E. C. STOVER. ARTICLE OF EARTHENWARE, APPLICATION FILED AUG. 11, 1906.

943.484.

Patented Dec. 14, 1909.

Fig. 1.

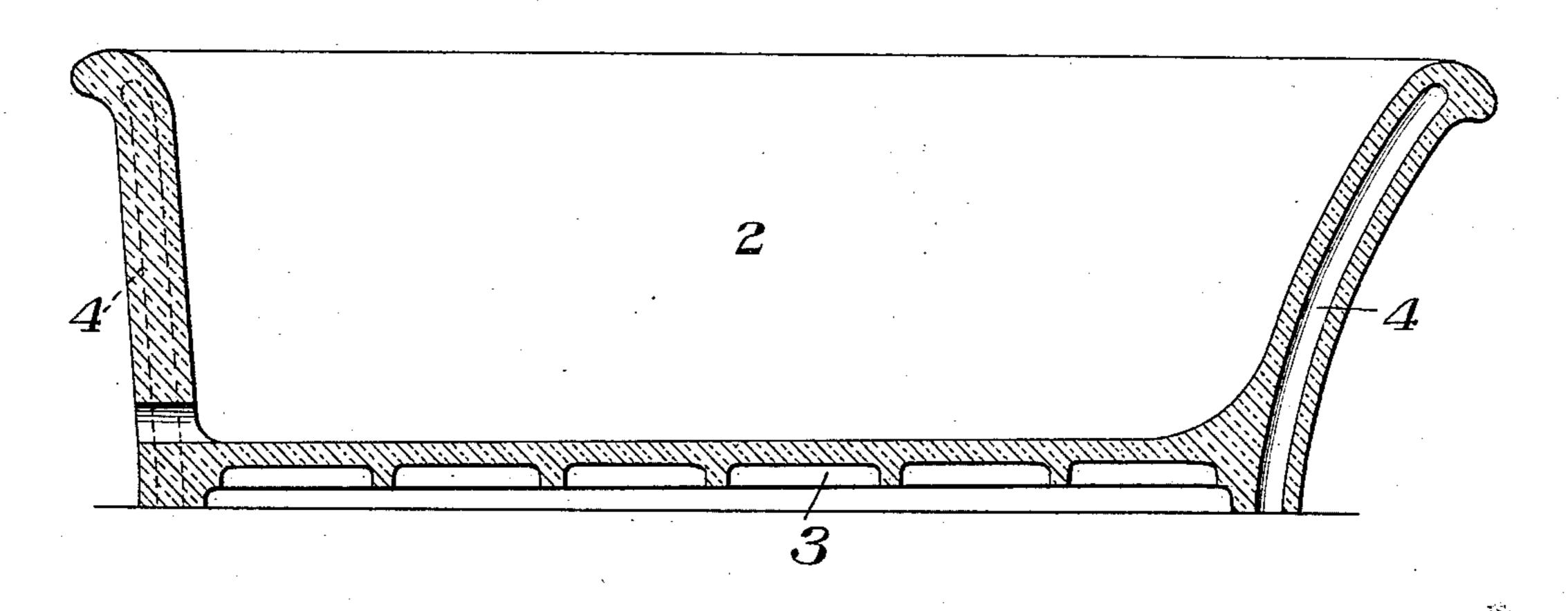
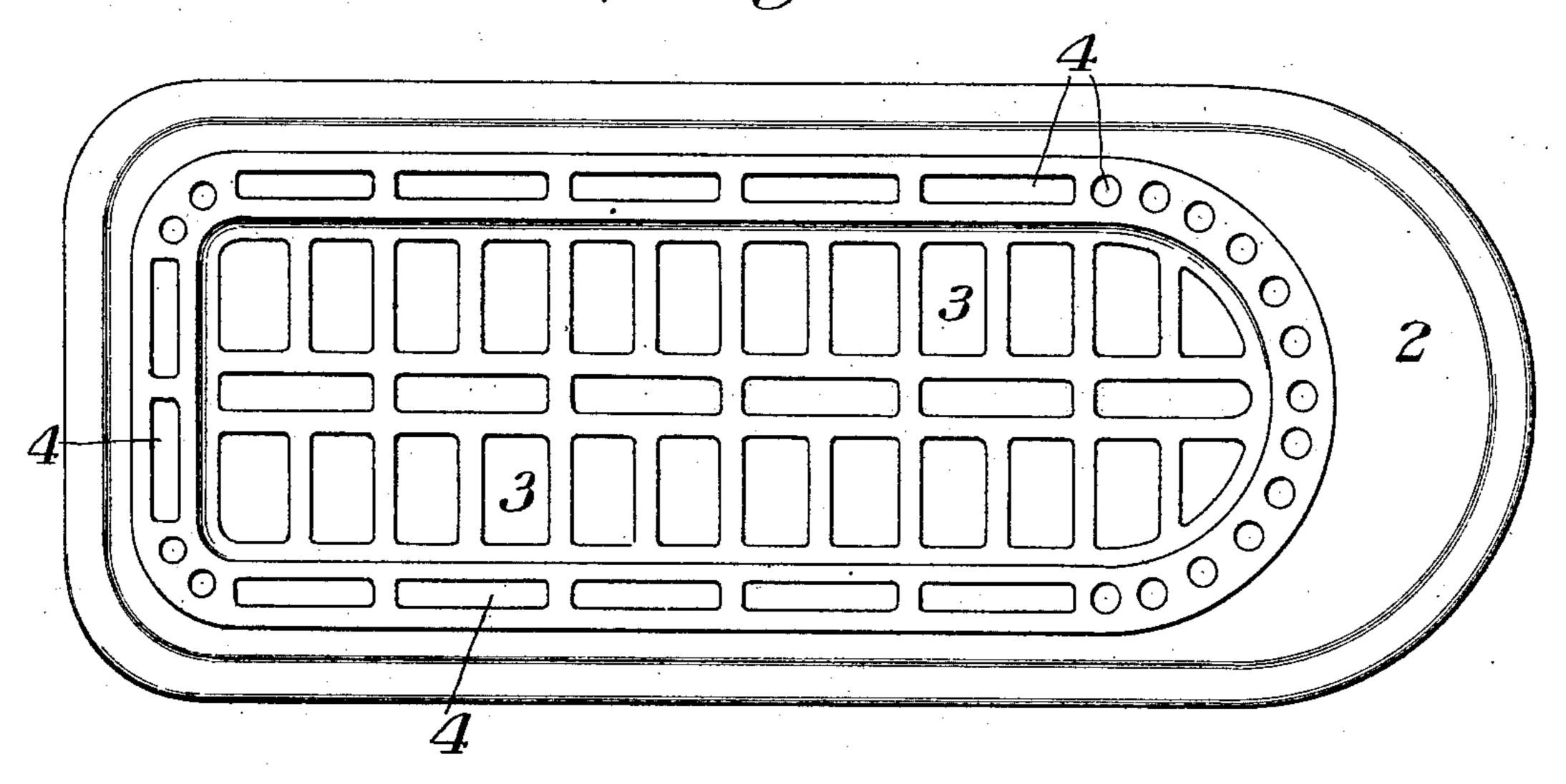


