A. T. KRUSE.

CONSTRUCTION OF RECEPTACLES.

APPLICATION FILED AUG. 1, 1908.

943,686.

Patented Dec. 21, 1909.

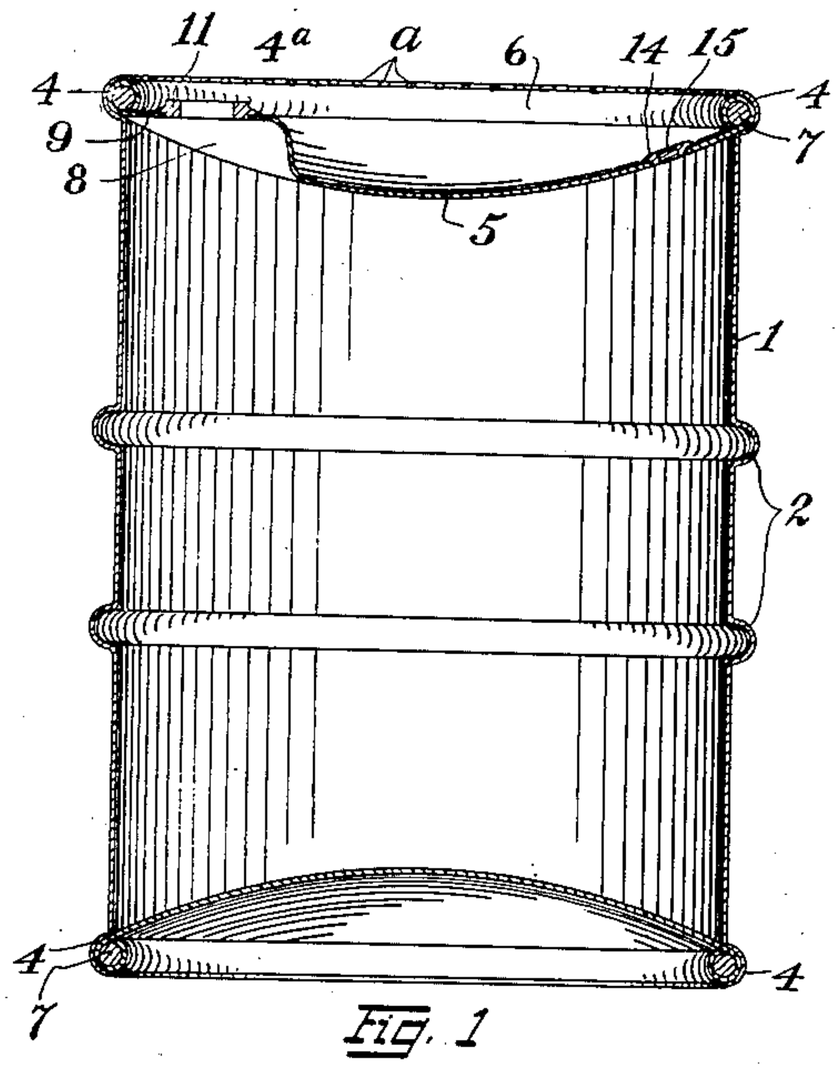

Fig. 1

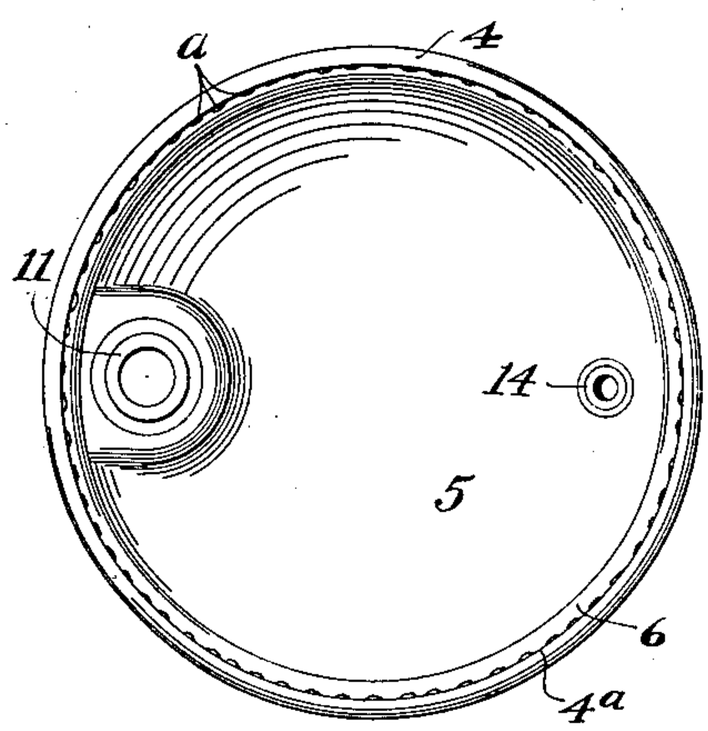

Fig. 2

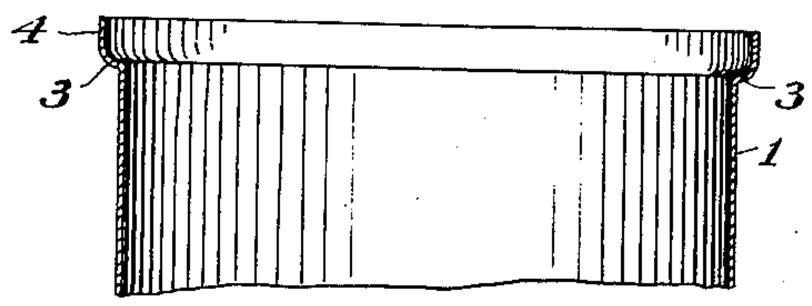

Fig. 3

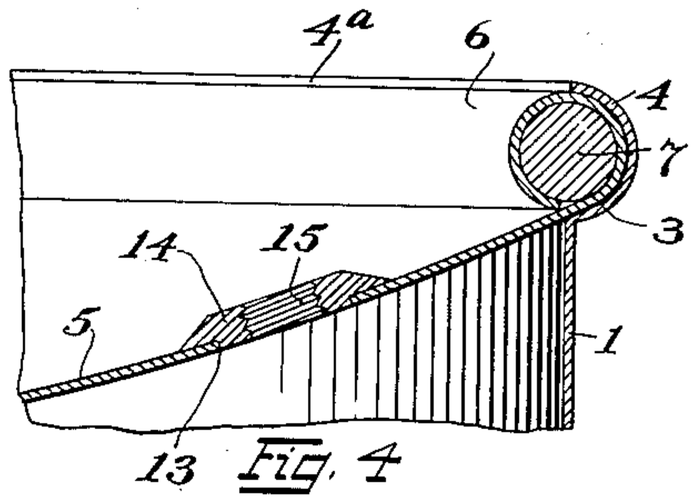

Fig. 4

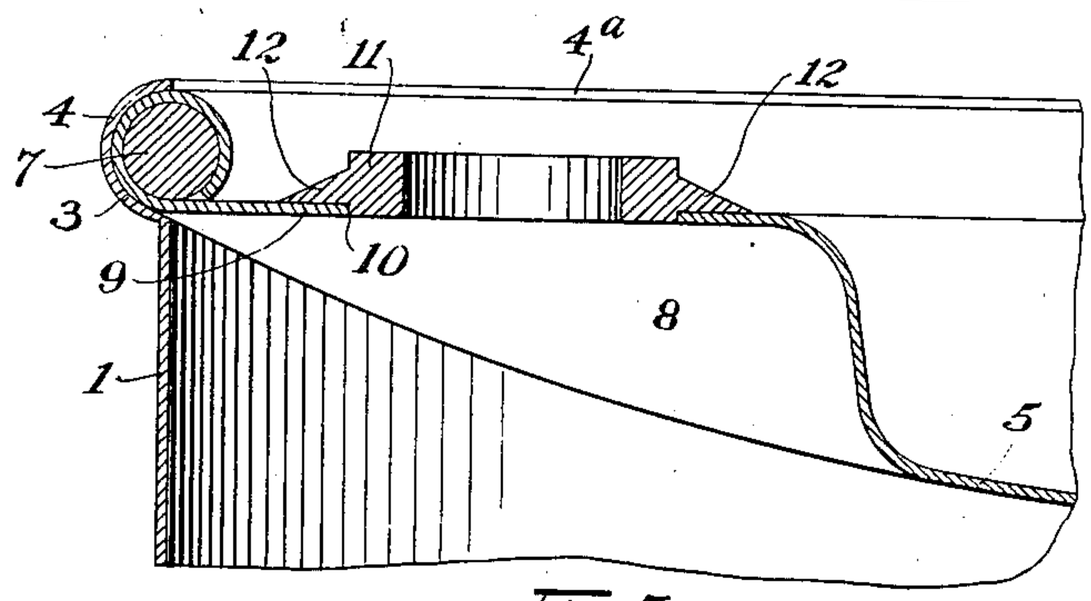

Fig. 5

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UNITED STATES PATENT OFFICE.

ALFRED T. KRUSE, OF DEFIANCE, OHIO, ASSIGNOR TO THE AMERICAN STEEL PACKAGE COMPANY, OF DEFIANCE, OHIO, A CORPORATION OF OHIO.

CONSTRUCTION OF RECEPTACLES.

943,686. Specification of Letters Patent. Patented Dec. 21, 1909.

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To all whom it may concern:

Be it known that I, ALFRED T. KRUSE, a citizen of the United States, residing at Defiance, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Construction of Receptacles, of which the following is a specification.

My invention relates to improvements in the construction of receptacles, and particularly to the construction of metallic barrels and similar vessels designed to carry fluids or other substances which necessitate a fluid or liquid-tight receptacle.

The invention relates more particularly to the form of the head and method of constructing, and means for securing the same, to the main body portion of the barrel or similar vessel, and uniting the meeting edges thereof to form a fluid-tight barrel or package.

The primary object of the invention is to produce a generally-improved vessel of this class, which may be completely drained of its contents by reason of the form of the improved head and its disposition relative to the barrel body.

