J. GROSS & A. RUTH.

Improvement in Show-Cases for Ribbons, &c.

No. 132,207. Patented Oct. 15, 1872.

Fig. 1.

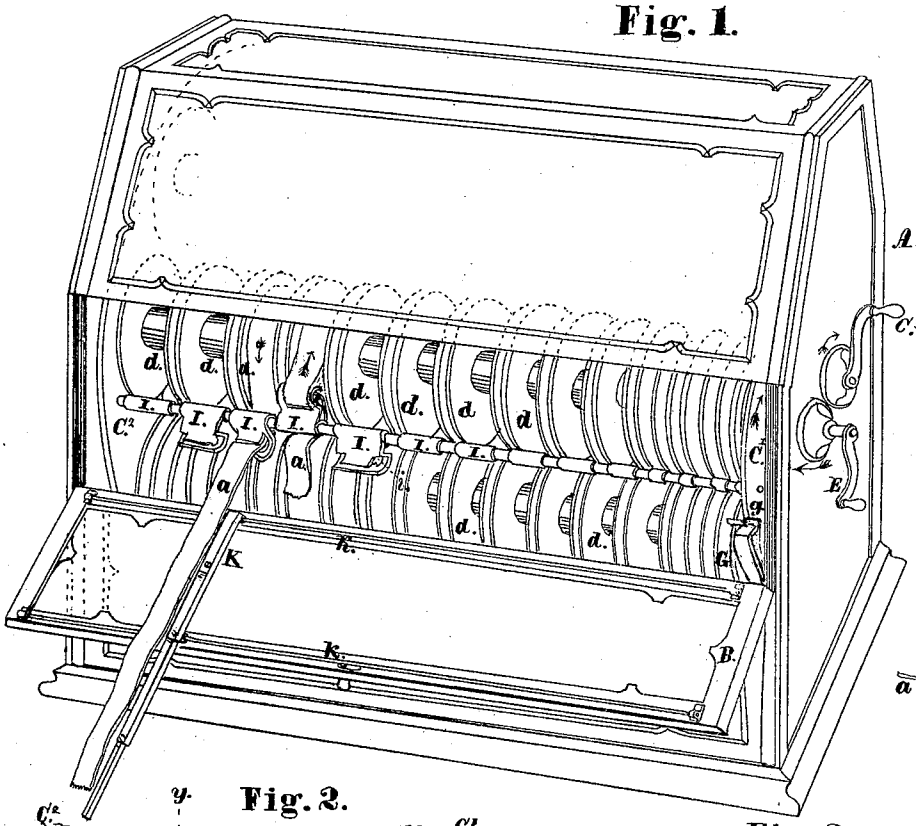


Fig. 7.



Fig. 8.

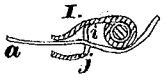
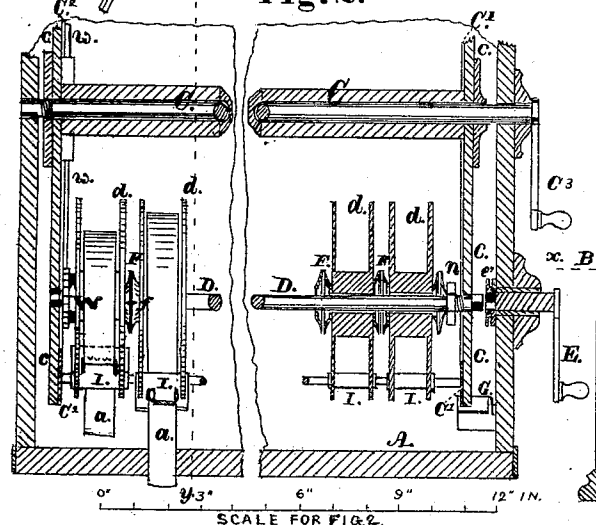
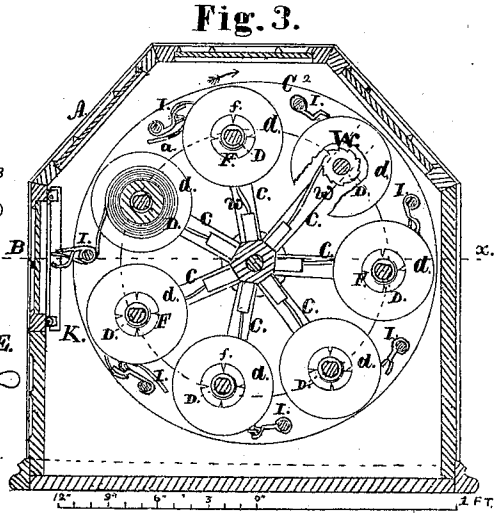


Fig. 2.



SCALE FOR FIG. 2.

Fig. 3.



SCALE FOR FIG. 3.

Figs 5. & 6.

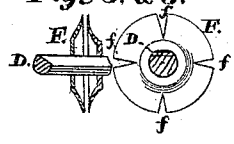
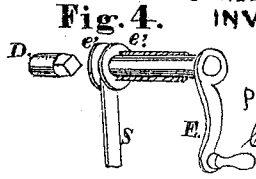


Fig. 4.



