May 24, 1949. F. BARTELS 2,471,189

STRAINER AND SPOUT ATTACHMENT FOR CANS

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Fig. 1

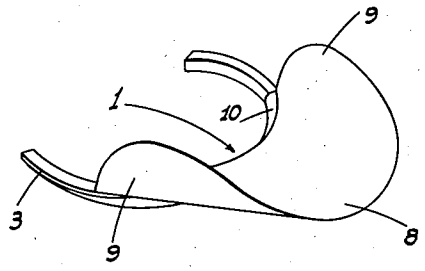


Fig. 2

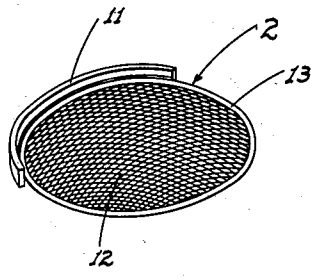
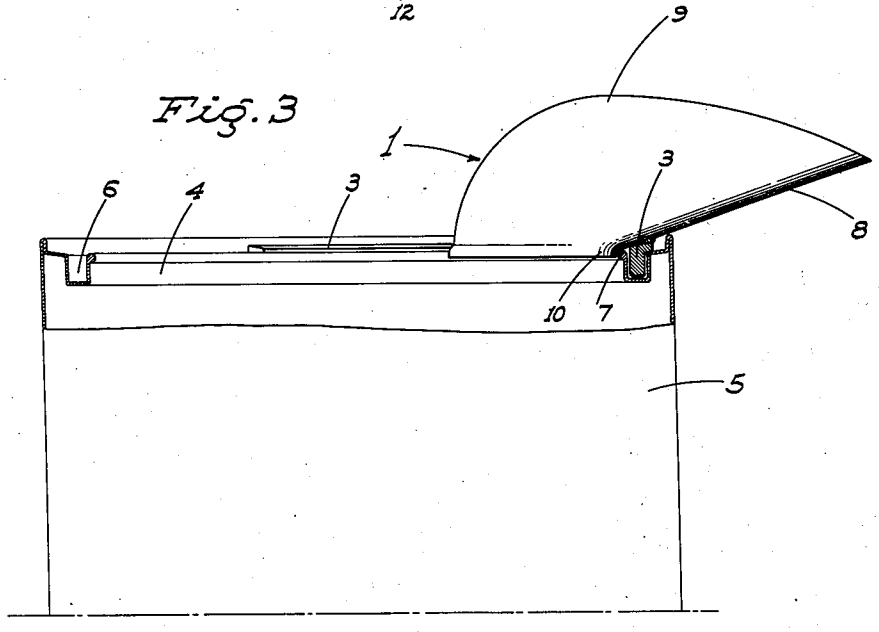


