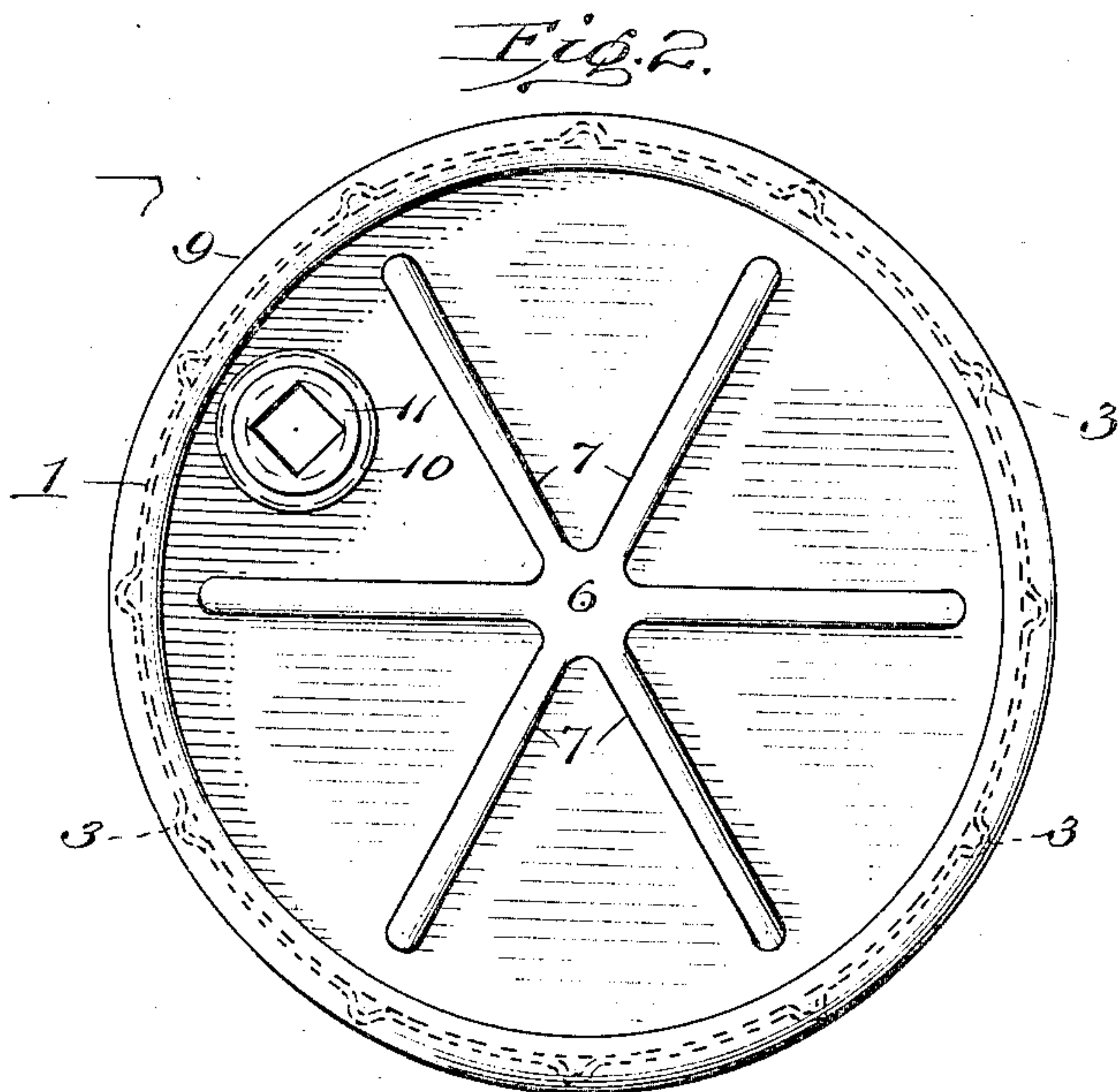
