## W. HEBDON. Rotary Cloth-Measures.

No. 146,337.

Patented Jan. 13, 1874.

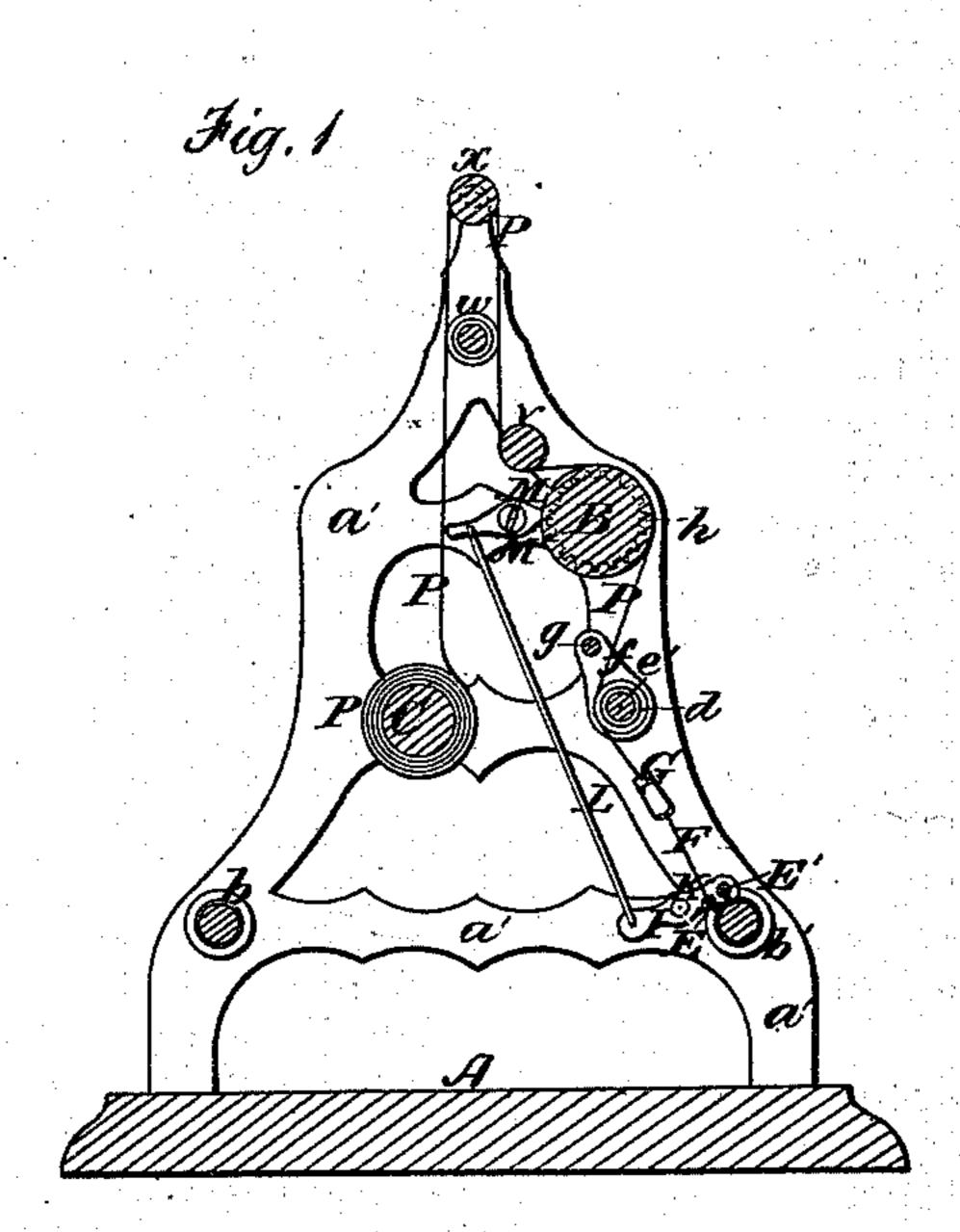


Fig. 2.

Sam & Mon Barton Jesse F Wheeler

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William Hebberght
Canul Melinght
Attorney.

## UNITED STATES PATENT OFFICE.

WILLIAM HEBDON, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN ROTARY CLOTH-MEASURES.

Specification forming part of Letters Patent No. 146,337, dated January 13, 1874; application filed May 2, 1873.

To all whom it may concern:

Be it known that I, WILLIAM HEBDON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Machines for Measuring and Examining Cloth, &c., of which the following is a specification:

Figure 1 of the accompanying drawing is a central vertical transverse section of my improved machine for measuring and examining cloth, carpets, &c. Fig. 2 is a perspective view

of spring-clamp of said machine.

The present invention relates to certain new and useful improvements on an invention for improvement in cloth measuring machines, granted to me by Letters Patent of the United States No. 90,262, May 18, 1869; the principal objects of this invention being to perfect the arrangement of the machine, so as to save time and labor, and allow the better examination of the goods.

My improvement consists, mainly, of an adjustable guiding-rod, being provided and properly held to accommodate the reception of goods of different thickness. It also consists of a toothed or other suitable spring-clutch, that is adjusted to one end of the goods, and arranged, as will be duly described, to operate a pawl or brake connecting with, so as to hold, the receiving-roller, and stop the index when the end of the cloth has reached its termina-

tion.

In the drawings, A represents a platform, to which are secured the sides a a' of the machine, at the lower portion of the front and rear of which are transverse rods b b', whose ends extend through the sides a a', and are secured to the frame by screw-nuts cc'. Above the rod b is a guide-rod, d, held to the sides a a' by screw-nuts e, and formed on the inside near the ends with collars e', between which and the sides a a' are located, so as to turn on the rod d, and be held in any desired position by means of the screw-nuts e, arms f f', the upper ends of which arms receive the ends of a  $\overline{\text{rod}}$ , g, which is thus allowed to be adjusted upward and downward to accommodate the reception of material of different thickness. Above the rod d is located a transverse receiving-roller, B.

By the above description, reference being had to the drawings, it will be seen that one end of the cloth, &c., being carried up between the guide-rods d and g, the latter of which is readily adjusted, by means of the arms ff', turning on rod g, to material of different thickness, is brought to the top of the receiving-roller B, when the index t is turned by the operator to the head point of the dial u. The material is then put under the roller v, and brought over the top roller x, and carried down and connected with the windingroller C, which, being rotated by the crank D, or otherwise, feeds along the material, which, in its passage, rotates the roller B, and operates the gear mechanism, so as to revolve the index t around the dial u, and accurately indicate the number of yards, &c., measured, the index being stopped when the end of the cloth is reached by the action of the brake M on the roller B, as above described.

By my improved arrangement, material of any thickness may be readily operated without the expense of time and labor heretofore required in adjusting the tension-regulators

to material of various thickness.

Having thus fully described my improvements, what I claim as my invention, and desire to have secured to me by Letters Patent,

1. In a machine for measuring and examining cloth, carpets, &c., a spring-clutch, G, arranged to hold one end of the cloth, &c., and connected with, so as to operate, a brake or pawl, M, and stop the roller B and index t when the end of the cloth has reached the desired position, substantially as described.

2. In a machine for measuring and examining cloth, carpets, &c., an adjustable rod, g, provided with arms ff', turning on rod d, and held or released by screw-nuts e, substantially as and for the purpose specified.

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

WILLIAM HEBDON.

Witnesses:
SAML. M. BARTON,
CARROLL D. WRIGHT.