No. 695,874. Patented Mar. 18, 1902.

P. DE LACY.

SODA WATER FOUNTAIN.

(Application filed Feb. 14, 1901.)

(No Model.)

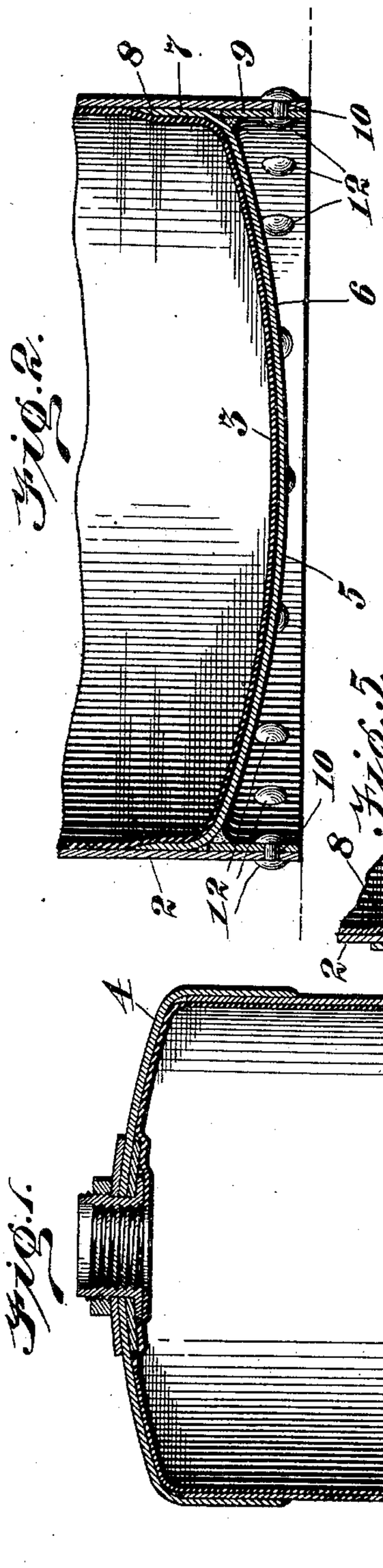

Fig. 2.

