Aug. 5, 1952 J. D. CASEY 2,605,926

CONTAINER WITH A HINGED COVER

Filed Oct. 1, 1949

Fig. 1

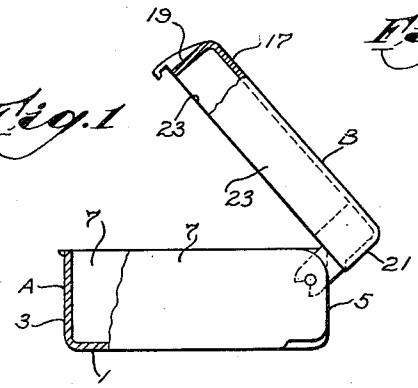


Fig. 2

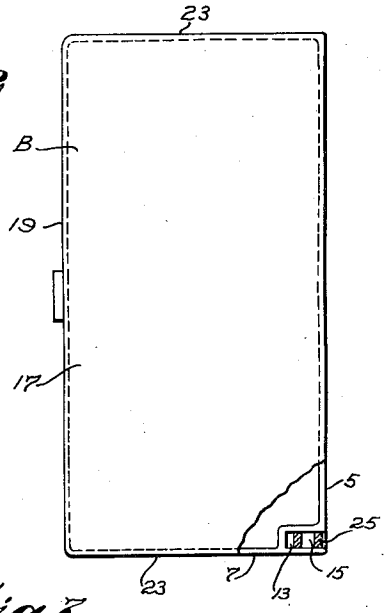


Fig. 3

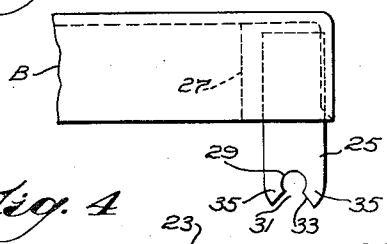


Fig. 4

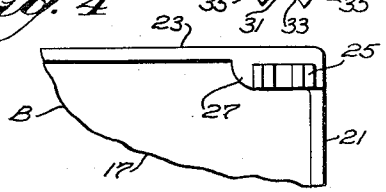


Fig. 5

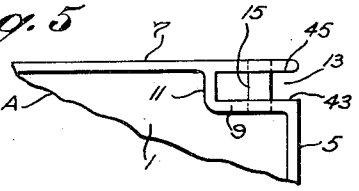


Fig. 6

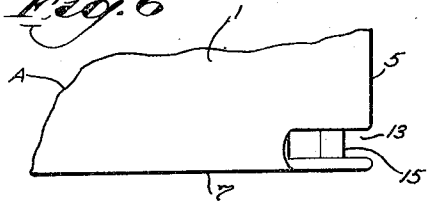


Fig. 7

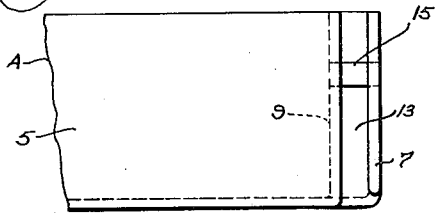


Fig. 8

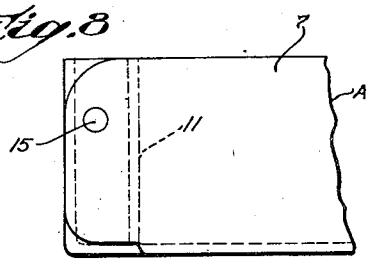


Fig. 9

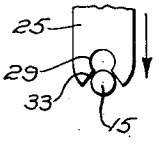
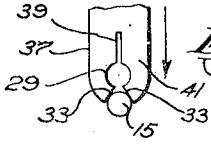


Fig. 10



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CONTAINER WITH A HINGED COVER

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Application October 1, 1949, Serial No. 119,029

1 Claim. (Cl. 220—31)

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My invention relates to containers having hinged lids or covers.

The invention, which has among its objects the provision of a container the hinged cover of which may be readily assembled with the container body portion, will be best understood from the following description when read in the light of the accompanying drawings of several embodiments of the invention selected for illustrative purposes, while the scope of the invention will be more particularly pointed out in the appended claim.

In the drawings:

Fig. 1 is an end elevation, with parts broken away, of a container according to the invention;

Fig. 2 is a plan of the container according to Fig. 1, with parts broken away;

Fig. 3 is an end elevation of a corner of the cover portion of the container according to Figs. 1 and 2 on an enlarged scale;

Fig. 4 is a bottom view of the parts shown by Fig. 3;

Fig. 5 is a plan of one of the rear corners of the body portion of the container according to Figs. 1 and 2 on an enlarged scale;

Fig. 6 is a bottom view of the parts according to Fig. 5;

Fig. 7 is an elevation of the parts shown by Fig. 5 as viewed from the right;

Fig. 8 is an elevation of the parts shown by Fig. 7 as viewed from the right;

Fig. 9 is a diagram illustrating a step in the operation of hingedly securing the cover portion to the body portion of the container according to Figs. 1 to 8; and

Fig. 10 is a diagram corresponding to Fig. 9 and also illustrates a modified form of the invention.

Referring to the drawings, the container, which preferably is made of molded plastic material, comprises a body portion A and a cover portion B, the latter being hingedly connected to the former.

