L. L. KNOX.

GALVANIZING POT.

APPLICATION FILED FEB. 4, 1918.

1,282,862.

Patented Oct. 29, 1918.

2 SHEETS—SHEET 1.

Fig. 1.

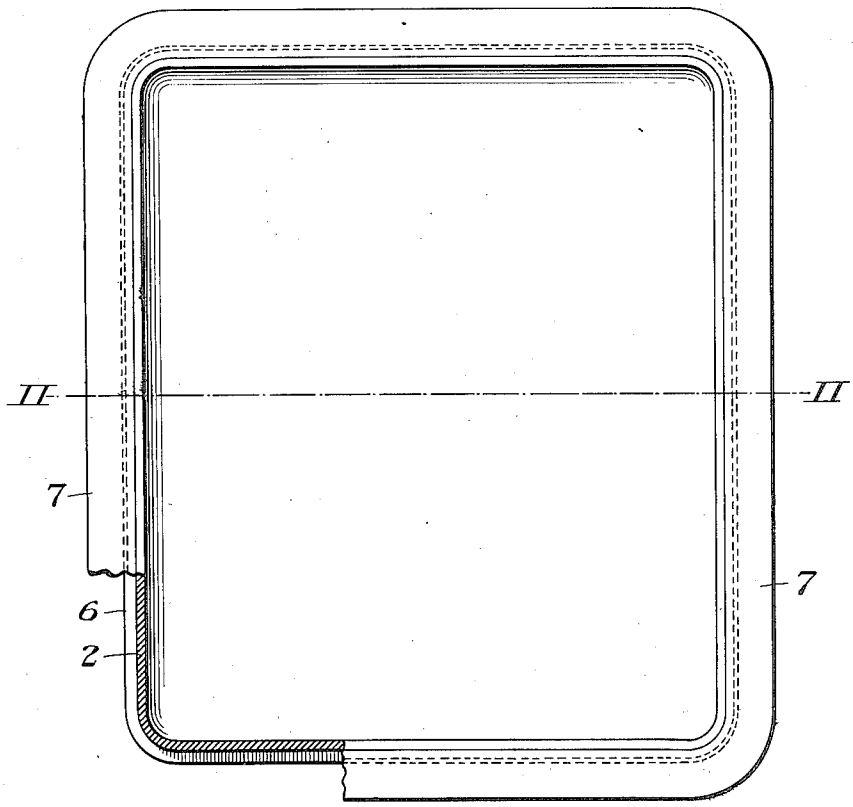


Fig. 2.

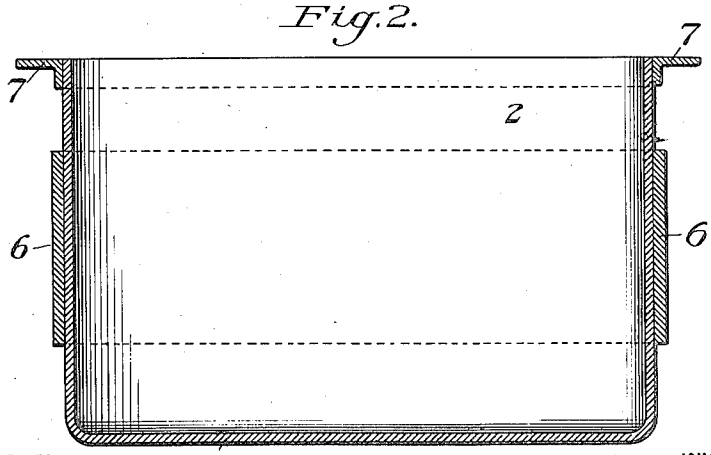


Fig. 2a



WITNESSES

R. A. Balderson

H. N. Windridge

INVENTOR

L. L. Knox

by Bakewell, Clymer & Parmelee

Attys.

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2 SHEETS—SHEET 2.

Fig. 3.

