

No. 684,263.

Patented Oct. 8, 1901.

W. S. JUDD.
SODA WATER TANK.

(Application filed Dec. 11, 1900.)

(No Model.)

Fig. 1,

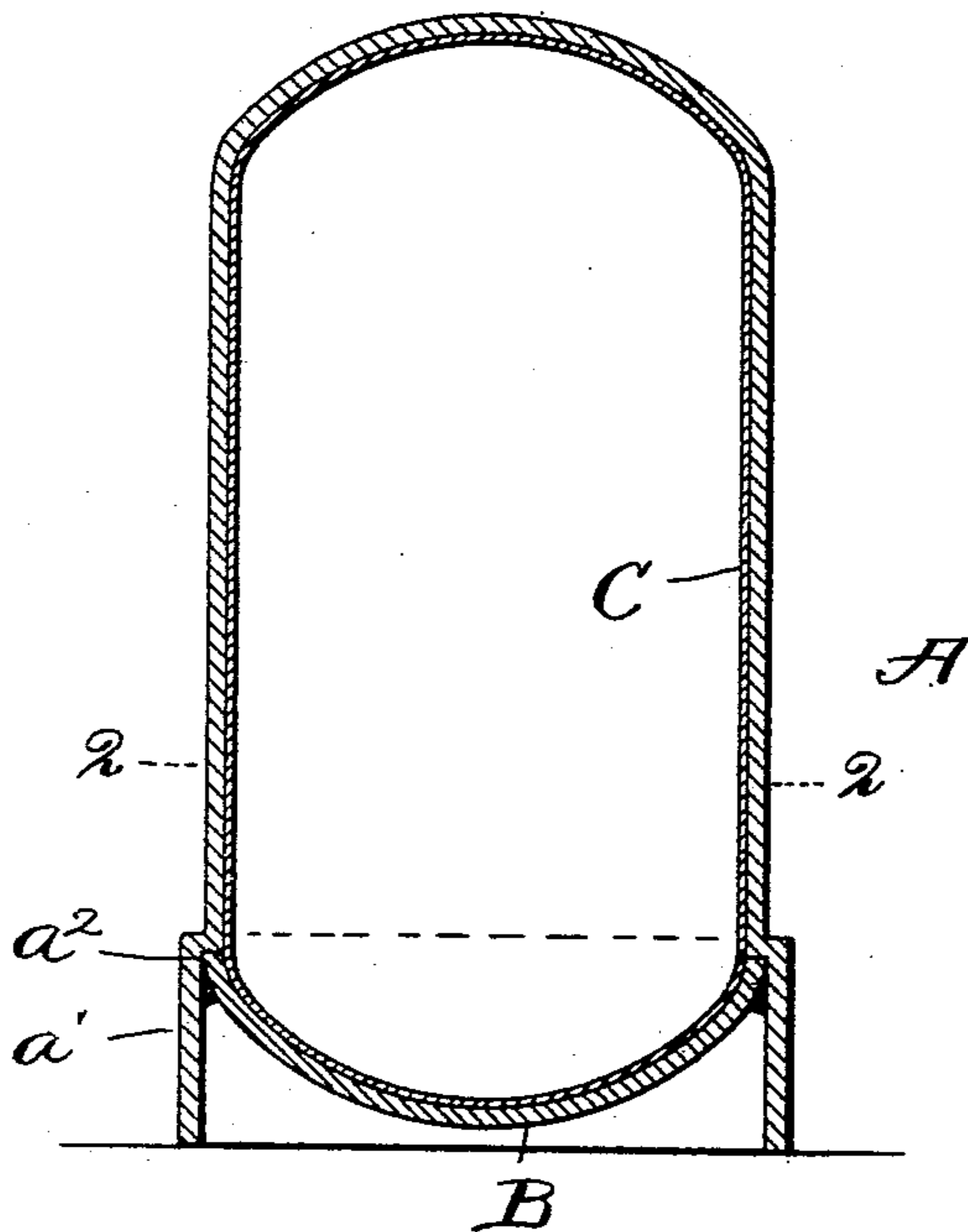
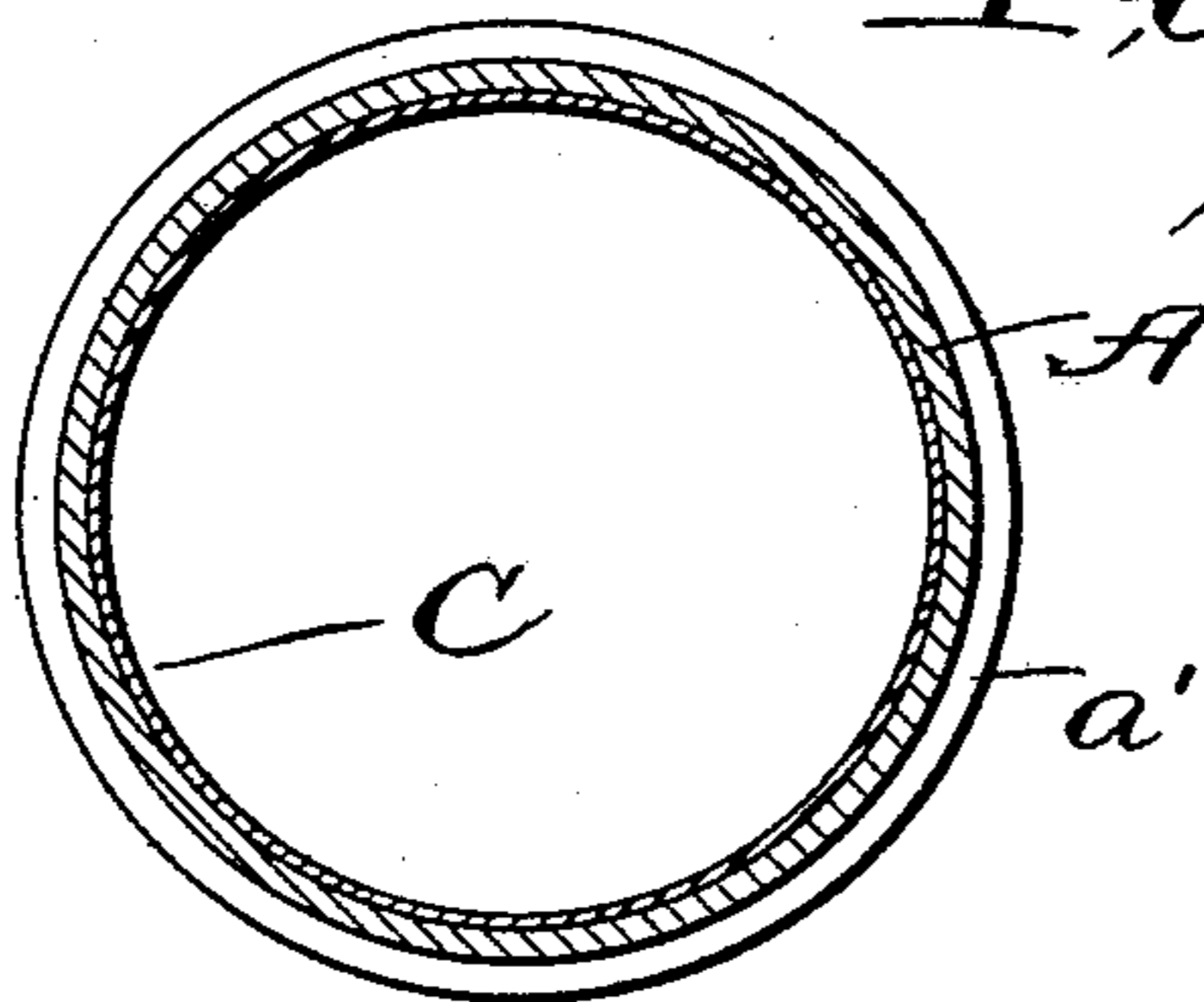


