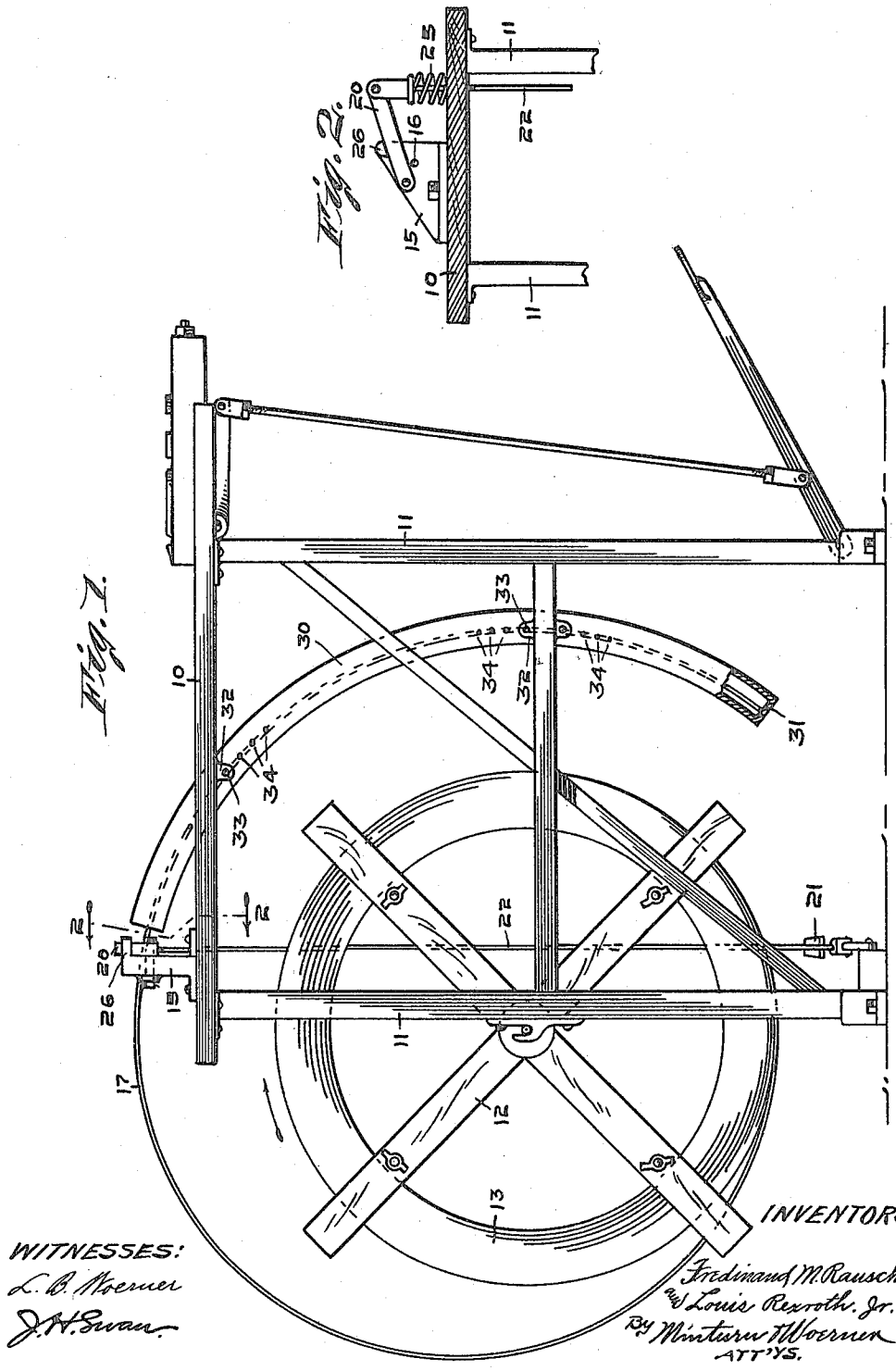
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WIRE MEASURING AND CUTTING MACHINE.

APPLICATION FILED FEB. 1, 1915.

1,162,879. Patented Dec. 7, 1915.



COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FERDINAND M. RAUSCHER AND LOUIS REXROTH, JR., OF INDIANAPOLIS, INDIANA; SAID RAUSCHER ASSIGNOR TO SAID REXROTH.

WIRE MEASURING AND CUTTING MACHINE.

1,162,879. Specification of Letters Patent. Patented Dec. 7, 1915.

Original application filed February 17, 1914, Serial No. 819,167. Divided and this application filed February 1, 1915. Serial No. 5,521.

