

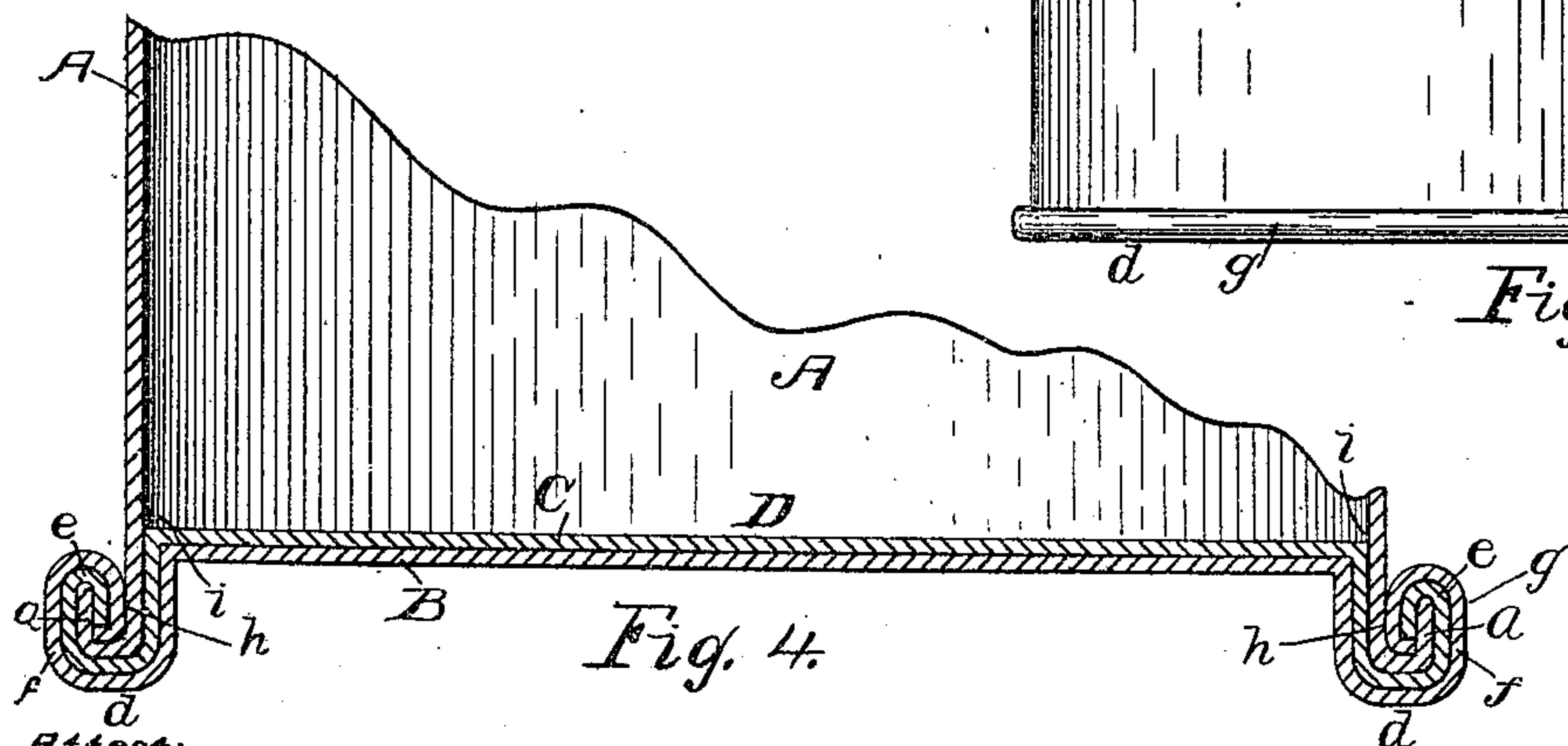
