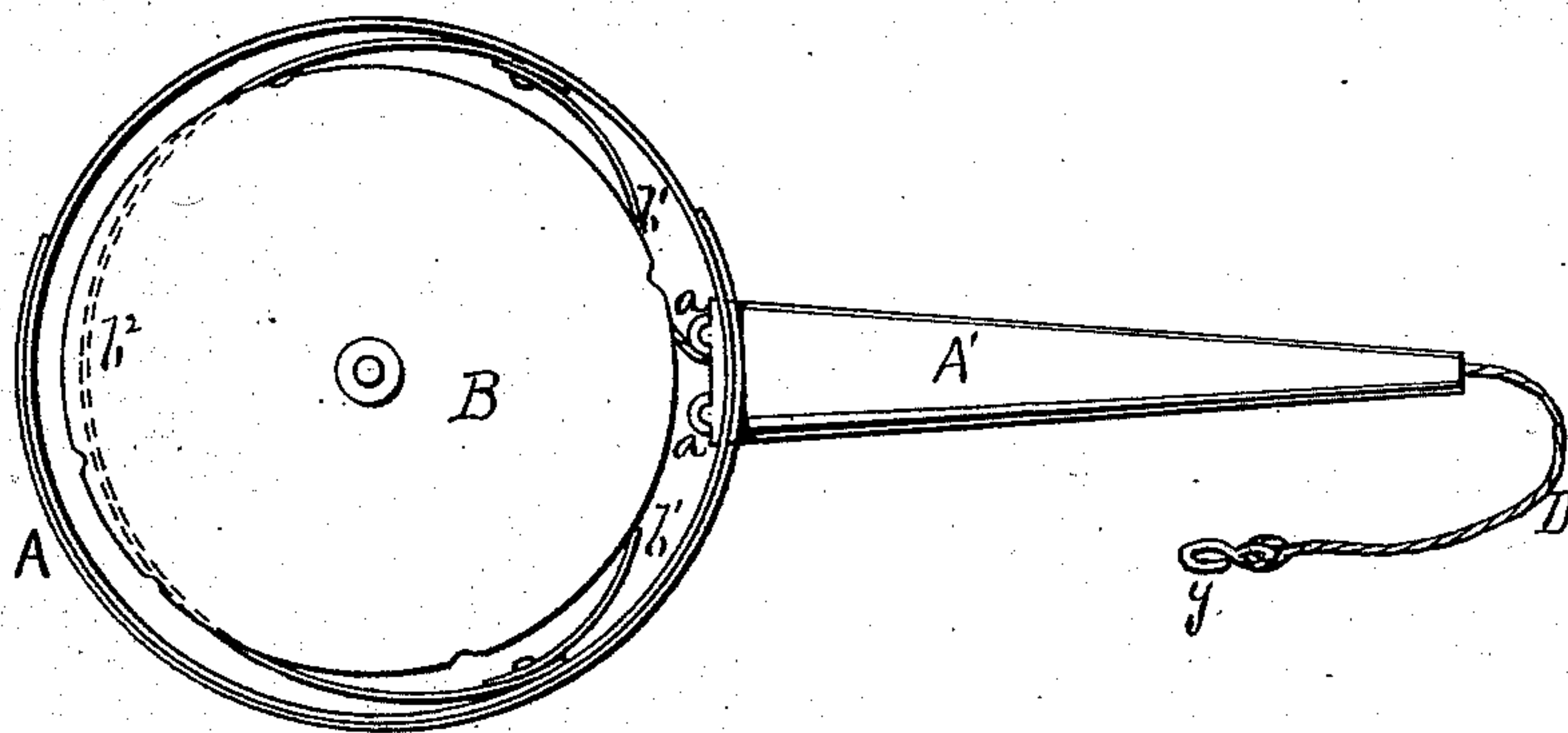


**J. McNEILL.**  
**Cloth-Measuring Machines.**

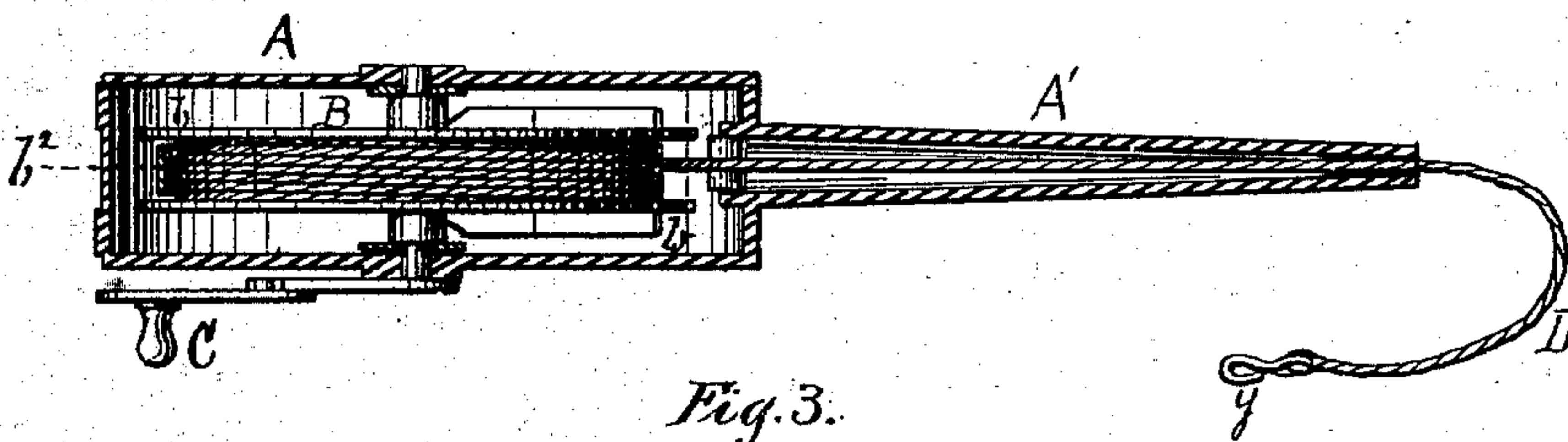
No. 156,586.

