ARTICLE DISPLAY AND STORAGE STRUCTURE

Inventors: David E. Hill, Gardner; Jack Briar, Shawnee Mission, both of Kans.


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Primary Examiner—Leonard Summer

ABSTRACT

An article display and storage structure includes a display and storage portion adapted to receive and display articles particularly adapted for personal hygiene use by a plurality of individuals, such as oral spray devices, using gas producing elements and liquid in a container with an elongated jet nozzle, and a cover member removably mounted on the display and storage portion which has a plurality of walls extending from a base portion and defining a plurality of open top compartments each adapted to receive and support therein respective articles. The walls terminate in an upper deck having a plurality of recesses therein each adapted to receive for storage therein a respective one of a plurality of similar articles.

4 Claims, 5 Drawing Figures
ARTICLE DISPLAY AND STORAGE STRUCTURE

The present invention relates to structures for displaying and storing articles used for personal hygiene and more particularly to such an article display and storage structure adapted to receive and display articles particularly adapted for personal hygiene use by a plurality of individuals, such as oral spray devices, power toothbrushes, and the like.

The principal objects of the present invention are: to provide an article display and storage structure adapted to display and store articles adapted for personal hygiene use by a plurality of individuals, such as oral spray devices, and the like; to provide such an article display and storage structure having a plurality of compartments wherein one of the compartments is adapted to receive for storage therein an elongated article, such as an oral spray device; to provide such an article display and storage structure particularly adapted to receive, display and store an oral spray device such as shown and described in U.S. Letters Pat. No. 3,583,609; issued June 8, 1971; to Robert H. Oppenheimer; for a Dispensing Device Useable as an Oral Spray; to provide such an article display and storage structure having recesses therein each adapted to receive for storage therein a respective one of a plurality of similar articles, such as spray tips for oral spray devices, and similar attachments; to provide such an article display and storage structure wherein at least one other of the compartments is adapted to receive for storage therein a stock of a plurality of packages each having a tablet therein for use in an oral spray device; to provide such an article display and storage structure wherein one of the compartments is adapted to support an elongated article in an inverted position for preparation of same for use such as being positioned to receive a tablet in an oral spray device, batteries for power units and the like; to provide such an article display and storage structure having a cover member removably mounted thereon to enclose the articles stored within said compartments and recesses and wherein the cover member is substantially dust proof; and to provide such an article display and storage structure which is attractive in appearance, stable in design, durable in use, economical to manufacture, and particularly well adapted for the proposed use.

Other objects and advantages of this invention will become apparent from the following description taken in connection with the accompanying drawings wherein are set forth by way of illustration and example certain embodiments of this invention.

The drawings constitute a part of this specification and include an exemplary embodiment of the present invention and illustrate various objects and features of the article display and storage structure.

FIG. 1 is a perspective view of an article display and storage structure embodying features of the present invention.

FIG. 2 is a longitudinal sectional view with portions broken away to show an article receiving recess.

FIG. 3 is a transverse sectional view taken on line 3–3, FIG. 2.

FIG. 4 is a transverse sectional view taken on line 4–4, FIG. 2.

FIG. 5 is a perspective view of the article display and storage structure with an article shown therein in an inverted position during preparation for use.

Referring more in detail to the drawings:

As required, detailed embodiments of the present invention are disclosed herein, however, it is to be understood that the disclosed embodiments are merely exemplary of the invention which may be embodied in various forms. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to virtually employ the present invention in virtually any appropriate detailed structure.

In the disclosed embodiment of the present invention, the reference numeral 1 generally designates an article display and storage structure adapted to receive and display articles particularly adapted for personal hygiene use by a plurality of individuals. The article display and storage structure includes a display and storage portion 2 adapted to receive and display articles particularly adapted for personal hygiene use by a plurality of individuals, such as oral spray devices, and the like and a cover member 3 removably mounted on the display and storage portion 2 which has a plurality of walls, as latter described, extending from a base portion and defining a plurality of open top compartments each adapted to receive and support therein respective articles. The walls terminate in an upper deck 4 having a plurality of recesses 5 therein each adapted to receive for storage therein a respective one of a plurality of articles.

The display and storage portion 2 has a base portion 6 defined by side walls 7 and 8 and end walls 9 and 10 suitably connected together as being integrally formed to provide a substantially rigid base portion 6 for the display and storage portion 2.

The walls extending from the base portion 6 defining the plurality of open top compartments which may be arranged in any desired manner. However, the illustrated structure has a bottom wall 11 extending between upper edges of the side walls 7 and 8 and the end walls 9 and 10 thereby closing a lower end of the plurality of compartments. Laterally spaced side walls 12 and 13 and end walls 14 and 15 extend upwardly from the bottom wall 11. The display and storage portion 2 may have any desired number of compartments, however, the illustrated structure includes intermediate walls 16 and 17 extending upwardly from the bottom wall 11 and between the side walls 12 and 13 thereby defining a center compartment 18 and end compartments 19 and 20.

