March 2, 1943. L. J. McCARTHY 2,312,351

CAN OPENER SPOUT

Filed Aug. 1, 1939

Fig. 4

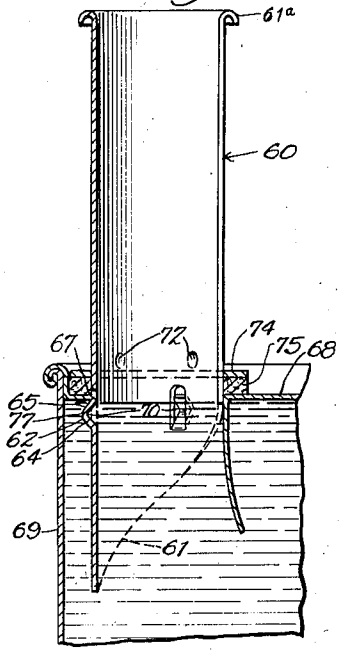


Fig. 1

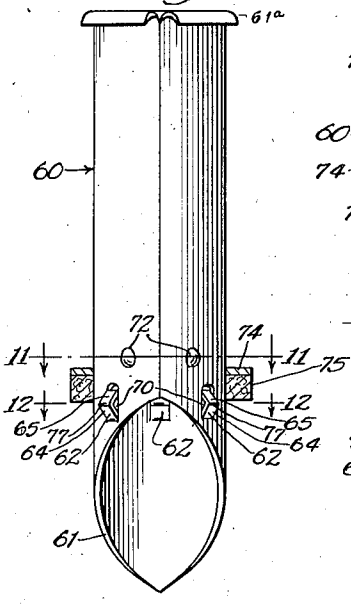


Fig. 7

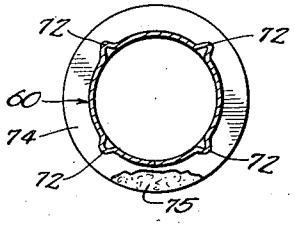


Fig. 3

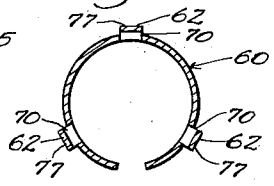


Fig. 9

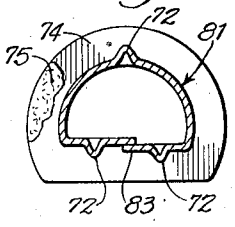


Fig. 6

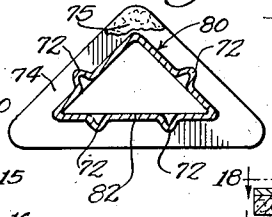


Fig. 8

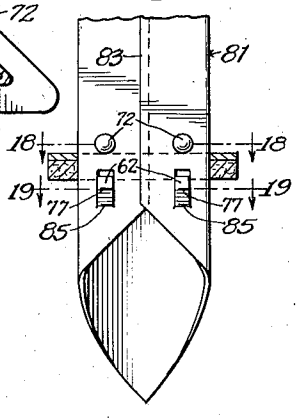


Fig. 5

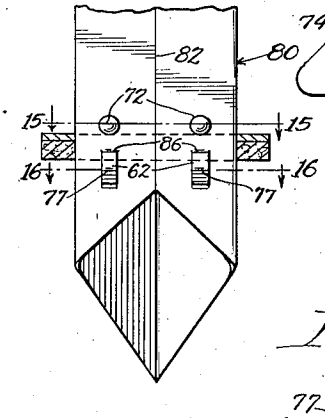


Fig. 10

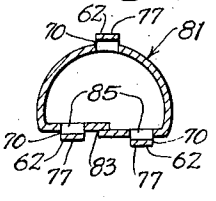
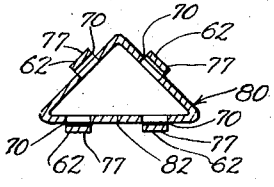


Fig. 7



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UNITED STATES PATENT OFFICE

2,312,351

CAN OPENER SPOUT

Lawrence J. McCarthy, Maywood, Ill., assignor to Sears, Roebuck and Co., Chicago, Ill., a corporation of New York

Application August 1, 1939, Serial No. 287,761

1 Claim. (Cl. 221—23)

This invention pertains to can opener spouts, and is concerned more particularly with a can opener spout of the type which may come separate and be used with any number of cans.

It is an object of my invention to provide a self-sealing spout adapted to be readily applied to and removed from a can.

It is another object of my invention to provide a spout which may be readily driven to puncture a can and, at the completion of the driving, efficiently performs its office as a spout.

It is a further object to provide a spout which retains itself securely in place without assistance.

