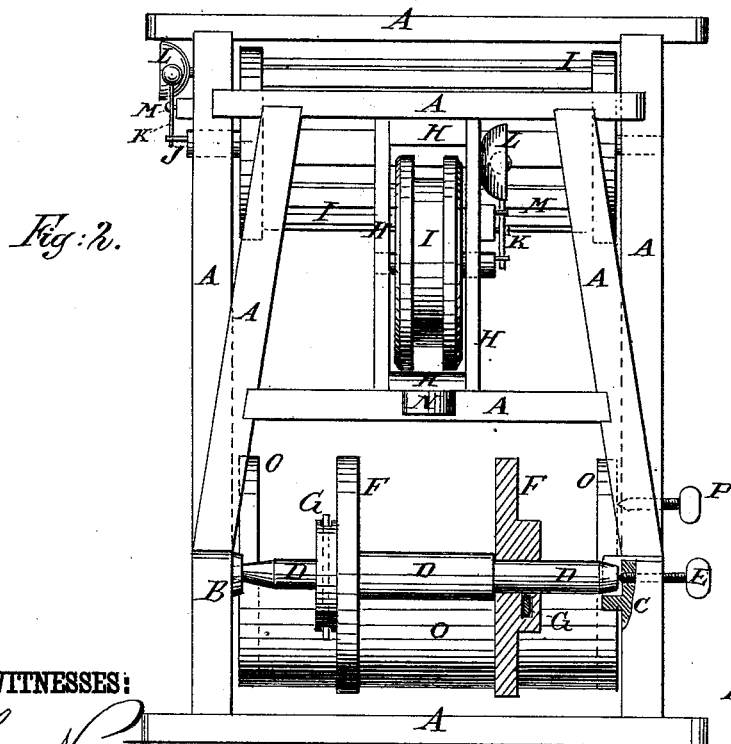
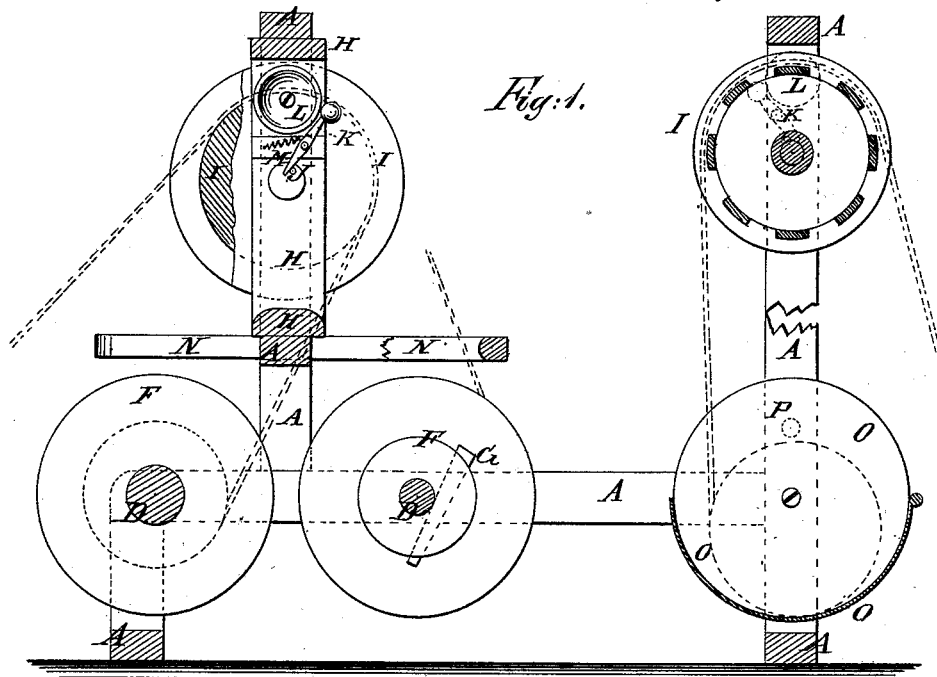


A. H. SIMMS & J. L. PORTER.  
Rope-Measuring Machine.

**No. 215,073.**

Patented May 6, 1879.