The illustrated end compartments 19 and 20 are particularly adapted for storing a plurality of packages of articles therein. It is desirable to provide access to said end compartment 19 and 20 for easy removal of the packages therein. Therefore, passages 21 and 22 are formed in respective portions of one of the side walls, for example, side wall 12 defining the end compartment 19 and 20 respectively. It is also desirable that the passages 20 and 21 extend the full depth of the end compartments 19 and 20 whereby the last article or package therein may be removed from the respective end compartment.

The end compartments 19 and 20 may be any desired shape in plan and in transverse cross-section. However, the illustrated compartments are generally rectangular in plan and transverse cross-section to accommodate generally rectangular packages 23 of articles, such as a tablet to be used in an oral spray device.
What we claim and desire to secure by Letters Patent is:

1. A display and storage structure for a liquid discharge apparatus comprising:
   a. a base portion;
   b. walls extending from said base portion and arranged to define sides and a bottom of a plurality of compartments, one of said compartments being adapted to receive for storage therein a liquid discharge apparatus having a liquid chamber therein and one end with a removable end portion for filling of said chamber and the other end with a discharge nozzle extending generally laterally outward therefrom, said walls terminating in an upper deck;
   c. one of the walls defining the bottom of said one compartment for supporting engagement of said one end of the liquid discharge apparatus with said discharge nozzle thereof above said upper deck;
   d. said one wall defining the bottom of said one compartment having a portion with downwardly recessed surfaces for supporting engagement with the other end of said liquid discharge apparatus, said recessed surfaces cooperating with the compartment sides thereofabove in holding said liquid discharge apparatus inverted in the compartment in chamber filling position with the removable end portion upwardly and above the upper deck;
   e. one of the walls defining a side of said one compartment having a passage therethrough for receiving the nozzle when the discharge apparatus is supported in inverted position in said one compartment.

2. A display and storage structure for an elongated discharge apparatus and activating articles used therein comprising:
   a. a base portion;
   b. walls extending from said base portion and arranged to define sides and a bottom of at least two vertically elongate open top compartments, said walls terminating in an upper deck, at least one of said compartments being adapted to receive for storage therein an elongated discharge apparatus, at least one other of said compartments being adapted to receive for storage therein a plurality of activating articles for use by the elongated discharge apparatus, said elongate compartments being of less length than the elongated discharge apparatus and a portion of said apparatus extends from said one compartment when positioned therein;
   c. one of the walls defining the bottom of the one of said compartments of said plurality of compartments for supporting engagement of one end of the elongated discharge apparatus, said one end of said discharge apparatus being larger than the other end thereof;
   d. said one wall defining the bottom of said one compartment having surfaces defining a recess therein for receiving in supporting engagement the other end of所述 elongated discharge apparatus with said recess surfaces and said one wall cooperating with side walls of the said one compartment to support said elongated discharge apparatus in an inverted position;
   e. one of the walls defining a side of said one compartment having a passage therethrough for the
length of said compartment for a projection on the elongated discharge apparatus to extend from said one compartment when the elongated discharge apparatus is inverted and supported on the other end thereof in said one compartment;

f. a cover member removably mounted on said base portion and enclosing said compartments and apparatus and articles stored therein.

3. A display and storage structure for an oral spray device having a hollow body for a gas producing element and liquid and an elongated jet nozzle for jet discharge of said liquid, said structure comprising:

a. a base portion;

b. walls extending from said base portion and arranged to define sides and a bottom of a plurality of open top compartments, one of said compartments being adapted to receive for storage therein a hollow body of an oral spray device, at least one other of said compartments being adapted to receive for storage therein a plurality of packages having a gas producing element therein, said one other of said compartments having access to packages therein through at least one of said respective walls, said walls terminating in an upper deck;

c. a plurality of recesses in said upper deck each adapted to receive for storage therein a respective one of a plurality of tubular spray tips for the oral spray device; and

d. a cover member removably mounted on said base portion and enclosing said compartments and the hollow body of the oral spray device and the packages having a gas producing element therein and the tubular spray tips in said recesses.

4. A display and storage structure as set forth in claim 3 wherein:

a. certain of said walls each have an elongated passage therethrough for access to the packages having a gas producing element therein;

b. one of the walls defining the bottom of the one of said compartments is adapted to support thereon a bottom of the body of the oral spray device;

c. said one wall defining the bottom of said one compartment has a recess therein shaped to receive and support therein the top of the body of the oral spray device; and

d. an other of the walls defining said one compartment has an elongated passage therethrough adapted to permit a projection on the body of the oral spray device to extend from said one compartment when the top of the body is received and supported within the recess in said one wall defining the bottom of said one compartment.

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