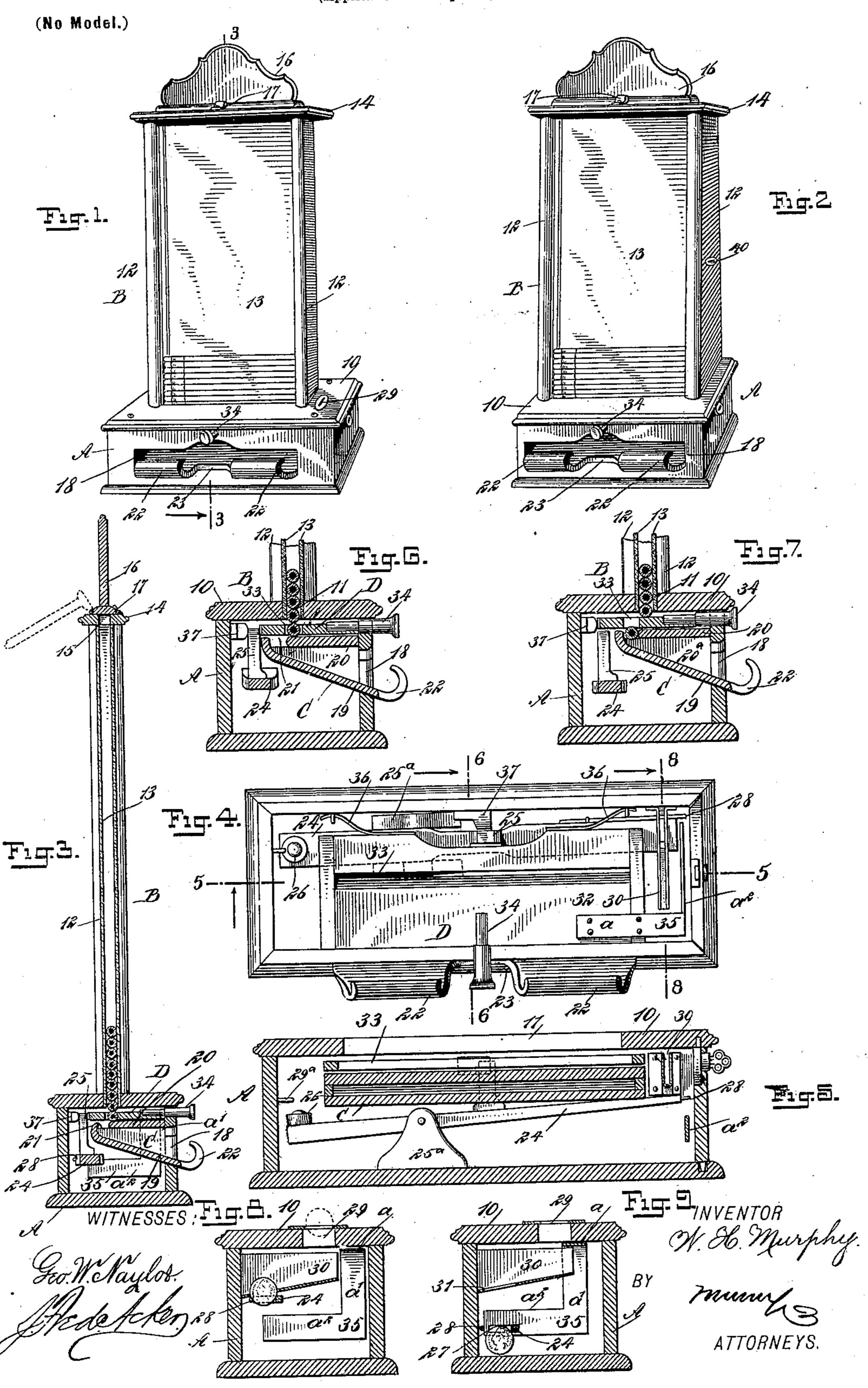
W. H. MURPHY. VENDING MACHINE.

(Application filed Apr. 21, 1898.)



United States Patent Office.

WILLIAM H. MURPHY, OF FOX LAKE, WISCONSIN.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 621,614, dated March 21, 1899.

Application filed April 21, 1898. Serial No. 678,380. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. MURPHY, of Fox Lake, in the county of Dodge and State of Wisconsin, have invented a new and Improved Vending-Machine, of which the following is a full, clear, and exact description.

The object of my invention is to provide a coin-operated machine particularly adapted for distributing pencils or articles of like

to type.