Patented Nov. 3, 1874.

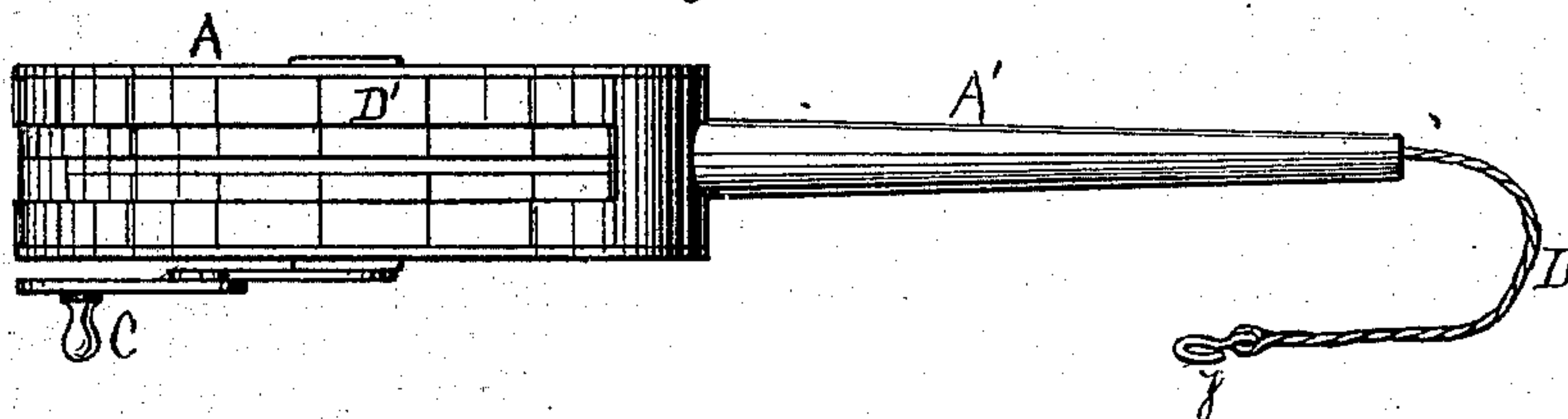
*Fig. 1.*



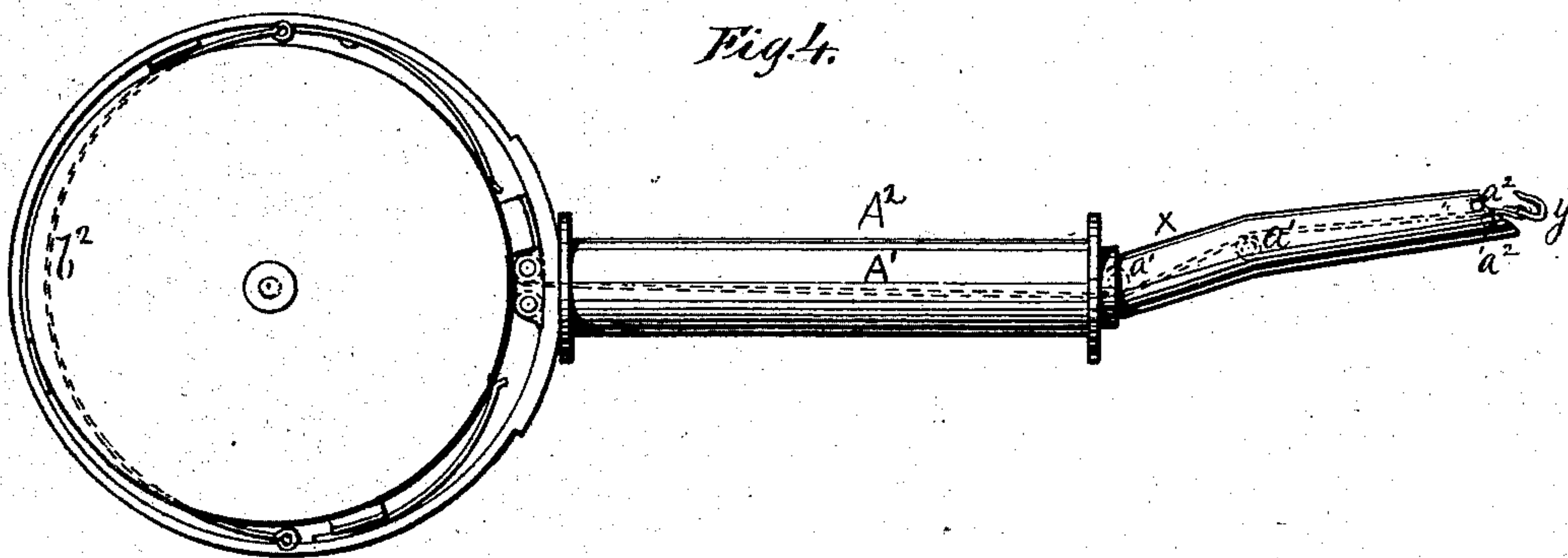
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES  
 Edwin James.  
 N. E. Gordon.

