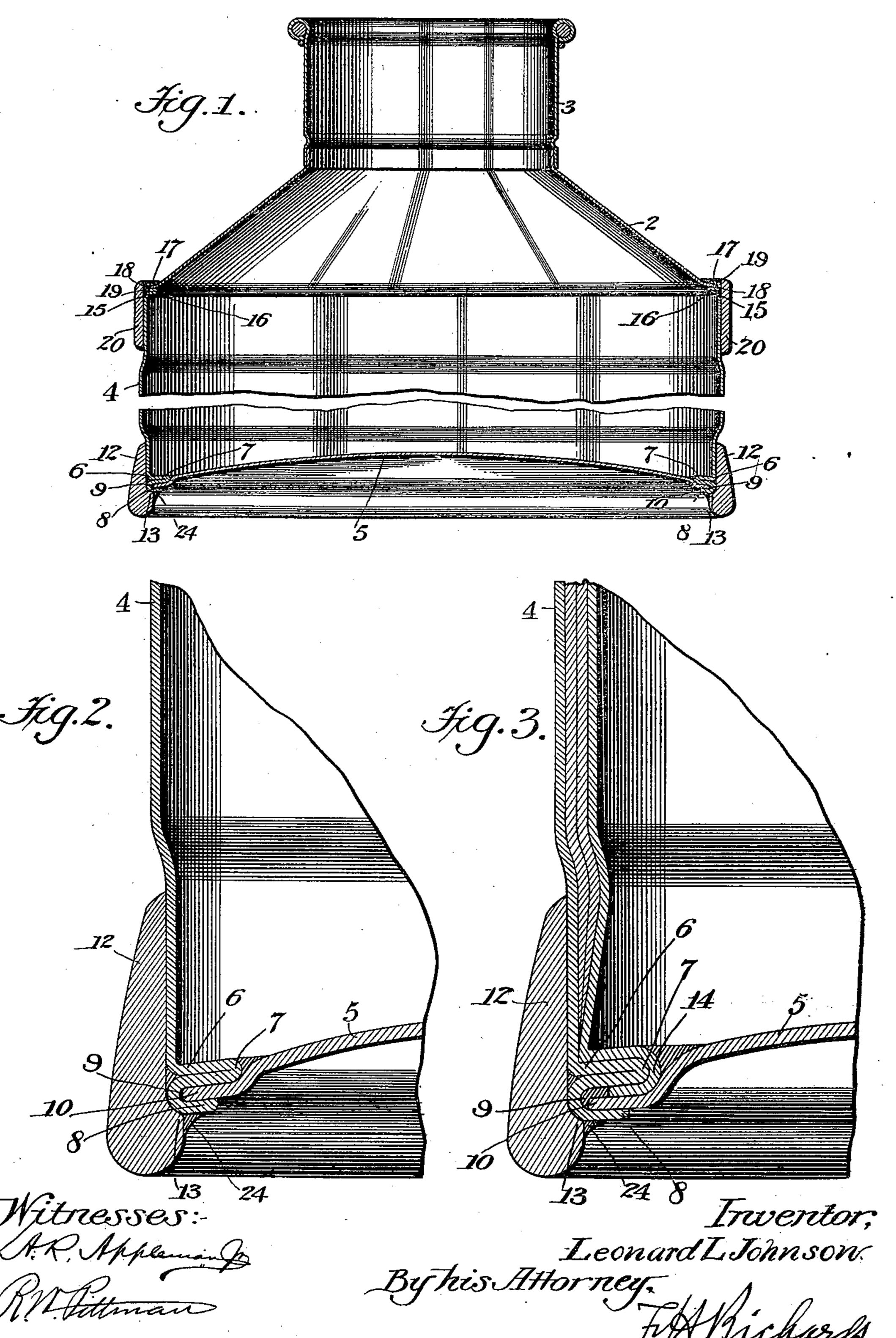
L. L. JOHNSON. METALLIC RECEPTACLE.

(Application filed Apr. 23, 1900.)

(No Model.)



United States Patent Office.

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METALLIC RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 668,521, dated February 19, 1901.

Application filed April 23, 1900. Serial No. 13,866. (No model.)

To all whom it may concern:

Be it known that I, Leonard L. Johnson, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State 5 of New York, have invented certain new and useful Improvements in Metallic Receptacles, of which the following is a specification.

