Feb. 17, 1959 A. STARKENBERG 2,873,890

DISPENSER FOR COMMINUTED COMMODITIES

Filed May 27, 1957

FIG. 1

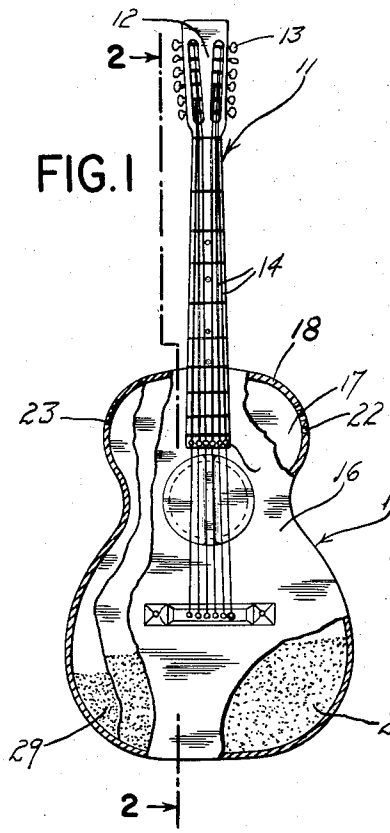


FIG. 2

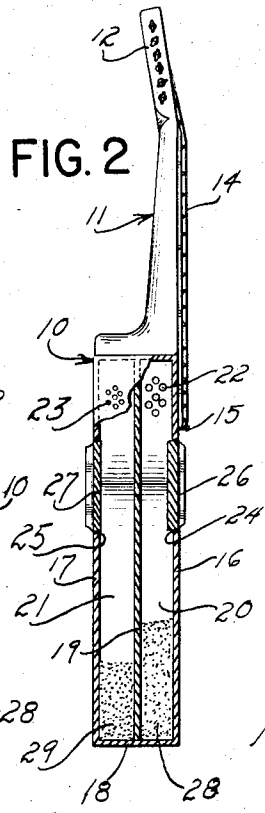


FIG. 3

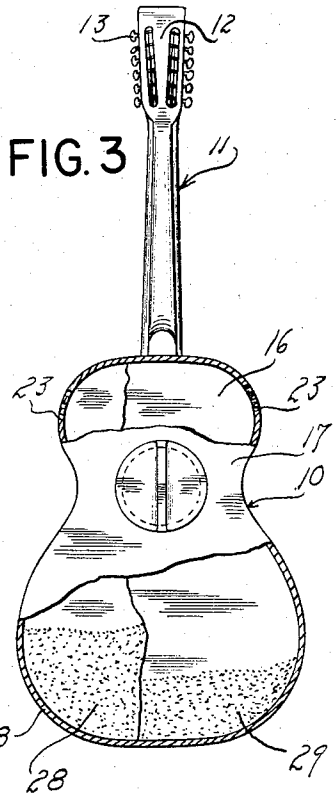


FIG. 5

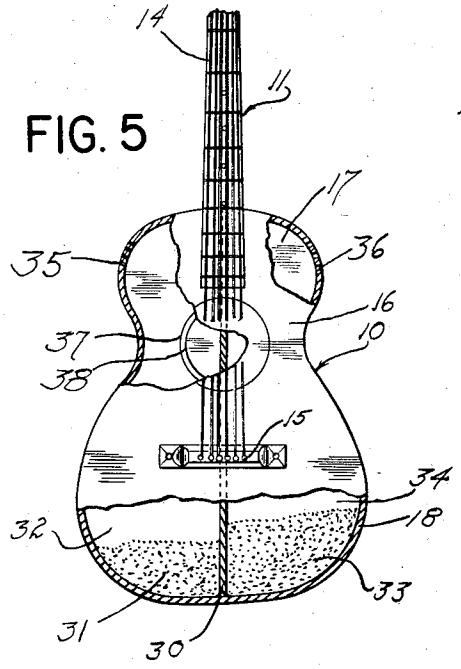
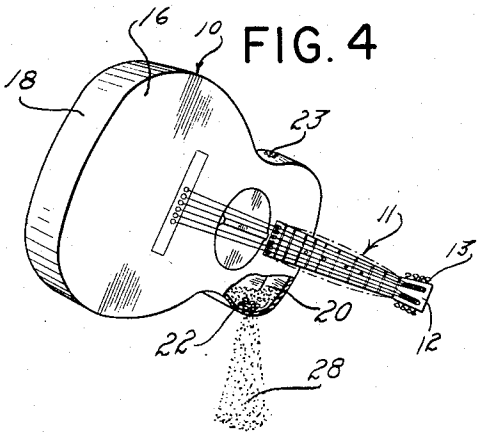


FIG. 4



INVENTOR
Arnold Starkenberg
BY
Howard E. Packenbach
ATTORNEY

United States Patent Office 2,873,890 Patented Feb. 17, 1959

2,873,890

DISPENSER FOR COMMINUTED COMMODITIES

Arnold Starkenberg, Brooklyn, N. Y.