To all whom it may concern:

Be it known that we, FERDINAND M. RAUSCHER and LOUIS REXROTH, Jr., citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Wire Measuring and Cutting Machines, of which the following is a specification.

This invention relates to a machine for measuring and cutting wire of uniform lengths, being a division of our Patent No. 1,127,515, dated February 9, 1915.

The object of the present invention is to provide means whereby wire may be cut into uniform lengths as it is being unrolled from the wound bales, the wire maintaining its curvature as it is unwound from the bale during the cutting operation, the said curvature assisting in the operation in converting the wire into the finished product to be produced therefrom.

A further object of the invention consists in the provision of certain means capable of receiving the different sections of curved wire as they are cut from the bale, to measure the wire so that the sections will be of uniform lengths, and to preserve the curvature of the wire as it comes from the bale.

Referring to the drawings, forming a part hereof, and in which similar numerals of reference indicate similar parts—Figure 1 is a side elevation of our improved wire measuring and cutting machine, showing the relative positions of the different parts in operative position. Fig. 2 is a fragmentary detail view in cross section of the wire cutting mechanism, on the line 2—2 in Fig. 1.

The machine comprises a suitable table 10 for conveniently mounting the necessary parts of the wire supplying, measuring and cutting devices, which table is supported upon suitable legs 11. At one end of the framework and supported by the legs 11 is a reel 12 for supporting the wire bale 13 in the shape that it is received from the factory, and the reel 12 is capable of rotating to allow the wire to pay out as it is cut into the desired sections of uniform lengths. Mounted upon the table-top 10, and in position to be freely accessible to the end of the curved wire as it is leaving the bale, is a wire-cutting mechanism consisting of an upright member 15 which is rigidly secured to said table-top 10, and is provided with an aperture 16 through which the wire 17 is fed. The wire is severed at the proper place by means of a cutting-blade 20 which is pivotally connected to the upright member 15 and is actuated by means of a foot-pedal 21 through the connecting-rod 22. When the cutting-blade 20 is actuated by the foot-pedal 21 the said blade is lowered across the aperture 16 to sever the wire, the said cutting-blade being normally held above said aperture 16 by means of a spring 25. The upward movement of the cutting-blade 20 is limited by means of a laterally depending lug 26 on the upright member 15. While we have mentioned the fact that the cutting-blade 20 is actuated by foot power, it will be understood that other power may be substituted if desired.

In order to insure that the sections of wire which are cut from the bale will be of uniform lengths, we provide a hollow container 30 of sufficient size to act as a repository for the sections of wire. The bottom of the container 30 is located at a proper distance from the cutting-blade 20 to correspond to the lengths of wire sections to be cut from the main bale. It is well understood that when wire is unwound from the bale the wire retains its curved position to a certain extent until it is straightened. As it is desirable to use the cut sections of the wire, in this instance, to produce a product which requires in its initial process the bending of the sections on a curve corresponding approximately to the curve of the wire sections as they come from the bale, we preserve this curvature of the sections, to assist in the subsequent manufacture of the finished product, by forming the container 30 on a curve corresponding to the curvature in the wire which, in this particular machine, is one of the main features. The container 30 is adjustably supported in the table-top 10 by means of suitable ears 32, secured to the frame of the machine, and the screws 33, the said container being provided with a plurality of apertures 34 which may be brought into registration with the apertures in the ears 32 thereby moving the bottom 31 of the container toward or away from the cutting blade 20, so that the wire may be cut into varying prescribed lengths.

In the operation of the machine, it will be

noted that the wire 17 is drawn in a direction to unwind it from the bale 13 by passing the end of said wire through the aperture 16 and projecting the end of said wire into the curved container 30 until the end engages the end 31 of said container at which time the section to be cut is of the desired length and the inherent curvature of said section is maintained. The wire 17 is prevented temporarily from backing out of the container 30 by the contact of the blade 20 in severing the wire 17.

Having thus fully described our said invention, what we desire to secure by Letters Patent, is—

1. In a machine of the class described, the combination of means for uniformly measuring and for receiving the uniform lengths of cut wire, means for adjustably mounting said wire receiving means, and means for temporarily holding and for cutting the measured wire.

2. In a machine of the class described, the combination of curved means for uniformly measuring and holding the measured lengths of cut wire, means for adjustably mounting said curved wire receiving means, said adjustment being parallel with the arc in which said receiving means is formed, and means for temporarily holding and for cutting the measured wire.

In witness whereof, we have hereunto set our hands and seals at Indianapolis, Indiana, this 25th day of January, A. D. one thousand nine hundred and fifteen.

FERDINAND M. RAUSCHER. [L. S.]
LOUIS REXROTH, JR. [L. S.]

Witnesses:
F. W. WOERNER,
J. A. MINTURN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."