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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

JOHN GROSS AND AARON RUTH, OF DECATUR, ILLINOIS.

IMPROVEMENT IN SHOW-CASES FOR RIBBONS, &c.

Specification forming part of Letters Patent No. **132,207**, dated October 15, 1872.

To all whom it may concern:

Be it known that I, JOHN GROSS and AARON RUTH, of Decatur, in the county of Macon and State of Illinois, have invented certain Improvements in Cases for Ribbons, Velvets, Laces, Cords, &c., of which the following is a specification:

Our invention relates to an improvement in cases for ribbons, velvets, laces, cords, &c.; and consists, first, in a reel on a central shaft, and the arrangement of the parts so that each of the spool-shafts can be operated upon alternately with one key and crank, and the goods placed in or drawn from the case through the one door; second, a spring-washer between each of the spools, so that there shall be a uniform tension the whole length of the spool-shaft; third, the device for holding the goods so that the end shall not be drawn into the reel; and a measuring-stick, of a telescopic form, attached to the case, to measure the goods as they are drawn from the case.

Figure 1 is a perspective view of the case, and embodies our invention; Fig. 2 is a plan of the same, partially in section on the dotted lines *x x*, Fig. 3; Fig. 3 is a vertical transverse section on the dotted lines *y y*, Fig. 2; Fig. 4 is a perspective view of the key that operates the spool-shafts; Figs. 5 and 6 are, respectively, a transverse section and a plan of spring-washer; and Figs. 7 and 8 are sections of ribbon-holder.

A is the case, with a hinged door, B, in the front. C is the shaft of the reel, with a crank, C^3; C^1 and C^2, the rims; and *c c*, arms of the reel. D D are the spool-shafts. E is the key, with a crank attached to it that operates the spool-shafts, and has a square socket in the end in which fits the square end of the spool-shafts. By pressing the key in, it is caused to engage with the spool-shaft, and when released the spring *s*, (see Fig. 4,) between the collars *e' e'*, forces the key back, so that it is clear of the spool-shaft, and the reel can be turned and another of the spool-shafts brought in position with the key. A spring-catch, G, engages with a slot, *g*, in the rim C^1, (a slot is in the rim for each of the spool-shafts,) and holds the reel so that the key can be placed on the spool-shaft, and this spring and the slot prevent the reel from turning when the goods are drawn from the spools. *d d* are the spools which revolve on the shaft D. F is a spring-washer composed of two concavo-convex disks of sheet-metal. A small portion of the center is plane where they rest against the spools. *f f* are slots in the washers, which make them elastic, each part of the washers between the slots making springs. (See Figs. 5 and 6.) These washers are made to fit closely to the shaft D, which is flat on a small part of its circumference, so that when the goods are withdrawn the washers remain stationary on the shaft, which is held from a reverse motion by a ratchet-wheel, W, on the shaft, and a spring-pawl, *w*, attached to the arm of the reel. These washers cause a uniform tension the whole length of the shaft, which tension, when too loose, can be increased by the nut *n*. I is the device for holding the ribbons, &c., from being drawn into the reel. It is made of sheet metal, and of substantially the form shown in the drawing. The end of the goods *x* is passed through the slot *i*, (see Fig. 8,) and attached to the spool. The goods are held taut and wound on the spool by connecting the key to the shaft. When the end is reached it is dropped, the holder falls down, and the goods are caught on the teeth *j* in the slot, and the holder, as the shaft is turned, is drawn back in the position shown in Fig. 7, and to the right, as shown in Fig. 1. When it is desired to withdraw the goods, pull on the end of the same that protrudes through the slot in the holder. This throws the holder back in the position shown in Fig. 8, and the goods are clear of the teeth and can be withdrawn. K is a measuring-stick, in a telescopic form, and slides on the rods *k k*, and can be moved from spool to spool to measure the goods upon as drawn from the spools. When the door is opened and left below a horizontal position the joints of the stick slide out, as shown in Fig. 1, and slide into each other when the door is raised to be closed, as shown in Fig. 3.

The holder prevents the end of the goods from being drawn in the reel when other spools are being filled, as it holds the end of the goods and the spool stationary while the shaft revolves, the tension from the spring-washers being sufficient to cause the spools to revolve when the goods are not held by the holder. As the spring-washers do not turn on the shaft, and the shaft is held with the

ratchet, one spool can be uncoiled without disturbing the others. By this arrangement of spool-shafts on the reel all of the spools can be turned with one key, and the goods placed in and drawn from the one opening or door in the case, and the goods exhibited through the door and the top of the case, both being glazed.

We claim as our invention—

1. The combination of the reel, composed of the central shaft C, rims C^1 C^2, with the spring-catch G and notches *g g*, so that each of the spool-shafts D D can be operated with the key E, substantially as described, and for the purpose set forth.

2. The key E and spring *s*, in combination with the spool-shafts D D and spring-washers F F, substantially as described, and for the purpose set forth.

3. The spring-washers F F with the slots *f f*, in combination with the spools *d d*, shaft D, ratchet-wheel W, and spring-pawl *w*, substantially as described, and for the purpose set forth.

4. The holder I, in combination with the spools *d d*, spring-washers F F, and shaft D, substantially as described, and for the purpose set forth.

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