

UNITED STATES PATENT OFFICE.

ROBERT B. WARDIN, OF COVINGTON, KENTUCKY.

REGISTER.

SPECIFICATION forming part of Letters Patent No. 534,307, dated February 19, 1895.

Application filed June 29, 1893. Serial No. 479,183. (No model.)

To all whom it may concern:

Be it known that I, ROBERT B. WARDIN, a citizen of the United States, and a resident of Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Mechanism and Advertising Apparatus for the Use of Barbers and others, of which the following is a specification.

The several features of my invention and the various advantages resulting from their use, conjointly or otherwise, will be apparent from the following description and claims.

In the accompanying drawings making a part of this application, and in which similar letters of reference indicate corresponding parts,—Figure 1 is a front elevation of a register embodying my improvements, a part of the front portion of the front casing being broken away to better show the working parts within the register. Those working parts not seen through this opening are indicated by dotted lines. Fig. 2 is a side elevation of the same register, the working parts behind the said wall being shown by dotted lines. Fig. 3 is a side elevation of one of the bearings of the shaft. Fig. 4 is an edge view (enlarged) of a compound guide and knife, or paper cutter. Fig. 5 is a detail view of the suspended lock bar, and shaft and adjacent bearing for the latter, the shaft being shown in section. Fig. 6 is an edge view of the parts shown in Fig. 5.

A indicates the casing suitably formed to include the working parts, as shown, and to provide the front portion of the register with an incline A'. The preferred form of the casing is as shown, and consists of a bottom A², a back wall A³ and a top A⁴. The lower portion of the casing is occupied by a drawer B, for the reception of the cash received. The outline of the drawer is shown by dotted lines B', B', in Fig. 2. The front of the drawer is provided with a drawer pull B³.

Within the machine is a roller or drum C on which is wound a roll of paper or equivalent fabric D. When this register is used for advertising, for it is especially designed for such a purpose, there will be printed thereon an advertisement which will be seen and to which notice will be called, as hereinafter mentioned. This drum rotates on, or prefer-

ably with a concentric shaft C', whose ends are respectively set or journaled in suitable bearings C², C³. The drum can be readily removed and as readily replaced by means of a slot C⁸, beginning at the inside of the bearing and extending through it toward the front of the register. (See Fig. 3.) This slot allows the adjacent end of the drum shaft C' to be withdrawn from the bearings and then the drum can be withdrawn. Suitable means for preventing said shaft C' from riding out of its drum are employed. A preferred, novel and very simple and useful means consists of the suspended lock bar C⁴ pivoted at C⁵ to the register, and provided with the slot C⁶. As the lock bar is suspended, and tends to hang vertically, the drum shaft C' enters the slot C⁶ and rests against or close to the end of the slot. As this slot C⁶ is inclined, and the slot C⁸ of the bearing is horizontal, the shaft C' cannot work out of place.

A novel, ingenious and simple device for causing the announcement bell to ring whenever a given portion of paper is torn off from the register is as follows: D⁷ indicates a bent lever having portions D' and D² and pivoted in portion D' at D³. The free end of the portion D² carries the bell hammer D⁴, and is adjacent to a bell D⁵, preferably located in part or in whole above the casing A, A⁴, A³, containing the drum C and the operating mechanism. On the free end of the portion D' of the lever D⁷ is attached one end of a coiled spring D⁶, whose other end is connected to a fixed part of the register. In conjunction therewith is a lever E, having short arm E' and longer arm E², this lever being pivoted at E³ to a fixed part of of the register as, for instance, the back wall thereof. The free end of the short arm E' is held to that portion M of part D⁷ which is between pivot D³ and the portion D² of lever D⁷, and is yet free to slide thereon, the preferred mode of making said connection being by looping the said end of E' around said part M.

