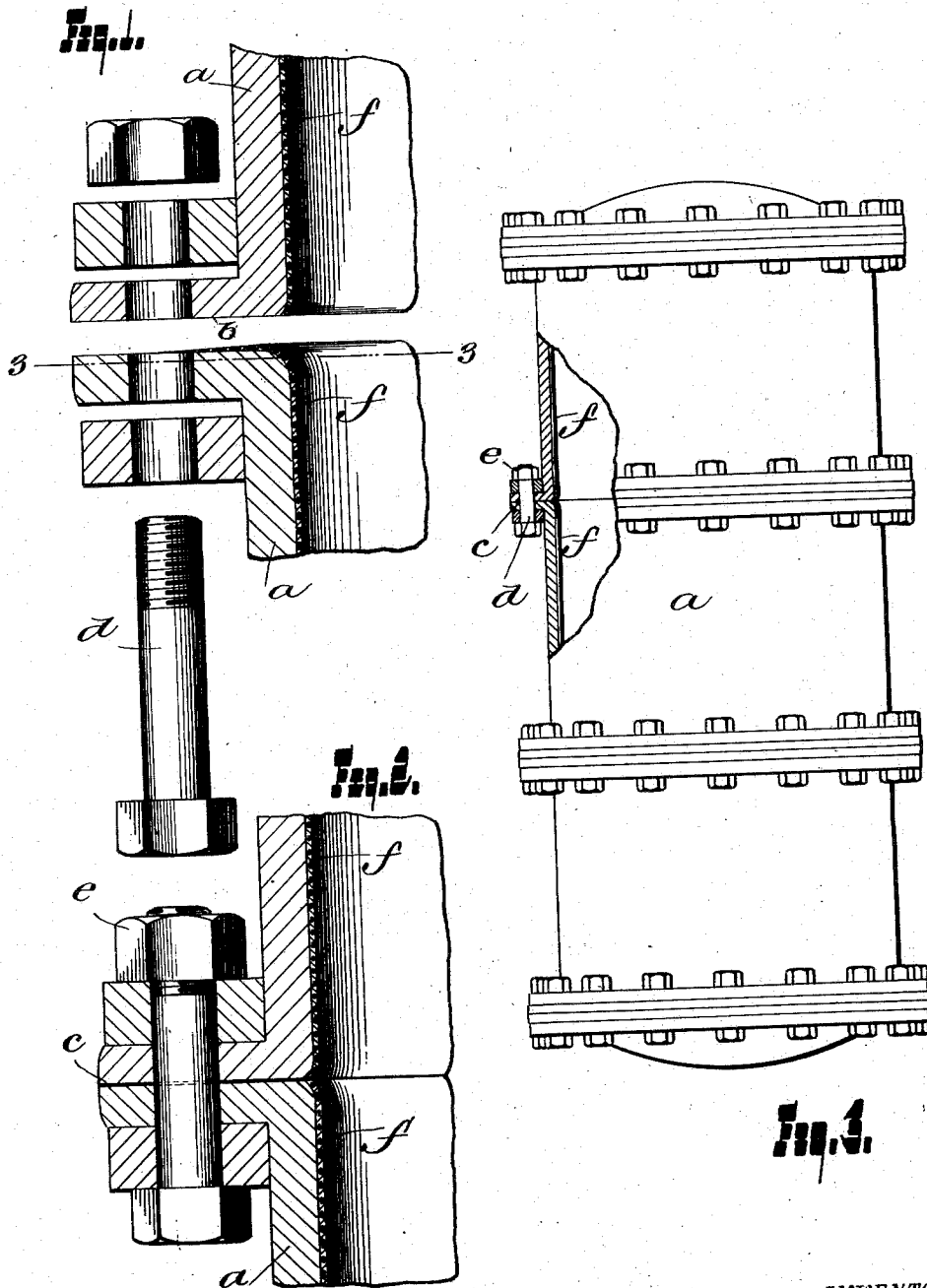


C. E. ROGERS.
TANK.
APPLICATION FILED AUG. 19, 1907.

Patented Jan. 18, 1910.

947,130.



WITNESSES.

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UNITED STATES PATENT OFFICE.

CHARLES E. ROGERS, OF DETROIT, MICHIGAN.

TANK.

947,130.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed August 19, 1907. Serial No. 389,239.

To all whom it may concern:

Be it known that I, CHARLES E. ROGERS, 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 Tanks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in tanks, and the object of my invention is to produce large sized enamel lined steel tanks made in sections, and so united together that each tank is practically in a single piece when it is finished, thus avoiding the use of gaskets between the sections.

In making large sized enamel lined tanks, such as are used for storing beer, for example, it is customary to build up these tanks of steel sections having flanged edges, these edges being bolted together with gaskets between. Such a construction has been proved to be somewhat unsanitary after long use, and by my invention this objection is removed.

In the accompanying drawing; Figure 1 shows a joint disconnected of an enamel lined tank, the upper flange being ground off and the lower flange unground. Fig. 2 shows the same joint when completed, and Fig. 3 shows in side elevation, partly in section, a tank made according to my invention.

In constructing tanks of this character, a sheet of steel of appropriate size, and rectangular in shape, is rolled so that it assumes the form of a hollow cylinder. The abutting edges are then welded together by any suitable means. This hollow cylinder is then put into a special machine, whereby the ends of said cylinder are turned over forming flat flanges. The interior of the flanged hollow cylinder has enamel then flowed onto it until its interior surface is thoroughly covered, and then said cylinder

is put into a furnace and subjected to a heat sufficient to fuse the enamel. By means of an appropriate machine, bolt holes are then cut through the flanges, and the sections are ready to be bolted together with gaskets interposed. All these steps are old and well known. By my invention, however, as soon as one of the hollow steel cylinders, represented by *a* in Fig. 1, is prepared, it is ground off down to the dotted line 3—3 in the lower part of Fig. 1, making a perfectly flat smooth flange, as shown at *b*, Fig. 1, the upper part of both the steel and the enamel being ground off. The flat surface of the flanges, such as *b*, are then tinned, *c*, Fig. 2, representing the layer of tin. Bolts *d* are then passed through the holes in the flanges *b*, and nuts *e* are screwed down upon said bolts. The joint is then sweated in the usual manner, thus making the two flanges into practically a continuous piece. The edges of the enamel upon the various sections of the tank come into close contact, and the result is a tank which when finished, is practically made in one piece, which is perfectly tight and sanitary, and which contains no gaskets.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

An enamel lined steel tank, consisting of top and bottom pieces, sections provided with flanged ends having bolt holes therein, the whole provided with an enamel lining, said flanged ends being ground off and united by a layer of tin, and said sections being sweated together, and bolts and nuts for securing the whole structure together, substantially as described.

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

CHARLES E. ROGERS.

Witnesses:

H. H. HAGER,
LOUIS DARWIN.