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M. MELLIN

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DISPENSING DEVICE FOR SMALL COMMODITIES

Filed Feb. 8, 1929

Fig. 1.

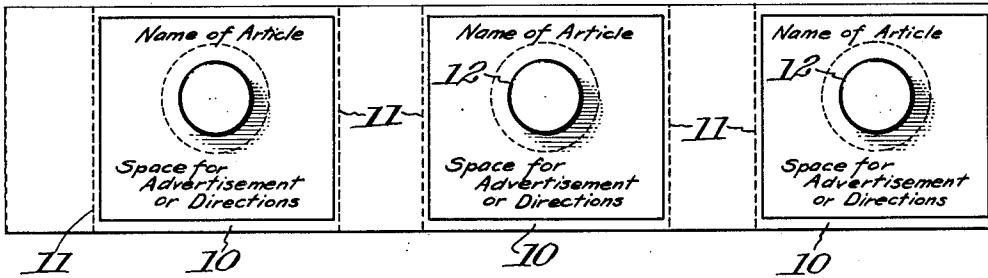


Fig. 2.

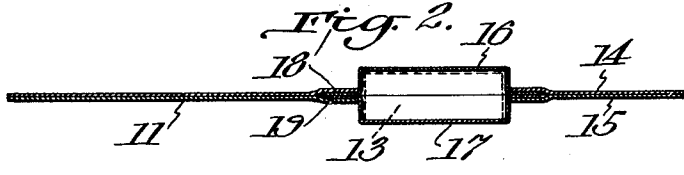


Fig. 4.

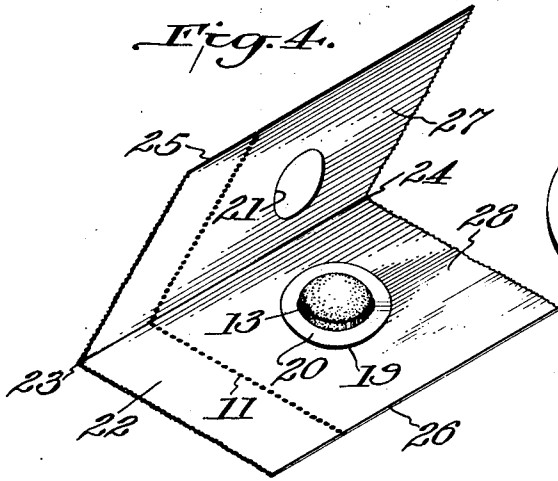
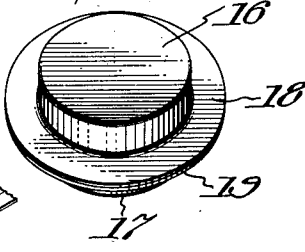


Fig. 3.



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DISPENSING DEVICE FOR SMALL COMMODITIES

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This invention relates to devices for dispensing, (shipping, retailing and otherwise distributing or handling) small articles of trade, and while it is particularly useful in connection with tablets of medicine, such as acetylsalicylic acid, salicylic acid phenyl ester, soda-mint and the like, and capsules, pills, pellets, etc. representing doses or partial doses of medicine, and which are likely to be crushed or fractured or which may be hygroscopic, this device is likewise useful in connection with the handling of other small articles of commerce, or of predetermined small quantities of solid materials in general. The term "small commodities" as used hereinafter will therefore be understood to mean either preformed small articles or small quantities of material in bulk.

An object of the invention is to provide a device which is useful to facilitate retailing commodities of the character described and which affords a practical and extremely convenient means for the handling of such articles of trade by the consumer.

Another object is to provide a device which although of a generally flexible nature and possessing therefore the advantages inherent in a flexible device, provides a receptacle as a part of the same which may be sufficiently rigid and strong to prevent undesirable deformation or rupture thereof and thereby preclude crushing or fracture of preformed articles which may be placed in the receptacles, and which will exclude dirt, dust, moisture, etc. from the articles.

Still another object is to provide a device in strip form which carries a plurality of article-containing receptacles in spaced relation, and wherein means is preferably provided for facilitating separation of the sections or packets thus provided so that one of them may be detached for sale or use without exposing the commodity in the other receptacles or disturbing the remainder of the packets of the strip.

A further object of the invention is to provide a simple and practical method of preparing the packets or the multiple article described.

The invention will be clearly understood by

reference to the accompanying drawings, wherein

Fig. 1 illustrates in plan view a multiple packet strip, showing a single receptacle in each of the sections;

Fig. 2 is a longitudinal sectional view of a portion of the strip, somewhat enlarged;

Fig. 3 is a perspective view of a suitable form of receptacle, and

Fig. 4 is an inside perspective view of one of the sections, showing a preferred manner of mounting the receptacles or receptacle parts.