Fig. 2



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWARD C. STOVER, OF TRENTON, NEW JERSEY, ASSIGNOR TO THE TRENTON POT-TERIES COMPANY, OF TRENTON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

ARTICLE OF EARTHENWARE.

943,484.

Specification of Letters Patent. Patented Dec. 14, 1909.

Application filed August 11, 1906. Serial No. 330,176.

To all whom it may concern:

Be it known that I, Edward C. Stover, of Trenton, Mercer county, New Jersey, have invented a new and useful Improvement in 5 Articles of Earthenware, 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 vertical longitudinal section of a bath tub embodying my invention; Fig.

2 is a bottom plan view.

The purpose of my invention is to provide an improved method of manufacture of ar-15 ticles of earthenware such as porcelain bath tubs, laundry tubs and sinks. My invention enables these articles to be made from vitreous earthenware, and this is a great advantage, for such earthenware does not substan-20 tially absorb water and is very desirable for the purpose, but the methods of manufacture heretofore employed have not admitted of its use.

My invention consists in making the arti-25 cles above specified with the bottom and sides having cavities therein. Besides these, the sides of the tub are provided with holes which may extend nearly from top to bottom and may be round, oval or oblong in 30 cross section, and the bottom of the tub or sink is provided with cavities which are preferably open downwardly. The articles can be made in this way by putting the clay into molds, the bottom of which is provided 35 with blocks or pieces of plaster or other material, which will form the desired cavities in the bottom of the molded article, and the openings in the sides can be made by placing in the mold cores made of combustible ma-40 terial, such as paper or saw dust which will burn out during the operation of burning the tub in the kiln; or the cores may be made of wood or plaster or metal and may be withdrawn from the molded article when it 45 is set on end to dry. As an alternative method of manufacture, I may make the sides of the tub of double pieces having registering grooves which, when placed together and before firing, will constitute cavities ex-

tending from top to bottom; or the grooves 50 may be formed in only one of the sections.

My invention is of great advantage because it not only lightens the tub, which is important, but it prevents twisting of the same during the burning operation, and thus 55 enables me successfully to make these articles of vitreous or other ware and to secure a shapely and strong product. I preferably carry out my invention by a single firing operation.

My invention is illustrated in the accompanying drawing, which shows a bath tub 2 having on the bottom cavities 3, 3, which are open downwardly and are formed during the molding operation, as above de- 65 scribed; and has in the sides and ends vertical openings 4, which extend from the bottom of the tub upwardly to, but not quite through, the roll rim of the tub.

It will be seen that my invention is of 70 great utility when the tub is finished both on the inside and outside, since the cavities enable the gases and water of combination to escape readily. In tubs in which the walls are of solid construction and which 75 are finished both inside and outside, it has been found that a very large percentage of such tubs dunt or break, which breakage is attributed to gases remaining in the walls of the tub and which has been unable to 80 escape by reason of the glazing of both the inner and outer surfaces of the tub.

The shape and arrangement of the cavities may be varied by those skilled in the art, since

What I claim is:

1. A new article of manufacture consisting of a single fired tub of earthenware having passaged walls and finished both inside and out by one firing operation.

2. An article of vitreous earthenware having passaged walls and finished on both the inside and the outside by one firing operation.

3. A single fired article of vitreous earth- 95 enware having passaged walls.

4. The herein described process of manufacturing articles of earthenware which con-

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sists in firing and finishing an article of earthenware with passaged walls on both the inside and outside by one firing operation.

5. The herein described process of manufacturing articles of earthenware which consists in molding an article of earthenware with passaged walls and in firing and finish-

ing the said article both inside and out by one firing operation.

one firing operation.
In testimony whereof I have hereunto set my hand, July 30, 1906.

EDWARD C. STOVER.

Witnesses:

THOMAS W. BAKEWELL, JOHN A. CAMPBELL.