This invention relates to metallic receptacles, and more particularly to the method of 10 assembling the parts thereof together to form the body of said receptacle; and one object of the invention is to provide a receptacle having the parts forming the body thereof firmly and rigidly connected in an improved man-15 ner without the use of rivets or other independent fastening means.

A further object of the invention is to provide a receptacle in which the shell or sides and bottom forming the body are united in 20 an improved manner and reinforced by a hoop or band in position and constructed to assist in the support of said bottom.

In the drawings accompanying and forming part of this specification, Figure 1 is a verti-25 cal sectional view of this improved receptacle having a part of the body broken away. Fig. 2 is an enlarged sectional view showing the manner of securing the bottom in position; and Fig. 3 is an enlarged sectional view 30 taken through that portion of the shell where the edges are connected by a seam, and thus show a plurality of thicknesses of metal united to the bottom in the manner hereinafter set forth.

Similar characters of reference designate like parts in all the figures of the drawings.

The receptacle in the present instance may be formed in any desired manner with or without a breast, the invention more particu-40 larly relating to the manner of securing the bottom thereof to the shell; but when the receptacle is provided with a breast it may be assembled with the shell in a similar manner to that in which the bottom is united there-45 with.

In the present instance the receptacle is shown comprising a breast 2, having a neck 3, a shell 4, and a bottom 5, the shell being preferably formed of less diameter adjacent 50 to its upper and lower edges than the in-

hoops hereinafter specified are in position they will not project appreciably beyond the outer wall of the largest part of such shell. The lower edge 6 of the shell is shown bent 55 at an angle thereto—as, for instance, inwardly and upon itself—to form a substantially straight inwardly-extending annular duplex flange 7 and also bent inwardly and upon itself to form a substantially straight 60 annular locking-flange 8, with an annular recess 9 intermediate such flanges. Into this recess 9 the edge 10 of the bottom 5 projects, being clamped therein against the duplex flange by the inwardly-extending annu- 65 lar locking-flange 8. In the form shown the bottom 5 is represented as a concavo-convex plate, the edge 10 of which is bent at an angle to the major part thereof, so that the upper surface of said plate may form a continu- 70 tion of or be flush with the upper face of the duplex flange. The convexed face of this bottom is shown located interiorly of the receptacle, so as to present an arched surface to the contents of the receptacle whereby the 75 weight thereof will be sustained in a much better manner than if a flat or a concaved surface were located interiorly of the receptacle and whereby also the weight of the load will act to maintain the edge of such bottom in 80 close contact with the shell.

To reinforce the shell and also to assist in maintaining the bottom in position, a hoop or band 12 is provided, shown extending below the bottom of said shell to form a rest for 85 the receptacle, and also having a part thereof forming an annular projection 13 in engagement with the under face of said lockingflange. This part 13 of the hoop also forms an abutment for the firm clamping of the 90 bottom in position intermediate said flanges, as well as a means for supporting such bottom. In practice when an overlapped seam is provided one edge, as 14, of the shell may also be clamped, together with the bottom inter- 95 mediate said flanges, and firmly maintained in position. When a breast is provided, the upper edge 15 of the shell is also bent at an angle thereto—as, for instance, inwardly and upon itself—to form a substantially straight 100 annular duplex flange 16 and bent inwardly termediate part thereof, whereby when the and upon itself to form a substantially straight

annular locking-flange 17, with a recess 18 intermediate said flanges. Into this recess the edge 19 of the breast projects, being clamped therein by the locking-flange.

To reinforce the shell adjacent to its juncture with the breast, a suitable hoop or band

20 is provided.

To prevent any leakage that may occur and also to assist in securing the parts together, to solder may be forced into the crevices, whereby the bottom, the shell, and its hoop are all firmly united together, as is also the breast and its hoop. In practice the solder is so placed that it extends at the under side of 15 the locking-flange and forms a projecting part of the hoop and also a bearing or support 24 for such locking-flange.

From the foregoing it will be seen that this improved receptable comprises a shell and a 20 member-such, for instance, as a bottom—one of which parts is so bent upon itself as to form an annular duplex flange and a locking-flange, with a recess intermediate such flanges for the reception of the edge of the other of said 25 members, combined with a hoop or band located on said shell and having a part thereof

projecting under one of said flanges.

In conclusion, it will be seen that the bottom may be secured to the can without the 30 use of rivets and without depending entirely upon the use of solder, as is frequently the case.

