A. T. KRUSE, DEC'D.

C. M. WILLOCK & A. M. KRUSE, EXECUTORS.

METALLIC BARREL.

APPLICATION FILED AUG. 3, 1908.

943,687. Patented Dec. 21, 1909.

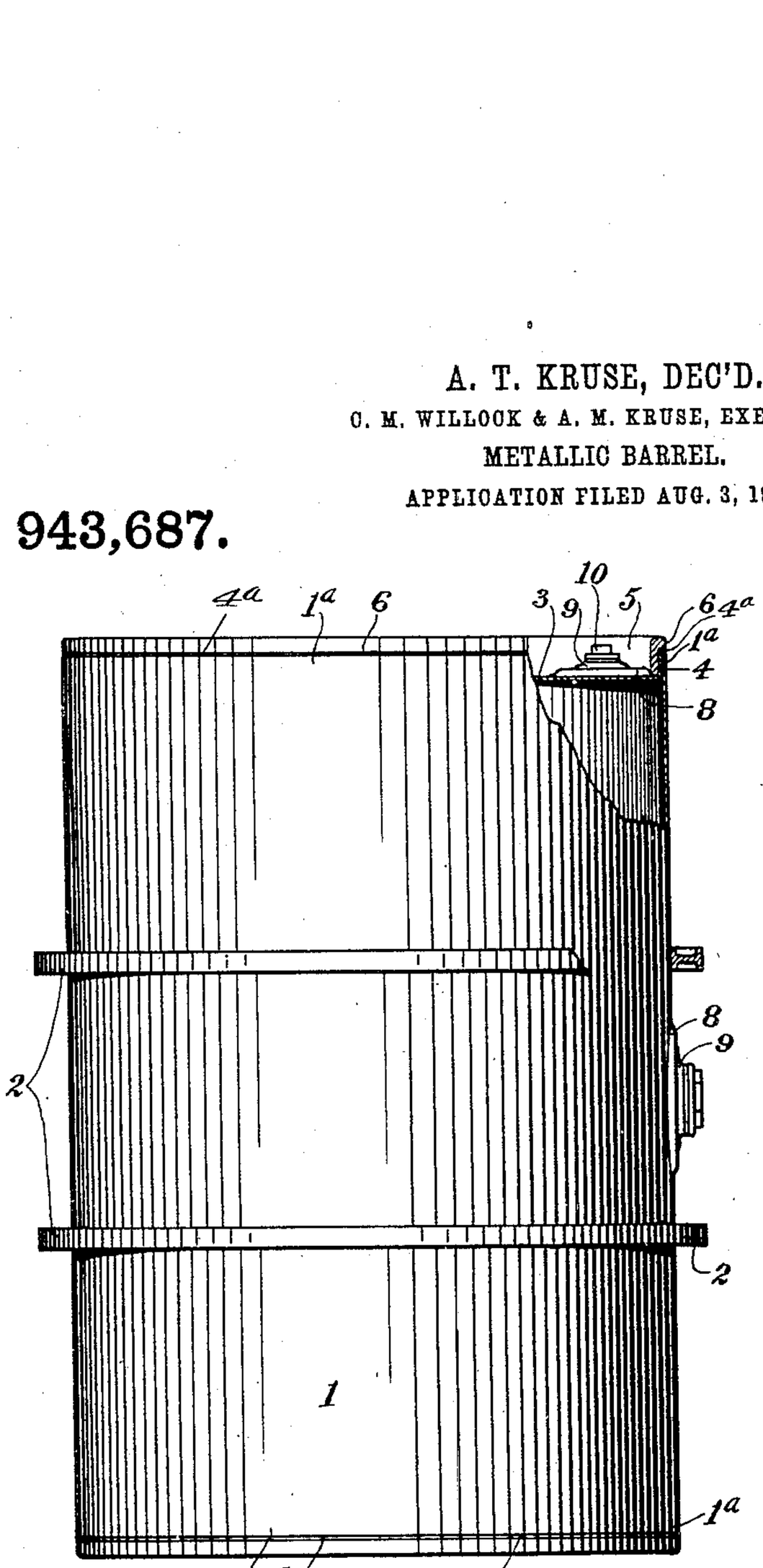

Fig. 1

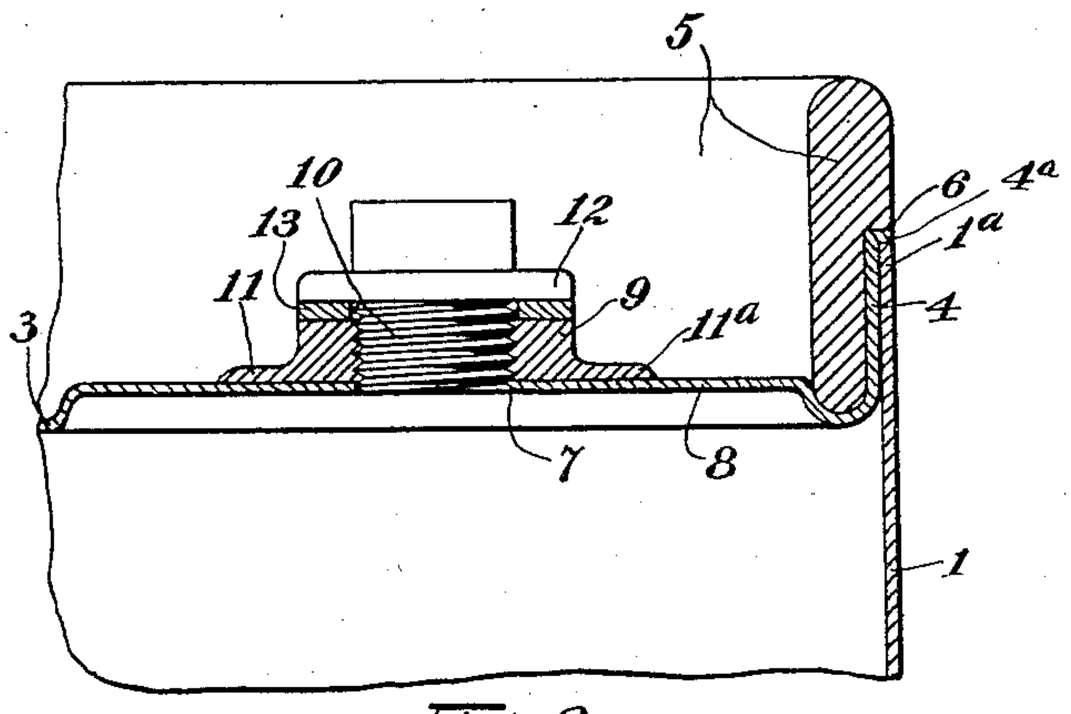

Fig. 2

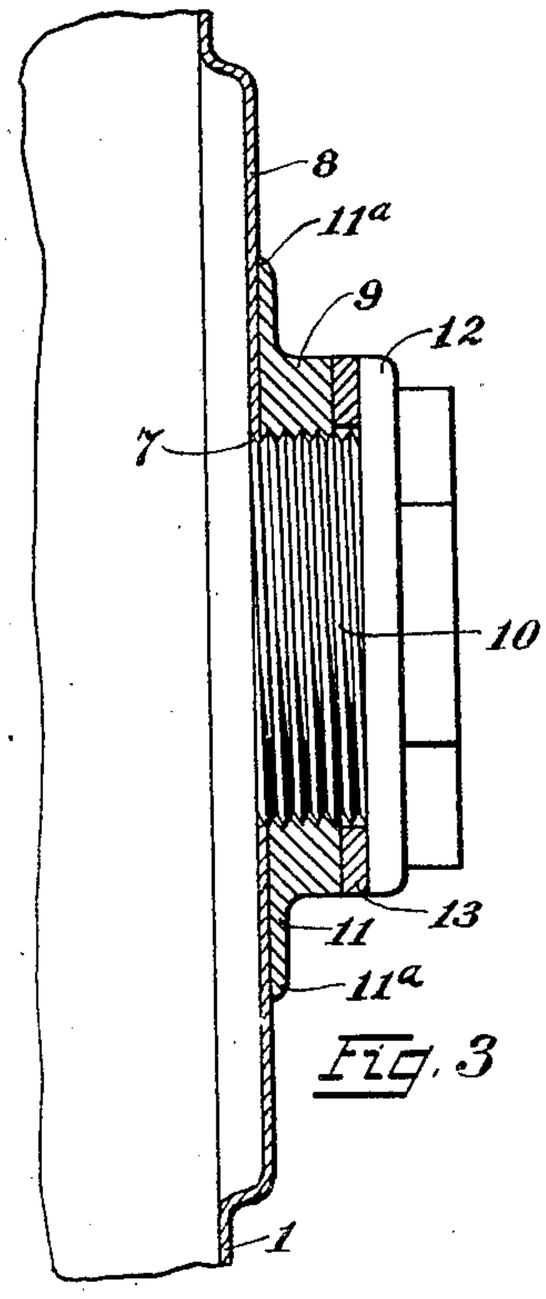

Fig. 3

Witnesses:
H. C. Valentine
Melva Linnehart.

Inventor:
Alfred T. Kruse
by Obed B. Billmeier
his attorney.

UNITED STATES PATENT OFFICE.

ALFRED T. KRUSE, OF DEFIANCE, OHIO; CURTIS M. WILLOCK AND A. M. KRUSE, EXECUTORS OF SAID ALFRED T. KRUSE, DECEASED, ASSIGNORS TO THE AMERICAN STEEL PACKAGE COMPANY, OF DEFIANCE, OHIO, A CORPORATION OF OHIO.

METALLIC BARREL.

943,687. Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed August 3, 1908. Serial No. 446,526.

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 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 necessitate 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 and are united together at their meeting edges to form a fluid-tight barrel or package, the invention relating more particularly to means for uniting, reinforcing and welding said meeting edges whereby to form a generally-improved chime construction for vessels of this class.