As shown, the body portion A of the container is entirely open at its top and comprises the bottom wall 1, front wall 3, back wall 5, and opposite end walls 7. As best shown in Fig. 5, the back wall 5 at each of opposite ends terminates short of the adjacent end wall 7, each end of the back wall being connected to the adjacent end wall by an L-shaped interior corner portion having a longer leg 9 integral with the end of the back wall and a shorter leg 11 integral with the end wall. This construction provides at each end of the back of

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the body portion of the container a narrow open ended slot 13 extending the full height of said portion, enabling the latter to be readily formed by injection molding.

As shown, extending across each slot 13 is a pintle 15 opposite ends of which are carried by the adjacent end wall 7 and the adjacent leg 9 of the L-shaped corner portion. The pins forming these pintles, which are also preferably of plastic material, conveniently are cut to length and inserted in the mold employed for producing the body portion A of the container, so that their ends will be molded into the walls supporting them to form in substance an integral structure.

The cover portion B of the container, as shown, comprises the top wall 17, front wall 19, back wall 21, and opposite end walls 23. At each of its opposite back corners this portion is shown as provided with a projecting flat blade-like lug 25, these lugs serving hingedly to connect the cover to the pintles 15 of the body portion A of the container. The lugs 25 preferably are of plastic material and are molded into the enlargements 27 at the interior corners of the cover portion by inserting them in preformed condition in the mold for that portion so that in substance an integral structure is formed.

In the form of the invention shown by Figs. 1 to 9 each lug 25 is formed with a perforation 29 which is connected with the free end edge of the lug by a passage 31 having the side walls 33 converging toward each other as they extend away from said edge. The passage 31 and perforation 29 together form a slot which causes the portions 35 of the lug at opposite sides of such slot to be resiliently bendable toward and away from each other because of their decreased cross-section as compared to the body of the lug. The width of this slot where it opens on the free end edge of the lug is greater than the diameter of the pintle 15 received in the perforation 29, while the width of its opening on the perforation 29 is less than the diameter of the pintle. This construction permits the lugs to be entered into the slots 13 to present the pintles to the open ends of the slots to cause the diverging surfaces 33 to rest against the pintles, as diagramatically illustrated in Fig. 9, whereupon by forcing the cover and body portions of the container relatively toward each other the portions 35 of the lugs will flex transversely of the pintles to permit the latter to snap into the perforations 29 wherein they will be retained.

In situations where it is desirable more securely to retain the pintles in the perforations of the lugs the lug **37** of Fig. 10 may be employed. In this form of the invention the slot of which the pintle receiving perforation **29** forms a part may be continued inwardly beyond the perforation in the form of a narrow slot portion **39**. This provides the lugs **37** with resiliently bendable portions **41** that are longer than the corresponding portions **35** of the lugs **25**, and therefore enables the width of the opening on the perforation **29** of the passage formed by the divergent walls **33** to be narrower than is the case with the lugs **25**, so that, when the pintle is presented to the lug to bear against the surfaces **33**, and the cover and body portions of the container are forced toward each other, as diagrammatically illustrated in Fig. 10, the pintle will readily snap into the perforation **29** and be more securely retained therein by reason of this narrower width.

It will be understood that the opposite side walls **43** and **45** of the slots **13** act to guide the resiliently bendable portions of the lugs **25** and **37** when such lugs are forced inwardly of the slots for engaging the lugs with the pintles, and also to guide the lugs in their swinging movements after they are engaged. Also it will be understood that such side walls act to prevent movement of the cover portion of the container relative to the body portion of the container in a direction lengthwise of the pintles. If desired, those portions of the end walls **7** which form the side walls **45** of the slots **13** can be omitted, in which case the remaining side walls **43** of the slots will prevent movement of the cover relative to the body portion of the container longitudinally of the pintles. However, without such omission one side of both slots **13** simultaneously acts on the two lugs to prevent movement in either direction longitudinally of the pintles, and further causes the container to have a more finished appearance.

It will be understood that within the scope of the appended claim wide deviations may be made from the form of the invention described without departing from the spirit of the invention.

I claim:

A container comprising an open top body portion having a bottom wall, opposite end walls and a back wall, the side walls extending at the rearward corners of said body portion to substantially the plane of said back wall, each of opposite ends of said back wall being spaced from the adjacent end of the adjacent end wall, interior upstanding walls carried by said bottom wall at each of the

rearward corners of said body portion for connecting each end of said back wall to the adjacent end wall at a portion of said end wall spaced from its end adjacent the back wall, said upstanding walls comprising portions parallel to said end walls forming narrow slots between them and said end walls extending inwardly from the back of said body portion, said bottom wall being formed to present notches aligned with said slots so that the slots open on the bottom of said body portion as well as on its back and top, pintles integral with said end walls and said upstanding walls extending across said slots for tying to said upstanding walls the portions of said end walls at said slots so as to brace said portions, a cover for said body portion having a top wall which, adjacent its periphery, carries a back wall and opposite end walls forming corners substantially aligned with the adjacent end edges of the end walls of said body portion so as to cause said cover to cover said slots when said cover is in closed position, said cover being integrally formed with projecting flat prongs received in said slots and fitting the parallel wall portions thereof for preventing end play of said cover relative to said body portion, said prongs being formed with perforations through which said pintles hingedly extend, said prongs being of relatively stiff yet appreciably resilient material and also being formed with slots which place said perforations in communication with the free ends of said prongs, which last mentioned slots where they open on said perforations are of width less than the diameters of said pintles but of requisite width to permit, when assembling the cover with the body portion of the container, the prongs to be forced over the pintles by way of said slots of said prongs to cause the pintles to be received by said perforations and to be retained therein.

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