

J. M. HOTHERSALL.
 SEAL FOR SHEET METAL CONTAINING VESSELS.
 APPLICATION FILED MAR. 28, 1912.

1,148,683.

Patented Aug. 3, 1915.

Fig. 1

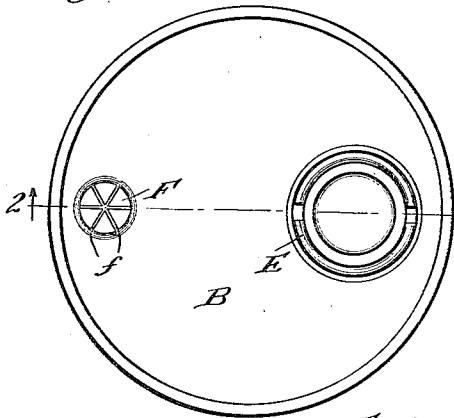


Fig. 3

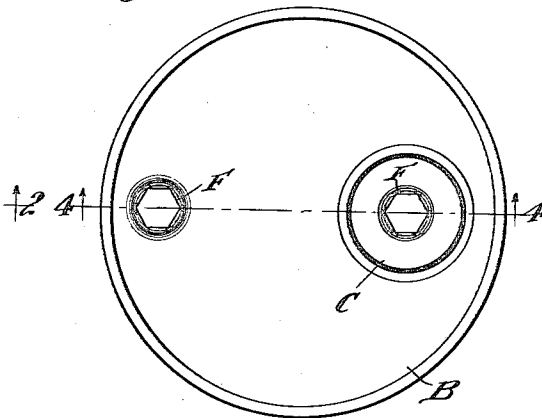


Fig. 2

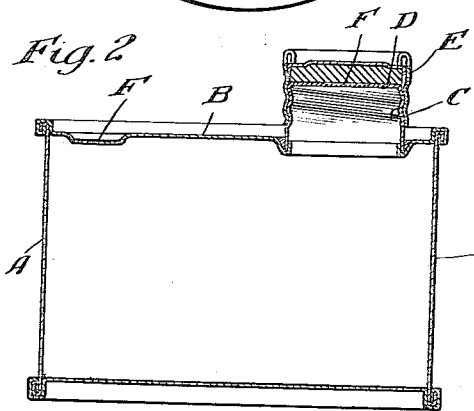


Fig. 4

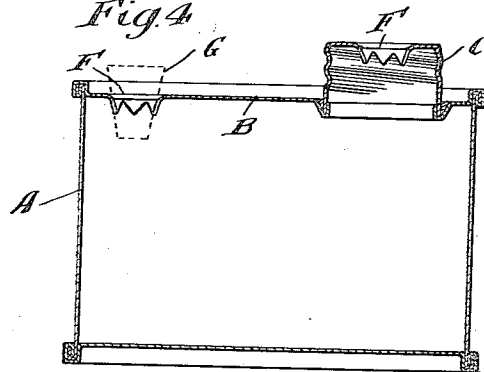
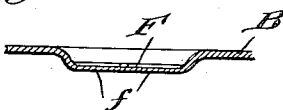


Fig. 5



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN M. HOTHERSALL, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CAN COMPANY,
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SEAL FOR SHEET-METAL CONTAINING VESSELS.

1,148,683.

Specification of Letters Patent.

Patented Aug. 3, 1915.

Application filed March 28, 1912. Serial No. 686,811.

To all whom it may concern:

Be it known that I, JOHN M. HOTHERSALL, a citizen of the United States, residing in the borough of Brooklyn, city of New York, in the county of Kings and State of New York, have invented a new and useful Improvement in Seals for Sheet-Metal Containing Vessels, of which the following is a specification.

10 This invention relates to an improvement in seals for sheet metal containing vessels.

The purpose of the invention is to provide a seal closure which can be readily broken, which must be broken in the opening of the vessel and in which the seal is preferably made of the same material as the vessel itself.

20 The invention consists in forming at the opening of the vessel an imperforate star shaped score which can be ruptured or perforated with any blunt instrument, and which, after being so perforated, cannot be readjusted to hide the fact that it has been broken and the vessel opened.

25 In the accompanying drawing which forms a part of this specification, Figure 1 is a top or plan view of a vessel provided with two of my improved seal openings, one for pouring and the other for vent. Fig. 30 2 is a section of Fig. 1, taken on the line 2—2. Fig. 3 is a plan view of the same structure after the seal has been broken. Fig. 4 is a sectional view on the line 4—4 of Fig. 3. Fig. 5 is a sectional view of one 35 of the seals in Fig. 1, said Fig. 5 being upon a somewhat larger scale.

This improved sealed nozzle or closure has the advantage that it does not require any extra part to be applied to the ordinary can or vessel, the seal being made of the material of the vessel or nozzle itself. It has the further advantage that when the seal has been once ruptured, all of its parts remain attached to the can and it is impossible to readjust or reconstruct the parts in such manner as to hide the fact that the seal has been broken and the vessel opened. It has the further advantage of constituting in itself an opening means for the can or 45 vessel adapted to furnish an orifice through which the contents of the vessel or can may be discharged, and which provision is simple, cheap and easily operated, the opening being one that can be made by simply

punching any blunt instrument into the 55 place of the seal.

In said drawing, A represents any ordinary can or vessel, such as is used for containing milk, oil, syrup, paint, varnish or other like material.

60 B is the ordinary cover seamed to the body.

C is the nozzle, made with an imperforate top D, and upon which may be fitted, if desired, any ordinary screw cap E.

65 F is the seal, which consists of a series of scored lines *f* radiating from a common center and formed in the material of the vessel itself either at the nozzle C or elsewhere. The seal is surrounded by a bounding wall 70 of the metal of the can, which wall limits the opening produced by the perforating tool. The seal is preferably formed in a depression of the thin metal top of the can, as shown in Fig. 5, and the bounding wall 75 of this depression limits the breaking of the seal, by a tool, along the said scored lines; so that a pouring opening of regular and substantially circular contour may be produced by the wall of the depression, into 80 which a cork may be inserted to form a removable closure. The head or other part of the vessel may be provided with one or more of these scored imperforate sealed openings, so that the vessel may be opened 85 at various points, as, for example, at the nozzle for pouring, and at another point for vent, as shown in the drawings. After the seal is broken, after the manner shown in Figs. 3 and 4, the vessel can be closed again 90 by screwing on the cap E or by inserting a cork G, as shown in dotted lines in Fig. 4, or in case of more than one opening, both these closures may be employed to advantage. Such a double facility of opening 95 and closure is specially desirable in cans containing olive oil, which is better kept both from the light and from the air.

The star shaped scoring can easily and cheaply be done as a part of the die work, 100 or it may be done after the die work is finished by a single stroke of a suitable tool.

It will be seen that this seal is not merely a seal, but also a simple form of opening 105 for the can or vessel.

I claim:—

A sheet metal can having a hermetic and perforable closure composed of the thin

metal integral with a top portion of the can, and formed by radial scores bounded at their outer ends by a wall of the can top which determines the contour of the perforation; whereby a tool may cause the metal to be broken along the radial scores to form a pouring opening of regular and

substantially circular contour, bounded by the said wall and adapted to be closed by a removable plug; substantially as specified. 1)

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Witnesses:

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