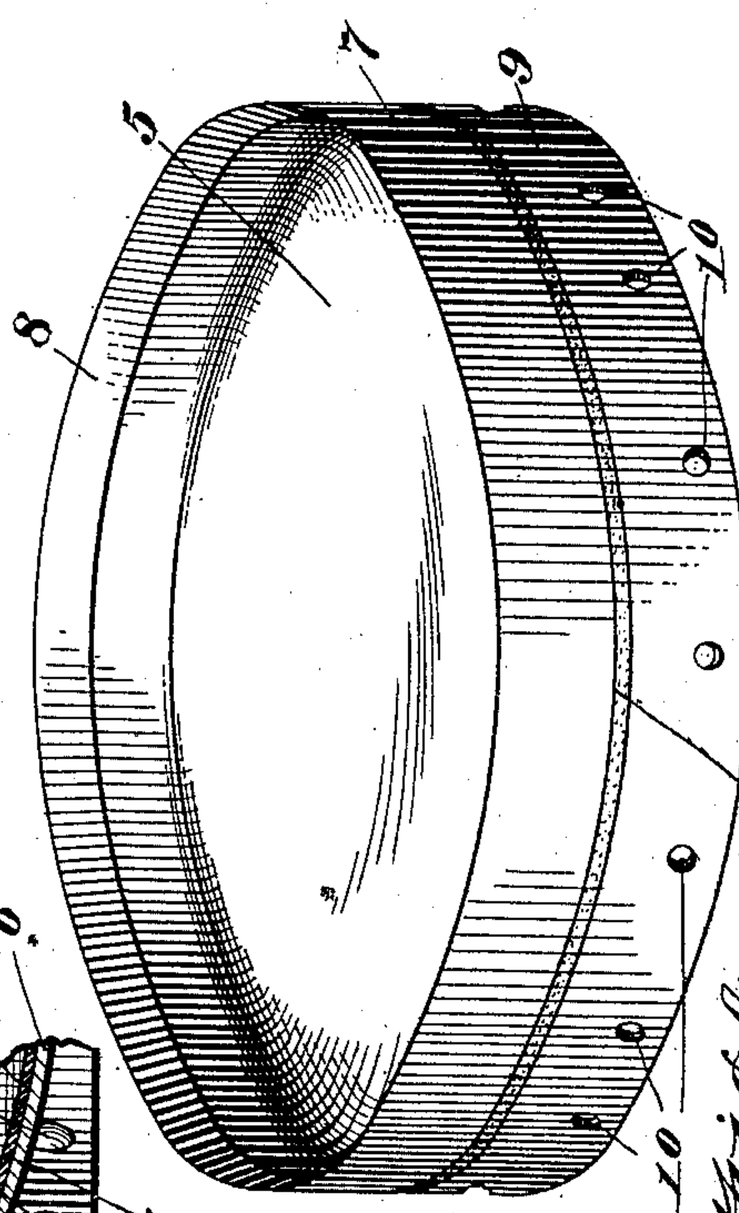

Fig. 3.

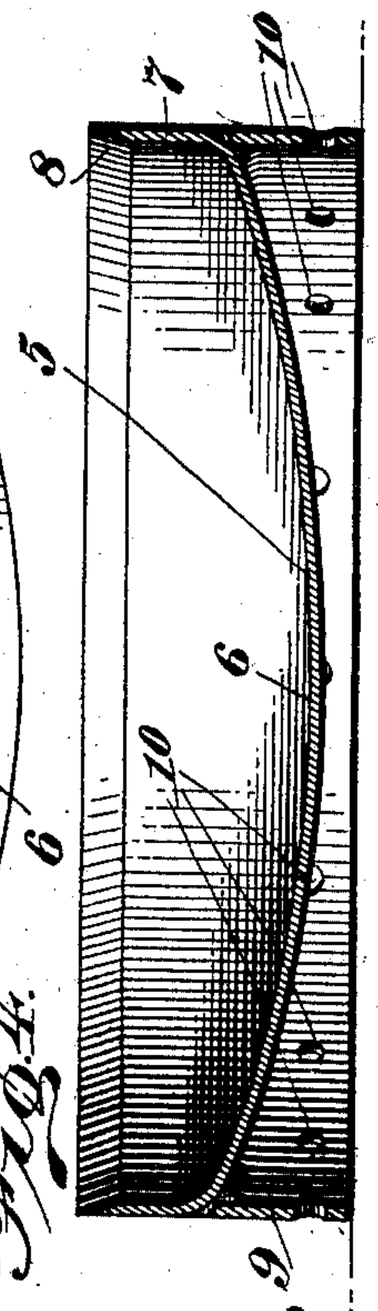

Fig. 4.

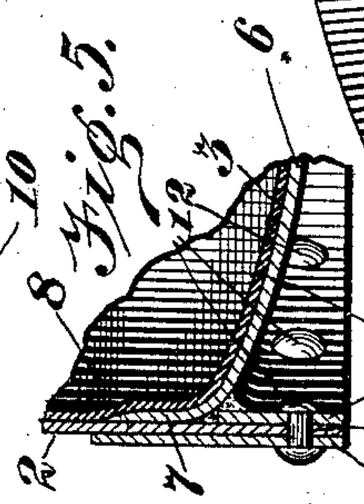

Fig. 5.

