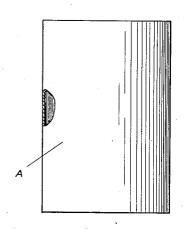
C. L. COFFIN. METALLIC VESSEL. APPLICATION FILED APR. 20, 1905.

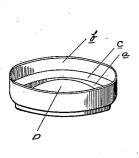
2 SHEETS-SHEET 1.



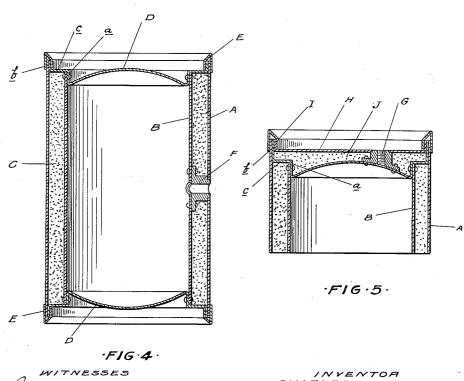
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F16 2

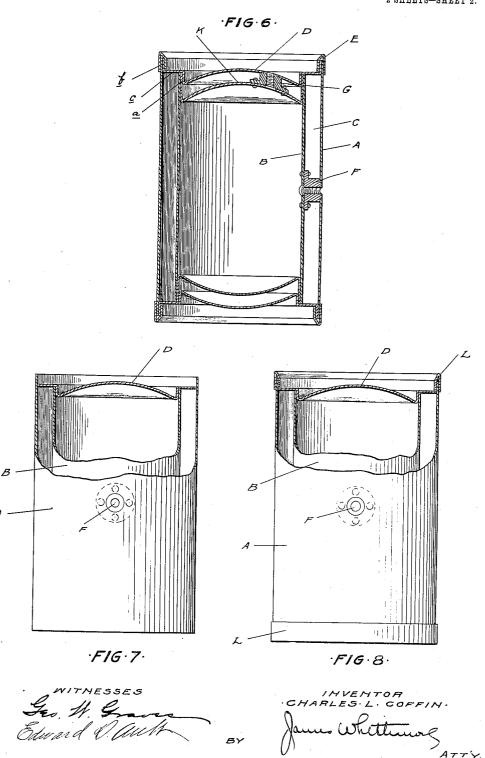


F16.3



C. L. COFFIN. METALLIC VESSEL. APPLICATION FILED APR. 20, 1905.

2 SHEETS-SHEET 2.



UNITED STATES PATENT OFFICE.

CHARLES L. COFFIN, OF DETROIT, MICHIGAN, ASSIGNOR TO ELECTRIC METAL WORKING COMPANY, OF DETROIT, MICHIGAN, A CORPORATION.

METALLIC VESSEL.

No. 816,558.

Specification of Letters Patent.

ratented April 3, 1906.

Application filed April 20, 1905. Serial No. 256,659.

To all whom it may concern:

Be it known that I, Charles L. Coffin, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Metallic Vessels, of which the following is a specification, reference being had therein to the accompanying drawings

The invention relates particularly to metallic vessels of the type wherein the body is surrounded by an air space or chamber forming insulating means for protecting the vessel contents; and it consists in the novel construction of a receptacle or vessel of this character, in the peculiar manner of insulating the same, and in other details of construction, as will be more fully hereinafter set forth.

o For the purpose of illustrating my invention I have shown the vessel in the form of a

metallic keg or barrel, of which—

Figures 1 and 2, respectively, are views in elevation of the outer and inner shells composing the vessel-body. Fig. 3 is a perspective view of one of the heads for the barrel. Fig. 4 is a vertical central section through the barrel; and Figs. 5 to 8, respectively, are modifications.

The body of the barrel is composed of two metallic shells A and B, preferably concentrically arranged and spaced one from the other to form an air space or chamber C for insulating purposes. The outer section is preferably of greater length than the inner, and two are united by means of the barrel-

heads D, as hereinafter set forth.