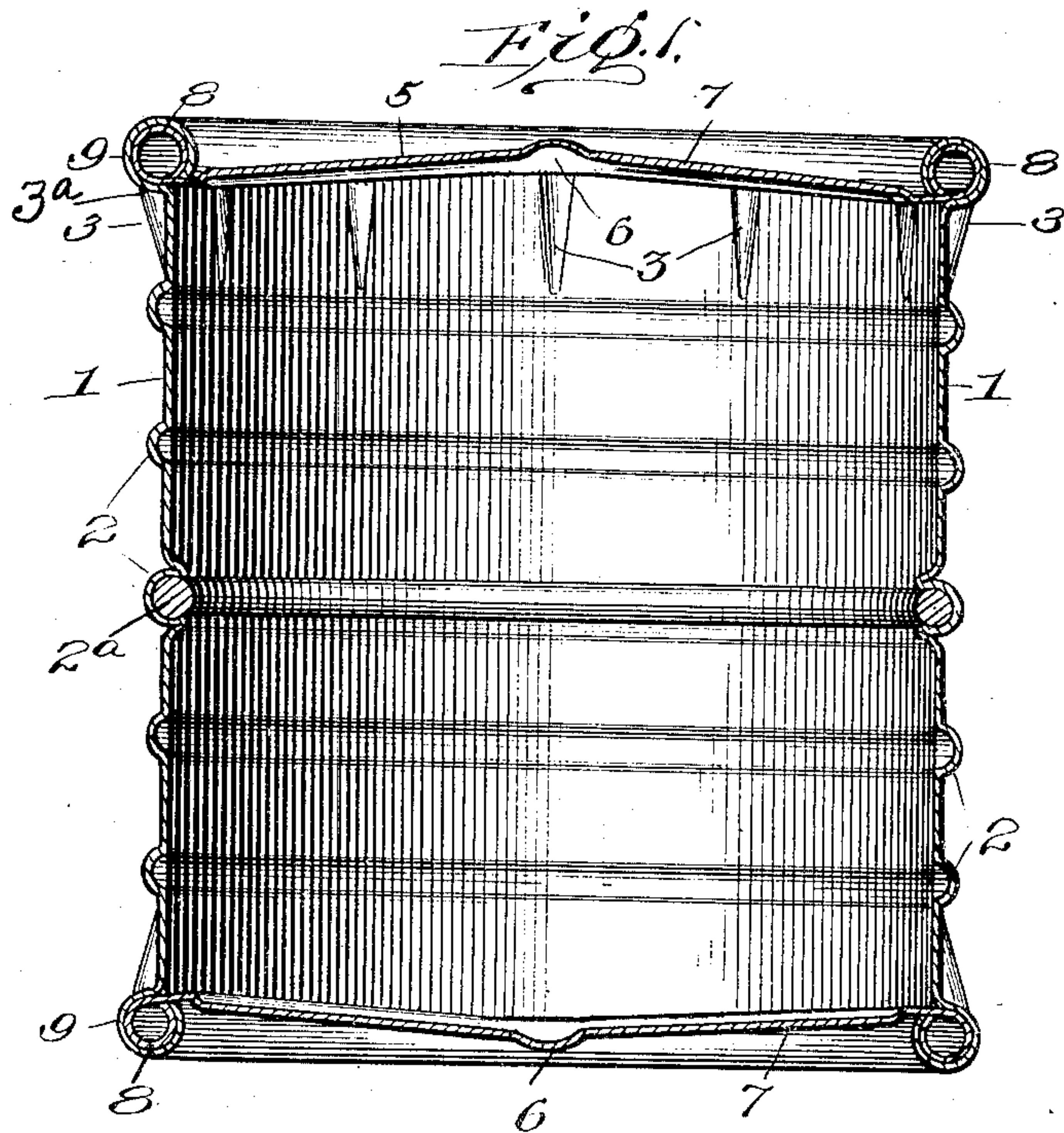