**WITNESSES:**

Chas. Nida.  
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BY

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# UNITED STATES PATENT OFFICE.

ALONZO H. SIMMS, OF NIXBURG, AND JOSEPH L. PORTER, OF ROCKFORD, ALA.

## IMPROVEMENT IN ROPE-MEASURING MACHINES.

Specification forming part of Letters Patent No. **215,073**, dated May 6, 1879; application filed August 16, 1878.

*To all whom it may concern:*

Be it known that we, ALONZO HENRY SIMMS, of Nixburg, in the county of Coosa and State of Alabama, and JOSEPH LUCIUS PORTER, of Rockford, in the county of Coosa and State of Alabama, have invented a new and useful Improvement in Coil Protector and Measurer, of which the following is a specification.

Figure 1 is a vertical longitudinal section of our improved machine, parts being broken away to show the construction. Fig. 2 is a front view of the same, parts being broken away to show the construction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine.

The invention consists in the combination of the detachable shafts, provided with the adjustable heads, the slotted guide-bar, and the measuring-wheel, with each other and the frame-work of the machine; in the combination of the semi-cylindrical case, made with circular ends, and the set-screw, with the measuring wheel or cylinder and the frame-work of the machine; and in the combination of the eccentric or crank pin, the lever-hammer, the gong, and the spring with the journal of the measuring wheel or cylinder and the frame-work of the machine, as hereinafter fully described.

A represents the frame-work of the machine, to the side bars of which are attached two or more sets of socket-bearings, B C, for the shafts D. The bearings B of each set are cup-shaped, and the bearings C are made open upon the top, so that the shafts D can be readily put in and taken out.

E are set-screws, which pass in through the side beams of the frame A through the open-topped socket-bearings C, and enter recesses in the ends of the shafts D. The set-screws E keep the shafts D in place, keep the coils from unwinding, and make sufficient friction to cause the material to revolve the measuring-wheel with certainty.

The coils are kept upon the middle parts of the shafts D by the heads F, both of which are adjustable, so that coils of any desired length may be placed upon the said shafts and ad-

justed with their centers at the centers of the shafts.

The heads F are secured in place, when adjusted, by keys or drift-pins G, which pass through the hubs of the said heads and bear against the sides of the shafts D, as shown in Figs. 1 and 2.

To and between the cross-bars of the upright frame A is attached a frame, H, to and within which is pivoted a flanged wheel, I. The face of the wheel I is exactly a yard in circumference, so that as the rope is drawn over it each revolution of the said wheel will measure off a yard.

To the end of the journal of the measuring-wheel I is attached an eccentric or crank pin, J, which, at each revolution of the said measuring-wheel I, strikes and operates the lever-hammer K of the gong L each time a yard is measured off.

The hammer K is thrown forward against the gong L, when released from the pin J, by a spring, M, attached to it and to the frame H.

To the lower cross-bar of the upright frame is attached the middle part of a bar, N, the arms of which project over the shafts D, and are slotted longitudinally to serve as guides to the rope as it passes from the shafts D to the measuring-wheel I.

O is a semi-cylindrical case, which is made with circular ends or heads, and which is suspended and pivoted at the centers of the said ends to the posts of the frame A. The case O is locked in position by a set-screw, P, which passes in through one of the said posts, and bears against an end of the said case. To the posts of the frame A, above the case O, is pivoted a flanged cylinder, I, which is made exactly a yard in circumference, and with one of its journals are connected an eccentric or crank pin, J, a pivoted lever-hammer, K, a gong, L, and a spring, M, so that the gong may be sounded as each yard of the material is measured off.

With this construction, by loosening the set-screw P, the case O may be swung forward or back, for convenience in putting in the roll, and may then be adjusted and again secured in place, tightening up the said set-screw.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of the detachable shafts D, provided with the adjustable heads F, the slotted guide-bar N, and the measuring-wheel I, with each other and with the frame-work

A, substantially as herein shown and described.

ALONZO HENRY SIMMS.  
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Witnesses:

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