Another object of the invention is to construct a machine of this character which will comprise but few parts and which will be accurate in operation and simple, durable, and economic in its construction.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and

pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the im-25 proved machine adapted to be placed upon a counter or other horizontal support. Fig. 2 is a perspective view of the machine adapted to be hung from a wall or other perpendicular support. Fig. 3 is a longitudinal vertical 30 section through the machine, taken substantially on the line 3 3 of Fig. 1, the parts being shown in their normal position. Fig. 4 is a plan view of the interior of the base, the top having been removed. Fig. 5 is a longi-35 tudinal vertical section through the base on the line 5 5 in Fig. 4. Fig. 6 is a transverse vertical section through the base and a portion of the receptacle for merchandise, the parts being in normal position, the said sec-40 tion being taken substantially on the line 66 of Fig. 4. Fig. 7 is a transverse section taken on the same line as Fig. 6, the parts being in position to admit of the discharge of merchandise. Fig. 8 is a transverse section taken 45 substantially on the line 8 8 of Fig. 4, the parts of the machine being in normal position; and Fig. 9 is a section similar to Fig. 8, illustrating the coin-operated lever in position to admit of the discharge of merchan-50 dise.

The base A is of box-like construction and | rear longitudinal edge of the lever. The is provided, preferably, with a removable top | weight serves to normally hold the coin-re-

10, in which top, at the center, a longitudinal opening 11 is made, and upon the top of the base a receptacle B for the pencils is erected, 55 the interior of the receptacle being in communication with the slot 11 in the base. The receptacle B preferably consists of side pieces 12, in which transparent panes 13 are introduced, a top 14 having an opening 15 therein, 60 through which the pencils are introduced into the receptacle, and a cover 16 for the upper opening 15, which cover is usually hinged and is held over the inlet-opening 15 by means of a latch 17 of any approved construction. The 65 cover is usually provided with an attached or integral sign-board or panel, as illustrated.

An opening 18 is made longitudinally in the front of the base, as shown in Figs. 1, 2, 6, and 7, and a portion of a discharge-chute C 70 extends through the opening 18. This discharge-chute, as shown in Figs. 3, 6, and 7, consists of a combined bottom and back 19, inclined in direction of the lower wall of the opening 18, through which the said combined 75 bottom and back passes, a top 20, and suitable end pieces 20°. At the rear upper end of the discharge-chute a longitudinal slot 21 is made in the top 20 of sufficient dimension to admit of the passage of a pencil or other merchandise 80 to be delivered into the said chute. That portion of the chute which extends through the opening 18 in the base is curved upwardly, as shown at 22, in order to retain the pencil delivered from the machine in position to be 85 readily removed by the purchaser, and in order that the pencil may be readily grasped a recess 23 is made in the projecting portion 22 of the chute. The chute is fixed to an interior wall of the base in any suitable or ap- 90 proved manner, and the chute is of less length than the length of the base, a space intervening the end walls of the base and the ends of the chute, as shown in Fig. 4.

A lever 24 is located near the back of the 95 base, extending longitudinally thereof. This lever is provided at or near its center with an upwardly-extending post 25, and at one end the lever is provided with a weight 26, while at the opposite end of the lever an opening 100 27 is made to receive a coin—a penny, for example—the opening extending through the rear longitudinal edge of the lever. The

621,614

ceiving lever uppermost and the post 25 in a position to extend some distance beyond the top of the chute C; but the weight is overbalanced by the weight of the coin that is to 5 be placed in the slot of the lever. The coin is temporarily retained in the slot 27 of the lever by a spring-arm 28, which crosses the open end of the slot and extends beyond the slotted end of the lever, as illustrated. The 10 coin is introduced into the base through an opening 29, usually made in the top thereof at one side of the receptacle, as shown in Figs. 1, 8, and 9, and immediately below the opening 29 a coin-receiving chute 30 is located, 15 having a tapering bottom and an opening 31 in the bottom, adapted to register with the slot 27 in the lever, and normally the slotted end of the lever is held in engagement with the bottom of the coin-receiving chute by 20 means of the weight 26. The upward movement of the weighted end of the lever is limited by a pin 29a, (shown in Fig. 5,) and the lever 24 is fulcrumed upon a suitable bearing 25°, secured to the bottom of the base.