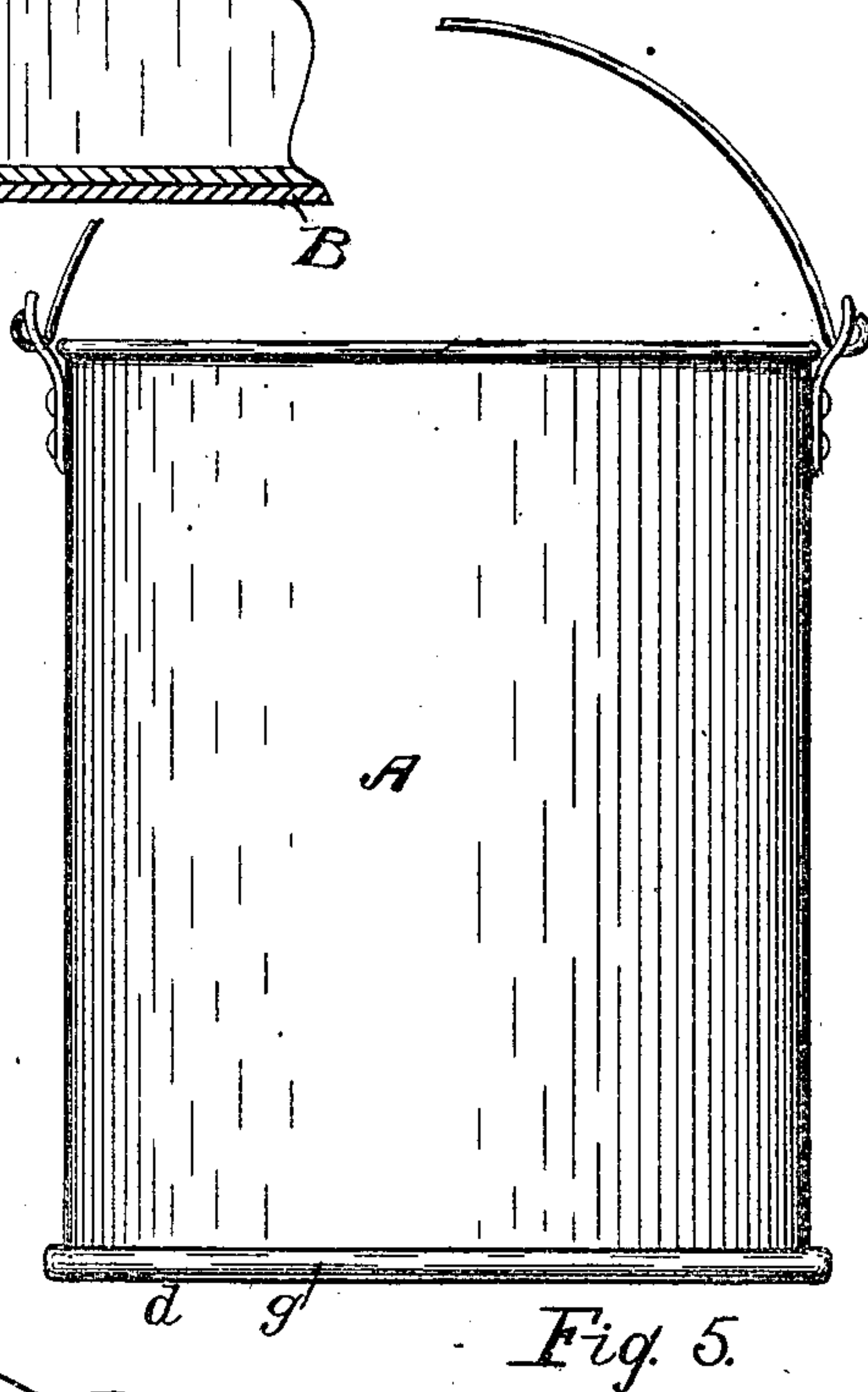
