

J. J. DOBES.
DISPENSING DEVICE.
APPLICATION FILED APR. 8, 1911.

1,017,856.

Patented Feb. 20, 1912.

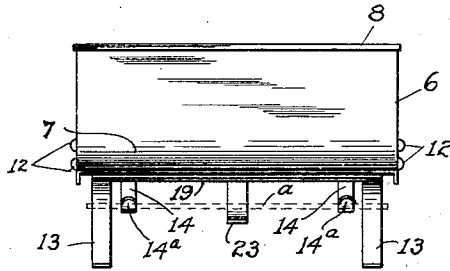


FIG. 1

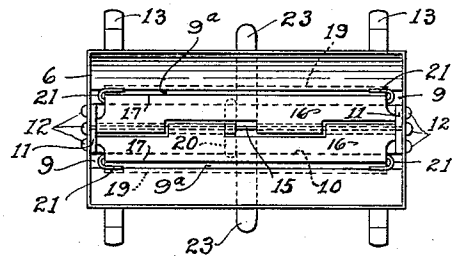


FIG. 2

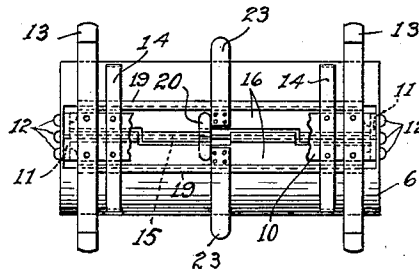


FIG. 3

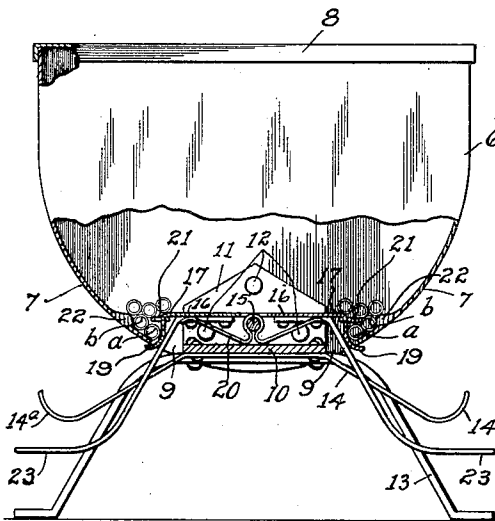


FIG. 4

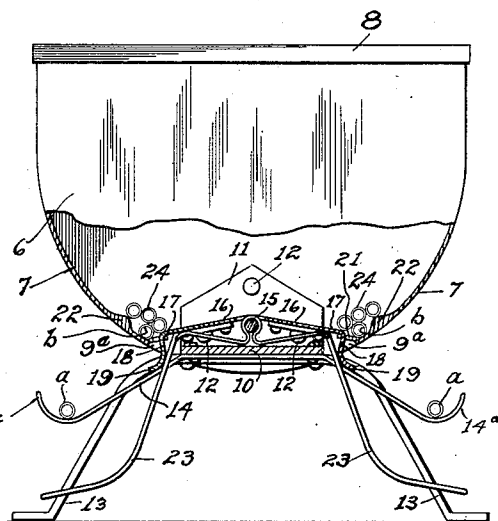


FIG. 5

WITNESSES:

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DISPENSING DEVICE.

1,017,856.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH J. DOBES, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Dispensing Devices, of which the following is a specification.

My invention relates to dispensing apparatus and is designed for holding cylindrical articles such as straws, pencils or tubular containers, and discharging them singly when required.

The chief objects of the improvements which constitute the subject matter of this application for patent are:—to provide a simple, durable and efficient dispensing device for cylindrical articles, to furnish a protective holder or magazine for containing a supply of the articles to be dispensed, and to arrange means whereby the articles can be successively removed from the magazine.

Another object is to provide a receiving rack for the discharged articles, which is adapted to support one or more of them in such a position that they can be readily removed therefrom without touching their extremities, such feature being of advantage in handling drinking straws which are in common use in connection with the dispensing of beverages at soda fountains.

The magazine casing is provided with a cover, and when closed forms a protection to the straws, and when once placed therein they are kept free from dust and require no further handling until they are disposed upon the rack.

Other objects stated in detail are:—to arrange the selecting and discharging mechanism so that only one article can be delivered at one operation of the discharge lever, said discharging mechanism comprising hinged plates or valves having fingers which engage and hold back all the articles except the one selected for discharge, and corrugations in the magazine walls which prevent clogging of the supply articles at the throat or passage forming the delivery outlet.

I accomplish the desired results by means of the apparatus illustrated in the accompanying drawing which forms a part of this application and in which the construction of my improved apparatus is disclosed in the following views:—

Figure 1 is a side elevation of the com-

plete apparatus adapted to dispense drinking straws; Fig. 2 is a top plan view with the cover of the magazine removed; Fig. 3 is a bottom plan view with the middle portion of the bracket plate broken away; Fig. 4 is an enlarged end elevation, partly in section, showing the delivering mechanism in initial or inoperative position, and Fig. 5 is a similar view, showing the valves in their delivering position.