A slide D is located upon the top of the discharge-chute C. This slide consists, preferably, of a flat body portion 32, provided with a longitudinal slot 33 and with a knob 34, extending out through an opening at the front 30 of the base. A trip-arm 35 is attached to one end portion of the slide. This trip-arm is of angular construction and comprises a horizontal member a, which is attached to the top of the slide and extends beyond the end 35 of the slide adjacent to the coin-receiving chute 30, a vertical member a', and a second horizontal member a^2 , which extends in the direction of the lever 24. Springs 36 are attached to the rear of the slide, having guided 40 bearing against the rear wall of the base, and a stop or bearing block 37 is secured to the rear wall of the base immediately back of the post 25 of the lever 24 when the said post is in its normal position. When the post is 45 in its normal position, the rear end of the slide will engage with the post 25 and the slide cannot be pushed rearward, but the lowermost pencil will lie in the slot 33 of the slide, resting on the top 20 of the discharge-50 chute C, as shown in Fig. 6.

When a coin is dropped in the coin-receiving chute, the coin will enter the slot 27 in the lever 24, as shown in Fig. 8, and will bear down that end of the lever, as illustrated in 55 Fig. 9, carrying the post 25 away from the stop-block 37 and below the under face of the slide, as is shown in Fig. 7, whereupon the slide may be pushed backward, compressing its springs 36, and the pencil that is contained 60 in the slot 33 of the slide will be delivered to the inlet-opening in the discharge-chute, as illustrated in Fig. 7, and as the slide is carried rearward to deliver a pencil the lower horizontal member a^2 of the trip-lever will 65 engage with the free end of the spring-rod 28, holding the coin in the lever, and will

force the rod away from the slot, permitting

the coin to drop to the bottom of the base, whereupon the lever will rise again at its coin-receiving end and the post 25 of the le- 70 ver will be again brought in position to prevent the rearward movement of the slide, such action occurring as soon as the slide is released. A drawer may be provided for the reception of the coins or one end of the base 75 may be made removable, being usually secured by a padlock or its equivalent.

When the device is to be suspended from a wall or other support, the coin-receiving opening 40 is preferably located in one side 80 of the receptacle, being placed in suitable

communication with the chute 30.

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

1. The combination, with a base, a receptacle for merchandise carried by the base, being in communication with the interior thereof, and a discharge-chute located within the base and extending out beyond said base, the 90 said chute being provided with an inlet-opening at its upper rear portion and with an outlet at its outer portion, of a slide mounted between the upper portion of the chute and the said receptacle, the slide being provided 95 with a pocket normally closed but capable of registry with the inlet of the chute, a lever weighted at one end and provided with a coinreceiving slot at the opposite end, the slide extending through one side of the lever, and 100 a retaining-strip crossing the slotted portion of the lever, a stop carried by the lever, being normally held in the path of the slide, and means, substantially as described, for tripping the retaining-strip and releasing the 105 coin held thereby, as and for the purpose specified.

2. The combination, with a hollow base, a merchandise-receptacle located above the base, being in communication with the inte- 116 rior thereof, and a discharge-chute located within the base and extending at one of its ends out beyond the base, the chute being provided with an inlet at its top and with an outlet at its extended end, of a slide adapted 115 to receive merchandise, and arranged to alternately receive merchandise from the receptacle and to deliver the same to the said chute, a coin-operated lever, a stop carried by the lever normally in the path of the slide, 120 and means for releasing the coin from the said lever by the movement of the said slide, substantially as and for the purpose specified.

3. In a vending-machine, the combination of a delivering-slide, a lever provided with a 125 post normally engaging the slide to stop the movement thereof, the lever being actuated by a coin and having a spring-rod serving to hold the coin on the lever, and a trip-arm carried by the slide and serving to engage the 130

spring-rod to dislodge the coin.

4. In a vending-machine, the combination with a base and a merchandise-receptacle mounted thereon, of a chute in the base, a

delivering-slide mounted above the chute to move the merchandise thereby, a lever having a post normally engaging the slide to stop the movement thereof, the lever being actuated by a coin, a spring-arm carried by the lever and serving to retain the coin on the lever, and a trip-arm carried by the slide and serving to move the spring-arm to dislodge the coin.

of a delivering-slide, a lever mounted adja-

cent to the slide and serving normally to stop the movement of the slide, the lever being actuated by a coin, a spring-arm carried by the lever and serving to retain the coin on the lever, and a trip-arm carried by the slide and serving to move the spring-arm to dislodge the coin.

WILLIAM H. MURPHY.

Witnesses;
F. L. HAWLEY,
JOHN EGAN.