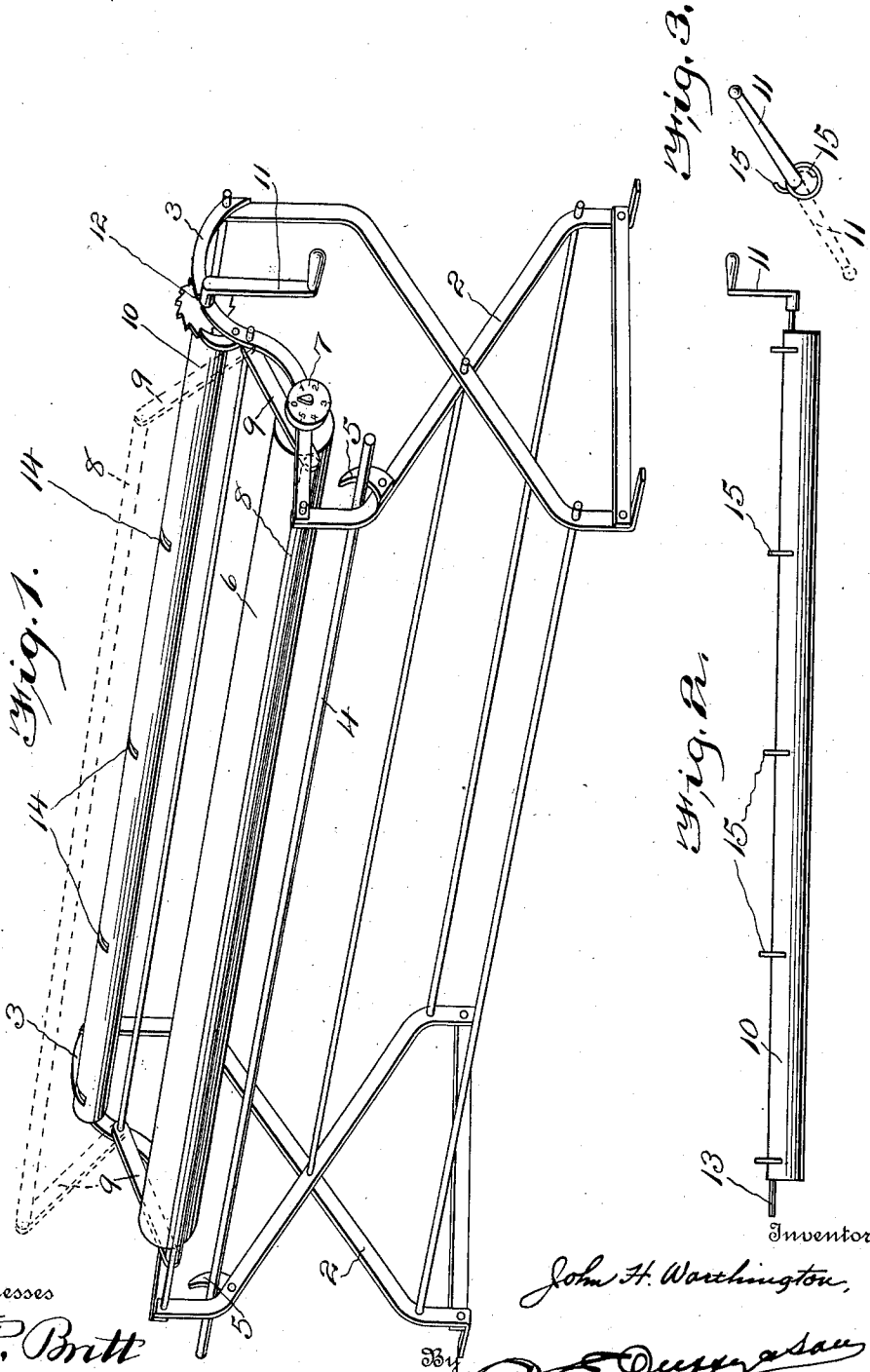


J. H. WORTHINGTON.
WIRE MEASURING MACHINE.
APPLICATION FILED AUG. 24, 1911.

1,043,494.

Patented Nov. 5, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN H. WORTHINGTON, OF STAUNTON, VIRGINIA.

WIRE-MEASURING MACHINE.

1,043,494.

Specification of Letters Patent.

Patented Nov. 5, 1912.

Application filed August 24, 1911. Serial No. 645,778.

To all whom it may concern:

Be it known that I, JOHN H. WORTHINGTON, a citizen of the United States, residing at Staunton, in the county of Augusta and State of Virginia, have invented certain new and useful Improvements in Wire-Measuring Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to a device for holding, measuring and rolling off widths of chicken or similar wire, and has for its object to provide a device for this purpose which is particularly simple in its construction, compact and easy and positive of operation.

This invention consists in the novel construction of the wire rolling and measuring reels, and also in certain other novel features of construction and in combinations of parts, all of which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawing, Figure 1 is a perspective view of a wire measuring machine constructed in accordance with this invention. Fig. 2 is a detail plan view of the rolling reel, and Fig. 3 is an end elevation of the same.

Like numerals of reference indicate the same parts throughout the several figures in which; 1 indicates the device and 2 are suitable legs to which are connected the reverse curved reel supporting pieces 3.