Application May 27, 1957, Serial No. 661,806

7 Claims. (Cl. 222—136)

This invention relates to dispensers for comminuted commodities, and more particularly to such dispensers in which a positive aid for the discharge of the commodity contained therein is provided, by contrast to conventional commodity dispensers in which gravity alone or shaking by the user is relied upon to cause discharge of the commodity therefrom.

Doubtless everyone is familiar with conventional salt and pepper shakers, the word shaker being more than a structural designation, being descriptive of the action on the part of the user which is required in order to cause emission of the condiment from the container. It is apparent to anyone who has used a shaker, that the act of shaking to procure discharge of the commodity is inconsistent with the localized distribution of the commodity. This is true because the act of shaking by the user takes in an arc, at any point along which discharge of the commodity may occur.

Furthermore, users of shakers must also be well aware that the action of shaking by the user does not always accomplish its purpose, for clogging of dispensers for salt and pepper, as well as other commodities, is a frequent occurrence. Clogging occurs frequently in salt and sugar dispensing devices particularly, and the cause generally is the occurrence of lumps of larger or smaller size due to hygroscopic pick-up on the part of the condiment which causes an agglomeration of the discrete particles of the condiment. The lumps are then often shaken into a position where they obstruct the outlet openings which are provided for the condiment. Shaking alone frequently does not accomplish the purpose of removing the lumps from their position of obstructing the egress holes, and therefore the user is reduced to removing the cap of the dispenser to clear the holes, and often must either squash the lumps of condiment, or remove them from the container.

It is the primary object of this invention to provide a dispenser for comminuted commodities which relies upon an entirely different mechanism for inducing emission of the commodity. Thus, one does not shake the present structure, but rather sets up a vibration within the structure through a means carried by the structure. Discharge is thereby positively stimulated, and may be readily confined to a localized area. A means which may be relied upon to set up the vibrations are a string or strings which may be strummed by the user much in the manner of a musical instrument, the vibration imparting energy to the particles of the commodity so that they move around within their container and move out through egress apertures when such come within their path of movement. It will be apparent also that vibrations will cause movement of any impeding lumps, and as they move about within the container, will now and again be displaced away from the egress apertures, permitting ready access to such apertures by the particles of the commodity which are of such size that they may pass through such apertures.

It is a further object herein to provide a structure of

the character already described which is suitable for the dispensing of more than one comminuted commodity, the structure being of such character that where a plurality of commodities are carried therein, it is possible to dispense one at a time.

Another object herein is to provide a dispensing device of the character described which is inexpensive to produce, and therefore can easily compete economically with the conventional dispensers already on the market.

How these and many other objects are to be implemented will become clear through a consideration of the accompanying drawings wherein:

Fig. 1 is a plan view, partially in section, of a first embodiment of my invention particularly adapted for dispensing salt and pepper;

Fig. 2 is a section taken at 2—2 of Fig. 1;

Fig. 3 is a rear plan view of the structure shown in Fig. 1, shown partially in section;

Fig. 4 is a perspective view of the first embodiment of my invention in position for dispensing one commodity; and

Fig. 5 is a front plan view, partially in section, of a second embodiment of my invention.

It will be readily apparent that the kind of structure here disclosed lends itself especially well to a device made in the shape of a conventional string instrument, and this is the shape shown in the drawings. Thus, there is a box or container portion generally designated **10**, a neck portion designated **11**, there being a terminal peg holding portion **12**, having pegs **13** therein. Strings **14** extend from the pegs **13** along the length of the neck portion **11** to pins **15**, the length of strings between pegs **13** and pins **15** being free, that is, held out of contact with any part of the dispenser. The container portion **10** is hollow, having a front panel **16**, rear panel **17**, and peripheral wall **18** extending between the front and rear panels, the peripheral wall **18** having the contour, as seen in the drawings, of a violin or guitar. A partition **19** subdivides the interior of container portion **10** into a front chamber **20** and a rear chamber **21**. In each of the chambers **20** and **21** is present a set of apertures **22** and **23** respectively, disposed on opposite sides of the structure as best seen in Fig. 2. Each of the chambers **20** and **21** has an opening **24** and **25** respectively, and cover **26** and **27**, respectively, for each opening. The condiment to be dispensed from the respective chambers may be introduced into such chamber through the openings **24** and **25**. As seen in Fig. 2 the openings **24** and **25** are tapered and the respective covers **26** and **27** are simply held therein by friction, although thread means or other holding means may be used as well.