No. 829,477.

PATENTED AUG. 28, 1906.

A. T. KRUSE.
METALLIC BARREL.
APPLICATION FILED MAY 24, 1905.

2 SHEETS—SHEET 1.



Witnesses
R. M. Fowler Jr.
H. E. Mantz

Alfred T. Kruse Inventor
By *Obed C. Billman* Attorney

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2 SHEETS—SHEET 2.

Fig. 3.

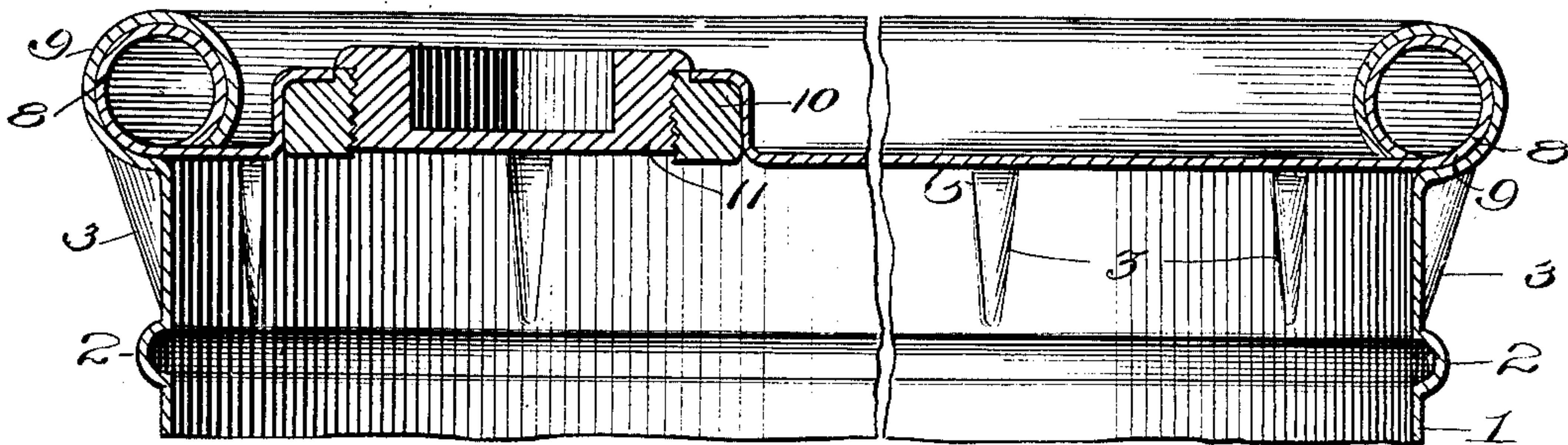
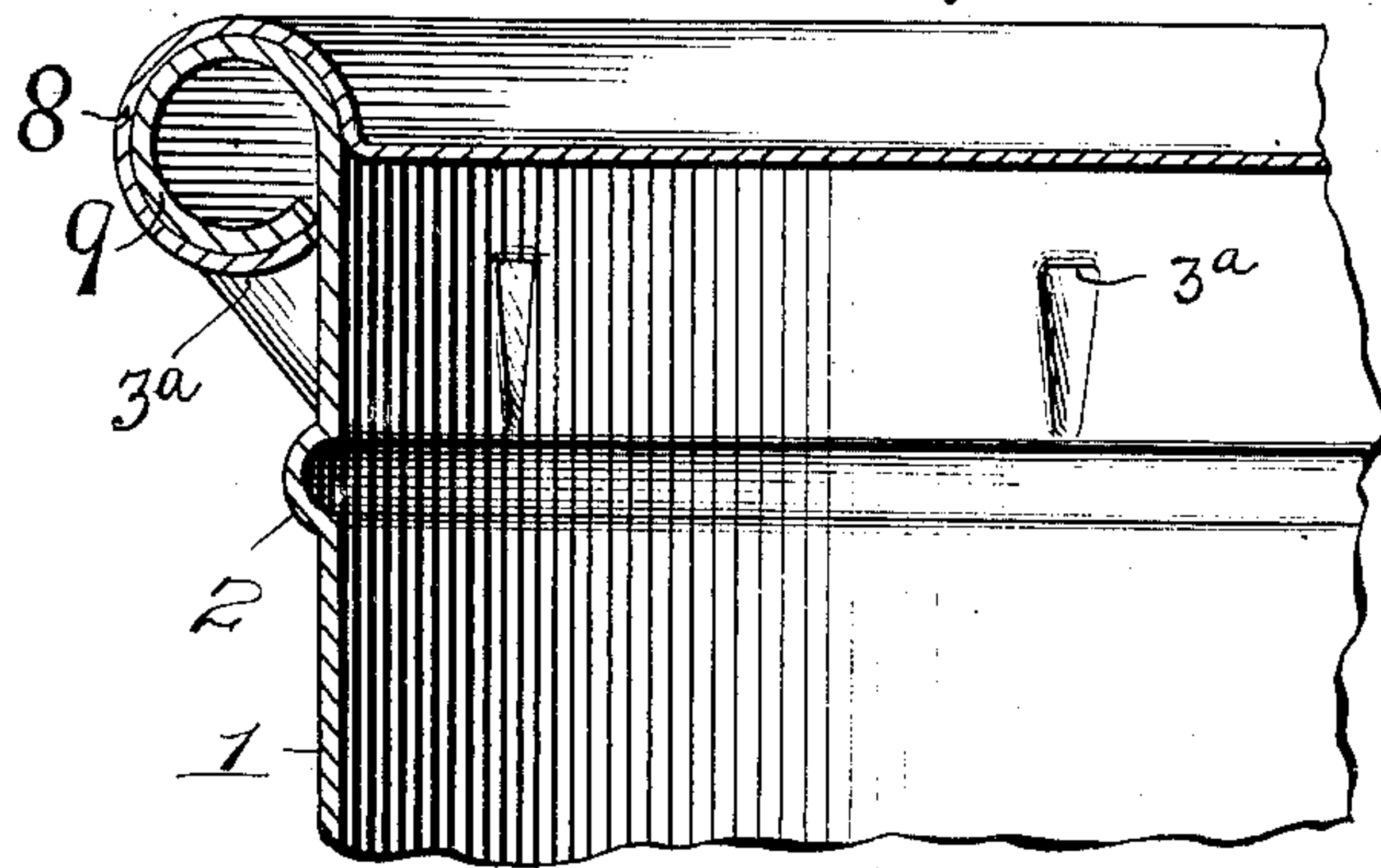


