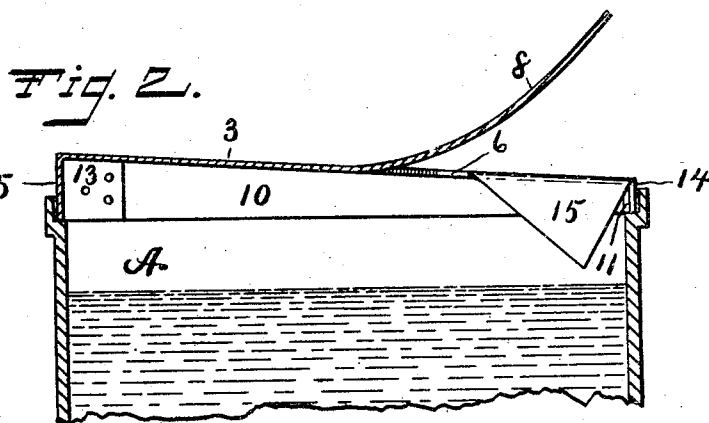


COVER FOR TANKS USED IN SKIMMING SULLAGE FROM CRUCIBLES INTO WATER.
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COVER FOR TANKS USED IN SKIMMING SULLAGE FROM CRUCIBLES INTO WATER.

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To all whom it may concern:

Be it known that I, WILLIAM H. CARPENTER, a citizen of the United States, residing at Bristol, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Covers for Tanks Used in Skimming Sullage from Crucibles into Water.

My invention relates to improvements in covers for tanks used in the process of skimming sullage from crucibles into water, in accordance with the process patented to me March 2, 1909, Patent No. 913,874 and the objects of my improvement are simplicity and economy in construction with convenience and efficiency in use.

In the accompanying drawing:—Figure 1 is a plan view of the sheet metal blank from which my cover is made. Fig. 2 is a vertical section on the line $x x$ of my cover as formed up from the said blank together with the upper portion of the tank upon which the said cover is placed.

In making my covers I first cut a piece of sheet metal into the form shown in Fig. 1. The edges of this blank in the direction of its greatest dimensions are straight and parallel while the other two edges are tapered as shown from the rear to the front over that portion which constitutes the top 3 of the formed up cover. Two longitudinal slits 4, 4, are made near the top of Fig. 1, at the proper distance from the edge to form the desired height for the rear side or flange 5 of the cover, the broken line in continuation of the two slits 4, indicating the line upon which the metal is bent in forming the said rear flange 5. At the front edge of the blank, (the lower edge as shown in Fig. 1,) two parallel slits 6, 6, are cut at the middle portion for about one third the width of the blank and in continuation of the said slits 6, 6, outwardly flaring slits 7, 7, are cut for a short distance to form a central tongue 8, that is gradually widened at its base, as shown. Near each corner at the front edge, a slit 9 is formed that intersects the inner end of the slit 4 and the broken lines in extension of the slits 9, 9, indicate the line of bend in forming the upright or end flanges 10, 10, of the cover. The length of the slits 9 is made the same as the intended width or height of the two front flanges 11, 11. The blank on each side

of the central tongue 8 is cut to form the outwardly extended slits 12, 12, parallel to the front or lower edge and in line with the inner ends of the slits 9, 9. The broken lines in continuation of the slits 12, indicate the line of bend in forming the two front flanges 11, 11. The lines of bend in forming the flanges 5, 10 and 11 extend across the respective corner pieces that form the wings 13, 13, on the ends of the rear flange 5 and the wings 14, 14, on the front ends of the end flanges 10, 10. These wings 13 of the rear flange overlap the end flanges 10, and by being riveted or otherwise secured thereby rigidly connect the said flanges at the rear corners of the cover. The wings 14 may in like manner form a rigid connection of the side flanges 10 and front flanges 11. This construction forms substantially a box-like cover with a slanting top, tapering end flanges, a wide rear flange and narrow front flanges. The central tongue is bent upwardly as shown in Fig. 2, so as to form a central skimming opening at the front. The corners of the cover at each side of this opening are bent on the oblique broken lines shown in Fig. 1, to form corner flaps or guards 15 at each side of the sullage opening for the double purpose of enlarging the said opening and forming downwardly extended flaps at each of the said enlargements. When in use, this cover is placed on the top of a tank A, Fig. 2, which tank is nearly filled with water into which the sullage is skimmed directly from the crucible as in my aforesaid patented process.

By my improvement a cheap, efficient and inexpensive cover for the tank is produced. The central tongue bent upwardly and the oblique flaps bent downwardly together form an ample opening through which the sullage may be skimmed which opening is at the same time substantially covered and guarded. The cover protects the workman from heat, steam, smoke, and dirt. While there is not so much danger as may be supposed of water or metal being forced outwardly as the sullage falls into the water, the up-turned tongue will prevent the same from spurting directly upward, while the downward flaps will prevent the same from spurting obliquely outward on either side, thereby giving the workman complete confidence as to ample protection.

I claim as my invention:—

1. A tank cover, the top of which is provided with a skimming opening and an upwardly bent tongue over the said opening.
- 5 2. A tank cover, the top of which is provided with a skimming opening, an upwardly bent tongue over the same, and downwardly bent flaps on the opposite sides of the said opening.
- 10 3. A tank cover formed of sheet metal with bent down side and end flanges and a connected top having a skimming opening

and an upwardly bent tongue over the said opening.

4. A tank cover formed of sheet metal 15 with bent down and connected side and end flanges, and a connected top having a skimming opening, an upwardly bent tongue over the same, and obliquely bent flaps on opposite sides of the said opening.

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Witnesses:

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