No. 823,956. PATENTED JUNE 19, 1906.

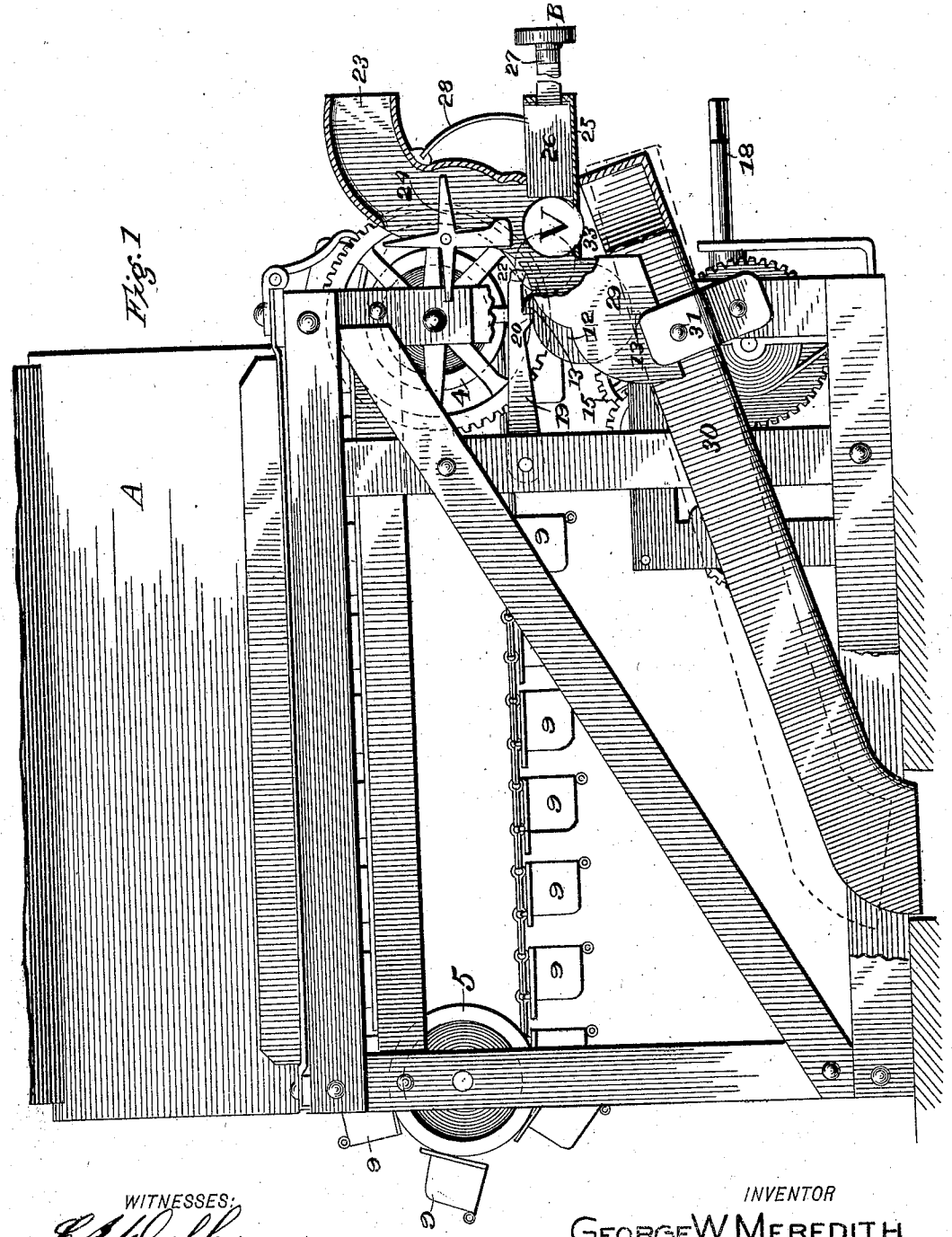
G. W. MEREDITH.

COIN CONTROLLED VENDING DEVICE.

APPLICATION FILED FEB. 23, 1906.

2 SHEETS—SHEET 1.

Fig. 1



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2 SHEETS—SHEET 2.

