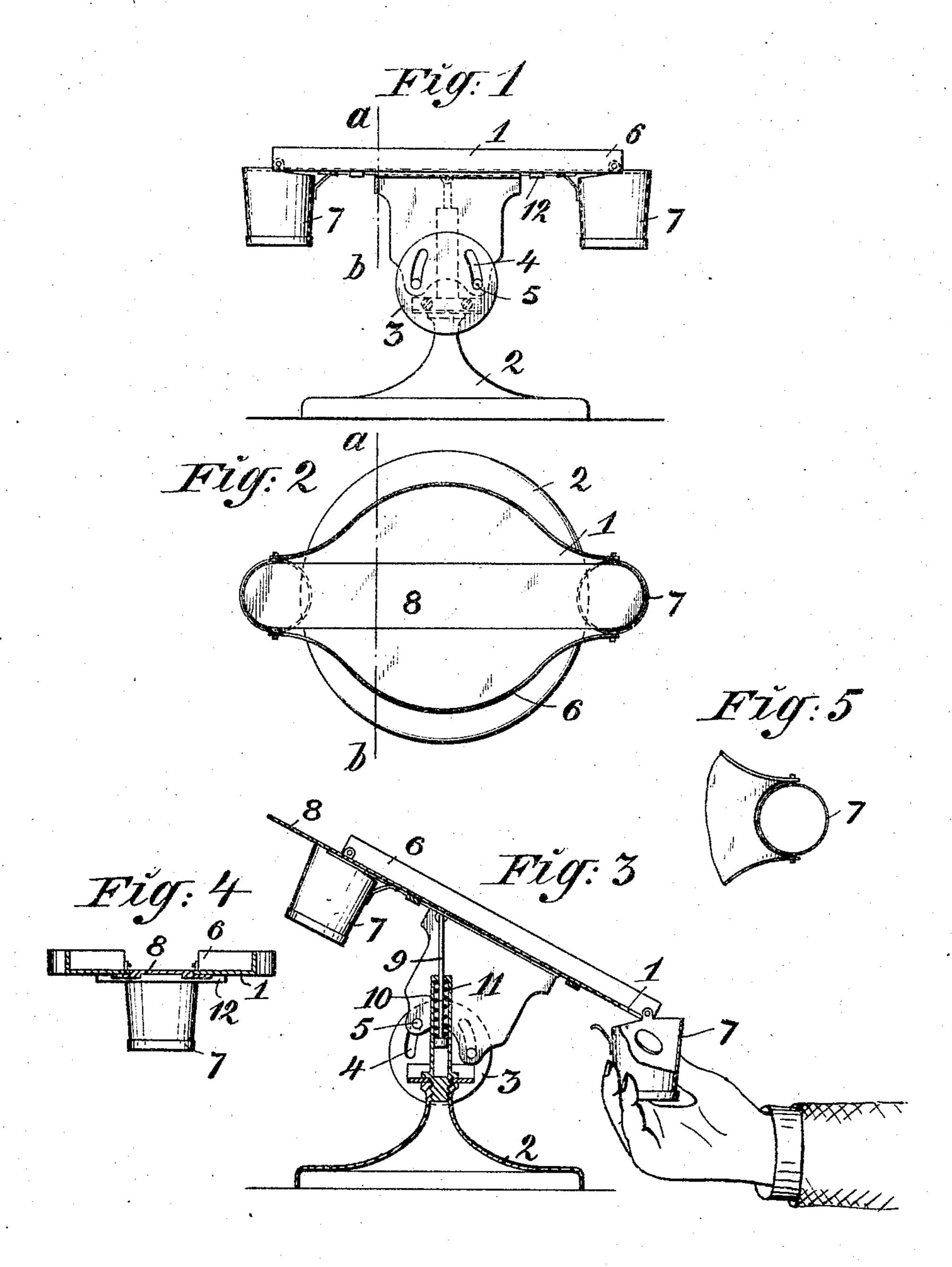
M. G. FRÖBERG.

COIN DELIVERING DEVICE.

APPLICATION FILED 00T. 31, 1904.



Witnesses Jew. Kuchul Paul Newhut Treventor. Magni G. Fröberg

United States Patent Office.

MAGNI GUSTAFSSON FRÖBERG, OF STOCKHOLM, SWEDEN, ASSIGNOR TO SAM LAGERLOFS MASKINBYRA, OF STOCKHOLM, SWEDEN.

COIN-DELIVERING DEVICE.

SPECIFICATION forming part of Letters Patent No. 785,605, dated March 21, 1905.

Application filed October 31, 1904. Serial No. 230,773.

To all whom it may concern:

Be it known that I, Magni Gustafsson Fröberg, mechanic, a subject of the King of Sweden and Norway, and a resident of Pipersgatan 20, Stockholm, in the Kingdom of Sweden, have invented certain new and useful Improvements in Coin-Delivering Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in coin-delivering devices in which the coins delivered are placed upon a tray, dish, or the like which can be made to tip in a desired direction, in consequence of which the coins lying on the tray, &c., can glide down the tray and quit it at the place desired in order to fall into a hand which is held beneath the said place.

