May 14, 1929. N. P. BACH 1,713,067

METAL CAN

Filed Jan. 9, 1924

Fig. 1.

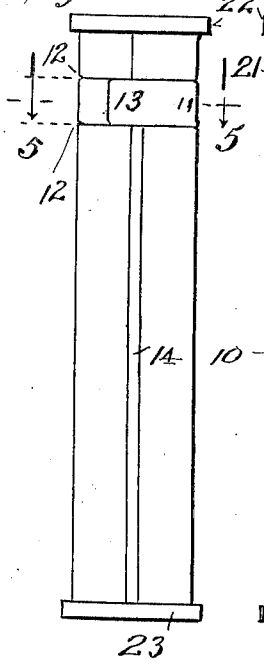


Fig. 2.

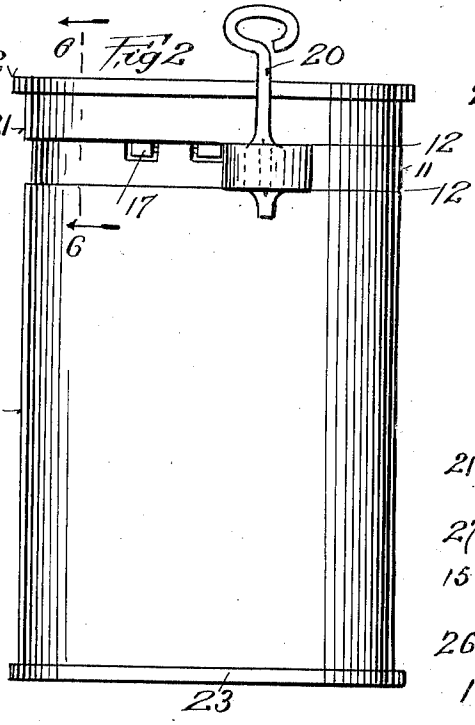


Fig. 6.

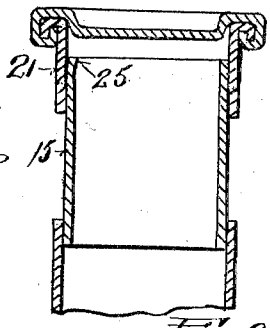


Fig. 7.

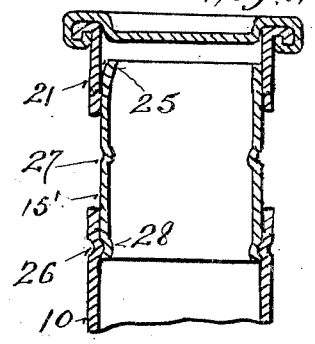


Fig. 3.

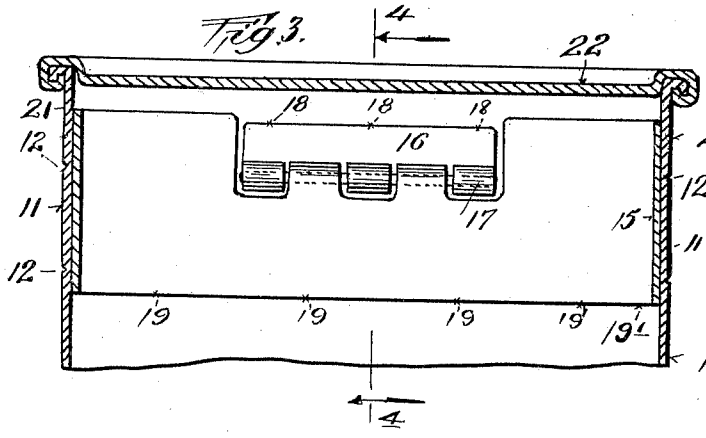


Fig. 4.

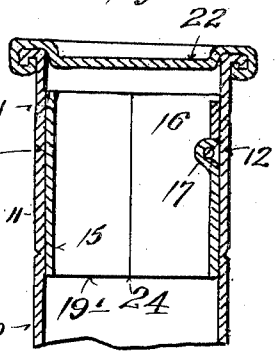
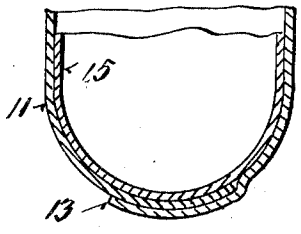


Fig. 5.



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UNITED STATES PATENT OFFICE.

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METAL CAN.

Application filed January 9, 1924. Serial No. 685,100.

