(Model.)

W. B. GLEASON & M. J. HARRINGTON.

RIBBON AND LACE EXHIBITOR AND MEASURER.

No. 332,074. Patented Dec. 8, 1885.

Fig. 2.

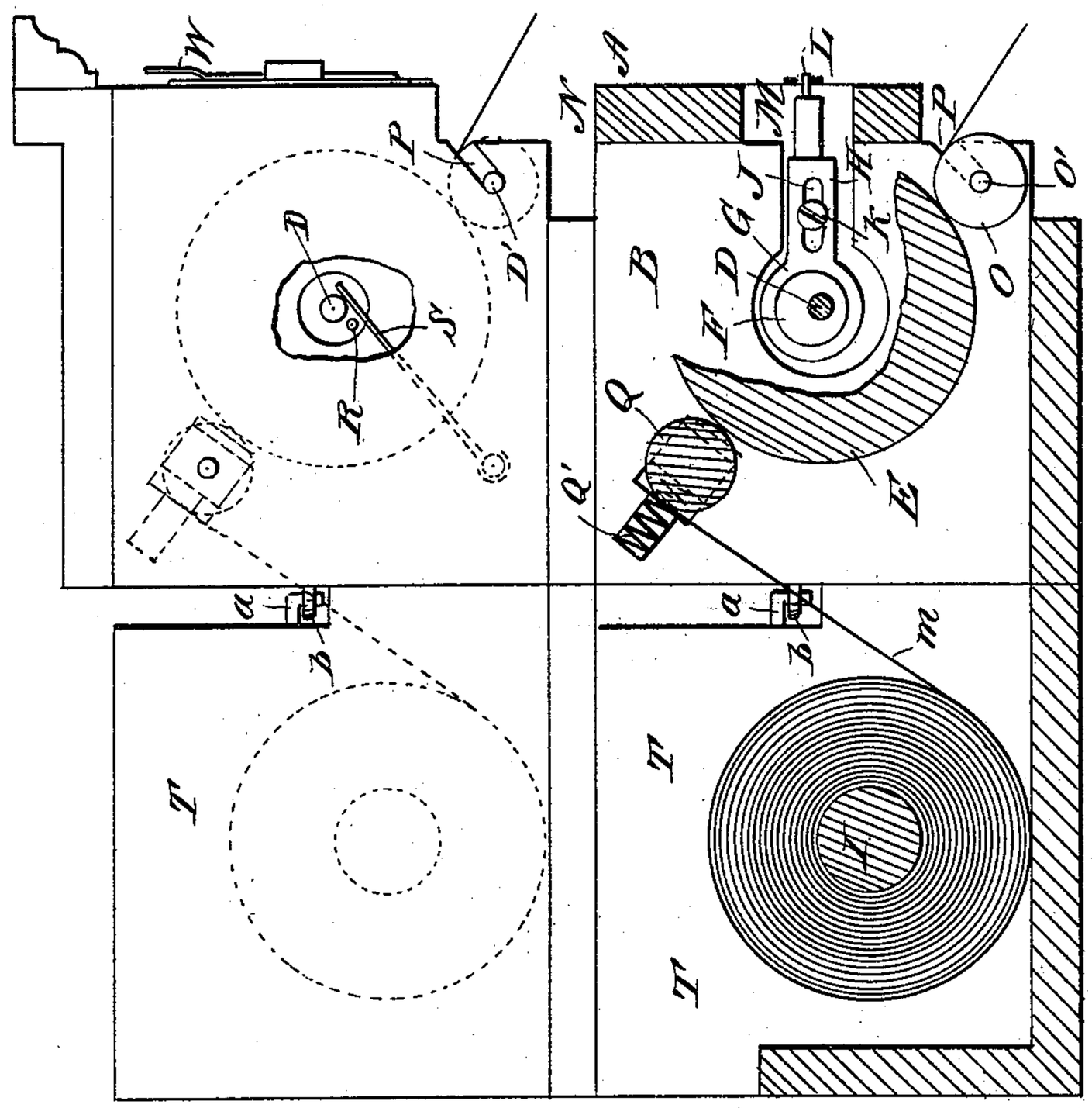
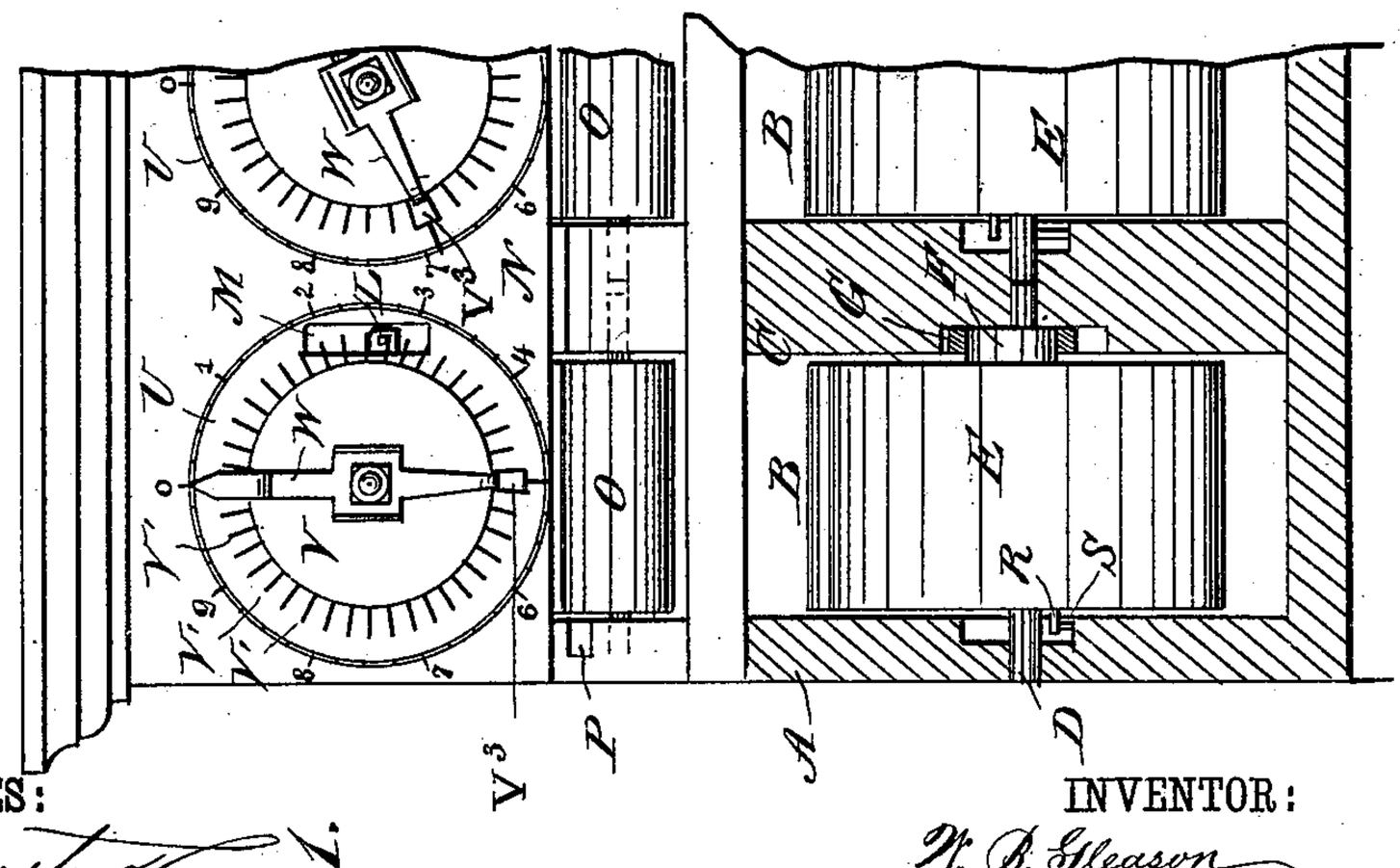