Devices which are made in accordance with this invention are chiefly distinguished by the circumstance that at the place where the coins can leave the tray, &c., the device is provided with a tubular part or-a pipe directed downward and which preferably is pivotally attached directly to the tray.

In the accompanying drawings is shown a device made in accordance with this invention, in Figure 1 as seen from the side and in Fig. 2 in plan. Fig. 3 gives a vertical middle section of the device, which is shown in the position for delivering the coins, while Fig. 4 shows a section along the plane a b in Figs. 1 and 2. Fig. 5 is a detail.

The device shown in the drawings is so ar-35 ranged that it can deliver the coins in two directions—for example, both from a customer to a shop-assistant, and vice versa. It consists of a basin or tray 1, which can be tipped in two opposite directions and is supported 40 by a foot 2, intended to be placed on a counter, for example, and which at its top is provided with two plates 3, opposite to each other, in which there are openings or grooves 4 for pins 5, which are attached to vertical plates 45 fastened to the bottom of the tray or basin 1. When the tray or basin is in its normal position, the pins rest in the lower ends of the grooves 4. The oblong bent grooves 4 are so arranged that the one set of grooves is co-

axial with the reciprocally-coaxial pins which 50 lie in their normal positions in the other grooves. This arrangement permits the basin or tray to be tipped in the one direction or the other and to return of itself to its horizontal normal position, since the common center of gravity of the tray and the parts connected with it is situated when the tray is tipped inside the pins, around which the turning for the moment occurs. This arrangement can plainly be replaced by any other 60 suitable for the purpose.

The tray 1, which is somewhat elongated in form, is bordered at the sides by upwardbent plates or edges 6, which prevent the coins from falling off at the sides when placed 65 in the tray. These edges do not occur at the ends of the tray, so that the coins resting on the tray can, if so wished, be swept by the one hand down into the other hand, which is held under one or the other end of the tray. 7°

Under each of the two ends of the tray are pivotally suspended tubular parts or tubes 7. The middle part of the tray, stretching from the one end to the other, consists of a ruler-shaped slide 8, which can be moved freely within the 75 other parts of the tray and whose rounded ends cover the mouths of the tubes 7 when the tray assumes its normal position. (See Fig. 3.) On its under side the slide 8 is pivotally attached to a rod 9, which is guided in 80 a vertical position in some suitable way—for instance, by a cylindrical house 10, attached to the foot 3—and which (the rod) is preferably influenced by a downward-directed pressure brought about, for example, by a spiral 85 spring 11, inserted in the cylindrical house. (See Fig. 3.)

When a number of coins are to be given to a person, he grasps one of the tubes 7 with his fingers (after the money has been laid on the 9° tray 1) in the way shown by Fig. 3—that is to say, in such a way that the palm of the hand comes under the opening of the tube—after which the tube is drawn downward, and in consequence of this the tray turns upon the 95 pins 5, situated nearest to the tube affected, and assumes such a position as is shown in Fig. 3. In consequence of the rod 9, which is

connected with the slide 8, being able to move in a vertical direction only, then when the tray is turned in the way just mentioned the slide will be moved into such a position rela-5 tively to the other parts of the tray that the opening in the tube affected will be left free, (of Figs. 2 and 3,) so that the coins which, in consequence of the tipping of the tray, glide down on the same will fall through the orio fice of the tube into the hand. On the tube being thereupon released the tray, both of itself and also in consequence of the action of the spring 11, (if there is one,) returns to its normal position, as shown in Fig. 1. When the slide 8 is moved on the tray being tipped, it moves over the free tube and retains it in the position given in Fig. 3.

The parts of the tray 1 at the sides of the slide 8 are kept together by rods 12, (see Fig. 20 4,) in which there are guides for the slide. It is clear that the tray 1 can be pivotally secured to the foot 2. The device can also be so constructed that the tray shall consist of a single piece—i. e., not be provided with any 25 slide—in which case the tray must be of such a form that the openings of the tube 7 will not be covered by it. (See Fig. 5.) The invention can also be carried out in such a way that the tray, or that part of the device which 3° serves to support the coins till they fall down into the hand of the person who is to receive them, can be made to tip in more than two directions, and this can be done, for example, by hanging the tray on a compass-suspending

device, and in this form of construction the 35 tray is provided with a number of tubes corresponding to the number of directions in which the tray can be tipped. The tubes need not be pivotally hung upon the tray, but they can also be immovably attached to it, although 40 their being pivotally attached to the tray is preferable.

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

1. A coin-delivery device consisting of a support, a tray pivoted to said support, so as to be tipped in different directions, tubes pivoted to said tray at opposite sides, a slide normally covering the tubes and means for causing said slide to uncover one of said tubes when the tray is tilted.

2. A coin-delivery device consisting of a support, a tray pivoted to said support so as to be tilted in different directions, tubes piv-55 oted to said tray, a slide normally covering the upper ends of said tubes and a rod guided vertically in the support and connected to the slide so that when the tray is tilted said slide will be moved to uncover one of the tubes, 60 substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

MAGNI GUSTAFSSON FRÖBERG.

Witnesses:

HANS B. OPESSON, CARL TH. SUNDHOLM.