

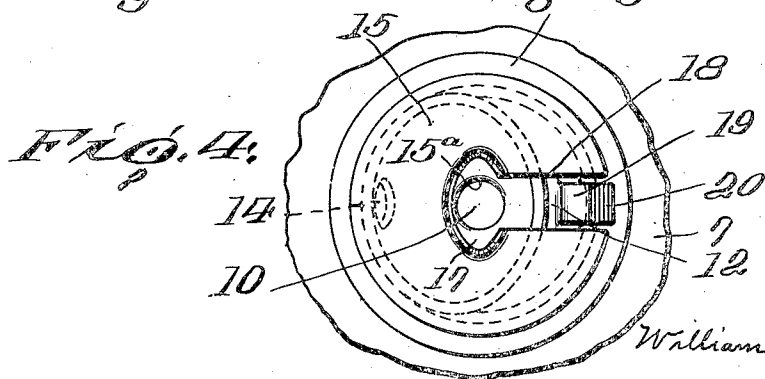
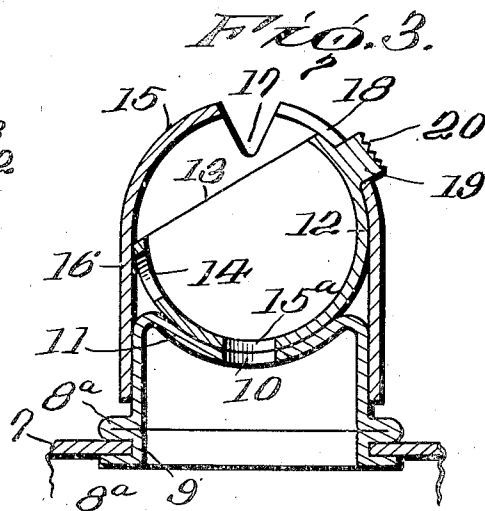
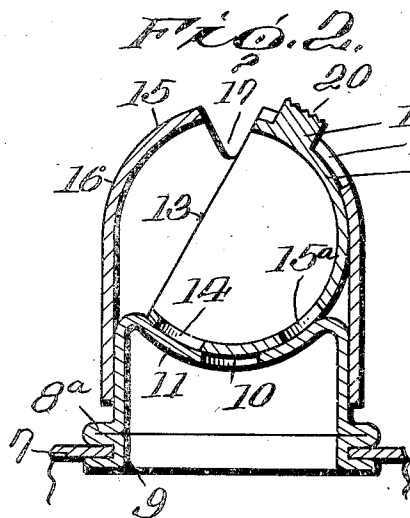
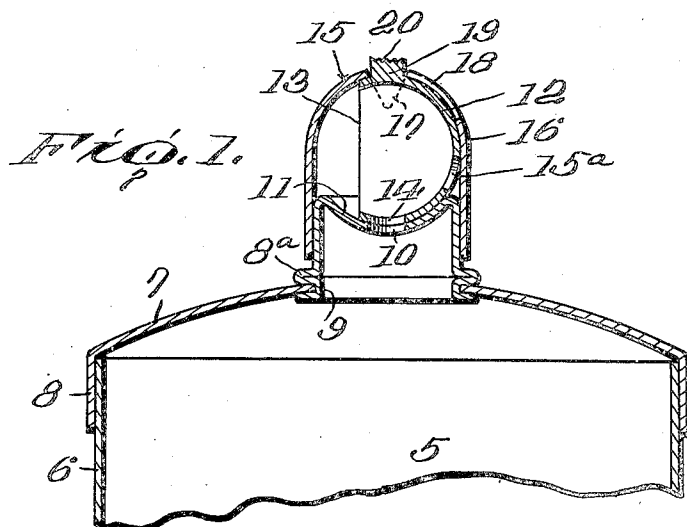
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W. F. PUNTE

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DISPENSING CONTAINER

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Inventor

William F. Punte

Mason & Porter

Attorney

UNITED STATES PATENT OFFICE

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DISPENSING CONTAINER

William F. Punte, Syracuse, N. Y., assignor to
Continental Can Company, Inc., New York,
N. Y., a corporation of New York

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1 Claim. (Cl. 221-117)

The invention relates to new and useful improvements in a container for dispensing tooth powder and the like.

5 An object of the invention is to provide a container of the above type wherein the parts which are assembled to form the dispensing means therefor are made by drawing sheet metal and joining by frictional contact.

10 A further object of the invention is to provide a container of the above type with a rotatable valve of spherical shape with a seat and retaining cap therefor which are similarly shaped and wherein the valve member may be moved to different set positions for dispensing a measured amount of the contents of the container, or for dispensing the contents continuously therefrom.

15 With these and other objects in view as will appear in the course of the following specification, an illustrative embodiment of the invention is shown in the drawing, in which:

20 Fig. 1 is a vertical sectional view of the improved container;

25 Fig. 2 is an enlarged sectional view of the valve assembly showing the dispensing opening in the neck closed;

30 Fig. 3 is a vertical sectional view similar to Fig. 2 but showing the opening in the neck in registry with the opening in the valve for dispensing the contents of the container directly therefrom;

Fig. 4 is a top plan view of the container.