Fig. 4.



Witnesses
J. M. Fowler
H. E. Mantz

Alfred T. Kruse Inventor
By *Obed C. Billman* Attorney

UNITED STATES PATENT OFFICE.

ALFRED T. KRUSE, OF DEFIANCE, OHIO, ASSIGNOR OF ONE-HALF TO THE AMERICAN STEEL PACKAGE COMPANY, OF DEFIANCE, OHIO, A CORPORATION OF OHIO, AND ONE-HALF TO HARRY H. WILLOCK, OF PITTSBURG, PENNSYLVANIA.

METALLIC BARREL.

No. 829,477.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed May 24, 1905. Serial No. 262,072.

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 new and useful Improvements in Metallic Barrels, of which the following is a specification.

My invention relates to improvements in metallic barrels and similar vessels of that class or type designed to carry fluids or other substances which necessitates a fluid or liquid tight receptacle.

The cylindrical wall and the ends of my improved metallic barrel or vessel are stamped, drawn, or spun from sheets or blanks of metal united together at their meeting edges to form a fluid-tight barrel or package; and the paramount object of my invention is to produce a generally improved vessel of this class which will be exceedingly simple in construction, cheap of manufacture, and efficient in use, and which will be better adapted to its intended purposes than any other device of the same class with which I am acquainted.

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

Referring to the accompanying drawings, forming a part of this specification, Figure 1 is a central longitudinal section showing a completed sheet-metal barrel having the meeting edges of the cylindrical wall and the ends thereof bent over and about to form an annular beading or chime. Fig. 2 represents a top plan view of the same. Fig. 3 represents an enlarged detail sectional view of the annular beading or chime formed by the meeting edges of the cylindrical side and ends. Fig. 4 is an enlarged detail sectional view of a modification of the annular beading or chime formed by the meeting edges of the cylindrical side and ends.

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

Referring now to the drawings, 1 design-

ates the cylindrical wall or body portion of the improved vessel.

2 designates a series of circumferential outwardly-extending corrugations, the central one of which is provided in the present instance with an iron ring or wire 2^a, disposed within the same for strengthening purposes. Any number or all of the corrugations, however, may be provided with a similar ring or wire, if found necessary or desirable.

3 designates a series of corrugations formed about the cylindrical wall or body portion of the barrel or vessel near the edges thereof and forming shoulders 3^a, adapted to abut up against the annular beading or chime herein-after described.

5 designates the ends, bent in the present instance into a slightly concavo-convex shape and provided with a central raised or dished portion 6 and a series of radially-extending outwardly-projecting ribs or corrugations 7.

8 designates an annular beading or chime formed with and about the edges of the ends 5.

9 designates a corresponding beading or chime formed with and about the edges of the cylindrical wall or body portion of the barrel or vessel and bent over and about the beading 8 to form a second or double beading with and about the meeting edges of the cylindrical wall 1 and ends 5, whereby the same are greatly stiffened and strengthened at this point.

If desired, a wire similar to the wire 2^a may be inclosed within the double beading formed as above, and the annular beadings or chimes 8 and 9 may be joined and welded together by the electric or other suitable welding process to form a single integral structure.

10 designates a flange-plate mounted in a suitable opening formed in one of the ends 5 of the barrel or vessel and threaded to receive a plug 11, screwed therein.

12 designates a longitudinal seam formed in the cylindrical wall 1 by beading or crimping the edges thereof over and about so as to overlap and interlock with each other, as shown most clearly in Fig. 4 of the drawings.

