(No Model.)

G. H. BARTLETT.

PAPER CAN.

No. 525,937. Patented Sept. 11, 1894.

Fig. 1.

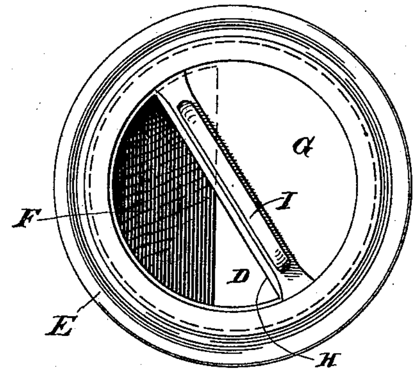


Fig. 3.

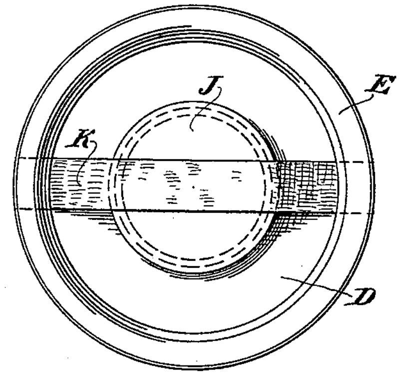


Fig. 2.

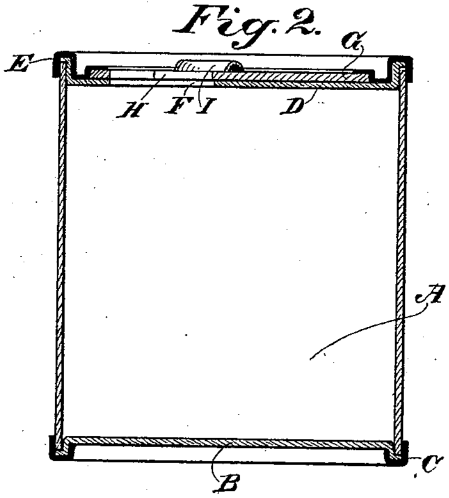


Fig. 4.

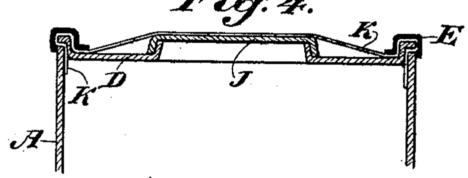
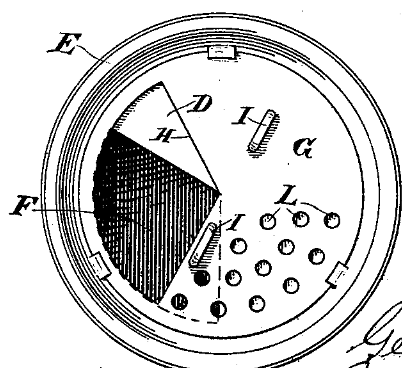


Fig. 5.



Witnesses,
J. H. Nourse.
H. F. Ascheck

Inventor,
George H. Bartlett
By Dewey & Co.
Attys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE H. BARTLETT, OF TIBURON, CALIFORNIA.

PAPER CAN.

SPECIFICATION forming part of Letters Patent No. 525,937, dated September 11, 1894.

Application filed February 1, 1894. Serial No. 498,781. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. BARTLETT, a citizen of the United States, residing at Tiburon, Marin county, State of California, have invented an Improvement in Paper Cans; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in the manufacture of cans.

It consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a plan view of the head showing the manner of opening and closing the can. Fig. 2 is a vertical section through a can of my construction, showing the application of the top and bottom heads. Fig. 3 is a plan view of a modification showing a central opening and a means for fastening. Fig. 4 is a vertical section of the same. Fig. 5 is a view of a modified form of head showing a large opening, dredge openings, and means for closing either or both.

In the manufacture of cans for containing baking powder, tea, coffee, or other dry materials, it is preferable to use paper or paste-board rather than metal, and it has been customary to partially effect this object by making the can with paste-board sides and metal ends.

The object of my invention is to provide a can with complete paste-board or paper sides and ends, and a means for uniting them with the smallest amount of metal, and to provide an opening and closing device whereby the contents of the can may be easily reached or the can hermetically closed at will.

A is the body of the can which I have shown in the present case made cylindrical and formed in any usual or suitable manner of paper or paste-board rolled and pasted together.

B is the bottom end which is also made of paste-board of a shape to fit the bottom of the can and to project a little beyond the edges, and C is a ring of sheet metal which is crimped upon the edge of the paste-board disk which forms the bottom, and also upon the bottom end of the can body so as to secure the whole firmly in place. This leaves the main bottom of the can of paste-board which fills the space from side to side on the interior, and the metallic crimped ring gives sufficient rigidity to the can while securing the bottom in place.

The central portion of the metallic ring which is cut out will, when taken from larger cans, serve to form similar rings for smaller ones and when the smallest one is reached, it will still form a central cap or a movable top which is made to open so as to utilize the contents of the can, as will be hereinafter described. The top D of the can is also made of paste-board crimped so as to fit the top of the can, and it has a metallic ring E fitting over it and crimped upon the top of the can in the same manner that the bottom is secured. Within the central portion of this head a segment is cut out leaving an opening as shown at F.