Fig. 1.



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UNITED STATES PATENT OFFICE.

WILLIAM B. GLEASON AND MILO J. HARRINGTON, OF ALBION, PA.

RIBBON AND LACE EXHIBITOR AND MEASURER.

SPECIFICATION forming part of Letters Patent No. 332,074, dated December 8, 1885.

Application filed March 3, 1885. Serial No. 157,680. (Model.)

To all whom it may concern:

Be it known that we, WILLIAM B. GLEASON and MILO J. HARRINGTON, of Albion, Erie county, Pennsylvania, have invented a new and Improved Ribbon and Lace Exhibitor and Measurer, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved box or holder for exhibiting ribbons and lace, and also measuring them automatically as they are drawn from the holder.

The invention consists in a drum or roller having an eccentric hub, of a reciprocating and swinging arm operated from the said hub, and a counting-wheel operated from the arm.

The invention also consists in parts and details and combinations of the same, as will be fully set forth hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a front view of part of our improved ribbon and lace exhibitor and measurer, parts being broken out and others in section. Fig. 2 is a side view of the same, parts being broken out and others in section.

A drawer, A, is divided into a series of compartments, B, by partitions C, and in each compartment a shaft, D, is journaled on which a drum or roller, E, is rigidly mounted, provided on one end with an eccentric hub, F, surrounded by a ring, G, formed on the inner end of arm H, having a longitudinal slot, J, through which a screw-pin, K, is passed into one side of the compartment. From the front end of the arm H a pin, L, projects through a vertical slot, M, in the front end of the drawer. A roller, O, has its pivots O′ passed into inclined notches P in the front of the box at the lower corner of the compartment. A roller, Q, is journaled parallel with the drum E at the upper rear corner of the compartment, and springs Q′, acting on the boxes in which the shaft of the roller Q is journaled, press the said roller Q against the outer surface of the roller or drum E. From that end of the roller or drum E opposite the one on which the eccentric hub F is formed a pin, R, projects, which can act on the free end of a spring-rod, S, resting against the shaft D, and secured on the side of the compartment. A box, T, is held on the back of the drawer A by hooks *a* and eyes *b*, and is to contain the ribbon-lace roll I. On the face of the box a dial, U, is secured in front of each compartment, and is divided into eighths, quarters, or halves of yards, according to the circumference of the drum or roller E. In the case shown the circumference is nine inches, and the dial U is divided into quarter-yards. On the dial U a disk, V, is pivoted, which has as many radial teeth, V′, as there are subdivisions on the dial, and which teeth project over the slot M. A hand, W, is pivoted on the middle of the disk V. Any desired number of compartments B may be formed in the box A, as many dials U being provided as there are compartments B. A pointer, V^3, projects from the edge of the disk V.

The operation is as follows: The ribbon, lace, &c., M, on the roll I in the box T is passed over the roller Q, which presses it against the drum or roller E, and then it is passed over the roller O and hangs from the front of the box, thus showing a sample of the article. The salesman pulls out the ribbon, &c., whereby the drum E is revolved once for every quarter-yard pulled out. The arm H is moved down and moves the disk V the distance of one tooth V′ as the pin L presses down on the tooth V′ below it; then the pin L is pulled back, raised slightly, moved out again and over the next tooth, and so on. The hand W on the disk V revolves with the disk and shows the number of revolutions made by the drum and the number of yards and quarter-yards of ribbon or lace pulled out. The pointer V^3 on the disk is moved with the disk, and shows the number of yards that have been measured. The hand W is turned back to zero, the said hand being held on the disk in such a manner that the friction will carry the hand around; but when the friction is overcome the hand can be moved back. The pointer V^3 is turned around with the disk V, on which it is formed, and shows the number of yards that have been measured. For instance, if first two yards have been

measured, then six and then five, making thirteen altogether, the pointer V^3 will first be moved to 2, then to 8, and then to 13. If desired, the teeth on the disk V may be formed on the back of the same, instead of on the edge. Every time the roller E makes a revolution the pin R and spring produce a click which enables the operator to determine at what time he must stop pulling out the ribbon, lace, &c.

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

1. The combination, with a drum or roller having an eccentric hub on one end, of a reciprocating and swinging arm operated by the said hub, and a toothed counting-wheel acted upon by the said arm, substantially as herein shown and described.

2. The combination, with the drum or roller E, having the eccentric hub F, of the reciprocating and swinging arm H, operated by the hub F, the toothed counting-wheel V, the pin R, and the spring S, substantially as herein shown and described.

3. The combination, with the drum or roller E, having the eccentric hub F, of the arm H, having the slot J, the screw or pin K, the pin L, and the toothed counting-wheel V, substantially as herein shown and described.

4. The combination, with the drum or roller E, having the eccentric hub F, of the reciprocating and swinging arm H, the toothed counting-wheel V, and of the hand W on the same, substantially as herein shown and described.

5. The combination, with the toothed counting-wheel V, of an arm for moving the counting-wheel, a hand held frictionally on the counting-wheel, and a pointer held rigidly on the said counting-wheel, substantially as herein shown and described.

6. The combination, with the box A, having a slot, M, in its front, of the toothed counting-wheel V on the front of the box, the roller or drum E, the arm H, operated from the said roller and projected through the slot M, to engage the teeth of the counting-wheel, substantially as herein shown and described.

7. The combination, with the drum or roller E, of the arm H, operated thereby, the toothed counting-wheel V, rotated by said arm, the roller O, the roller Q, and the springs Q′, substantially as herein shown and described.

8. The combination, with the drawer A, provided with a counting mechanism, of the box T, held on the back of the drawer, and serving to hold a roll or ribbon passed over the counting mechanism, substantially as herein shown and described.

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