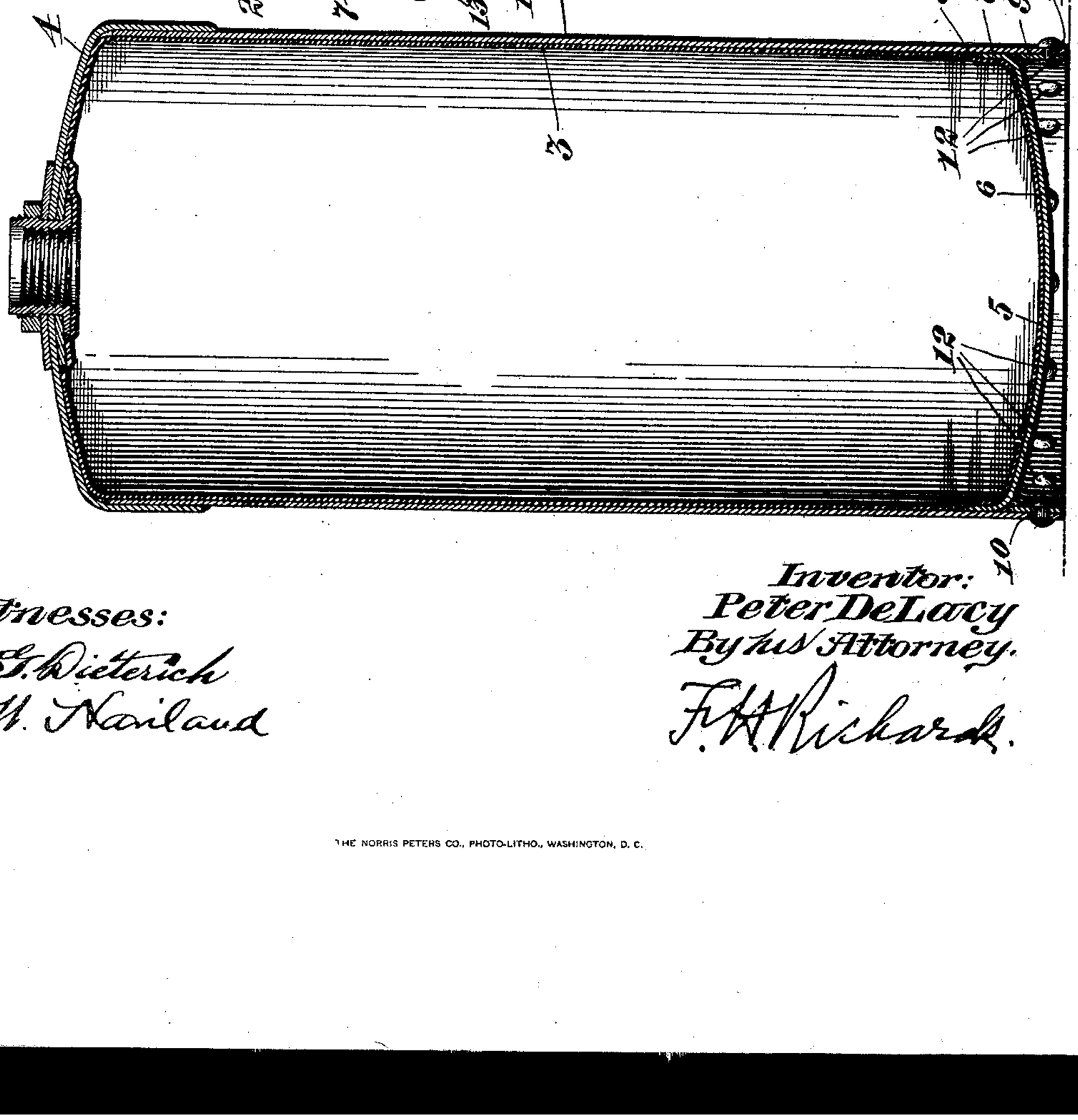

Fig. 1.

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UNITED STATES PATENT OFFICE.

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SODA-WATER FOUNTAIN.

SPECIFICATION forming part of Letters Patent No. 695,874, dated March 18, 1902.

Application filed February 14, 1901. Serial No. 47,199. (No model.)

To all whom it may concern:

Be it known that I, PETER DE LACY, a citizen of the United States, residing in the borough of Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Soda-Water Fountains, of which the following is a specification.

This invention relates to vessels or receptacles adapted to contain fluids, especially fluids under pressure, and is in part an improvement upon that shown and described in my contemporaneously-pending application, Serial No. 21,254, filed June 23, 1900, the object of the invention being to provide an improved receptacle of this character having an improved head or bottom assembled with the body of the receptacle in an improved manner.

A further object of the invention is to provide an improved reinforced bottom or head comprising a bottom plate and a truss adapted to be assembled as a single structure with the shell or body of the receptacle.

In the drawings accompanying and forming part of this specification, Figure 1 is a longitudinal sectional view of a soda-water fountain with this improved head or bottom assembled therewith. Fig. 2 is a sectional view, on an enlarged scale, of the head or bottom and a part of the body. Fig. 3 is a perspective view of this improved head or bottom. Fig. 4 is a sectional view of said head or bottom; and Fig. 5 is a sectional view of a portion of this improved tank, showing an exterior reinforcing-hoop.

Similar characters of reference designate corresponding parts in the different figures of the drawings.

