Feb. 14, 1928. 1,659,065

W. A. WEIGAND

DISPENSING DEVICE

Filed Aug. 2, 1926

Fig 1

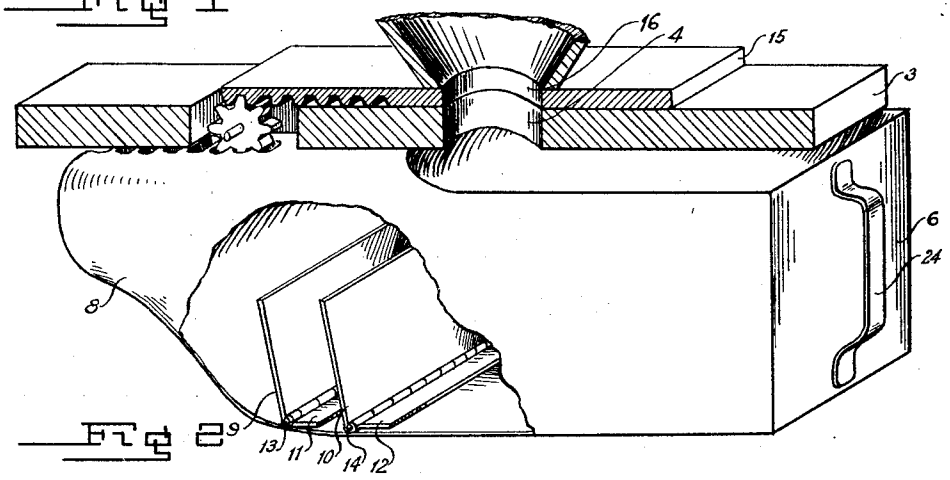


Fig 2

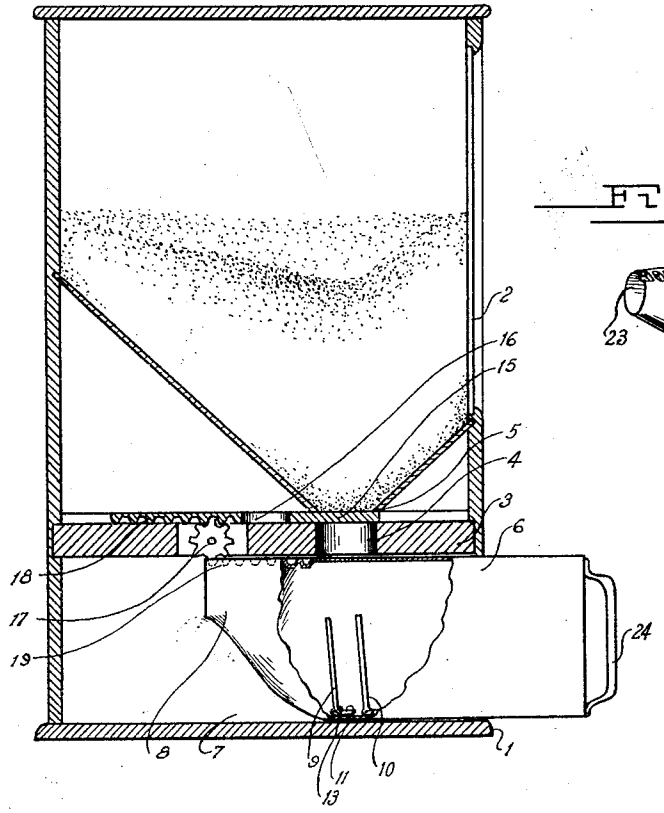
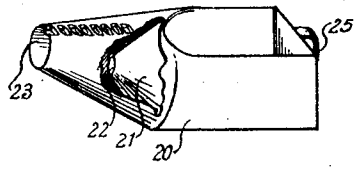


Fig 3



INVENTOR

W. A. Weigand

BY

B. F. Funk

ATTORNEY

Patented Feb. 14, 1928. 1,659,065

UNITED STATES PATENT OFFICE.

WILLIAM A. WEIGAND, OF WICHITA, KANSAS.

DISPENSING DEVICE.

Application filed August 2, 1926. Serial No. 126,732.

This invention relates to dispensing receptacles in which a hopper or container is employed to receive a quantity of material, which may be fractionally released into a scoop-like drawer below it. The discharge of the material from the hopper may be effected by a sliding valve actuated by the drawer in such manner that when the drawer is within the drawer space, communication will be established between the hopper and the drawer, but when the drawer is withdrawn or partially withdrawn communication between the hopper and the drawer will be cut off. Thus measured quantities of merchandise can be dispensed from the hopper, an advantage being that the merchandise may be kept fresh in the hopper and protected from dust, dirt and deleterious matter.

The novel construction of my invention will be clearly apparent by reference to the following description in connection with the accompanying drawing in which:

Fig. 1 is a fragmentary perspective sectional view of the lower part of the hopper, the base with its drawer space, the slide valve and the operating mechanism therefor.

