

July 26, 1932.

C. J. PHARE

1,869,022

REGISTER

Filed Aug. 27, 1930

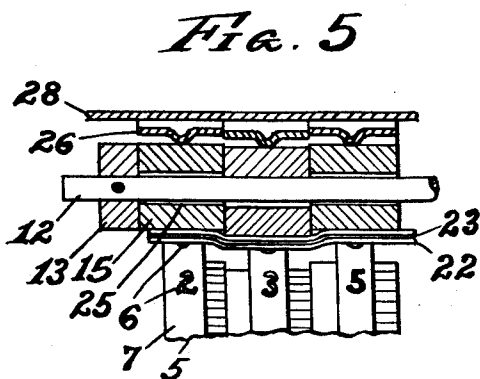
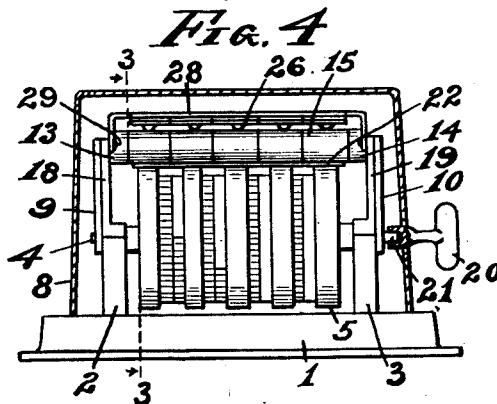
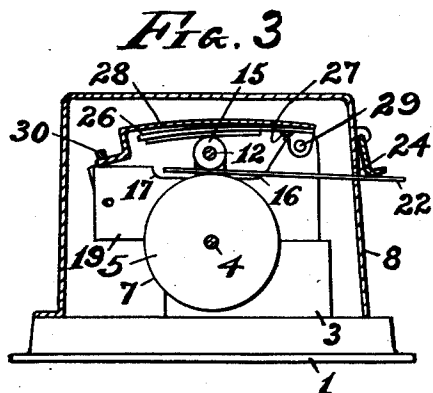
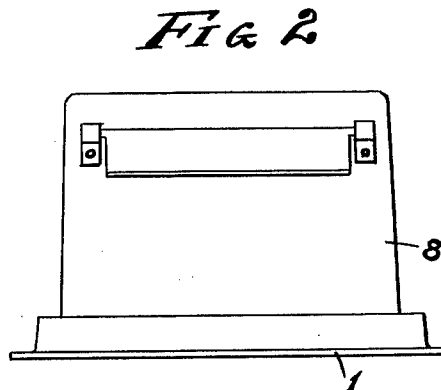
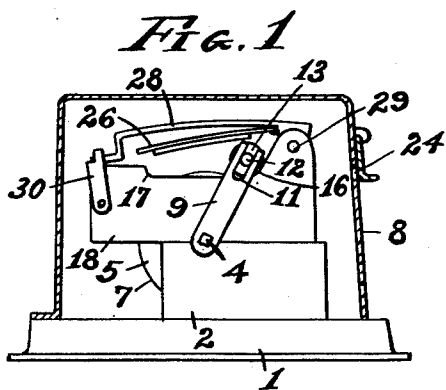
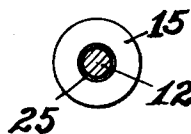


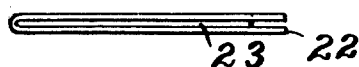
Fig. 6



Inventor

C. J. Phare

Fig. 7



By

W. Dunstan,
his Attorney

UNITED STATES PATENT OFFICE

CLINTON J. PHARE, OF CLEVELAND, OHIO, ASSIGNOR TO HOYT V. BRIGHT, OF CLEVELAND, OHIO

REGISTER

Application filed August 27, 1930. Serial No. 478,104.

This invention relates to registers and more particularly to registers for use in connection with turnstiles.

The main object of the invention is to provide a printing register with an improved roller for causing complete impressions when taking off the totals.

With the above and other objects in view, the invention will be hereinafter fully described as illustrated in the accompanying drawing, and the novel features thereof will be distinctly pointed out in the appended claims.

In the drawing, similar characters of reference are used to indicate corresponding parts.

Figure 1 is an end elevation of a register with improved printing roller constructed in accordance with my invention, the casing being broken away to show the construction,

Fig. 2 is a rear view of Fig. 1,

Fig. 3 is a sectional view taken on line 3—3 of Fig. 4, the printing roller being in its vertical position,

Fig. 4 is a rear elevation of Fig. 3, that side of the casing having been removed,

Fig. 5 is a longitudinal sectional view, on an enlarged scale, illustrating the operation of the improved impression roller,

Fig. 6 is an end view of the rod and an impression roller, and

Fig. 7 illustrates a recording strip of paper with carbon paper therebetween.

