

No. 152,234.

Patented June 23, 1874.

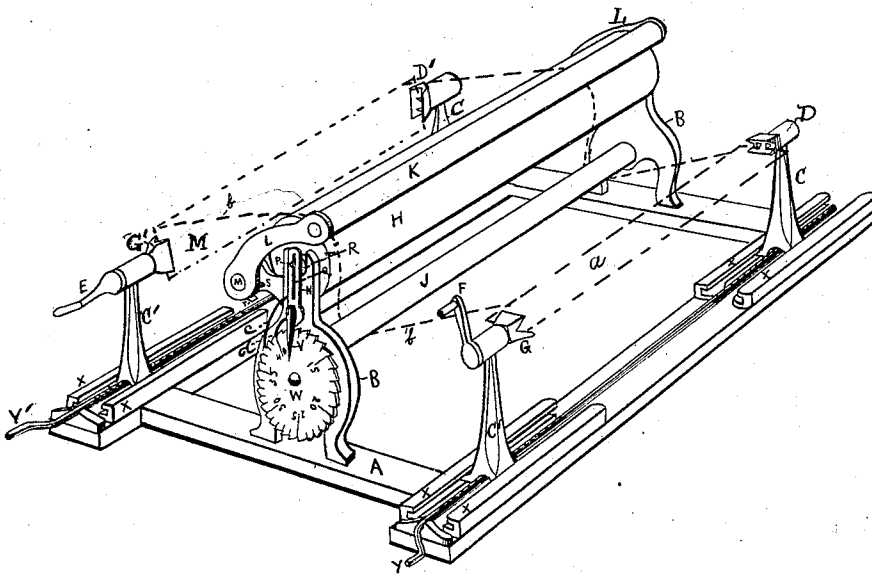


FIG. 1

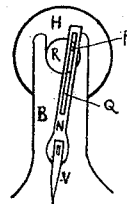


FIG 2

WITNESSES
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IMPROVEMENT IN CLOTH-MEASURING MACHINES.

Specification forming part of Letters Patent No. **152,234**, dated June 23, 1874; application filed April 14, 1874.

To all whom it may concern:

Be it known that I, WILLIAM M. KEYES, of Stanstead, in the county of Stanstead, Province of Quebec, Dominion of Canada, have invented a certain new and useful Improvement in Mechanisms for Measuring Cloth, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an isometrical perspective view of my improved cloth-measuring machine. Fig. 2, is a sectional view, showing the indicator.

Like letters refer to like parts in the different figures of the drawing.

My invention relates more especially to that class of measuring-machines which are used for measuring cloth from the cut; and consists of a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a cheaper and more effective device of this character is produced than is now in common use.

The extreme simplicity of my invention renders an elaborate description unnecessary.

In Figure 1, A is the frame or base of the machine, and B B uprights, connected by the cross-bar J, and carrying the main roller H. A gravitating friction-roller, K, is disposed in the arms L L, which are pivoted to the uprights B B at M. A stud, S, projecting from the upright B acts in conjunction with the projection T on the arm L to prevent the roller K from being thrown back too far. The side pieces of the frame A are provided with grooved runlets or ways *xx*, in which the traversing standards or uprights C C C' C' are arranged. The lower ends of these standards are fitted with nuts, in which right and left hand screws on the crank-shafts *yy* work in such a manner that when the shafts are turned in one direction the standards will be caused to approach each other, and when turned in the opposite direc-

tion, to separate. The standards C C are provided with chucks D D', fitted to revolve in sockets, and the standards C' C' with chucks, having the cranks E F. The journal R of the main roller H is provided with a crank-pin, P, Fig. 2, which works in the slot Q of the index-lever N. This lever is pivoted in a vertical position to the upright B, and is provided with a pointer or index-finger, *v*. An index-wheel, W, having ratchet-teeth on its periphery, is arranged to revolve freely on a stud or pin projecting from the standard B, and is actuated by the long pawl *c* and short pawl *d*, which are hinged to the lever N, but respectively above and below its center of motion.

From the foregoing the nature and operation of my invention will be readily understood by all conversant with such matters.

The roll or cut of cloth to be measured is wound on the board represented by the dotted lines M, and held by the chucks G' D', which are caused to grasp the board by turning the crank *y'*. The web of cloth represented by the dotted lines *b b* is then passed over the roller H, under the friction-roller K, under the tension-roller J, and around the board *a*, held in the chucks G D. If, now, the crank F is turned, the roller H will be revolved, causing the lever N to vibrate and the index-wheel W to revolve in a manner which will be readily obvious. The index-wheel should be spaced and numbered properly with yards and fractional parts of yards. The quantity of cloth necessary to start up the machine, or to reach from the roller H to the board *a* may be measured and accounted for in any usual manner, or by causing the wheel H to turn as the end of the cloth is passed over it from M to *a* the index will register the quantity. It will be seen that the cloth may be run in either direction through the machine, and that after being measured by running it through in one direction the measurement may be verified by reversing the movement and running it through in the opposite direction. In case sufficient ten-

sion is not obtained by the roller J, the cloth may be carried under another tension-roller (not shown) on the opposite side of the roller H.

Having thus described my invention, what I claim is—

In a cloth-measuring machine, the stand-

ards C C' provided with the chucks D G, and mounted on the screw crank-shaft Y, substantially as and for the purpose specified.

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Witnesses:

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