Fig. 3



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Fig. 4

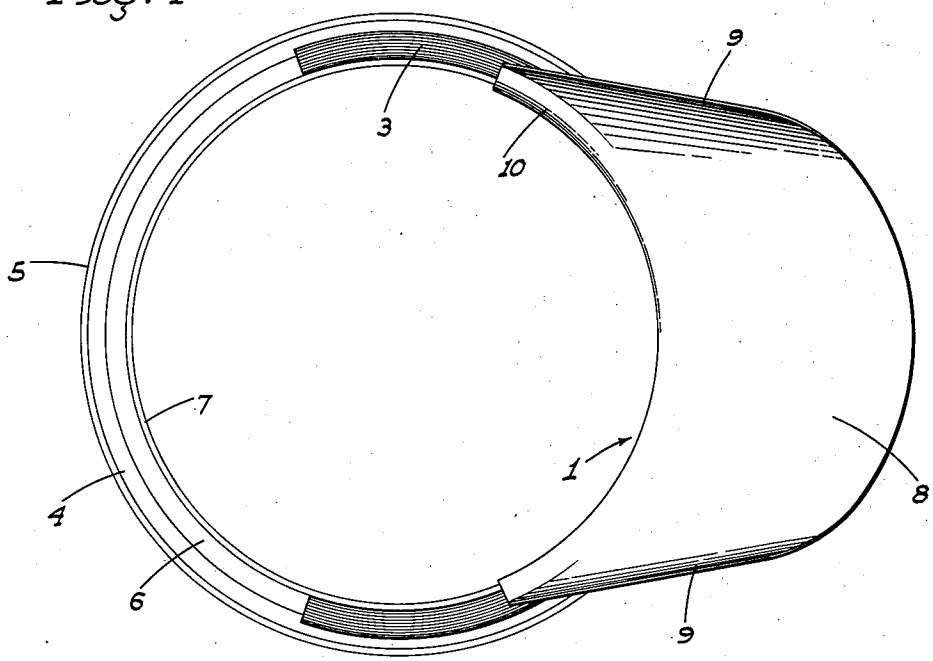


Fig. 5

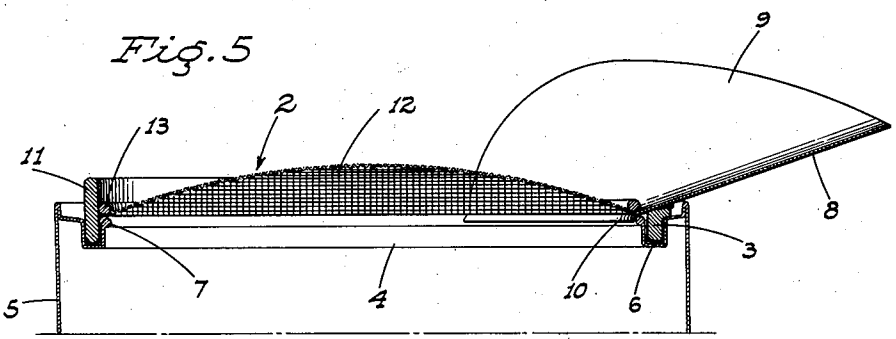
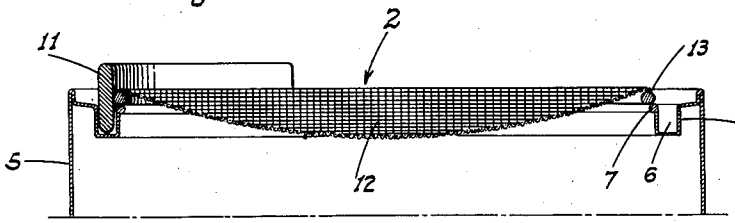


Fig. 6



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UNITED STATES PATENT OFFICE

2,471,189

STRAINER AND SPOUT ATTACHMENT FOR CANS

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Application November 22, 1944, Serial No. 564,682

1 Claim. (Cl. 210—163.5)

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This invention relates to, and it is an object to provide, a unique straining and pouring attachment for cans containing a liquid; the attachment being especially designed for paint cans.

An additional object is to provide a pouring attachment, for paint cans, which is operative to prevent loss of paint from the can, as well as access of paint, when poured, to the lid engaging portions of the can at the top.

A further object of the invention is to provide a straining and pouring attachment, for paint cans, which comprises, in initially separate relation, a pouring spout unit and a straining screen unit. Such units are arranged so that they may be applied to a paint can either separately for independent pouring or straining operations, or may be applied to the can jointly to accomplish straining and pouring at the same time.

Another object of the invention is to provide a straining and pouring attachment, as above, which includes a pair of segmental members adapted to frictionally engage in the annular channel of the lid engaging portion of the can, a circular straining screen secured to one segmental member in covering relation to the open end of the can, and a pouring spout secured to the other segmental member and projecting outwardly therefrom.

A further object of the invention is to produce a simple and inexpensive device, and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Figure 1 is a perspective view of the pouring unit, detached.

Figure 2 is a perspective view of the straining unit, detached.

Figure 3 is a sectional elevation of the pouring unit, as mounted on an open top can.

Figure 4 is a plan view of the pouring unit, as mounted on an open top can.

Figure 5 is a sectional elevation of the pouring unit and straining unit as mounted, in cooperative relation, on an open top can.

Figure 6 is a sectional elevation of the straining unit as mounted alone on an open top can and in inverted position for straining of liquid poured into said can.

Referring now more particularly to the characters of reference on the drawings, the improved straining and pouring attachment for open top cans, such as paint cans, comprises a pouring unit, indicated generally at 1, and a straining unit, indicated generally at 2.