INVENTOR  
 John McNeill.  
 per J. E. F. Holmead  
 Attorney



# UNITED STATES PATENT OFFICE.

JOHN McNEILL, OF STERLING, ILLINOIS.

## IMPROVEMENT IN CLOTH-MEASURING MACHINES.

Specification forming part of Letters Patent No. **156,586**, dated November 3, 1874; application filed July 17, 1874.

*To all whom it may concern:*

Be it known that I, JOHN McNEILL, of Sterling, in the county of Whitesides and State of Illinois, have invented an Improved Machine for Measuring Cloth, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing and the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a top-plan view, the top being removed. Fig. 2 is a longitudinal sectional view. Fig. 3 is a side view. Fig. 4 is a top-plan view of a modification of Fig. 1.

The nature of my invention consists in securing, in a suitable case provided with a tube through which the measuring-cord is drawn, a flanged reel, spring-guards, and a pressure-band, the whole being combined and arranged in such manner as to securely retain the cord in proper position on the reel, and which prevents the line from being thrown over the flanges of said reel, should the same be turned in the wrong direction, and which is not unfrequently the case.

The construction and operation of my invention are as follows:

A is the case, which contains the reel, and may be constructed out of any suitable material. A' is a tube attached to the outside of the case A, and tapers from its point of attachment to its free end. B is the reel, upon which the cord or tape is wound. This reel has its axis in the top and bottom of the case A, and is formed with flanges *b b*, which extend entirely around the reel for the purpose of preventing the cord or tape from slipping off of the same. *b<sup>1</sup> b<sup>1</sup>* are spring-guards, which are riveted to the inside of the case A. The free ends of these guards rest against the flanges *b b* of the reel B, in such relative position to the cord or tape as to act as brakes on the reel to prevent it from throwing off the line when it is not drawn through the tube. *b<sup>2</sup>* is a band of thin metal, each end of which is also secured to the interior of the case near where the guards *b<sup>1</sup> b<sup>1</sup>* are fastened. The center of this band passes between the flanges *b b*, and its object is to prevent the line from being thrown off the reel should it be turned the wrong way. *a a* are two guide-rollers, located at the point of connection between the

tube A<sup>1</sup> and the case A. C is a crank for winding up the reel. D is the cord or tape, and is marked off in colors at definite distances representing halves, quarters, or eighths of yards, or one, five, or twenty yards, each color corresponding with the color of the index-plate D'. D' is an index-plate, secured to either the side or top of the case. This index-plate is laid off in spaces, each space being stained with a color, and the number of yards, &c., corresponding to the color, is indicated either above or below the same.

In Fig. 4 is shown a modification of my device. In this the band *b<sup>2</sup>*, instead of being permanently secured to the interior of the case A, has its ends curved in the form of a loop, and through said loop the screws which connect the top and bottom of the case pass, and thus secure the band. The tube A<sup>1</sup> is also slightly bent at *x*, and is provided with four extra guide-rollers, two, *a<sup>1</sup> a<sup>1</sup>*, being located at the bend of the tube, and two, *a<sup>2</sup> a<sup>2</sup>*, at the mouth of the same. The tube is also provided with a hand-roller, A<sup>2</sup>. In this modification tape is used which has the yards and divisions of a yard marked on it, in which case no index-plate is required. On the ends of both the cord and tape is secured a small hook, *y*, for the purpose of fastening the line to the inside end of the cloth in the bolt.

To measure by my device, this hook *y* is fastened to the cloth and the line run off the reel until the color on the cord corresponds with the color on the index-plate opposite to the number of yards required, or until the figure on the tape indicates the number of yards.

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

The case A, provided with the tube A<sup>1</sup>, spring-guards *b<sup>1</sup> b<sup>1</sup>*, and index-plate D', flanged reel B, band *b<sup>2</sup>*, and cord D, when the whole is constructed and arranged to operate substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN McNEILL.

Witnesses:

F. O. HEADLEY,  
D. BARD ROCK.