E. A. HAMILTON.

SERVING CABINET.

APPLICATION FILED OCT. 3, 1912.

1,101,924. Patented June 30, 1914.

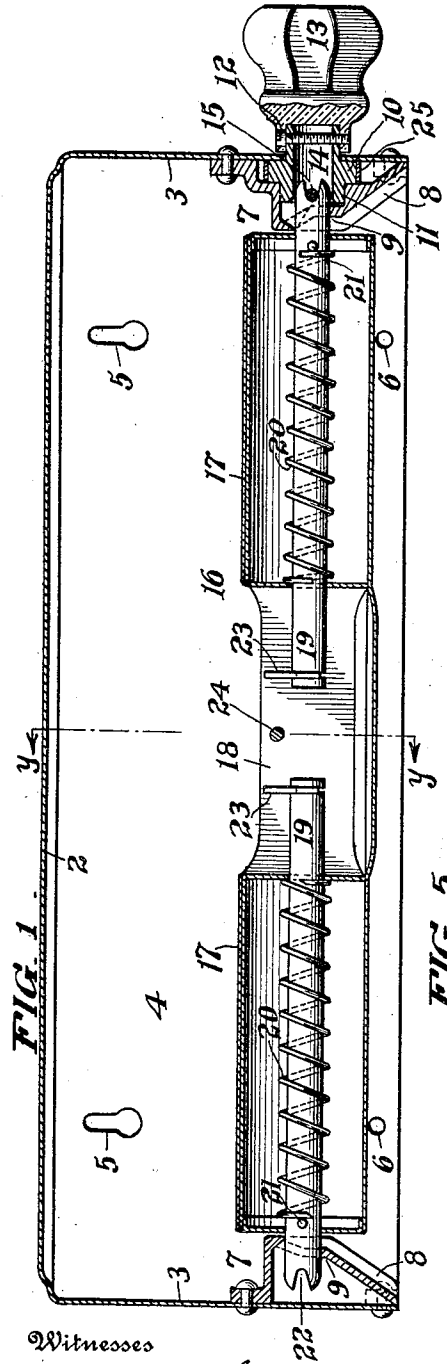


FIG. 1.

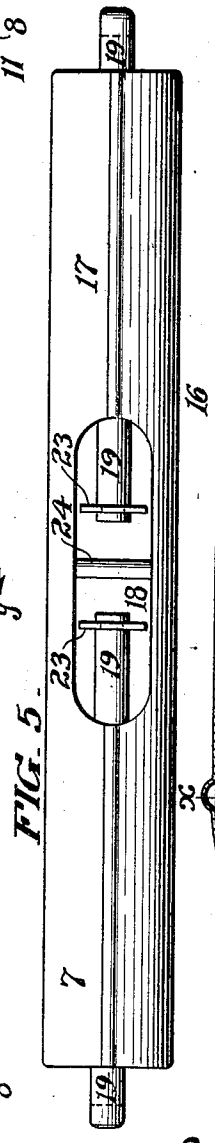


FIG. 5.

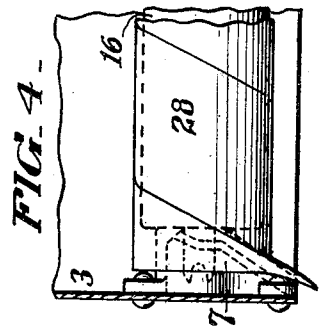


FIG. 4.

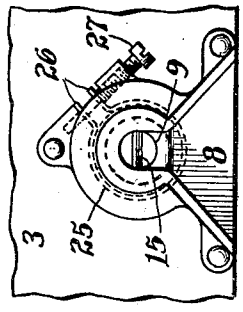


FIG. 3.

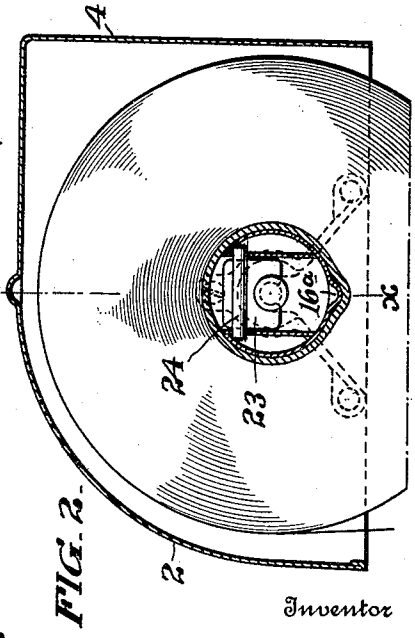


FIG. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

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SERVING-CABINET.

1,101,924. Specification of Letters Patent. Patented June 30, 1914.

Application filed October 3, 1912. Serial No. 723,715.