In using the embodiment shown in Figs. 1 through 3, the front chamber **20** would be filled with salt **28**, and the rear chamber **21** would be filled with pepper **29**, the only reason for such distinction being that the apertures for egress **22** in chamber **20** are larger than the apertures **23** in chamber **21**, since larger apertures are usual in salt dispensers than with pepper dispensers. The filling openings **24** and **25** are then sealed by covers **26** and **27**, respectively, and the structure is ready for dispensing the condiments. To dispense salt, the structure shown in Fig. 1 would then be tilted to the right as seen in Fig. 4 so that the salt **28** would pour towards the apertures **22**. The user would then simply strum the strings, whereupon salt would be discharged through apertures **22**, due to the vibration set up in the dispenser. Similarly, to dispense pepper, the structure seen in Fig. 1 would be tilted to the left so that the pepper **29** in chamber **21** would pour towards the apertures **23**, whereupon the user would simply strum the strings and the pepper would be discharged through the apertures **23**.

The second embodiment shown in Fig. 5 has essential-

ly the same structural elements as the embodiment shown in Figs. 1 through 3, except in the interior of the container portion **10**. Therefore all of the elements in Fig. 5 which are identical to those in Figs. 1 through 4, are identified by the same indices already given. But in Fig. 5, the interior of the container portion **10** is subdivided from side to side by a partition **30**, so that one condiment, for example, pepper **31**, would be contained in the left chamber **23**, and a second condiment, for example, salt **33**, would be contained in the right chamber **34** of Fig. 5. Egress apertures **35** are present in the left chamber **32** and egress apertures **36** are present in the right chamber **34**. A single filling opening **37** having a removable frictional sealing cover **38** in the rear panel **17** of the container portion **10** would suffice for the filling of left and right chambers, eliminating the need for a filling opening in the front panel **16** of the structure shown in Fig. 5, in contradistinction to the first embodiment which requires two filling openings. The second embodiment shown in Fig. 5 would then be operated for the discharge of salt or pepper in the identical manner as heretofore described for the first embodiment.

While I have described two specific embodiments of my invention it is apparent that changes and modifications may be made therein, and as so changed or modified, the resulting structures will still fall within the ambit of my invention.

I claim:

1. A dispenser for a comminuted commodity comprising a container portion for said commodity, and a neck element extending from and integral with said container portion, an opening in said container portion through which said commodity may be introduced into said container, means for releasably sealing said opening, an egress aperture in said container portion through which said commodity may be discharged, a string, and means within said dispenser for supporting the ends of said string, said string otherwise being free, whereby vibrations may be induced in said container portion when said string is plucked.

2. A dispenser as claimed in claim 1 wherein said means for supporting the ends of said string are situated at either end of said neck element.

3. A dispenser as claimed in claim 1 wherein said means for supporting the ends of said string are situated substantially at one end of said neck element and upon said container portion of said dispenser.

4. A dispenser for a comminuted commodity comprising a container portion having substantially parallel front and rear panels and a peripheral wall defining the contour of said container portion extending between said front and rear panels, a neck element extending from and integral with said container portion, an opening in said container portion through which said commodity may be introduced into said container, means for releasably sealing said opening, an egress aperture in said container portion through which said commodity may be discharged, string means mounted at one end thereof upon said neck element and at the other end thereof upon said container portion, whereby vibrations may be induced in said container portion when said string means is plucked.

5. A dispenser as claimed in claim 4 including a partition within said container portion subdividing the interior of said container portion into a plurality of chambers, egress apertures in each of said chambers, a filling opening in each of said chambers and means for releasably sealing each of said filling openings.

6. A dispenser as claimed in claim 5 wherein said partition is coplanar with said front and rear panels and is mounted upon said peripheral wall, whereby the interior of said container portion is subdivided into front and rear chambers, and said egress apertures are situated on either side of said neck element.

7. A dispenser as claimed in claim 5 wherein said partition extends between said front and rear panels and is mounted upon said panels, whereby the interior of said container portion is subdivided into chambers side by side, and said egress apertures are situated on either side of said neck element.

References Cited in the file of this patent

UNITED STATES PATENTS

1,102,978	Conger	July 7, 1914
1,866,294	Chott	July 5, 1932
2,154,283	Reisdorf	Apr. 11, 1939
2,513,865	Hazza	July 4, 1950
2,665,036	Riva	Jan. 5, 1954