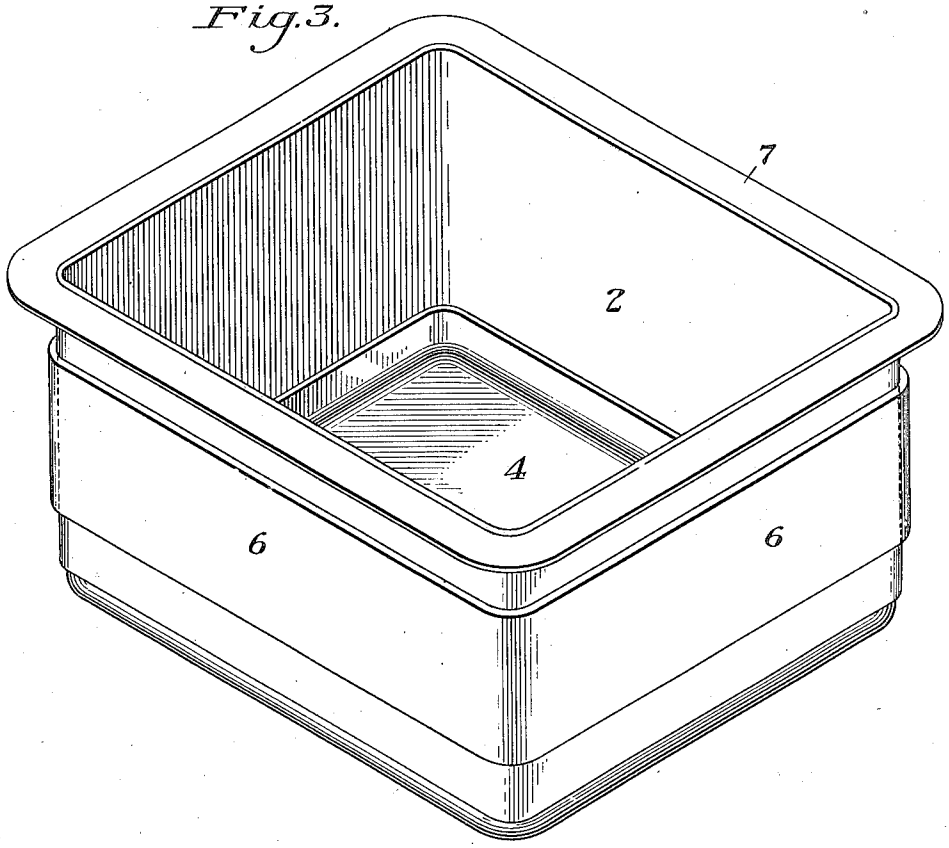
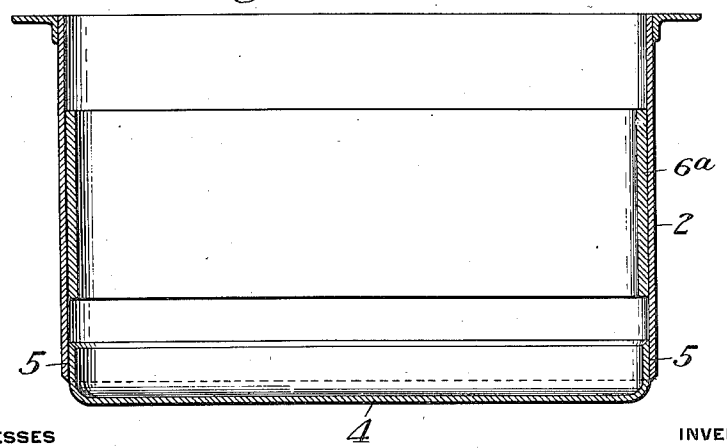


Fig. 4.



WITNESSES

R. A. Balderson

F. N. Windridge

INVENTOR

L. L. Knox

by Bakewell, Byron & Pamely

Attys.

UNITED STATES PATENT OFFICE.

LUTHER L. KNOX, OF BELLEVUE, PENNSYLVANIA, ASSIGNOR TO BLAW-KNOX COMPANY, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

GALVANIZING-POT.

1,282,862. Specification of Letters Patent. Patented Oct. 29, 1918.

Application filed February 4, 1918. Serial No. 215,281.