The wire holding rod 4 is suitably mounted at the front of the machine. Mounted in the reverse curved reel supporting pieces 3 at a higher plane than the wire holding rod 4 is the measuring roller 6, a dial 7 being arranged in connection with the measuring roller 6 in order to indicate the length of the wire passing over the roller 6, it being understood that as the wire passes over the roller 6 it causes the same to rotate, which rotations are indicated on the dial 7 in such manner that the length of wire passing over the roller is indicated in feet by the dial 7. Mounted in the roller supporting pieces 3 is a tension roller 8 which is carried by two arms 9, said roller 8 lying normally in close

position to the measuring roller 6 in order to insure a good close engagement between the wire to be measured and the measuring roller, said tension roller 8 being raised into position shown in dotted lines in Fig. 1 when the wire is being attached to the winding roller 10, which winding roller is mounted in the roller supporting pieces 3 and is manually operated by means of a crank 11. It will be noted from the drawing that the roller supporting pieces 3 are provided with a notch 12 to receive the shaft 13 of the said roller in such manner that the said winding roller can be readily lifted off of the machine after the wire has been wound thereon.

Referring particularly to the construction of the winding roller 10 it will be seen that the shaft 13 is mounted eccentrically in the roller as by bearings arranged in the ends of the roller 10 or in any other manner which will maintain the shaft 13 eccentrically within the roller 10, the means employed for mounting the shaft 13 eccentrically in the roller 10 being immaterial as far as this invention is concerned, and that the said roller is provided at intervals with transverse slots 14 (Fig. 1). Secured to the shaft 13 of the winding roller 10 are a series of hooks 15 which extend through the slots 14 in the periphery of the said roller in the manner as shown in Fig. 3, the said hooks 15 being so arranged on the shaft 13 that when the roller 10 is being rotated in the direction of winding the wire thereon that the said hooks 15 will project beyond the periphery of the said roller and be maintained in that position by the shaft 13 and winding crank 11 as will be clearly obvious from Figs. 2 and 3.

Having thus described the several parts of this invention its operation is as follows: As the shaft 13 is mounted eccentrically within the roller 10 and as the hooks 15 project through the transverse slots 14 said hooks 15 engage one end of each slot 14 to cause the roller 10 to be rotated with the shaft 13 as will be obvious from an inspection of Figs. 2 and 3.

Chicken wire and other mesh wires come to the retailers in rolls and are sold by the retailers from the rolls, the desired length of wire being measured from the rolls usually by a yard stick, tape or foot rule, and as mesh wire of this character is at all times difficult and unhandy to handle the operation of measuring off and cutting a

length of wire from a roll is attended with considerable loss of time and enormous difficulties. In the operation of this invention the wire to be measured is slipped over the wire holding rod 4 and the end of the wire is carried up over the measuring roller 6 and under the tension roller 8. The shaft 13 of the winding roller 10 is rotated by means of the crank 11 to throw the hooks 15 thereon into position shown in Fig. 3 and the end of the wire is engaged by said hooks. When the wire is thus threaded or connected to the machine in this manner the crank 11 is rotated to wind up the wire on the winding roller 10, and as the wire passes over the measuring roller 6 said roller is caused to rotate and the rotation of the said roller is indicated on the dial 7 in such manner that any desired length of wire can be quickly and easily measured off and at the same time rolled up on the winding roller 10. When the requisite length of wire has passed over the measuring roller 6 the wire is cut and the winding roller 10 is lifted out of the roller supporting pieces 3. The wire therefore is in a rolled condition and the same is removed from the winding roller 10 in the following manner: After the winding roller 10 has been removed the crank 11 is rotated in the opposite direction from that of winding up the roller, which opposite movement of the crank carries all of the hooks 15 thereon within the roller 10 and houses them therein in such manner that they do not project or extend beyond the periphery of the roller 10 and consequently are entirely disengaged from the wire on the roller, this position of the hooks 15 and crank 11 being clearly illustrated in dotted lines in Fig. 3. When therefore the hooks 15 are in this position the periphery of the winding roller 10 is entirely free from obstacles and the wire which has been wound thereon is simply slid off of the end of the roller 10 opposite to the crank 11 and the wire is then in condition to be received by the customer.

It is of course obvious that with this machine any width or character of mesh of wire can be measured thereon by simply placing the desired wire upon the wire hold-

ing rod 4 and one roll of wire can be quickly and readily removed from the machine and another roll substituted therefor.

Having thus fully described the invention the utility of the same is at once apparent and as the construction is capable of many immaterial changes I consider myself clearly entitled to all such modifications as fall within the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent of the United States is:—

1. In a fabric holding and measuring machine the combination with a fabric holding device and a fabric measuring device, of a fabric winding roller, a driving shaft for driving said roller, said driving shaft being located eccentrically within the said roller, said roller being provided with an opening in the periphery thereof, an element on said driving shaft passing through the said opening in the periphery of the winding roller to enter and engage the fabric on said roller when said shaft and roller are being rotated to wind the fabric thereon, the said driving shaft disengaging the said element thereon from the fabric when the said shaft and roller are rotated in the direction for unwinding the fabric from the roller in such manner that the roller can be withdrawn from the rolled fabric, substantially as described.

2. In a fabric holding and measuring machine the combination with a fabric holding device and a fabric measuring device, of a fabric winding roller, a driving shaft for rotating said winding roller, said shaft being eccentrically located in said roller, means operated by said eccentrically located shaft for engaging fabric on said roller when the said shaft and roller are being rotated to wind the fabric thereon and for disengaging the fabric on said roller when the said shaft and roller are rotated in the direction for unwinding the fabric.

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

JOHN H. WORTHINGTON.

Witnesses:

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