Various changes in the form, proportion, and the minor details of construction may be

resorted to without departing from the principles or sacrificing any of the advantages of this invention.

Having thus described my invention, without having attempted to set forth all the forms in which it may be made or all the modes of its use, I declare that what I claim, and desire to secure by Letters Patent, is—

1. A metallic barrel, comprising a cylindrical wall or main body portion, ends secured thereto of concavo-convex shape and provided with the series of radially-extending corrugations, an annular beading or chime formed about the meeting edges of said ends and main body portion and a series of corrugated shoulders formed in the cylindrical wall and abutting against said annular beading or chime.

2. In a metallic barrel, a cylindrical wall or main body portion, an annular beading or chime formed about the ends thereof and taking over a similarly-shaped beading formed about the heads, a series of radially-extending ribs or corrugations formed in said heads, and a series of corrugated supporting-shoulders formed in said cylindrical wall and abutting against said annular beading or chime.

3. As a feature of construction in metallic barrels, a cylindrical wall provided with a circumferential corrugation near its edges, an annular beading or chime formed about the edges thereof, and a series of strengthening-shoulders formed therein and abutting against said circumferential corrugation and said annular beading or chime.

4. In a metallic barrel or similar vessel, the combination with ends provided with an annular beading; of a cylindrical wall secured thereto by having the edges thereof bent over and about said annular beading of the ends to form a double annular beading or chime, and a series of corrugations provided with shoulders adapted to abut against said last-mentioned beading.

5. As a feature of construction in metallic barrels, a concavo-convex head or end provided with an annular beading secured to the chime of a barrel provided with a series of strengthening-shoulders abutting and supporting the chime.

6. In a cylindrical vessel, the combination with ends provided with an annular beading; of a cylindrical wall provided with an annular beading secured to said annular beading of the ends to form a double beading or chime, and a series of corrugations provided with shoulders abutting against said double beading or chime.

7. A metallic barrel consisting of a cylindrical wall provided with a circumferential corrugation near its edges, and ends secured at the edges thereof by means of a double beading or chime, and a series of shoulders

formed near the ends of said cylindrical wall and adapted to abut against said double beading or chime and said circumferential corrugation.

8. A cylindrical vessel, consisting of ends provided with an annular beading, a cylindrical wall provided with an annular beading secured to said annular beading of the ends to form a double beading or chime, a series of circumferential outwardly-extending corrugations formed therein, and a series of corrugated strengthening-shoulders formed therein and abutting against and supporting said double beading or chime of the ends.

9. A metallic barrel or similar vessel comprising a cylindrical wall, an annular beading formed about the ends thereof, a series of corrugations formed near the end of said cylindrical wall and provided with shoulders abutting against and supporting said annular beading.

10. A metallic barrel, comprising a cylindrical wall or main body portion provided with an annular beading about its ends, and a series of corrugated supporting-shoulders formed therein and abutting against said annular beading, and a head provided with an annular beading adapted to be secured within said first-mentioned annular beading.

11. A cylindrical vessel, consisting of ends provided with an annular beading, a cylindrical wall provided with an annular beading secured to said annular beading of the ends to form a double beading or chime, and a series of corrugated strengthening-shoulders formed therein and abutting against and supporting said double beading or chime of the ends.

12. As a feature of construction in metallic barrels, a cylindrical wall, an annular beading or chime formed about the ends thereof and taking over a similarly-shaped beading formed about the head, and a series of corrugated shoulders formed therein near the ends thereof and abutting against and supporting said annular beading or chime.

13. As a feature of construction in metallic barrels, a cylindrical wall, an annular beading or chime formed about the edges thereof, and a series of strengthening-shoulders formed therein and abutting against said annular beading or chime.

14. As a feature of construction in metallic barrels, a cylindrical wall, provided with a circumferential corrugation near its edges, an annular beading or chime formed about the edges thereof, and a series of strengthening-shoulders formed therein and abutting against said circumferential corrugation and said annular beading or chime.

15. As a feature of construction in metallic barrels, a concavo-convex shaped head or end provided with an annular beading secured within the chime of a barrel provided

with a series of strengthening-shoulders and
abutting and supporting the chime, a central
raised or dished portion formed therein; and
a series of radially-extending outwardly-pro-
5 jecting ribs or corrugations formed about
said dished portion.

In testimony whereof I have affixed my

signature in presence of two subscribing wit-
nesses.

ALFRED T. KRUSE.

Witnesses:

CURTIS M. WILLOCK,
MAY PARTEE.