An additional object is to provide a spout adapted to cooperate with cans having flange-bounded areas of different sizes, to puncture the areas.

Another object is to provide a novel dispenser for grease and other fluent substances.

Further objects and advantages of the invention will appear as the description proceeds.

The invention will be better understood upon reference to the following description and the accompanying drawing in which:

Fig. 1 is a section-elevation of a form of my invention.

Figs. 2 and 3 are sections taken respectively as indicated by the lines 2—2 and 3—3 in Fig. 1.

Fig. 4 is a longitudinal fragmentary sectional view of the spout of Figs. 1–3 in pouring assembly with a can.

Figs. 5–7 are similar respectively to Figs. 1–3 but depict another modification.

Figs. 8–10 are similar respectively to Figs. 1–3 but show still another modification.

The spout is preferably made of sheet material such as sheet metal, and of tubular form, and may be generally round (Figs. 1 to 4), triangular (Figs. 5 to 7), half round (Figs. 8 to 10), or of any other suitable shape, and may be circumferentially endless or split, and rigid or resilient, as desired.

The spout appearing in Figs. 1 to 4 comprises a tubular body 60 having a cutting end 61 and a smooth striking beaded end 61*a* and spring tangs 62 struck from or otherwise united to the body. One tang may be provided, but two or more are preferred for maintaining the spout in proper pouring position. Each tang is formed with a lower cam side 64 and an upper cam side 65 so as to be cammed inward by the cut edge or rim 67 of the end 68 of a can 69, to enable the spout to be inserted and removed, and, when the spout, driven by hand or hammer blows, is fully inserted, to cooperate with the inner part of said rim in such manner as to yieldably but firmly retain the spout in proper pouring position. The tangs project in a manner to form openings 70 so located as to assure the escape of substantially the last drop of the contents of the can.

The can may have a metal, paper or other body and sheet metal ends.

Lugs 72 project outwardly on the tube. Between said lugs and the tangs is fitted a preferably stiff metal or other washer 74 and a resilient felt, leather, felt-neoprene or other suitable packing or gasket ring 75, both of which may be slipped up past the tangs to embrace the tube as shown in Fig. 1. The gasket normally is of such thickness that it covers the upper parts of the upper cam surfaces 65 of the tangs. When forced against the can end 68, the device cuts thereinto as previously described. The device is forced in sufficiently far to snap the noses 77 of the tangs past the rim 67 and compress the gasket, the spring resistance of the tangs being such as to maintain the gasket under compression without assistance, thereby providing a leak-proof seal completely about the hole cut in the can.

One of the openings 70 is located preferably opposite the longitudinal edges of the spout. When the contents are being dispensed, it is advisable to hold the can in such manner that such edges are uppermost because if the edges were lowermost, the material being poured might leak therebetween. The edges are therefore an indication to the user that by holding them uppermost when pouring, the contents will flow without leakage under all circumstances, the last portion of the contents entering the spout at the bottom thereof through one of the openings 70 when the can is inverted.

The article may be of any desired dimensions transversely and longitudinally. It may be desirable to make the distance between the bead 61*a* and the lugs or projections 72 such that the user may conveniently wrap his hand about the externally projecting part of the spout in such manner that his thumb or forefinger may be pressed against the can top while the remainder of his hand tightly grasps such part so that the spout may be withdrawn readily from the can for use with another can.

The triangular spout 80 of Figs. 5–7 and the substantially semi-circular spout 81 of Figs. 8–10 differ from the spout 60 substantially only in shape. Any of the spouts could be abutting, as at 82, overlapped, as at 83 or circumferentially endless, as will be readily appreciated by those

skilled in the art. The tangs may be anchored by their lower ends, as shown at **85** (Figs. 8 and 10), or by their upper ends, as shown at **86** (Fig. 5), or otherwise.

It is therefore evident that I have provided a spout of extreme simplicity which may be formed by simple and inexpensive operations and of inexpensive material so that it may be produced in large quantities at low cost, is sturdy and durable, may be used indefinitely and may be readily cleaned for re-use.

Various modifications may suggest themselves to those skilled in the art without departing from the spirit of my invention, and, hence, I do not wish to be restricted to the specific form shown or uses mentioned, except to the extent indicated in the appended claim, which is to be interpreted as broadly as the state of the art will permit.

I claim:

As an article of manufacture, a spout comprising a tube having a sharp end adapted to cut into a can or the like, when said end is driven thereagainst, said tube having means projecting laterally outwardly therefrom for connecting said tube to the can when the latter is penetrated by said end, and means sealing the juncture of said tube with the can when said tube is connected to the can, said projecting means including one or more integral tongues biasing said tube toward the interior of the can so as to promote the sealing action, said tube being transversely open at said tongues for drainage.

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