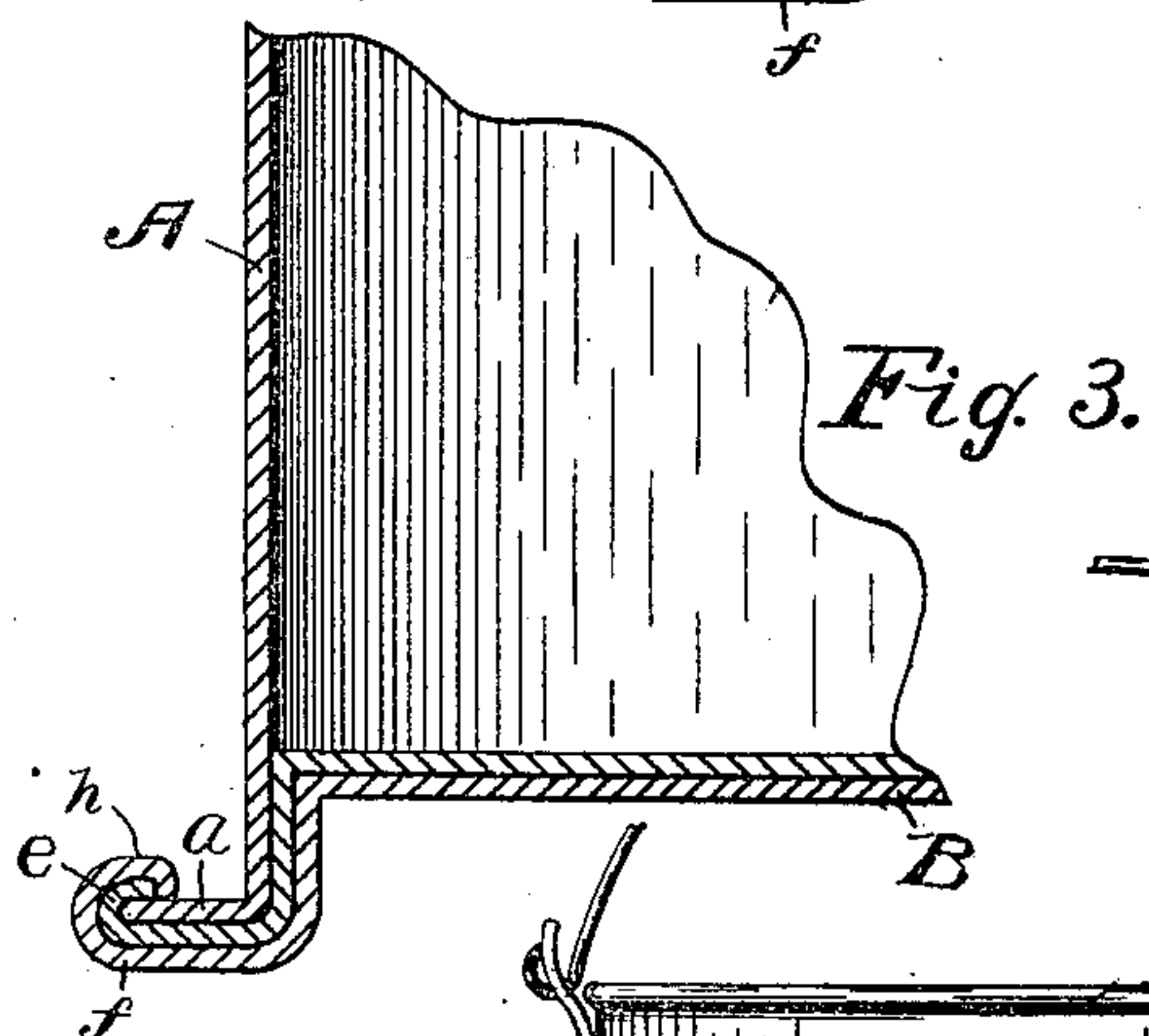