To all whom it may concern:

Be it known that I, LUTHER L. KNOX, residing at Bellevue, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Galvanizing-Pots, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view partly broken away of a galvanizing pot embodying my invention;

Fig. 2 is a section on the line II—II of Fig. 1;

Fig. 2ª is a detail sectional view;

Fig. 3 is a perspective view showing the manner in which the parts of the pot are assembled; and

Fig. 4 is a vertical section showing a modification and also showing the bottom member of the pot before welding.

My invention has relation to galvanizing pots, and is designed to provide a galvanizing pot constructed from sheet metal, which will be practically seamless, which can be readily constructed and in which the portions of the pot which are subjected to the greatest deterioration in use are protected in such a manner as to greatly extend the life of the pot.

Referring to the accompanying drawings, in which I have illustrated a preferred form of my invention, the numeral 2 designates the body portion of the pot which is preferably formed from a single piece of sheet metal bent into generally rectangular form but with rounded corners, the edge portions of the sheet being brought together and overlapped, as indicated at 3 in Fig. 2ª. These overlapped portions are then welded in any suitable manner, as by the water-gas method, so as to make a practically homogeneous connection of approximately the same thickness as the general thickness of the sheet metal. The bottom portion 4 of the pot consists of a separate sheet metal member having a surrounding upturned marginal flange 5, which is telescoped within the lower portion of the body 2, as shown in Fig. 4, and the overlapping portions of the flange and body are then welded together in the same manner as that described for the welding of the edge portions of the body.

The numeral 6 designates a reinforcing band also of sheet metal and preferably of somewhat greater thickness than that of the sheet metal body. This reinforcing band may be placed externally of the body and entirely surrounding the same, as shown in Fig. 2, or it may be placed internally of the body as shown at 6ª in Fig. 4. In either case, it is of a vertical width or height sufficient to cover the working levels of the metal in the pot. That is to say, its upper edge should be slightly above the normal maximum level of the bath in the pot, while its lower edge should extend below the level at which the pot is normally emptied in use. While this band may be riveted to the body, I prefer to weld it in place, its ends being overlapped and welded in a manner similar to the welds before described. In this way, it may be made to become a practically homogeneous part of the pot.

The numeral 7 designates a surrounding external flange at the upper edge of the pot. In this case, I have shown this flange as formed of a separate piece of metal fitted and riveted to the body portion.

Galvanizing pots tend to cut away and fail rapidly at that portion of the side walls which is at about the upper level of the molten bath in the pot and where oxidation of such bath occurs. By the provision of the reinforcing band, this portion of the pot is effectively reinforced and its life greatly extended.

My invention provides a sheet metal pot which can be readily constructed and which will be durable in service.

I do not wish to limit myself, particularly in so far as my broader claims are concerned, to any particular construction of the body portion of the pot, since this may be built up from sheet metal in other ways than that described.

I claim:

1. A galvanizing pot, having a sheet metal body portion of single thickness at its bottom and at the upper and lower portions of its vertical walls, the intermediate portion of the vertical walls being of double thickness; substantially as described.

2. A galvanizing pot, having a sheet metal body portion of single thickness at its bottom and at the upper and lower portions of its vertical walls, the intermediate portion of the vertical walls being thickened by a

reinforcing band secured thereto; substantially as described.

3. A galvanizing pot, having a sheet metal body portion of single thickness at its bottom and at the upper and lower portions of its vertical walls, the intermediate portion of the vertical walls being thickened by a reinforcing band permanently welded thereto, and terminating at its edges some distance from the top and bottom of the pot; substantially as described.

4. A galvanizing pot having a body portion, consisting of a single sheet of metal whose edges are overlapped and welded, and a continuous metal band extending around the intermediate portion only of said body and reinforcing the weld in the body as well as the body as a whole; substantially as described.

5. A galvanizing pot having a body portion, consisting of a single sheet of metal whose edges are overlapped and welded, and a continuous metal band extending around the intermediate portion only of said body and reinforcing the weld in the body as well as the body as a whole, the pot also having a separately formed bottom welded to the lower edge portion of the body; substantially as described.

In testimony whereof, I have hereunto set my hand.

LUTHER L. KNOX.