The portion of the sheet metal ring which projects toward the center is raised or struck up so as to leave a space between it and the can top D, and within this circular space is fitted a movable circular cap G. The periphery of this cap fits and is guided within the inside of the raised portion of the metallic ring, and it has upon one side a segmental opening cut away as shown at H, so that when this movable disk is in the position in which the segmental opening in it corresponds with that in the can head, it is easy to obtain access to the contents of the can either with a spoon or other implement, or the contents can be poured out as desired, without removing the cover. This segmental opening and the opening in the can head are preferably less than a semi-circle, and this leaves a sufficient portion of the movable cap for the attachment of a projecting lug or lugs I which may be stamped from metal and clamped or otherwise secured upon the movable cap, extending across the center and parallel with the straight edge of the segmental opening. When the head has been placed upon the can, the cap is placed centrally upon the head. The metallic ring is then placed over the head and cap, and is crimped around the periphery of the top of the can, thus holding the whole firmly together. The raised portion of the ring leaves a sufficient space for the cap to be turned by taking hold of the

raised lug or cross-bar, and when it is turned so that the segmental openings coincide the contents of the can can be reached. When turned so that the segmental opening in the cap is at the opposite side from the opening in the head, the can will be closed, and by reason of the flexibility of the paste-board material, the closing is more nearly hermetical than could be effected by tin or any metallic device.

In case of large cans, it may be found desirable to make a central opening in the head of the can, and to fit a cover J to this opening as is customary in large metallic cans. The head and cover, in this case, as before, are made of paste-board, and in order to close the can until such time as it is desired to use the contents, I have shown a band or ribbon K of any flexible material which extends across the top of the cap, thence passes beyond the edges of the head, so that when the metallic ring is crimped upon the head and the periphery of the can end, this band follows the curvature of the crimped portion of the metal and is clamped with the head and upon the body of the can, thus forming a permanent closure or lock for the central cap. This band or ribbon may be made broad enough to serve as a closure and safety attachment in any of the forms of cover herein described. When it is desired to use the contents of the can, this band is cut and the cap may be opened in the usual manner.

When it is desired to use the cap as a dredge, suitable holes L are made in one portion of the cap, occupying preferably about one-third of its circumference, the main opening by which access is obtained to the contents of the can occupies another one-third and the opening in the can head is of the same area, while the final third of the cap is unperforated and serves to cover and close the opening in the can head. The cap may be attached to the can head either by a central pin or by means of tongues which are stamped out around the periphery of the head, and are bent down over the edges of the cap after the latter has been placed between them, thus forming a peripheral guide or annularly arranged raised portion within which the cap rotates just as in Figs. 1 and 2, the raised portion in Figs. 1 and 2 being continuous, while in Fig. 5 it is broken or in several sections. The cap has a projecting lug by which it is rotated, and by turning it so that the unperforated portion of the cap covers the opening in the can head the latter will be closed as before described. By turning it so that the small holes or perforations correspond with this opening it may be used as a dredge for any powdered spices or salt, and by turning it again until the large opening corresponds with that of the can head, the contents of the can may be either emptied out or reached by any implement if desired. When the can is made in this manner, or in the manner first described, it may be closed when the goods are put up, by pasting a disk of paper over the whole head, and this must be removed when the contents are to be used.

The whole construction provides a cheap economical form of can for containing any dry articles which it is desired to put up in this manner, and it is especially useful for such substances as yeast powder which rapidly deteriorate when exposed to the air and which are better preserved out of contact with metal. It avoids the necessity for entirely removing the cover as the rotatable cap always remains in place, and it is only necessary to turn it about in its place to open or close the can.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A paper can consisting in an open ended paper body, a paste board bottom fitting therein and provided with a peripheral angular flange, the outwardly projecting portion of which projects over the end edge of the said body, a similarly formed end or head D, fitting in and overlapping the upper edge of the body, and having an outlet opening, a cover arranged to operate in connection therewith; and two U-shaped flanges embracing the respective ends of the cans and flanges of said ends, and firmly clamping them together, substantially as herein described.

2. A can consisting in an open ended paste board body A, having a peripheral flange, a U-shape ring embracing the said flange and also the edge of the body, and clamping them together, an upper paste-board end or head D, also having a peripheral flange, and an outlet opening F, a U-shaped ring E, embracing said flange and upper edge of the body, and firmly clamping them together, the said ring E having an annular guide way, a circular cap or cover G, resting on the end or head D within said guide way, and provided with an opening H, substantially as herein described.

3. A can comprising an open ended paste-board body, paste-board ends therefor, metallic rings embracing the adjacent portions of the edges of the body and its ends, and firmly clasping them together; one of the said ends having an opening, and the corresponding ring having a raised inner portion, and a cap turning in the space under the said raised portion, and also having a cut-away portion or opening to register with that in said end, substantially as herein described.

4. A can consisting in an open ended paste-board body A, a paste-board bottom B, having a peripheral flange, a U-shape ring embracing the said flange and lower edge of the body, and clamping them together, an upper paste-board end or head D, also having a peripheral flange, and an outlet opening F, a U-shape ring E, embracing said flange and

upper edge of the body, and firmly clamping them together; the said ring E, having an inner annular raised portion, a cap or cover G resting on the end or head D, under said raised portion of the ring E, and provided with an opening H, and with a finger piece I, substantially as herein described.

In witness whereof I have hereunto set my hand.

GEORGE H. BARTLETT.

Witnesses:
S. H. NOURSE,
H. F. ASCHECK.