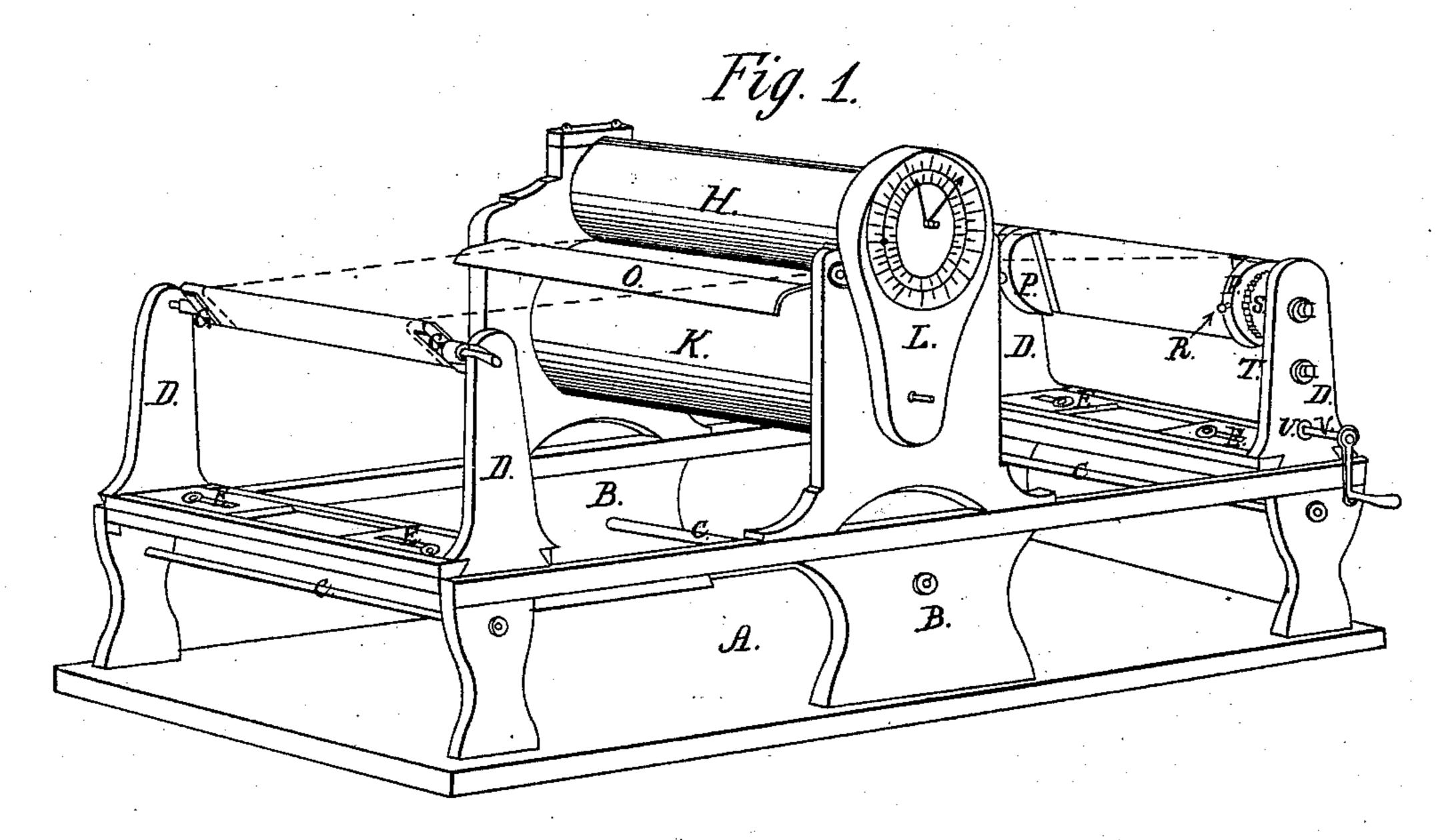
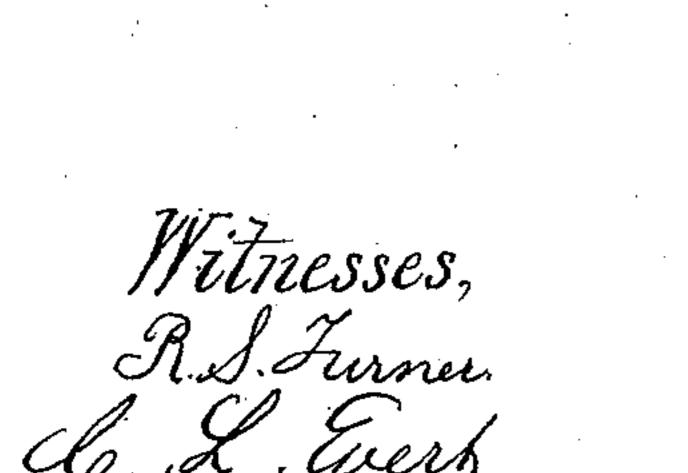
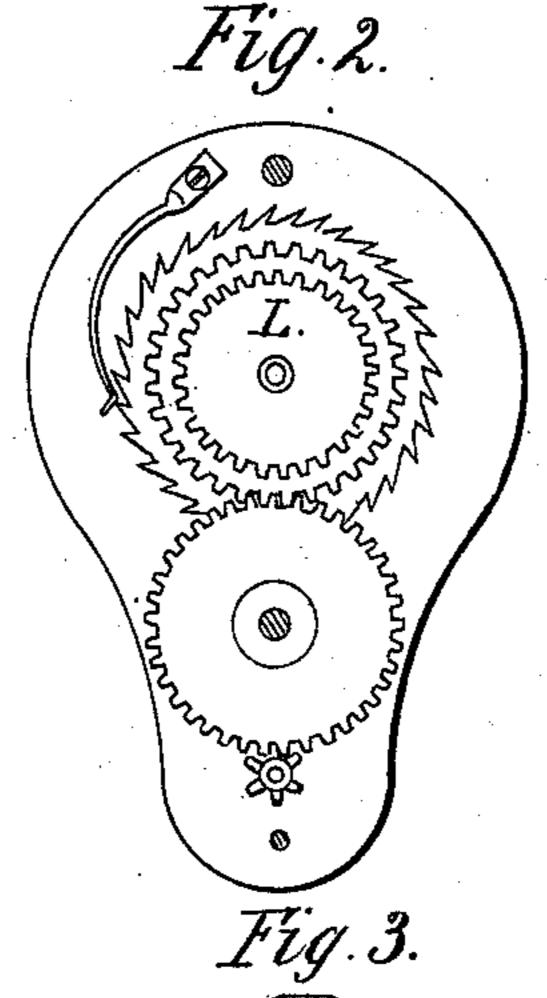
L. Hillman. Rotary Measure. Patented Aug. 10, 1869.