This invention relates more particularly to vacuum sealed cans, and has for its object the production of a sealed, and preferably a vacuum sealed, can which is provided with means for quickly opening said can and thereby converting the sealed can into a can provided with a hinged cover.

A further object includes the production of a can body which is provided with a weakened area, and with means whereby, when said weakened area is removed, the can is changed from a closed can unit into an open can having a hinged cover attached thereto.

Another object includes the provision of a hinged collar which is readily fastened into the can body before the can is assembled.

A still further object includes the production of a handy pocket tobacco can, wherein the tobacco is sealed in vacuo and which can is provided with potential hinging means capable of being rendered active at any desired time by breaking the seal.

I also provide simple but efficient means whereby said sealed can is readily converted into an open can having the cover hinged thereto for ready use.

Other objects will appear hereinafter, and I attain these objects by the device illustrated in the accompanying drawing, in which:—

Fig. 1 is an end elevation of a can embodying the principles of my invention.

Fig. 2 is a side elevation thereof, showing a portion of the scored area removed to open the can.

Fig. 3 is a sectional view showing the hinged part of the collar and associated parts.

Fig. 4 is a view on lines 4—4 of Fig. 3.

Fig. 5 is a view on lines 5—5 of Fig. 1, showing the seam.

Fig. 6 is an enlarged view taken on lines 6—6 of Fig. 2, looking in the direction of the arrows.

Fig. 7 is a view of a slightly different form.

Like numerals refer to similar parts throughout the several views.

A great demand exists for a simple, practical can unit which may be cheaply manufactured and which is constructed to permit ready sealing in vacuo for preserving the sealed commodity, and wherein, by simple means, the sealed unit is converted into an open can having a hinged cover attached thereto for ready use. Primarily, my container is intended for sealing and carrying tobacco therein but obviously other commodities can be sealed within, and I do not therefore desire to be understood as thus limiting myself unduly. This can is preferably flattened, and of suitable size to be easily carried in pocket by the user.

As a practical embodiment of my invention, the can comprises a somewhat flattened body 10 having a scored or weakened area 11 near one end thereof. The body part may be stamped or cut, as is usual, and the scorings 12 and lip 13 are provided in this operation in the manner well understood in the art. When the body blank has been shaped and united at the seam 14, one form of which is illustrated in Fig. 5, the end of the key tongue 13 lies folded against the can body for future use.

Within the can body I secure, by any suitable means, as by spot welding, the hinge collar member 15. This member comprises, in its simplest form, a band or strip of metal or plate tin, similar to that of which the can body is made, and is of sufficient width to extend well beyond the scored area 11, for the purpose more fully stated below.

On one side of the flattened area, approximately midway of the curved sides, I provide a cover hinge member or flap 16 which is hingedly connected to the collar member by hinge wings 17. The hinge member 16 is secured in any desired manner, as by spot welding 18, to the upper portion of the can body, that is, to the inner surface of that portion which is designed to become the cover 21, when the weakened area 11 is removed and the sealed can is opened. The lower part of the collar member 15 extends below the lower score or cut 12, and in my preferred form is fastened to the inner surface of the can body in any suitable manner, as by spot welding 19 or by soldering along the lower edge 19′ of the collar, or frictionally as is indicated in Fig. 7.

In the manufacture of my improved hinged can, I stamp out the blank which forms the can body 10 and is provided with an extension flap or key lip 13. The end of this lip is not soldered or fastened so that a key 20 may be applied when the can is to be opened.

The hinged collar member 15 is inserted in place so that the hinge 17 is approximately on the upper score line 12. It is then fastened in position by welding or soldering the flap at 18 and in my preferred form the collar is also welded at 19 or it is otherwise fastened to the can body. The end cap 22 is then supplied and the can is ready to be filled. When filled, the other end cap 23 is applied and it is vacuum sealed in the usual manner. The filled and sealed can is now ready for market, and goods thus sealed will retain their original flavor and strength for a very long period of time.

When it is now desired to open the container, it is only necessary to apply the key 20 and remove the scored area, in the manner indicated by Fig. 2. The can will then be supplied with a hinged cover 21 which is hinged at 17.

For convenience of manufacture, the collar may be stamped out of a piece of sheet metal and shaped by curving and abutting the ends, as shown at 24. If desired, the forward edge may be also slightly curved, as at 25, to facilitate opening and closing.