To all whom it may concern:

Be it known that I, ERNEST A. HAMILTON, citizen of the United States, and resident of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Serving-Cabinets, of which the following is a specification.

The object of my invention is to provide a serving cabinet or device suitable for dispensing paper towels or similar articles in rolled web form, which shall be strong and positive in operation; in which the paper roll support cannot be removed from the hand operative parts until the web has been consumed; in which the roll supporting cylinder may be readily snapped into engagement with the bearings and operating handle of the cabinet, but not disconnectible therefrom so long as the cylinder is covered by the paper roll; and in which the resistance to rotation of the handle, cylinder and paper roll may be adjusted to prevent too free unwinding of the paper web.

My object is also to provide the supporting cylinder with a destructible covering interposed between it and the paper roll, which must be ruptured before the cylinder can be released from its bearings, said covering being slidable longitudinally upon the cylinder and adapted to be split on its ends against the conical shaped bearings and guides, whereby the split covering may then be readily grasped by the fingers and torn off to expose the releasing devices of the cylinder.

My invention consists of improvements which are fully described hereinafter and more specifically defined in the claims, reference being had to the accompanying drawings, in which:

Figure 1 is a longitudinal sectional elevation of my improved serving cabinet taken on line *x—x* of Fig. 2; Fig. 2 is a cross section of the same on line *y—y* of Fig. 1; Fig. 3 is a front view of one of the pintle bearings and friction devices; Fig. 4 is a side elevation of the same with part of the cylinder in section; and Fig. 5 is a plan view of the supporting cylinder for the paper roll.

2 is a hood-shaped cabinet having closed ends 3 and back 4 but open on the bottom. The back portion may have slotted parts 5 to fit over supporting screws in a disconnectible manner and be further provided with one or more screw holes 6 for screws, to prevent the cabinet being raised to permit its disconnection from the screws which may be received in the slotted portions 5. The holes 6 are so placed that a screw driver cannot be inserted to remove the screws so long as the roll of paper is within the cabinet. In practice, this preferable hood-shaped cabinet may be substituted by any other suitable frame to support the remaining parts.

Secured to the inner faces of the end portions 3 of the cabinet are pintle bearings and guides, these comprising a casting 7 having a hole or pintle bearing 9 and an inclined and tapering guideway 8 leading to the bearing. These guideways flare outward at the bottom and provide inclined surfaces extending inward or away from the end parts 3 of the cabinet, so that the distance between the bearing portions 9 at the two ends of the cabinet are nearer together than are the flaring bottom portions of the guideways. Arranged in one of these castings 7 is a friction drum 10, having a bearing 11 journaled in the casting and a tubular extension 12 passing through the ends 3 of the cabinet, to which an operating handle 13 is secured. This friction drum 10 is also provided with a hole 14 in alinement with the bearing 9 and a transverse pin 15 extending across it to engage the slotted end 22 of the pintle 19 of the paper holding cylinder 16. Surrounding the drum 10 is a friction band 25, the ends of which are bent radially. One of the radial ends rests against an abutment 26 of the casting 7, and the other end is acted upon by a screw 27 carried by the casting, the construction being such that the friction band 25 may be tightened or loosened upon the friction drum 10 and thereby insure the desired resistance against rotation being provided for the drum and handle.

Referring now to the supporting cylinder for the paper roll: it is formed of a cylindrical body having spring actuated pintles to be withdrawn for disengagement of the cylinder with the cabinet bearings, but normally adapted to ride upon the guideway 8 and snap into bearings 9 when introducing the cylinder and its paper roll into the cabinet. The body of the cylinder comprises the end cylinder portions 17 and an intermediate portion 18 open at one side, the opening

being preferably provided with parallel sides 18ª. The portions 17 are provided with the rods 19 forming on their ends projecting pintles which are slotted or notched at 22. The rods 19 are provided with cross pins 21 and surrounded by coiled springs 20, at one end resting against the pins 21 to force the pintles outward and at the other end pressing against the inner heads of the portions 17. The inner ends of the rods 19 extend into the space 18 and are provided with transverse plates 23, guided between the side walls 18ª. The space 18 may also be provided with a cross pin 24 to limit the extent to which the rods 19 may be moved inward, so that the pintles shall not be withdrawn wholly through the ends of the cylinder. It will now be seen that the pintles are pressed outward under spring action and may be withdrawn positively by drawing the two parts 23 toward each other by pressure of the thumb and finger. The cylinder 16 is further provided with a rib 16ª on its middle portion, back of the open part 18, for creating a friction upon the destructible covering 28 about which the paper web is wrapped to form a roll 29. This covering 28 is preferably formed of cardboard and makes a sliding fit over the cylinder, and is held against rotating thereon by the rib 16ª biting into the covering. The paper web may be tightly wound upon this destructible covering and, if desired, the inner end of the web may be attached thereto by paste so that the roll of paper is positively connected with the cylinder 16 and under the control of the handle 13 which operates it.