Fig. 2 is a longitudinal sectional view through the dispensing device, and

Fig. 3 is a longitudinal perspective view through a modified form of drawer.

Referring now to the drawings by numerals of references, 1 designates the base of the dispensing device supporting a container or hopper 2, the front wall at least of which is transparent so that the contents of the hopper will be visible. The base is separated from the hopper by a horizontal partition 3 provided with a through opening 4 which is in register with the constricted lower end 5 of the hopper so that the merchandise may gravitate from the hopper into the drawer 6 receivable within the space 7 in the base 1. The drawer 6 is scoop shaped with an open top and a substantially conical discharge end 8 so that the contents of the scoop may be conveniently discharged into a paper sack or other container designed to receive it. It is obvious that the amounts of coffee or other merchandise delivered from the hopper into the scoop-shaped drawer will vary, that is more coffee may discharge into the drawer from time to time than will be transferred to the bag. It is desirable to get rid of the coffee left in the scoop during the next succeeding operation so I insure that the left-over coffee will be in the anterior end of the scoop before the scoop is again introduced into the space 7. In Figures 1 and 2 this is accomplished by providing the two baffles 9 and 10 hinged at the juncture of the stop lips or flanges 11 and 12 with the baffles as indicated at 13 and 14. By hinging the baffles so that they may tilt or yield toward the funnel shaped end 8 any coffee remaining in the scoop shaped drawer may be caused to pass into that part of the scoop in front of the baffles so that it will pass into the sack or scale pan the next time the contents of the scoop is discharged into the sack or scale pan. Therefore it will be apparent that the members 9 and 10 constitute non-return baffles, their rearward movement being stopped by the right angular projections 11 and 12 contacting with the floor of the scoop.

It is desirable that communication between the hopper and the scoop-like drawer be cut off when the scoop-like drawer is withdrawn so I have provided a sliding valve 15 beneath the hopper which rests upon the top of the base. The slide 15 has a hole 16 in it, which registers with the opening 4 in the base but which can be shifted out of register with said opening by the drawer 6. In order to effect the shifting of the slide I provide a pinion 17 in the base, the teeth of which mesh with teeth of a rack 18 at the bottom of the slide and with teeth of a rack 19 in the top of the forward part of the scoop so that when the scoop or drawer is introduced into the drawer space the teeth of the rack 19 will rotate the pinion in a clockwise direction to move the slide 15 toward the front of the hopper 2 to bring the openings 4 and 16 in register to permit the coffee to gravitate from the hopper into the scoop or drawer.

From the foregoing it will be seen that the coffee or similar merchandise may be visible through the container and that it may be dispensed in measured quantities through the medium of the scoop or drawer although it is to be understood that the scoop in no wise takes the place of a scales but merely approximates the amount to be delivered, for example a pound. It will also be apparent that old and stale coffee will not be trapped in the scoop or drawer because the "left over" coffee will be the

first to be discharged from the scoop because at the end of each discharge from the scoop or drawer.

In Fig. 3 I have shown a slightly modified form of scoop 20 in which the baffle consists of a cone 21 slightly in advance of the longitudinal center of the scoop with its opening 22 in line with the constructed end of the scoop that the "left over" coffee will be trapped in the space 23 in front of the cone-shaped baffle 21.

The scoop or drawer 6 has a suitable handle 24 and a similar handle 25 is provided for the scoop 20.

What I claim and desire to secure by Letters Patent is:—

1. A dispensing device, comprising a hollow base, a removable drawer in the base, a hopper carried by the base having a discharge opening in its lower end, a horizontal slide interposed between the base and the hopper, provided with an opening adapted to be brought into and out of register with the opening in the base, and means actuated by the drawer for actuating the slide.

2. A dispensing device, comprising a hollow base, a removable drawer in the base, a hopper carried by the base having a discharge opening in its lower end, a horizontal slide interposed between the base and the hopper, provided with an opening adapted to be brought into and out of register with the opening in the base, teeth on the slide, teeth on the drawer and a pinion interposed between the teeth on the slide and the teeth on the drawer and in mesh with both, so that lengthwise movement of the drawer will impart movement to the slide.

3. A dispensing device, comprising a hollow base, a removable drawer in the base, a hopper carried by the base having a discharge opening in its lower end, a horizontal slide interposed between the hopper and the base, provided with a through opening adapted to be brought into register with the opening in the hopper, and connections between the drawer and slide whereby movement of one will impart movement to the other to alternately cause the opening in the slide to move into and out of register with the opening in the hopper.

4. A dispensing device, comprising a hollow base, a removable drawer in the base, a hopper carried by the base having a discharge opening in its lower end, a horizontal slide interposed between the hopper and the base, provided with a through opening adapted to be brought into register with the opening in the hopper, and geared connections between the drawer and slide whereby movement of one will impart movement to the other to alternately cause the opening in the slide to move into and out of register with the opening in the hopper.

In testimony whereof I affix my signature.

WILLIAM A. WEIGAND.