Where I employ the frictional method of fastening the collar in position, I may utilize a bead 26 near the upper edge of the container 10 for engaging the corresponding beaded portion 27 in the collar 15′. An initial beaded area 28 may be provided in the collar to hold the same as the weakened area 11 is removed. When this area is removed, I press down the collar 15′, with the attached hinged flaps 16 (shown in Figs. 3 and 4) and cover 21, until bead 27 engages bead 26. The can is now ready for use, as in my preferred form, and the cover 21 fits closely on the upper edge of the can body 10.

While I have shown and described a flattened container and stated that the same is suitable for a pocket tobacco can, it is obvious that said container may be used for other purposes, as for tea, coffee, or the like, and that it may assume other shapes to meet the needs at hand.

What I claim, therefore, as new and useful, of my own invention, and desire to secure by Letters Patent is:—

1. In a vacuum sealed container, the combination of a continuous body part having a weakened part and a hinge member underlying said weakened part to flexibly hold together the parts formed by the severing of the weakened part.

2. In a vacuum sealed container, the combination of a continuous body part having a scored band, a collar underlying said band, a hinge flap connected to said collar and permently united to a portion of the can body, and means for removing said scored band thereby causing one part of the original can body to form a can cover which is hingedly united to the can body part by said collar.

3. In a vacuum sealed container, a can body comprising a main body part and a cap forming part having a scored band between said main body part and said cap part, a collar member lining said scored band, a hinge flap carried by said collar member, said hinge flap being permanently united to the cap part, whereby when the scored band is removed to open the can, a cap is formed and hingedly united to the main body part by said collar.

4. In a vacuum sealed container, a can body comprising a main body part and a cap forming part separated by a weakened part, a member underlying said weakened part overlapping the main body part and the cap part, and a hinge member uniting the collar member and the cap member, whereby when the weakened part is severed to open the container, a cap part will be formed from the can body and hingedly united to the main body part.

5. In a vacuum sealed container, a can body comprising a main body part and a cap part with a weakened part dividing said main body part and said cap part, a collar member underlying said weakened part and extending into the main body part and into the cap part, a hinge member uniting the collar member and the cap part, whereby when the weakened area is severed to open the container the cap part will be hingedly united to the collar member, and means for securing said collar to the main body part.

6. In a container, a can body comprising a main body part, a cap part and a scored part intermediate said body part and said cap part, a collar member underlying said scored part and a hinged flap uniting said collar member and said cap part, whereby when said scored part is severed the cap part is hingedly united to the collar member.

7. A combined hermetic and hinged closure container, comprising a body having score lines setting off an encircling tearing strip, and a collar member disposed within said body and extending across said tearing strip, the portion of the body above the tearing strip being hinged directly to said collar and forming a hinged closure for use after the tearing strip is removed.

8. A combined hermetic and hinged closure container, comprising a body having score lines setting off an encircling tearing strip, and a collar member disposed within said body and extending across said tearing strip, said body and said collar having integral parts hinged together to provide a hinged reclosure after the tearing strip is removed.

9. A combined hermetic and hinged closure container, comprising a body having score lines setting off an encircling tearing

strip, and a collar member disposed within said body and extending across said tearing strip, the portion of said body above the tearing strip having integral hinge lugs formed thereon and said collar having integral cooperating lugs hinged to said body lugs whereby, upon removal of the tearing strip, the top portion of the container is converted into a hinged reclosure.

10. A combined hermetic and hinged closure container, comprising a body having score lines setting off an encircling tearing strip beneath the top thereof, hinge lugs formed at the top of the body blank and adapted to be bent downwardly within the container, a separate collar disposed within the container and having cooperating lugs hinged to said body lugs whereby the top portion of the container forms a reclosure hinged to said collar after the tearing strip is removed.

11. A combined hermetic and hinged closure container, comprising a body having score lines setting off an encircling tearing strip beneath the top thereof, hinge parts extending downwardly within the container, a separate collar member disposed within said body, hinge parts bent from the body of said collar member and cooperating with said downwardly extending hinge parts to provide a hinge upon which the top part of the container may be opened and closed after the tearing strip is removed.

12. The process of making combined hermetic and hinged closure containers which consists in forming the container body with a hinge part extending downwardly therein from the top and with encircling score lines setting off a tearing strip beneath the top, forming an interior collar member with a hinge part depending therefrom, inserting said collar in said body in such manner as to effect engagement of said hinge parts, and to arrange the collar inwardly from the score lines, and later applying a hermetic closure.

In testimony whereof I have hereunto set my hand on this 5th day of January, A. D., 1924.

NEILS P. BACH.