Each head is preferably concaved and formed with two vertical spaced flanges a and b, one above the other, and an intermediate lateral portion or section c, which unites the flanges. The heads, as shown in Fig. 4, are fitted within the ends of the inner section with their vertical flanges a engaging the end portions of the shell. The transverse portions or offsets c of the head extend across the space between the shell-sections, acting to space the latter in the manner desired to

form the insulation, while the vertical flanges b engage the outer end portions of the outer shell, as plainly shown. As a matter of preference a chime-hoop E is fitted over each end of the barrel and extends over into the head, preferably into proximity to the

lateral offset portion c. In the side of the 55 barrel a bung of any suitable type, as F, may be placed, the bung preferably used being in the form of a threaded apertured flange (indicated by the reference-letter F) riveted to the inner section and engaging an opening 60 formed for the same in the outer shell.

From the description thus set forth it will be obvious that the inner shell is suspended from the heads of the barrel, which is an exceedingly desirable construction, in that the 65 inner section is protected against any jars or blows that the barrel may receive.

In case it is desired to insulate the heads of the barrel as well as the body the additional insulation may be obtained by employing an 70 auxiliary head, using the latter either as an outer head, as indicated in Fig. 5, or as a head for the inner shell, as shown in Fig. 6. Where an insulated head for the barrel is used, a bung-flange, as G, is employed, similar to the 75 one already described.

In Fig. 5 the auxiliary head H is flanged, as at I, and is fitted within the vertical flange b of the head D at a distance above the latter to form the desired air space or chamber J.

In Fig. 6 the barrel is shown as formed of a headed inner section or shell, the heads K therefor being flanged and welded within the shell ends, as shown, the outer section A having its head formed in the same manner as 85 previously described.

In the several constructions of the barrel heretofore described the heads for the barrel have been formed in each instance with vertical flanges and a transverse portion con- 90 necting the same. If desired, the barrel or keg may be made up with heads differing from this construction in that the outer vertical flange is entirely dispensed with, as shown in Figs. 7 and 8. Here the inner shell 95 has the inner vertical flange and the laterallyprojecting spacing portions, while the outer shell is driven tightly over the spacing-section and the parts held together by frictional engagement. This construction of barrel is 100 useful for many purposes, but is not especially adapted for use where it would be subjected to rough handling. It may be easily reinforced, however, and independent longitudinal movement of the shell-sections pre- 105 vented by the use of chime-hoops L, as shown in Fig. 8, the hoops extending over the outer

the spacing-section of the head, or by other means which would readily suggest themselves to one skilled in the art.

What I claim as my invention is—

1. A metallic barrel comprising an outer metallic headed shell, and an inner shell insertible within and suspended from the heads of the outer, free from the walls thereof.

2. In a metallic barrel, the body formed of two spaced shell-sections arranged one within the other, and a head for the body carrying a flange connecting with the inner section and a spacing and closure member extending between the sections.

15 3. A metallic barrel, consisting of a body formed of two concentrically-arranged spaced shell-sections, and heads for the body carrying integral therewith outwardly-projecting annular flanges forming means of connection between the heads and the inner section, and

lateral spacing-flanges extending intermediate of and closing the space between the shells.

4. A metallic vessel consisting of a body comprising two separated shell-sections ar-25 ranged one within the other, and heads having integral spacing portions for and uniting the shells, in different planes from the planes of the heads.

5. A metallic vessel consisting of a body composed of two separated shells arranged 30 one within the other, heads for said body, separated vertical flanges upon each head engaging the ends of the shell-sections, and lateral portions upon the heads uniting the flanges and covering the space between the 35 shells.

6. A metallic vessel comprising a headed inner shell-section, an outer shell-section spaced from the inner, and heads for the outer shell uniting the sections.

7. A metallic vessel comprising a headed inner shell-section, an outer shell-section spaced from and extending beyond the ends of the inner, and heads for the outer shell uniting the sections.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES L. COFFIN.

Witnesses:
Edward D. Ault,
Jas. P. Barry.

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