Fig. 2

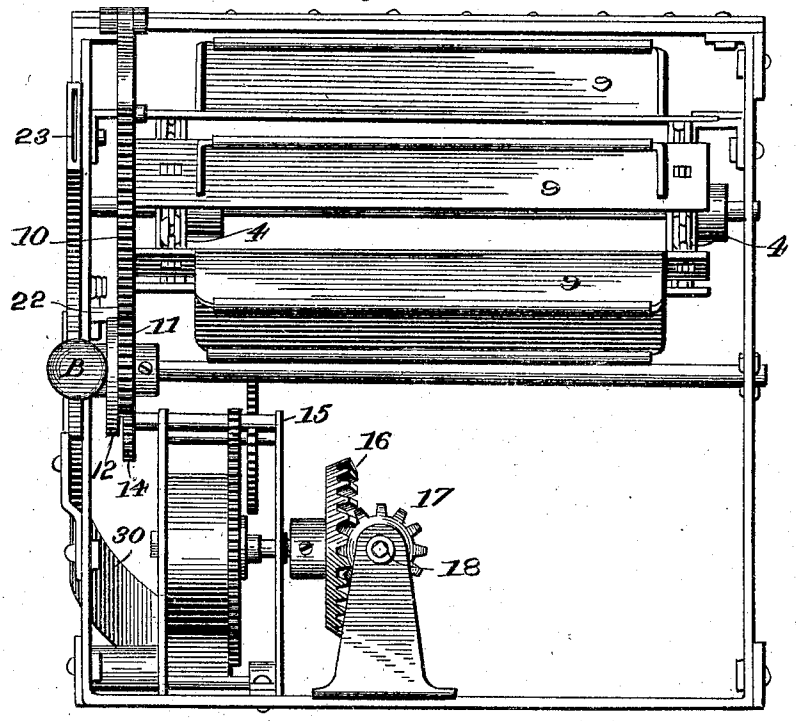
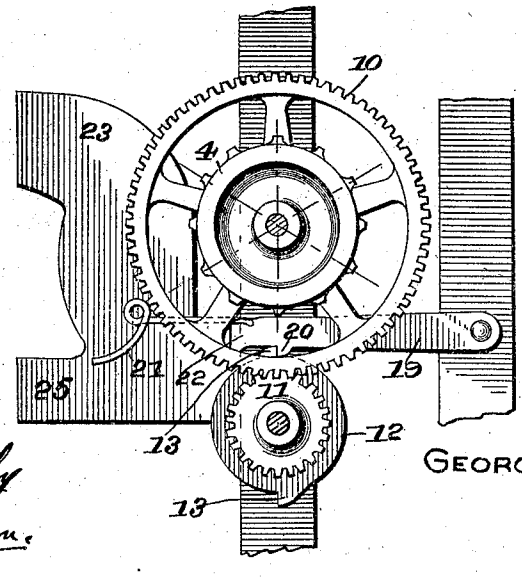


Fig. 3



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UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON MEREDITH, OF WICHITA, KANSAS, ASSIGNOR TO MILO R. MEREDITH, OF WABASH, INDIANA.

COIN-CONTROLLED VENDING DEVICE.

No. 823,956. Specification of Letters Patent. Patented June 19, 1906.

Original application filed April 11, 1905, Serial No. 255,042. Divided and this application filed February 23, 1906. Serial No. 302,592.

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON MEREDITH, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented a new and useful Improvement in Coin-Controlled Vending Devices, of which the following is a specification.

My invention relates to coin-controlled vending devices.

It is a division of a prior application for a patent for a cigar-vending machine, which was filed by me April 11, 1905, Serial No. 255,042; and it consists in the novel mechanical features whereby a deposited coin is made the intermediary through which one or more cigars held in the cells of a carrier-belt are discharged into range of possession by the purchaser.

Figure 1 is a side elevation of my coin-controlled vending devices applied to the carrier-belt containing the cells. Fig. 2 is an end elevation, and Fig. 3 is an enlarged view in detail taken on line 3 3 of Fig. 2 and looking in the direction of the arrow.

The cigars are fed through the open bottom of their box A, as seen in Fig. 1, into the cells 9 of an endless belt, which is distended about sprocket-wheels 4 5.

A spring-motor mechanism 15 16 17, Fig. 2, is wound up by shaft 18 and turns a gear 14, which meshes with a gear 11 and which in turn (see Fig. 3) meshes with a larger gear 10 on the same shaft with the front sprocket-wheels, and these latter give motion to the cell-belt to discharge the cigars whenever the motor mechanism is set into action through the coin-controlled devices. When the mechanism is at rest, these gears are locked by a detent 19, Fig. 3, pivoted at its rear end to the framework and having a tooth 20, adapted to strike against one of the ratchet-teeth 13 of the disk 12. This detent lies in the same vertical plane with the disk 12 and is pressed down by a coiled-wire spring 21 and has a laterally-projecting or right-angularly-bent end 22, Fig. 2, that lies across the top of a coin-chute and in the path of the coin. The coin-chute occupies a plane parallel to the detent 19. As the coin is forced under and past this bent end 22 of the detent, as in dotted lines in Fig. 1, said bent end 22 is lifted, and the tooth 20 of the detent being withdrawn from tooth 13 of the ratchet-disk the motor mechanism is unlocked, and it then turns the gears 11 and 10 and the cell-belt until the detent takes up against the other ratchet-tooth 13.