Referring to the drawing, 1 represents a base to which is fixed the sides 2 and 3 for supporting a rotatable shaft 4, carrying a plurality of rotatably mounted discs indicated by 5, and having sunken numerals indicated by 6 upon their faces 7. The discs 5 are suitably geared to be actuated by the operation of the turnstile. A suitable casing 8 is provided for the mechanism.

In order to be able to take off carbon paper impressions of the numerals 6 of the discs 5 to indicate the totals, the following described mechanism is provided. Arms 9 and 10 are fixed to the ends of the shaft 4, and the upper three ends of said arms are slotted at 11 for receiving and engaging the ends of a rod 12, which has fixed thereon adjacent each of said

arms collars 13 and 14, and therebetween are rotatably mounted a plurality of rollers indicated by 15. Said rollers are adapted to rest upon the faces 7 of the discs 5. The collars 13 and 14 are adapted to engage stops 16 and 17 of each of the side frames 18 and 19 fixed to the sides 2 and 3 for limiting the swinging movement of the rod 12. The shaft 4 is turned to move the arms 9 and 10 and thereby swing the rod 12 forwards and backwards by means of a key 20 applied to the square end 21 of said shaft. A strip of paper 22 for receiving the impressions of the numerals 6 and folded over a piece of carbon paper 23 is inserted through a slot 24 of the casing 8 and between the discs 5 and the rollers 15.

It is necessary that the rollers 15 press evenly and uniformly against the faces 7 of the discs 5 for making a complete and distinct impression of each aligning numeral 6 of said discs. Should the discs 5 not be of exactly the same diameter so that their faces 7 are not in alignment, or the rollers 15 of exactly the same diameter, the rollers would not press the paper 22 firmly and evenly against the faces of said discs. For accomplishing uniform pressure even in case of slight variation in the diameters of the discs 5, or the rollers 15, the openings of said rollers, indicated by 25, are slightly larger than the rod 12, and a separate and individual spring, indicated by 26, engage and press downwardly upon each of said rollers. The springs 26 are fixed at 27 to a cover plate 28 pivoted at 29 to the side frames 18 and 19 and held in its down position by a bail 30 engaging its forward edge. The single and separate springs 26 pressing downwardly upon each roller 15, tends to force each roller downwardly in contact with the strip of paper 22 and to press with equal and uniform pressure said paper against the face 7 of each disc 5.

In practice, the register is connected up with the turnstile and each turn thereof moves the discs 5 consecutively for giving a total number in alignment in the usual manner as will be understood. Whenever it is desired to know the total number of turns made by the turnstile or persons having

passed therethrough, the paper 22 for taking a record is inserted through the slot 24 and between the faces 7 of the discs 5 and the rollers 15. The key 20 is applied to the end 21 of the shaft 4 and by turning the key counter clockwise, the arms 9 and 10 will swing the rod 12 and the rollers 15 carried thereby under the action of the springs 26, thereby applying pressure to the paper 22 upon the faces of the discs 5 and thus recording the alignment of numerals 6. The key 20 is then turned clockwise, and the paper 22 withdrawn for inspection. As the rollers 5 float upon the rod 12 and each is pressed downwardly by a separate spring 26, a complete and uniform impression of each numeral 6 is obtained thereby giving a true and distinct total number of persons having passed through the turnstile.

The invention as illustrated and described is well adapted to accomplish the intended purpose, but it will be understood that slight changes in the details of construction may be made within the scope of the claims.

Having fully described my invention, what I claim is:

1. In a register, the combination of a plurality of discs, the discs having characters upon their faces, a rod, rollers supported by the rod, the rollers having openings larger than said rod, the rollers being adapted to press a single strip of paper against the faces of said discs, and a spring engaging the periphery of each of said rollers tending to press said rollers against said strip of paper for forcing same against the faces of said discs.

2. In a register, the combination of a rotatably mounted shaft, discs rotatably mounted upon the shaft, the discs having characters upon their faces, arms fixed to said shaft, the arms being slotted, and a rod resting within the slots of said arms, rollers upon said rod, the rollers having openings larger than said rod, the rollers being adapted to press a strip of paper against the faces of said discs, and a spring tending to press each of said rollers against said strip of paper for forcing same against the faces of said discs.

3. In a register, the combination of a rotatably mounted shaft, discs rotatably mounted upon the shaft, the discs having characters upon their faces, arms fixed to said shaft, the arms being slotted, and a rod resting within the slots of said arms, rollers upon said rod, the rollers having openings larger than said rod, the rollers being adapted to press a strip of paper against the faces of said discs, a spring tending to press each of said rollers against said strip of paper for forcing same against the face of said disc, and a key adapted to be applied to said shaft for actuating said arms to cause said rod to swing said rollers forwards and backwards.

4. In a register, the combination of a plu-

ality of discs, each disc having characters upon its face, a roller opposite the face of each of said discs adapted to co-operate therewith and press a strip of paper thereagainst, and means whereby each of said rollers is pressed bodily against said strip of paper.

In testimony whereof I affix my signature.
CLINTON J. PHARE:

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