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The pouring unit includes an arcuate member 3 formed to frictionally engage in supported relation in the annular trough 4 which paint cans or the like commonly include at the top for reception of the lid, the can being indicated at 5. The trough 4 forms an annular channel 6, and at its inner and upper edge thereof said trough includes an annular bead 7.

The member 3 is fixed at the top with a relatively wide pouring spout 8 which extends at an upward and outward incline; said spout including deflector or side wings 9.

The spout 8 is of lesser circumferential extent than the member 3 and is fixed to the latter in symmetrical relation thereto adjacent but short of the inner end of said spout. The inner end portion of spout 8 is formed as a full-width inwardly and downwardly curving lip 10 which closely overhangs the adjacent portion of the bead 7 in matching and engaging relation thereto. This lip 10 prevents the liquid contents of the can 5, such as paint, from gaining access into the annular channel 6 when the paint is being poured from can 5 and through spout 8. It will be seen that with a pouring spout constructed as above described, paint from the can 5 can be poured out of said can without spilling or loss, which is very desirable.

If it is desired to strain the paint at the same time that it is being poured, the straining unit, as shown detached in Fig. 2, is employed, and which straining unit is constructed as follows:

Another arcuate member 11 is adapted to frictionally seat in the trough 4 on the side of the can opposite the spout 8; the member 11 being of a circumferential extent to form with the member 3 a full-circle assembly. A circular concavo-convexo screen strainer 12 which includes a border frame 13 is fixed to the member 11 intermediate the upper and lower edges thereof, whereby when the member 11 is in position in the trough 4, the circular screen 12 fully covers the open end of the can, as shown in Fig. 5, so that paint from the can must first pass through the screen before reaching the spout 8.

When the screening unit 2 is employed in connection with the pouring unit 1, as above, the circular screen 12 is disposed with its convex side uppermost, as illustrated in Fig. 5, and at which time the portion of said screen adjacent

the lip 10 seats on top of the latter in symmetrical relation.

If it is desired to strain paint to be poured back into the can the screen 12 is inverted and disposed in covering relation to the open end of the can with the concave side of said screen uppermost, as shown in Fig. 6. In this position the border frame 13 of the screen 12 seats in matching relation on top of the annular bead 7 of trough 4. The screen may be mounted on the can in the above inverted position for the reason that the member 11 is of substantial height and as the screen is secured thereto intermediate its edges, either edge portion of said ring 11 may be seated in the trough 4.

While the pouring unit and straining unit 2 are here shown as including arcuate members 3 and 11, which are formed to engage in the annular trough 4 of the can, it will be recognized that if the can is of the type which includes an annular upstanding ring in place of the trough 4, the members 3 and 11 will be formed as segmental downwardly facing channels to cooperate with said can ring.

From the foregoing description it will be readily seen that there has been produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claim.

Having thus described the invention, the following is claimed as new and useful and upon which Letters Patent are desired:

In combination with a can which includes a circular opening in its top and a channel formed

in the top adjacent the opening, a pair of arcuate members, each member engaging in a portion of the channel to hold the members in position when the can is inverted, such members being of a size to complement each other to form a substantially full circle ring about the channel whereby to hold each member against displacement with respect to its fixed position in the channel, a spout fixed to one member, a lip on the spout projecting inwardly of the said one member and overhanging the adjacent inner edge of the circular opening of the can, and a strainer fixed on the other member, such strainer including a portion symmetrically fitting between the sides of the spout and overhanging and resting on the lip of the spout.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
194,354	Jones	Aug. 21, 1877
587,438	Irwin	Aug. 3, 1897
1,051,735	Hammond	Jan. 28, 1913
1,374,776	Stanley	Apr. 12, 1921
1,589,486	Sharpneck	June 22, 1926
1,760,228	Armstrong	May 27, 1930
1,849,134	Carter	Mar. 15, 1932
1,867,060	Carr	July 12, 1932
1,959,584	Hurley	May 22, 1934
2,106,381	Rough	Jan. 25, 1938
2,145,748	Bailey	Jan. 31, 1939
2,315,842	Dariano	Apr. 6, 1943
2,331,971	Gramp	Oct. 19, 1943
2,377,548	Giordano	June 5, 1945