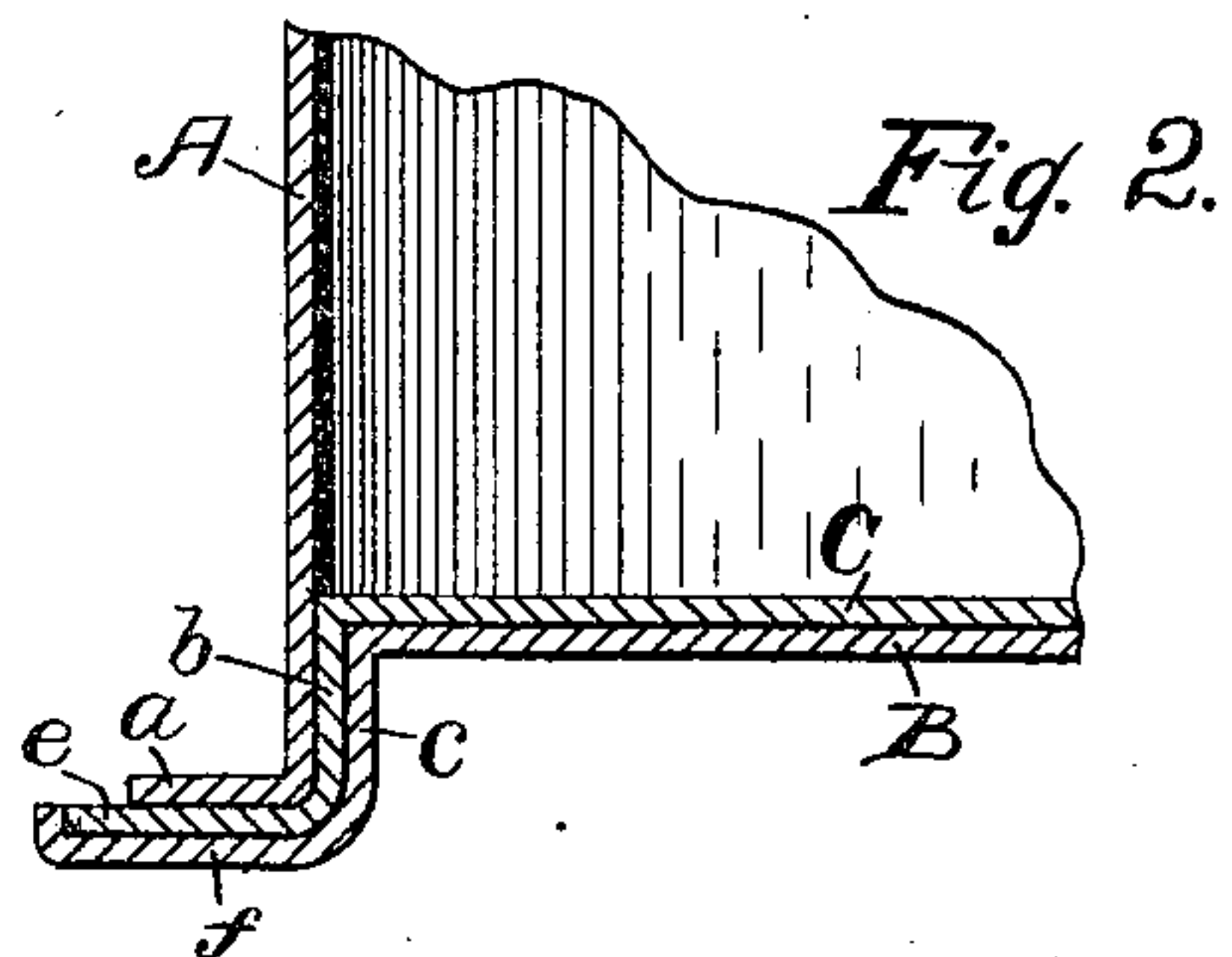