Having described my invention, I claim— 1. A metallic receptacle comprising a shell, 35 the metal of which is bent at an angle thereto and upon itself to form a substantially straight, annular duplex flange, and a substantially straight locking-flange at one side of said duplex flange; a member having its 40 edge clamped in position intermediate said flanges; and a hoop located around said shell and in position to prevent the springing of

the shell away from said member.

2. A metallic receptacle comprising a shell, 45 the metal of which is bent inwardly and upon itself to form an inwardly-extending substantially straight, annular duplex flange and a substantially straight locking-flange below said duplex flange; a bottom plate having its 50 edge clamped in position intermediate said flanges; and a hoop or band located around said shell and in position to prevent the springing of the shell away from said bottom plate, and having a part thereof located be-

55 low said locking-flange.

3. A metallic receptacle comprising a shell, and a concavo - convex bottom assembled therewith, with its convex face located interiorly of the receptacle, thereby to present 60 an arched surface to the load, one of said members having a part thereof bent upon itself to form an annular duplex flange, and at one side thereof a locking-flange with a recess intermediate said duplex flange and said 65 locking-flange for the reception of the edge of the other of said members.

4. A metallic receptacle comprising a shell,

the metal of which is bent inwardly and upon itself to form a substantially straight, annular duplex flange, and also upon itself to form 70 a substantially straight locking-flange with an annular recess between said lockingflange and said duplex flange; a concavo-convex bottom having its edge clamped in said recess by said locking-flange and having its 75 convex face located on the interior of said receptacle, thereby to present an arched surface to the load; and a hoop located around said receptacle and having a part projecting below and in engagement with one of said 80 flanges.

5. A metallic receptacle comprising a shell, the metal of which is bent adjacent to one of its edges to decrease the diameter of such shell at such bent portion, and with a part 85 thereof bent upon itself to form an annular duplex flange, and at one side thereof a locking-flange with a recess intermediate said duplex flange and said locking-flange for the reception of the edge of a member forming a 90 part of said receptacle; and a hoop or band located around said shell at the decreased

part thereof.

6. A metallic receptacle comprising a shell the wall of which is bent inwardly adjacent 95 to its bottom, whereby the diameter of said shell is less at such bottom than at the middle thereof, and which wall has a part thereof bent inwardly and upon itself to form a duplex flange, and also bent upon itself to form 100 a locking-flange with a recess intermediate said locking-flange and said duplex flange; a concavo-convex bottom comprising a plate having its edge bent to project into said recess and permit its upper surface to form a 105 continuation of the upper surface of said duplex flange; and a hoop or band extending around said shell at that part thereof having the smallest diameter and having a part projecting below and in engagement with said 110 locking-flange.

7. A metallic receptacle comprising a shell the upper edge of which is bent inwardly and upon itself to form an inwardly-extending, annular, duplex flange and a locking-flange 115 at one side thereof with a recess intermediate said flanges; a breast having its edge clamped in said recess by said locking-flange, said shell also having its lower edge bent inwardly and upon itself to form an inwardly-extending, 120 annular, duplex flange and a locking-flange below said duplex flange with a recess intermediate said flanges; a bottom having its edge clamped in said recess by said locking-flange; and a hoop extending around said shell and 125 having a part thereof projecting under said

locking-flange.

8. A metallic receptacle comprising a shell having its upper portion bent to form a part of decreased diameter with the edge thereof 130 bent inwardly and upon itself to form an inwardly-extending annular duplex flange, and a locking-flange at one side thereof with a recess intermediate said flanges; a breast hav-

ing its edge clamped in said recess by said locking-flange; a band or hoop located around said shell at the juncture thereof with said breast, said shell also having its lower portion bent to form a part of decreased diameter with its edge bent inwardly and upon itself to form an inwardly-extending annular duplex flange, and a locking-flange at one side thereof with a recess intermediate said flanges; a concavo-convex bottom having its edge clamped in said recess intermediate said flanges, the convex face of said bottom being located interiorly of said receptacle, thereby

to present an arched surface to the load; and a hoop or band located around said shell at 15 the juncture thereof with said bottom and having a part thereof extending below and engaging one of said flanges.

Signed at Brooklyn, in the county of Kings and State of New York, this 31st day of March, 20

A. D. 1900.

LEONARD L. JOHNSON.

Witnesses:

C. A. GUIBERT, H. C. ROBERTS.