Arms F, F, fixed to the drum C, or preferably to the shaft C', as shown, extend radially out from opposite sides of the axial center of the shaft, and as the drum is rotated each arm successively strikes the free end of the arm E² and elevates it, thus moving the arm E', which slides on part M of lever D and

depresses the latter, thus drawing the hammer D⁴ away from the bell and stretching the spring. As the arm F moves on, it leaves the arm E² and the spring retracts and throws the hammer D⁴ against the bell D⁵ and rings the latter. At the same time the lever E is moved to its first position.

The number of times the bell will be rung with a given rotation of the drum will depend upon the number of arms F, and these are to be varied at pleasure.

The free end of the arm F and of the arm E² may be straight, but each is preferably bent, as shown, in a common form of making such connection.

The paper to be used is wound upon the drum, and the latter placed in position and locked thereas aforementioned. The free end of the paper is brought up through the slot G, thence under a guide G', thence down over the front of the casing A', thence under the guide G², the lower edge of which is sharp and forms a cutting edge whereby the paper may be torn off.

In practice, the party using the paper as, for instance, a barber, pulls down a strip of paper until the bell rings one or more times as the case may be. He thus calls attention to the register and to the advertisement printed on the paper lying on the front of the register. The paper he has drawn down below he tears or rather cuts off and uses. Any cash he receives he may put in the drawer B. The foregoing operation is repeated as often as he needs paper.

The front casing A' usually has a door H, and this door may carry the guides G', G² aforesaid.

H', H' indicate the hinges of the door. By the latter, access is obtained to the parts within the register.

To remove the drum, the locking piece C⁴ is first withdrawn (swung back) out of connection with shaft C', and then the latter is withdrawn from its bearing C² through the slot C³.

The peculiar arrangement of the lever D⁷ and lever E in relation to one another, and the arm E' of lever arranged to slide on the part M of lever D⁷ affords a powerful leverage on said lever D⁷ to be exerted by the arm E' and thus enables the drum C to operate the said levers and ring the bell at a very light expenditure of power.

The slipping of the arm E' on part M makes an easy movement, and enables me to obtain extraordinary compactness for a given amount of leverage.

Attention is called to the novel and useful

construction of the lower guide G². This consists of a thin strip of metal as tin, having its side edges S, S, turned under to give it strength. One of these edges is then turned forward (see Fig. 4), and projects beyond the general edge of the guide and forms the cutter K by which the paper is cut off, in the well known manner.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination of a bell hammer D⁴, bent lever D⁷ having arm D² and arm D', pivoted at D³, and spring for retracting it, and lever E pivoted at E³ and having arm E², and arm E', whose free end slides on part M of lever D⁷, and drum having arm F arranged to engage the free end of arm E² of lever E, substantially as and for the purposes specified.

2. The combination of a bell, and hammer, and a lever D', M, pivoted at D³, and means substantially as described for enabling the same to operate the hammer, and lever E pivoted at E³ and having arm E' arranged to slide on and operate the lever D', M, and arm E², operated by the rotation of the drum C, substantially as and for the purposes specified.

3. The combination of the bell, hammer D⁴ fixed to the free end of arm D² of lever D⁷, the latter having arm D' and pivoted at D³ and tension spring D⁶ connected to the free end of arm D' and to a fixed part of the frame, bent lever E pivoted at E³, and having arm E', whose free end is looped around the part M of lever D⁷, and having arm E², and drum C, and arm F fixed on the shaft C, substantially as and for the purposes specified.

4. In a structure carrying a roller adapted to hold a roll of paper and a guide plate on to which the paper is delivered from the roll, the guide G², on the guide plate and made of thin metal, and having its edge S turned back under and then forward and projecting beyond the edge of the guide, substantially as and for the purposes specified.

5. In a structure carrying a roller adapted to hold a roll of paper and a guide plate on to which the paper is delivered from the roll, the guide G², made of thin metal, and having its edges S, S turned under, and one of said edges again turned forward, and projecting beyond the adjacent edge of the said guide, substantially as and for the purposes specified.

ROBERT B. WARDIN.

Attest:

C. J. MCDIARMID,
K. SMITH.