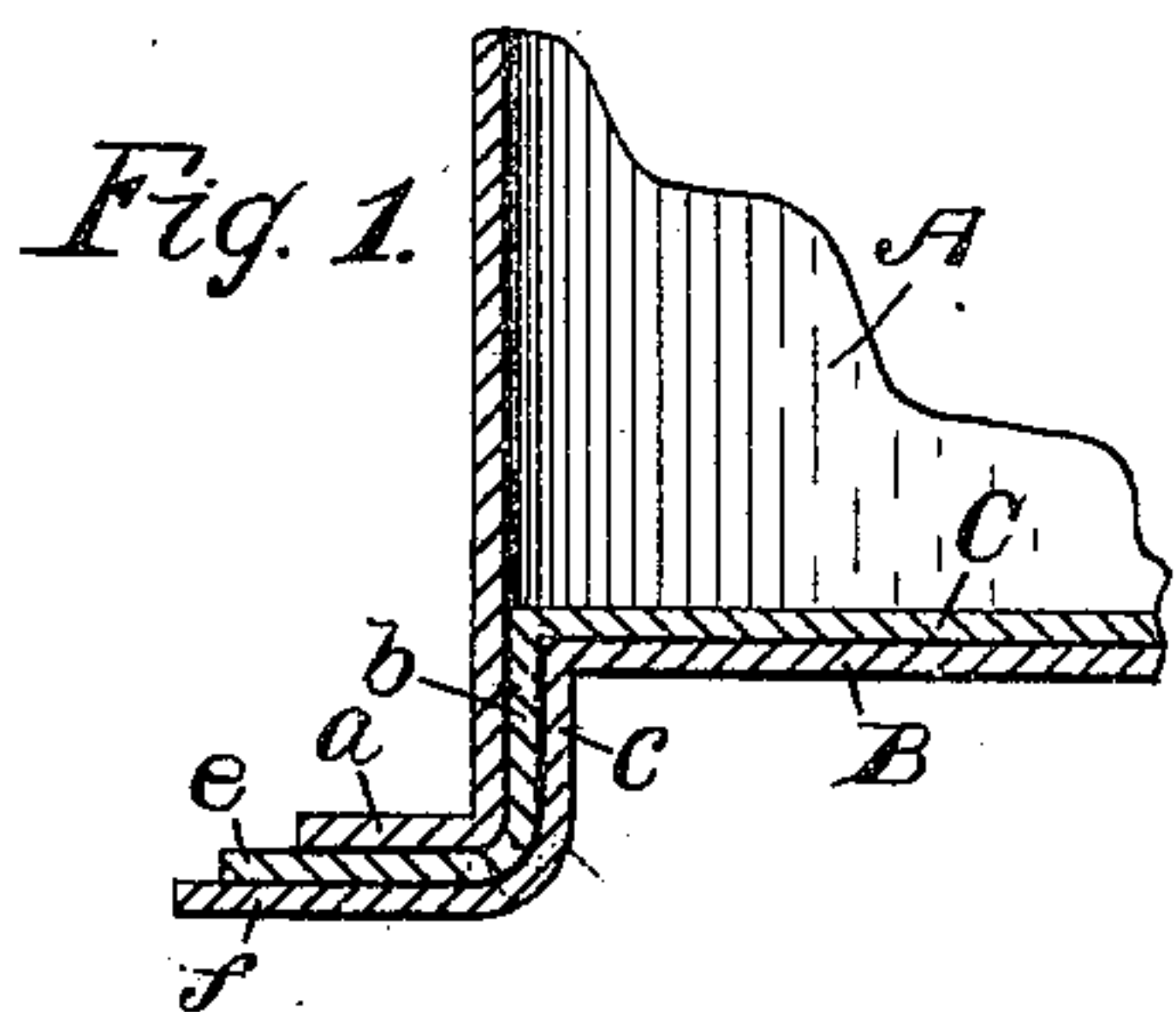
No. 653,439.