As illustrated in Figs. 1 and 2, a plurality of packets 10 are prepared in strip form, any desired number of the sections being provided in a single strip depending upon the demands of the particular use to which the strip packet is to be put and the character of the commodity to be dispensed. To facilitate separation of one or more of the sections or packets from the others, a line of small perforations or other line of weakness 11, or a plurality of such lines as illustrated, may be provided crosswise of the strip between successive receptacles.

To each section 10, conveniently in the center thereof, is attached a small receptacle 12 for the commodity. As indicated by the dotted lines in Fig. 2, the receptacle illustrated is adapted to hold snugly a single tablet 13, but it will be apparent that the size and shape of the receptacles as well as the nature of the material from which they are made and their strength, rigidity, etc. will be dictated by the character of the commodity to be handled. Two or more smaller articles may be placed in each receptacle, but for dispensing tablets of drugs, especially if susceptible to deterioration by the air or moisture, it is customary to place a single dose or a partial dose unit in each receptacle, so that no more is exposed upon opening a receptacle than is to be used immediately. The receptacles are dust-proof and preferably are also air- and moisture-proof. They may be adapted to hold preformed solid bodies or measured quantities of solid substances in bulk.

The strip packet, aside from the container, is preferably flexible and may be formed of

a single sheet of material but in its preferred form it is prepared from two sheets 14, 15 of paper or similar cheap and flexible material, superposed and pasted or otherwise secured together face to face. When superposed sheets are employed, it is convenient to form the receptacle 12 of two complementary parts 16, 17,—halves in the embodiment illustrated, each part having a flange 18, 19 at its inner edge. For some uses these flanges need not be continuous but for use in dispensing medicinal preparations it is advisable to have the flanges continued entirely around the edges of the cup or part as shown, so that when the cups are brought together in receptacle-closing relation as illustrated in Figs. 2 and 3 the inner faces 20 (see Fig. 4) abut to seal the receptacle all around the commodity.

The abutting flanges of cooperating parts may be held together by entering them between the sheets 14, 15. This may be accomplished by providing apertures 21 at corresponding intervals in each of the sheets, such that the apertures in one sheet will register with those in the other when the sheets are superposed, and inserting the complementary parts in the opposed apertures with the flanges innermost and underlying the adjacent portions of the sheets. A tablet or other commodity may then be dropped into one of the parts, the two sheets superposed and secured together as by heating, in case gum has been applied to the inner face of one or both of the sheets. Preferably the adhesive extends to the edges about the openings in the sheets so that the latter will be united to the respective flanges. The receptacles are firmly supported by the respective sections and will securely seal the commodity against external influences until it is to be removed for use.

Usually it is preferred to form the receptacles of a light metal such as aluminum or aluminum alloy, but other materials may be employed so long as they are capable, if necessary, of resisting any crushing strains to which the packets may be subjected.

Any desirable identifying names, directions, advertising matter, etc., may of course be applied to the outside of the receptacles or the outer faces of the sheets.

According to the slight modification illustrated in Fig. 4, a single piece 22 of paper or other suitable material is folded as at 23—24 to provide the two sheets 25, 26 which, after insertion of the receptacle parts into the respective openings 21 and introduction of the tablets 13 or other commodities, may be superposed and secured together in a manner such as that previously described. An adhesive may be applied to both inner faces 27, 28 or to but one of the same.

Various slight changes may obviously be made in the device as described and shown and the manner of making it, without de-

parting from the scope of the invention as defined in the appended claims.

I claim:

1. A dispensing device for small commodities comprising a strip composed of superposed sheets of paper secured together face to face, a plurality of receptacles for the commodity in the strip, each of said receptacles consisting of two complementary parts one of which is carried by each of said sheets in an aperture therein, said parts being held in cooperating receptacle-closing relation by the uniting of said sheets of paper, and means between successive receptacles to facilitate severing of the strip.

2. A dispensing device for small commodities comprising a strip of paper having adhesive on one of its faces and folded on itself to form a plurality of sections each composed of two superposed sheets secured face to face by the adhesive, each sheet having an aperture adapted upon folding of the strip to register with the aperture in the contiguous sheet on the other side of the fold, receptacles in the sections, each of said receptacles consisting of two cooperating complementary parts, one part of each receptacle being carried by each of said sheets in its respective aperture, and a line of perforations in the strip between successive receptacles to facilitate severing of the strip.

3. A dispensing device for small commodities comprising a strip composed of two superposed flexible sheets, secured together face to face, a plurality of receptacles for the commodity in the strip, each of said receptacles consisting of two complementary cups, each fitting within an aperture in one of the said flexible sheets and having a flange adapted to lie between the said flexible sheets, the opposite pairs of flanges abutting along their inner faces when the said flexible sheets are secured together to close the receptacles.

In testimony whereof I have hereunto set my hand.

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