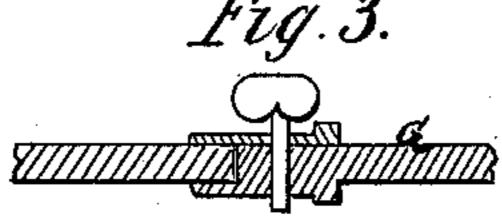


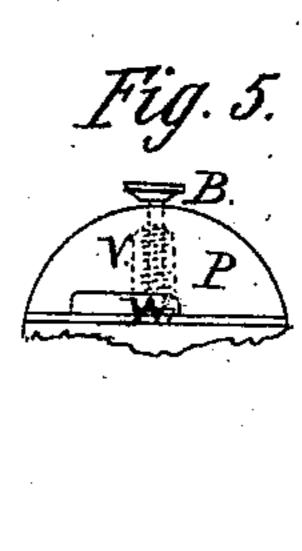
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Inventor. L. Hill wan Ju Alwandu Masson Alle and Masson Alle.

Anited States Patent Office.

L. HILLMAN, OF NEWTON, NEW JERSEY.

Letters Patent No. 93,619, dated August 10, 1869.

IMPROVEMENT IN MEASURING AND FOLDING CLOTH.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, L. HILLMAN, of Newton, in the county of Sussex, and in the State of New Jersey, have invented certain new and useful Improvements in Device for Bolting and Measuring Cloth; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a machine for bolting and measuring cloth, and in the arrangement of the devices hereafter set

forth and described.

Figure 1 is a perspective of my invention.

Figure 2 is a view of the internal arrangements of the indicator.

Figure 3 is a sectional view of the clamp.

Figure 4 shows the movable bearing of the roller. Figure 5 is a view of a portion of one of the disks, showing the spring-feet which hold the cloth.

Letter A represents the bed-plate of my device, upon the top of which is placed the frame B, extending from one end to the other, and braced by the cross-pieces C.

At each end of the frame there are two standards, D, which are secured to the slotted slides E, dovetailed between the guides, so that they can be moved back and forth.

Two of these standards have slots cut in their sides, near the top, which serve as rests to the clasps G, which hold the bolts of cloth while being measured.

These clasps are provided with thumb-screws, and are made to hold the ends of the board, around which the cloth is wrapped, and turn freely with the board in any direction.

As soon as the cloth has been unwound, the board can be removed by loosening the screws, or the standards can be moved back far enough to allow them all to be taken out at once.

Upon the centre of the frame there are placed two rollers, H and K, between which the cloth is passed, so as to be measured.

The lower one, K, is connected with the indicator L, which registers the length in yards and inches, while the upper one merely serves to press the cloth against the lower one with sufficient force to cause it to re-

volve, and is provided with the movable bearing M and spring N, so that it can adjust itself to any thickness of material.

Upon each side of the rollers there is placed a curved metal plate, O, which serves as a guide to the cloth to and from the rollers, and which is pivoted to the frame in such a manner that it can be raised and lowered at will.

Pivoted to the standards, at the farther end of the frame, there are two disks, P, which have flanges raised on their faces, so as to hold the board, around which the cloth is to be wound after being measured.

Extending downward through the periphery of these disks are the rods R, as seen in fig. 5, upon the lower ends of which are secured small flat plates, which serve as feet, W, to hold the cloth, and which can be turned in and out of the slot in the side of the disks.

Around these rods there has been placed a spiral spring, V, as shown by dotted lines, so as to press the feet downward sufficiently hard to hold the cloth securely.

Upon the back of one of these disks is secured the wheel S, which gears with the smaller one, T, which, in turn, gears with the one, U, on the end of the crank-shaft V.

Upon the face of the dial there are two circles of figures or numbers, and two hands, one of which marks the inches and the other the yards. The outer circle is intended to represent half inches, and is divided into seventy-two parts. At each revolution of the longer hand, making just one yard, the shorter one moves forward and registers it.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The combination and arrangement, upon the frame B, of the standards D D, slides E E, clasps G G, disks P P, guides O O, rollers H K, indicator L, and wheels S, T, and U, all substantially as shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand, this 25th day of May, 1869.

L. HILLMAN.

Witnesses:

OAKLY B. PELLET, MARTIN GROVER.