In the present instance the improvement is shown applied to a soda-water fountain, although it will be understood that it may be applied to other and various kinds of receptacles and that this improved head could be used to close either end of the tank. The cylinder or shell 2, the lining 3, and the upper head 4 in the tank shown in the drawings may be of the usual or any suitable construction. This improved reinforced head or bottom 5 in the present instance comprises a substantially concavo-convex plate 6, having, when the receptacle is in its normal upright position and when used to close the lower end thereof, an upwardly-extending flange 7, thus providing a substantially cup-shaped head or bottom the flange of which extends inwardly or interiorly of the body or shell 2 of the receptacle and closely engages the wall thereof, such flange being beveled or chamfered off, as at 8, so that the edge of such flange will be substantially flush with such interior wall for the purpose hereinafter set forth. Rigidly secured to the under side of this plate 6, and in practice prior to its assemblage with the body or shell 2 of the receptacle, is a ring-shaped member forming a depending flange 9, whereby the bottom or head comprises a curved plate having an upwardly or inwardly extending flange 7 and a depending or outwardly-extending flange 9. It will be obvious that in some forms of receptacles the location of the plate may be reversed, whereby the convex side thereof will extend upwardly; but in either case such bottom will comprise an upwardly-extending and a depending flange. This depending flange constitutes one means for securing the bottom in position relatively to the shell or bottom, in the present instance it being shown provided with rivet or bolt holes 10 for the passage of bolts 12, headed on the outer side of the shell and on the inner side of such flange, the bottom also being usually maintained in position by being sweated or soldered, this being the preferable mode of securing the depending flange to the curved plate, whereby the space between such depending flange and plate is filled up. This depending flange not only acts as a means to rigidly secure the bottom in position, but also acts as a support for such bottom.

In assembling the bottom it is usually inserted in position after the lining has been inserted in the tank, so that the flange 7 will extend between such lining and the body or shell of the receptacle; but, if preferred, the head may be located in position prior to the assemblage of the lining, whereby such lining may be forced by suitable pressure into close engagement at all points with the head or bottom and the walls of the cylinder, the chamfered or beveled edge 8 of the bottom enabling the lining to closely conform to the cyl-

inder without the provision of sharp angles, which are extremely detrimental to the life of tanks of this character. When the parts are assembled in the usual manner, the lining, in the form of a capsule and corrugated or otherwise with the bung or nipple attached, is inserted into the body or shell from the bottom, after which the bottom is inserted. The lining is then by suitable means pressed into close engagement with all sides of the shell and bottom.

When the improvement is applied to soda-water tanks, an exterior reinforcing-hoop 13 may be provided. (See Fig. 5.)

I claim as my invention—

1. A receptacle comprising a body and a head, said body extending beyond its point of engagement with the head proper and said head comprising a cup-shaped member having its edge beveled or chamfered and located interiorly of said body, and an outwardly-extending flange secured to the extension of said body and located in position to directly support the outer side of said plate, a lining located in said receptacle and closely conforming to the walls thereof, the part of the lining overlapping such head being continuous and unbroken, the organization being such that by the provision of the chamfered or beveled edge the formation of sharp angles in the lining is prevented and the head is maintained in position without injuring or weakening the lining, and an exterior hoop located on said body adjacent to the bottom thereof.

2. A receptacle comprising a body and a head, said body extending beyond its point of engagement with the head proper said head comprising a cup-shaped member having its edge beveled or chamfered and located interiorly of said body and an outwardly-extending flange secured to the extension of said body and located to support the under side of said member adjacent to its outer edge, and a lining located in said receptacle and closely conforming to the walls thereof, that part of said lining overlapping said head being continuous and unbroken, the organization being such that by the provision of the chamfered or beveled edge the formation of sharp angles in the lining is prevented.

3. A receptacle comprising a body having a lining and a head, the said head comprising a plate having an inwardly-extending flange, located intermediate the body-wall and said lining and said body extending beyond the point of engagement with the plate, said plate having an outwardly-extending flange secured to the extension of the said body, that portion of said lining overlapping the metal of said head, being continuous and unbroken.

4. A receptacle comprising in its structure a lining 3, outer shell 2 and a reinforcing-head comprising a plate 5 of a single thickness of metal having its edge formed into an inwardly-extending flange 7 having a beveled or chamfered edge 8, the said flange being surrounded by said shell an outwardly-extending reinforcing-flange 9, also surrounded by the said shell and secured directly by its edge to the outer circumference of the plate; also secured to the said shell by rivets substantially as described, the said lining lapping and covering the joint between the flange 7 and the shell, the said lining closely conforming to the walls of the shell and joint, that part of said lining overlapping the said joint being continuous and unbroken throughout its entire extent.

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