Fig. 2,



Witnesses.
E. B. Gilchrist
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By his Attorneys,
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UNITED STATES PATENT OFFICE.

WALLACE S. JUDD, OF CLEVELAND, OHIO, ASSIGNOR TO THE AVERY
STAMPING COMPANY, OF SAME PLACE.

SODA-WATER TANK.

SPECIFICATION forming part of Letters Patent No. 684,263, dated October 8, 1901.

Application filed December 11, 1900. Serial No. 39,461. (No model.)

To all whom it may concern:

Be it known that I, WALLACE S. JUDD, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Soda-Water Tanks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

Soda-water tanks are commonly made of sheet metal drawn into the desired form by well-known tools and methods. Such tanks must be strong enough to withstand a large internal pressure, and they must have a smooth interior, because they are all lined with a thin lining of block-tin, and if the tank had any interior angles or depressions the internal pressure would bend the tin lining at such points, forcing it into contact with the walls of the tank, and in most cases the lining would be fractured. To obviate this, internal packing in the angles has been used, but this has to be carefully constructed, is an additional expense, and is not always efficient.

The object of my invention is to provide a cheap sheet-steel soda-water tank having the necessary characteristics as above pointed out without the use of internal packing, and having also a flat end on which said tank may stand; and the invention consists in the construction and combination of parts to that end hereinafter described, and pointed out definitely in the claims.

Figure 1 is a central longitudinal sectional view of a soda-water tank embodying my invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1.

Referring to the parts by letters, A represents a seamless tank-body, which is formed by methods and with tools well understood. The body is cylindrical, and one end is closed by an integral dome end a . At its open end, however, this tank-body is enlarged or offset outward, whereby there is formed an internal annular shoulder a^2 . This end is closed by a dome-shaped end plate B, which fits in the enlarged end a' of the tank-body. This end plate is preferably of metal of substan-

tially the same thickness as the rest of the tank, at least its marginal edge is of the same thickness as the width of the shoulder a^2 , against which it will abut when it is in place. The interior surface of the tank-body will therefore join with the interior surface of this end plate without forming any angle or depression. This end plate may be secured in the end of the body by brazing or by any other suitable means.

C represents the block-tin lining, which will be made and inserted into the tank-body before the end plate B is inserted. The enlarged end portion a' of this tank projects beyond the end plate D and is squared off to form a base upon which the tank may stand.

Having described my invention, I claim—

1. A soda-water tank having a seamless body and one integral end, and having its open end enlarged and formed with an internal annular shoulder, combined with a separate dome-shaped end which fits within the enlarged end of said body and lies wholly within the same and has its edge abutting against said shoulder, the meeting surfaces being flush on their inner sides, substantially as described.

2. A soda-water tank having a seamless cylindrical body with one integral dome-shaped end and with the other end continued cylindrical but offset outward substantially the thickness of the metal, combined with a separate dome-shaped end fitting within such offset portion of the body and lying wholly within said body, said separate end being of substantially the same thickness as the rest of the tank whereby its inner surface is flush with the inner surface of the body where the two join, and a seamless lining within said tank in surface contact with the body and ends thereof, substantially as described.

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

WALLACE S. JUDD.

Witnesses:

ALBERT H. BATES,
H. M. WISE.