By the employment of the destructible covering 28, the rods 19 and their parts 23 are shielded and hence the cylinder and its paper roll cannot be removed and theft thereof is prevented.

When the paper web has been wholly removed, the destructible covering 28 is grasped by the hand and forced longitudinally over the cylinder 16, its end is split and expanded by the tapered construction of the casting 7 constituting the bearing and guide for the pintle. As soon as the destructible covering 28 has been ruptured it may be readily torn off to expose the recess or space 18 to permit the finger and thumb to be inserted to withdraw the rods and pintles and allow the cylinder 16 to be removed from the cabinet.

The paper roll 29, referred to in this specification, is preferably of prepared paper in web form perforated at intervals in its length to provide towels, the friction provided by the spring 25 and friction wheel 10 being sufficient to permit of easy detachment of the hanging section of the web from the roll. By providing ample frictional resistance, the roll will not freely rotate and hence no objectionable unwinding of the web will take place. In the preferred adjustment, it will be necessary for the handle 13 to be manually turned to expose a full towel section before it can be detached; and the pull for detachment, to rupture the web at its line of perforation or weakening before rotating the roll farther. In this way, only the quantity of towels will be unwound which is specifically desired and objectionable waste will thus be prevented.

I have shown my invention in the form which I have found commercially desirable and while I prefer the same, I do not restrict myself to the details as these may be modified without departing from the spirit of the invention.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a serving cabinet, the combination of a frame having end parts, bearing parts secured to the end parts of the frame and having pintle apertures and guideways leading thereto said guideways flaring at the bottom and inclined toward each other at the top, a paper roll holding cylinder having longitudinally adjustable pintles engaging the pintle apertures and provided with means within the cylinder for withdrawing the pintles, a friction drum journaled adjacent to one of the bearing parts and provided with means for engaging and rotating one of the pintles, a friction creating band around the friction drum, and a handle for rotating the drum.

2. In a serving cabinet, the combination of a frame having end parts, bearing parts secured to the end parts of the frame and having pintle apertures and guideways leading thereto said guideways flaring at the bottom and inclined toward each other at the top, a paper roll holding cylinder having longitudinally adjustable pintles engaging the pintle apertures and provided with means within the cylinder for withdrawing the pintles, a friction drum journaled adjacent to one of the bearing parts and provided with means for engaging and rotating one of the pintles, a friction creating band around the friction drum, means for adjusting the band to adjust the resistance to rotation of the drum, and a handle for rotating the drum.

3. In a serving cabinet, the combination of a frame having end parts, conical shaped bearing parts secured to the end parts of the frame and having pintle apertures and guideways leading thereto, said guideways flaring at the bottom and inclined toward each other at the top, and a paper roll holding cylinder having longitudinally adjustable pintles engaging the pintle apertures and provided with means within the cylinder for withdrawing the pintles, said conical

shaped bearing parts being adapted to split or rupture a destructible covering longitudinally movable upon said cylinder, whereby the means for withdrawing the pintles are exposed for operation.

4. In a serving cabinet for paper in roll form, the main frame, combined with pintle bearings at its ends provided with flaring guideways for directing the pintles into the bearings and providing inclined portions, a paper-roll carrying cylinder having two longitudinally adjustable pintles extending from its ends and adapted to the bearings, springs for forcing the pintles outward, means within the cylinder for withdrawing the pintles against the action of the springs, and hand operatable means adjacent to one of the bearings for engaging the pintle and rotating the cylinder.

5. In a serving cabinet for paper in roll form, the main frame combined with a pintle bearing at one end, a second pintle bearing at the other end having a flaring guideway leading thereto, a paper-roll carrying cylinder having pintles at its ends, a spring to press one of the pintles outwardly, hand means within the cylinder for withdrawing the pintle, hand operable means adjacent to the bearing for engaging a pintle for rotating the cylinder consisting of a friction drum detachably engaging the pintle and having a handle to rotate it, and means for applying friction to the drum.

6. In a serving cabinet, the combination of a frame, a bearing located at each side thereof having a pintle aperture therein, a cylinder for a paper roll, pintles longitudinally movable in said cylinder and respectively seating in said bearings, yielding means normally holding said pintles in engagement with said bearings, means normally concealed by a covering of destructive material for withdrawing said pintles from said bearings to release said cylinder, and means adjacent one of said bearing for causing said covering of destructive material to be ruptured when it is moved toward said rupturing means, whereby said releasing means is exposed for actuation.

In testimony of which invention, I hereunto set my hand.

ERNEST A. HAMILTON.

Witnesses:
R. M. KELLY,
E. W. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."