Referring to the details of the drawing the numeral 6 indicates a rectangular casing, or magazine, having its lower portion 7 semi-cylindrical in cross section and provided with a suitable cover 8. The middle portion of the curved bottom 7 of the magazine or receptacle is entirely cut away from end to end, of the casing to form an aperture 9, within which is located a bracket-plate 10, having its ends bent upward to form attaching flanges 11, secured by screws 12 to the inner faces of the end casing walls. Extending transversely beneath the magazine are flat bars which are attached to the said bracket-plate, and have their ends bent as shown to form legs 13 for the apparatus. Attached to the bracket plate 10 a little to the inner side of the legs are light straps or strips 14 having their outer portions projecting equally upon each side of the supporting plate and inclined downward, and then curved upward at the extremities forming hooks 14^a for arresting the straws as they roll down the inclines. These cooperating hooked strips or arms are hereinafter referred to as racks.

Extending along the median line above the bracket plate 10 is a rod or shaft 15, supported at its ends in suitable holes in the flanges 11. This rod supports two plates or valves 16, which extend substantially the whole length of the rod and project laterally therefrom, so as to lie parallel with and above the bracket plate 10. The inner margins of the valves 16 are bent around the rod 15, so as to have a hinged connection therewith, and their outer portions are bent downward at 17 forming flanges 18 the margins of which are curved outward as shown at 19 and are adapted to engage the edges of the opening 9, when forced upward by the action of a spring 20, which tends to hold the plates or valves 16 in their initial positions, as shown in Fig. 4, thus controlling the discharge openings 9^a between the

bracket plate 10 and the edges of the casing 7. Attached to the valves 16 at each end are selecting fingers 21 formed of short pieces of wire bent in the form of staples, one leg of the staple being attached to the underside of the valve at the bend 17, and the other lying parallel with the flange as shown in Fig. 2. The purpose of these fingers is to form detents which hold back all but the first straw and preventing more than one straw from getting into the passage between the valve and the margin of the casing 7. At a proper distance from the margin of the opening 9 the wall of the magazine is provided with a longitudinal corrugation or bead 22 which is so located that it will prevent the straws from becoming lodged above the discharge passage. The valves 16 are supplied with operating levers 23 which project upon each side of the receptacle.

The operation of the device will be readily understood from inspection of the drawing and a brief explanation as follows:—The straws 24 are placed in quantity within the receptacle or magazine, so that they will lie parallel above the hinged valves. The space between the fingers 21 and the bead 22 is of sufficient width to permit one of the straws to pass down below the fingers where it will rest over the line of meeting of the curved flange margin and the edge of the casing 7, as indicated at *a*, while the next straw will rest thereon, occupying a position between the fingers and the longitudinal corrugation or bead. If, now, the operating lever upon either side be depressed, this will swing the corresponding plate or valve to the position shown in Fig. 5, and as the curved lip 19 descends, the straw *a* will fall through the passage thus opened upon the rack arms, as shown. As the valve is depressed the detent or selecting fingers 21 will pass below the second straw *b*, thus preventing the escape of all but the first straw *a*. When the lever is released the spring 20 will carry the valve back to its initial position, and the fingers 21 will clear the second straw *b* and allow it to fall to the position *a*,

so that it will be delivered when the valve is again depressed.

The bead 22 is a very important feature of the invention since it has a positive effect upon the gravitation of the straws preventing them from arching over the passage or becoming jammed in the throat.

Having thus described my invention, what I claim as new, is:—

1. In a dispensing device, a receptacle having a longitudinal discharge opening in its bottom, a rod extending longitudinally of said receptacle adjacent said opening, a valve hinged on said rod and having its free edge bent to form a shoulder and a depending lip, said shoulder projecting over the discharge opening within the receptacle and said lip extending through said opening and engaging the edge of the receptacle wall on the opposite side of the opening, a spring yieldingly supporting said valve in its closed position, and means for moving said valve to open position.

2. In a dispensing device, a receptacle having a longitudinal discharge opening in its bottom, a rod extending longitudinally of said receptacle adjacent said opening, a valve hinged on said rod and having its free edge bent to form a shoulder and a depending lip, said shoulder projecting over the discharge opening within the receptacle and said lip extending through said opening and engaging the edge of the receptacle wall on the opposite side of the opening, a spring yieldingly supporting said valve in its closed position, a projection on the inner wall of the receptacle opposite the shoulder on the valve, and forming with said shoulder a restricted discharge passage, means for moving said valve to open position and means for receiving the articles dispensed from said receptacle.

In testimony whereof I affix my signature in the presence of two witnesses.

JOSEPH J. DOBES.

Witnesses:

CHAS. F. BASSETT,
H. DELOS HIGMAN.