Patented July 10, 1900.

J. E. BYRNES.
ANTIRUST VESSEL.

(Application filed Feb. 10, 1900.)

(No Model.)



Attest:

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UNITED STATES PATENT OFFICE.

JOSEPH E. BYRNES, OF NEWARK, NEW YORK.

ANTIRUST VESSEL.

SPECIFICATION forming part of Letters Patent No. 653,439, dated July 10, 1900.

Application filed February 10, 1900. Serial No. 4,836. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH E. BYRNES, of Newark, in the county of Wayne and State of New York, have invented a new and useful
5 Improvement in Antirust Vessels, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention relates to sheet-metal ware
10 generally, but more particularly to the class known as "antirust tinware," the device being for the purpose of preventing the rusting of the lower parts of the vessel.

The object of my invention is to provide
15 an antirust vessel so constructed that liquid cannot enter between the antirust sheet and the bottom of the vessel whether placed within the vessel or surrounding the same, solder not being depended upon to make the joint
20 tight against the inflow of the liquid. I effect this by making the antirust sheet large in diameter and extending its edge beyond the outside of the pail and folding the same into the seam at the bottom.

25 The invention is hereinafter fully described, and more particularly pointed out in the claims.

Referring to the drawings, Figures 1 to 4,
30 inclusive, are longitudinal diametrical sections of parts at the bottom of a tin vessel, showing different stages in the process of completing the same, the metal sheets being exaggerated in thickness for the purpose of
35 clearness. Fig. 5, drawn to a small scale, shows a complete vessel.

A is a metal sheet, as tin, forming the sides
40 of the vessel, B being the bottom sheet or plate, and C the superimposed sheet of antirust material. The form of the pail or vessel is immaterial to this invention, likewise the form or configuration of the sheets B and C as to their middle parts at D. These sheets
45 may be either flat or crowning, touching each other throughout their adjacent surfaces or separated with space between, or otherwise curved or bent, as may be desired.

The body of the vessel is formed with an
50 outwardly-turned flange *a*, Fig. 1, and the sheets B C are formed with flanges *e* and *f*, adjacent to and coacting with the flange *a*. The sheets B C are made contiguous adjacent to the inner surface of the vessel, as

shown at *b c*, being bent thereat to form a
circular downwardly-projecting foot *d*, Figs.
4 and 5, and finally bent outward to form the
55 above-mentioned flanges *e f*, parallel with the flange *a*. The proportion of the parts is such that the flange *e* extends beyond the flange *a* and the flange *f* extends beyond the edge of
60 the flange *e*.

In constructing the vessel the outer edge
of the flange *f* is first turned up against the
periphery of the flange *e*, as shown in Fig. 2.
The two flanges *e f* are then together turned
65 over the outer edge of the flange *a*, as shown in Fig. 3, the final operation in forming the
bead or band *g* being to turn at once all three
flanges to vertical positions, as shown in Fig.
4, bringing the surface *h* of the flange *f*, Fig.
3, to press snugly against the outer surface
70 of the side A of the vessel, as shown. Thus constructed the outer part or flange *e* of the
antirust sheet C is wholly inclosed within the
folds of the sheet B, forming the bottom of
the vessel, and between said sheet and the
75 flange *a* of the vessel. This construction renders the joint or seam at the bottom of the
pail tight and prevents the inflow of liquid
between the plates or sheets B and C.

In constructing the vessel solder is not em-
80 ployed on the outside in forming the band *g*, but is usually applied on the inside at *i* to
strengthen the structure.

What I claim as my invention is—

1. A sheet-metal vessel having a bottom
85 plate and an antirust sheet or plate superimposed thereon, the body of the vessel being formed with an outwardly-projecting
flange and said bottom plate and antirust
sheet having outwardly-projecting flanges
90 adjacent to and coacting with said flange of the body, the flanges of the two bottom plates
or sheets extending beyond the flange of the
body of the vessel, the one bent over the
other and both embracing the flange of the
95 body substantially as and for the purpose specified.

2. A sheet-metal vessel having a bottom
plate, and a superimposed antirust sheet or
plate, the body of the vessel and said antirust
100 sheet and the bottom plate each having an outwardly-turned flange, the flange of the antirust
sheet extending beyond the flange of the
body of the vessel, and the flange of the

bottom plate extending beyond the flange of the antirust sheet, the flanges of the antirust sheet and bottom being bent one over the other and over the flange of the body and all
5 again bent and lying contiguous to the wall of the vessel substantially as shown and described.

3. A vessel of the kind described, having the bottom formed of two sheets one placed
10 upon the other, one being of antirust material, the body of the vessel and the two bottom plates being formed with outwardly-pro-

jecting parts or flanges, said three flanges being of different lengths and bent one over the other and folded or rolled into an external bead or band for the vessel, substantially
15 as shown and described.

In witness whereof I have hereunto set my hand, this 19th day of January, 1900, in the presence of two subscribing witnesses.

JOSEPH E. BYRNES.

Witnesses:

WM. STEPHENSON,

S. L. MCGAULEY.