The coin-chute consists of four parts; the upper part 23, Fig. 1, which curves upwardly and forwardly and is the receiving-mouth. This part has pivoted in its sides a thin pronged wheel 24, which acts as a guard to prevent the insertion of a wire to surreptitiously lift the detent. One prong or arm of this wheel is weighted, so that it always gravitates to a position that closes the path to the entrance of a length of wire; but when a coin enters and strikes the gravitating arm the wheel yields and allows the coin to pass, as the descent of the next prong above the coin does not obstruct the passage of a coin, as it would the entrance of an extended length of wire. At the bottom of the part 23 of the coin-chute is another horizontal part 25, in which slides a thin plunger 26, attached to a stem 27, that bears a push-button B on its end. This plunger is normally held out by a spring 28, and when the coin is inserted it drops in front of this plunger, as shown, and then upon forcing the push-button in the plunger strikes the coin, and forcing it inwardly and upwardly the edge of the top of the coin strikes the lateral projection 22 of the detent and forcing it up releases the locking-detent and starts the delivery mechanism into action. As the coin passes under the bent end 22 of the detent the downward spring action of the detent forces the coin down into the receiving-chamber 29, and thence it passes into the trough 30, which leads down to an opening in the floor on which the vending device stands, and thence into any subjacent money-drawer. This coin-trough 30 is pivoted at 31, so that its lower end may be lifted from registration with the opening in the floor when it is to be removed therefrom, as indicated in dotted lines.

In the bottom of the part 25 of the coin-chute there is an opening 33, which forms a seat for a proper coin in front of the plunger. This opening is of such size that a smaller coin than the proper one will fall through it, and the action of the plunger will be ineffective. When a proper coin, however, rests in this seat and is forced forward by the plunger, such coin in rising from the seat will cause an

upward or lifting action against the bent end 22 of the detent to more positively lift it from its locking position.

Although intended for cigars, it will be understood that this device may be used for vending any other articles of uniform size.

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

1. In a coin-controlled vending-machine, the combination with the carrying-cells and a motor for actuating the same; of a tripping device consisting of a gear-wheel having a ratchet-tooth, a pivoted detent-arm arranged in the plane of and engaging said ratchet-tooth and having a laterally-projecting end, a coin-chute arranged parallel to the detent-arm and passing beneath said laterally-projecting end and a plunger arranged in the coin-chute and adapted to force the coin up against said laterally-projecting end of the detent and lift the same away from the ratchet-tooth.

2. In a coin-controlled vending-machine, the combination with the carrying-cells and a motor for actuating the same; of a tripping device consisting of a gear-wheel having a ratchet-tooth, a pivoted detent-arm arranged in the plane of and engaging said ratchet-tooth and having a laterally-projecting end, a coin-chute arranged parallel to the detent-arm and passing beneath said laterally-projecting end and having in its bottom a discharge-opening for improper coins said opening also forming a seat for a proper coin and a spring-plunger arranged to force a proper coin up out of said seat and against the laterally-projecting end of the detent-arm to lift the same.

3. In a coin-controlled vending-machine, the combination with the carrying-cells and a motor for actuating the same; of a tripping device consisting of a gear-wheel having a ratchet-tooth, a pivoted detent-arm arranged in the plane of and engaging said ratchet-tooth and having a laterally-projecting end, a coin-chute arranged parallel to the detent-arm and passing beneath said laterally-projecting end and having a spring-plunger for advancing the coin beneath said bent end of the detent, and a coin-trough pivoted beneath the discharge end of the coin-chute to permit adjustment of its discharge end.

4. In a coin-controlled vending-machine, the combination with the discharging devices, the coin-chute and the coin-controlled starting devices; of a coin-trough leading from the coin-chute and pivoted at its upper end below the coin-chute to permit the lower end of the trough to be adjusted as described.

GEORGE WASHINGTON MEREDITH.

Witnesses:
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G. A. GINTER.