35 The invention is directed to a container for dispensing tooth powder and the like. The container comprises a body portion preferably of metal having closure ends attached thereto. One of said ends has a reduced neck portion, said neck portion being formed by drawing sheet metal. The neck portion is integrally closed across its upper face except for a dispensing opening located centrally thereof. The neck is also provided with a spherical seat depressed in the upper face thereof and surrounding said opening. A spherical valve having its outer face of the same radius as the spherical segment of the seat is adapted to rest on said seat and contact with the seat throughout its spherical extent. The valve is provided with several dispensing openings one of which when the valve is in the proper position, may be used for filling the valve and thus a measured amount of the contents of the container is obtained. The other opening, when in proper position, will allow the contents of the container to be continuously dispensed therefrom.

50 A cap member is provided for retaining said valve on its seat. The cap has a skirt portion

which is adapted to frictionally engage the neck, and a spherical upper portion of the same radius as the valve which is adapted to contact with a portion of said valve. The cap has a central opening and a slot extending substantially at right angles thereto. The valve has a projection which protrudes through said slot for guiding the valve in its movement on said seat.

5 Referring more in detail to the drawing, a container embodying the invention is indicated at 5. The container has a body portion 6 having ends attached thereto. One of said ends is indicated at 7 in the drawing, and has a skirt portion 8 which is adapted to tightly fit over the body and be sweated thereto in the well known manner of attaching ends to containers of this type. The end 7 has a central opening and a reduced neck 8^a joined thereto. The metal of the lower portion of the neck is crimped to the portion of the end directly surrounding the central opening, as indicated at 9 in the drawing. The neck is integrally closed at its upper end except for a small central opening 10 through which the contents of the container may be dispensed. A portion of the metal surrounding said opening is depressed 15 and shaped to form a spherical seat 11.

20 A valve 12 is provided for said neck. This valve is spherical in shape and is of the same radius as the spherical seat 11 and has a portion thereof which is adapted to conform to and contact with the seat throughout the extent thereof. The valve has a large opening 13 and smaller dispensing openings 14 and 15^a. The openings 14 and 15^a are adapted to be brought into selective registry with the opening 10 in the neck.

25 A cap is used for retaining the valve on its seat. This cap has a skirt portion 16 which frictionally engages the neck and an upper portion 15 which is spherical and conforms to and contacts with said valve. As in case of the relation of the valve and the seat, the spherical portion of the cap also is of the same radius as that of the seat. The cap has a central opening 17 and a slot 18 extending substantially at right angles thereto. The valve has a projection 19 which is knurled as indicated at 20 and is so dimensioned as to fit and project through said slot in the cap. As best shown in Fig. 4 of the drawing, the width of the slot 18 is sufficient to allow free movement of the projection 19, but the projection confines the valve to movements back and forth in a line, and thus ensures registration of the opening in the valve with the opening in the seat.

55 In Fig. 1 the opening 14 in the valve is shown

as in registry with the dispensing opening 10 in the neck, and the opening 17 in the cap is closed by a portion of the valve. Upon inverting the container, the valve may be filled with a measured amount of powder, and upon turning of

5 said valve to the position as shown in Fig. 2, this measured amount of powder may be dispensed through the opening 17 in the cap.

In the position of the valve as shown in Fig. 3 of the drawing, the opening 15^a therein is in registry with the opening 10 in the seat, and the opening 17 in the cap is uncovered and if so desired the contents of the container may be dispensed continuously therefrom.

15 From the above it will be apparent that a container has been devised wherein measured amounts, or a continuous flow of the contents thereof may be dispensed. The neck portion, the valve and the cap are each formed from a single piece of metal which is given the desired shape by drawing. Furthermore, the parts are held in their assembled position by frictional engagement. This all contributes to the production of a dispensing container of few parts, which

25 may be cheaply made and which is at the same time efficient in dispensing either measured amounts or for dredging. A container of this type is very useful for dispensing powder of any kind and especially tooth powder.

30 It is to be understood, of course, that minor details and changes may be made without de-

parting from the scope of the invention as set forth in the appended claim.

Having thus described the invention, what I claim as new and desire to secure by Letters-Patent, is:

5 A metal container for dispensing tooth powder and the like comprising a body portion, an end joined thereto, a sheet metal neck portion seamed to said end through which neck portion the powder is to be dispensed, said neck portion 10 being of a single piece of metal having the outer end thereof closed and shaped so as to provide a spherical valve seat, said seat having an opening centrally thereof, a sheet metal hollow spherical valve formed from a single piece of metal, 15 said valve being shaped so as to conform to the valve seat and having openings therethrough adapted to be brought, respectively, into register with the opening in the valve seat, a sheet metal cap formed from a single piece of metal 20 and having a skirt adapted to frictionally engage the neck portion and a spherical outer end portion conforming to the shape of the valve, said cap being provided with a central dispensing opening and a slot leading therefrom, said 25 valve having a member projecting through the slot whereby the valve may be turned on its seat to bring the openings therethrough, respectively, into register with the opening in the valve seat. 30

WILLIAM F. PUNTE.