With these ends in view, the invention consists in the novel construction, arrangement, and combination of parts, hereinafter described, illustrated in the accompanying drawing, and particularly pointed out in the appended claims.

Referring to the drawings, forming a part of this specification, Figure 1, is a central longitudinal sectional view of a metallic barrel, constructed in accordance with my invention. Fig. 2, a view of the bung-head end of the same. Fig. 3, a view of the chime end of the barrel body, showing the form of same preparatory to receiving the improved head. Fig. 4, an enlarged detailed view of the beaded edge portion of the head as it appears secured within the chime of the barrel body. Fig. 5, a similar view showing the improved drain-opening-bushing and drain-pocket portion of the improved head.

Similar numerals of reference designate like parts throughout all the figures of the drawings.

The barrel body 1, is preferably cylindrical in form, and, if desired, may be provided with a pair of circumferential-outwardly-extending tread-ribs or corrugations 2, arranged one on each side of the longitudinal center of the vessel, and designed to afford a bearing-surface for rolling the same in transportation or storage. The barrel body is provided at its ends with annular shoulders 3, terminating in head-securing chime-welding-flanges 4, adapted to be bent or curled inwardly about the beaded edges of the barrel heads, and secured thereto, as hereinafter described.

The heads 5, are of concavo-convex shape, and are so disposed within the barrel body as to form a concavo-faced head, and said heads are provided with an annular beading 6, formed by curling the edges inwardly and over and about wire 7. One of the heads is provided, near one edge, with a drain pocket or recess 8, extending from one side of the head and into the convex portion, and having its base or bottom portion 9, at right angles of the longitudinal axis of the barrel body. The base, or bottom portion 9, of said drain-pocket or recess is provided with an opening 10, and a bushing 11, is fitted and secured within said opening 10, by being provided with an annular tapered welding-flange 12, adapted to cover the metal about the opening 10, and to be suitably welded thereto by any suitable and convenient process. A second opening 13, is formed in the head, preferably, diametrically opposite the opening 10, and is fitted with a second similarly shaped bushing 14, and similarly secured in the opening 13. The bushing 14, is provided with a threaded opening 15, designed to form a vent-opening for the inflow of air while the barrel is being drained of its contents through the opening of the bushing 11.

The method of securing the barrel heads in the ends of the barrel body is as follows: The ends of the barrel are first formed up so as to provide the annular shoulders 3, terminating in outstanding chime-welding-flanges 4, as indicated in Fig. 3, of the drawings, the shoulders 3, conjointly with the outstanding flanges 4, forming an annular recess or seat for the reception of the annular beadings 6, of the heads 5. The flanges 4, are then bent inwardly upon the beadings 6, forming a welding edge 4^a, preferably, directly above the center of the beadings 6. The edge 4^a, is then secured to the beading 6, by welding, as indicated at "*a*" in Figs. 1 and 2, preferably, by a welding process

known as "autogenous welding." The beaded edges of the barrel heads are thus conveniently and securely secured at the chime ends of the barrel body forming a perfect fluid or liquid-tight receptacle.

It will also be observed that by reason of the construction and disposition of the outlet barrel head, the contents of the barrel or vessel may be readily and completely drained.

From the foregoing description, taken in connection with the accompanying drawings, the construction and advantages of my invention will be readily understood.

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

1. A barrel, comprising a body provided with annular shoulders terminating in outstanding chime flanges, and heads provided with annular beadings resting on said shoulders, said beadings being partially inclosed by said chime flanges and welded to the edges thereof.

2. A barrel, comprising a body provided with annular shoulders having outstanding welding flanges bent inwardly and terminating in welding edges above said shoulders, and heads having their edges curled inwardly forming annular beadings resting within and partially covered by and welded to said welding flanges.

3. A barrel, comprising a body provided at its ends with annular shoulders terminating in outstanding head-securing chime flanges and heads having their edges curled about a wire forming annular beadings resting on said annular shoulders and partially covered by and welded to said welding flanges.

4. A barrel, comprising a body provided at its ends with annular shoulders terminating in outstanding semi-cylindrical shaped welding flanges presenting inwardly extending welding edges, heads provided with annular beadings resting on said shoulders and partially covered and seated within said welding flanges, and a welding uniting said welding edges to said beadings.

5. In a barrel, the combination with the body thereof; of a convex-concavo-faced head provided at one side with a depressed drain-pocket having its bottom extending from one side of said head and at right angles to the longitudinal axis of said body.

6. In a barrel, a convex concavo-faced head provided with a drain-pocket extending into its convex side from one edge thereof.

7. In a barrel, a convex concavo-faced head provided with a drain-pocket extending from its convex side and provided with an opening flush with the bottom of said drain pocket, and a bushing mounted in said opening and provided with an annular tapered flange welded to said head about said opening.

8. In a barrel, or similar vessel, a main body portion, and a convex concavo-faced head secured thereto and provided with a marginal drain-pocket off-set from the convex side of said head, and having its base or bottom portion extending from one side of said vessel and at right angles to the longitudinal axis of said main body portion.

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

ALFRED T. KRUSE.

Witnesses:
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