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 drawings, forming a part of this specification, Figure 1, is a plan view of a metallic barrel constructed in accordance with my invention. Fig. 2, an enlarged detail sectional view of the improved chime construction, with the barrel head opening and its fittings. Fig. 3, an enlarged detail sectional view of a barrel body opening and its fittings.

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

Upon referring to the accompanying drawings, it will be seen that the improved vessel consists of a cylindrical wall or main body portion 1, provided with a pair of circumferential tread-bends or hoops 2, arranged 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 1, is, preferably, of uniform diameter throughout, and is provided at its ends with heads 3, mounted and secured therein, as now described.

Each head is provided with an upturned rim or outwardly extending flange 4, preferably, bent at right angles to the plane of the body of the head as shown. The rim or flange 4, is adapted to rest within and abut against the marginal ends of the barrel body 1, and terminates at its end in a radially or outwardly-extending portion 4^a, taking over and resting upon the marginal end 1^a, of the barrel body when the head is forced home to its normal position, so that the extreme edge of the outwardly-extending portion 4^a, of the rim or flange will be presented as a welding point or surface substantially flush with the end 1^a, of the barrel body as shown in the drawings.

The upturned rim or flange 4, and the abutting marginal end of the barrel body are reinforced and secured by means of a reinforcing chime-band or rim 5, provided with a peripheral off-set recess adapted to receive and contain the upturned rim or flange 4, and abutting the marginal end 1^a, of the barrel body. It will be observed that the off-set recess is of a depth and width corresponding substantially with the thickness and width of the rim or flange 4, and the abutting marginal end 1^a, of the barrel body, said off-set recess extending to one side or edge of the chime-band or rim and, in the present instance, extending from the median line thereof. The peripheral off-set recess is formed, in the present instance, in the outer periphery of the chime-band or rim, and a shoulder 6, is provided at the base of the peripheral off-set recess adapted to abut against the outwardly-extending portion 4^a, at the end of the flange or rim 4, of the head 3, and the end 1^a, of the barrel body, thus providing a welding line whereby said ends may be welded to each other and to the chime-band by means of welding, preferably, by means of a process known as "autogenous welding".

As shown most clearly in Figs. 2, and 3, of the drawings, one of the heads and the intermediate portion of the barrel body are each provided with an opening 7, in the present instance, formed within a depressed portion or pocket 8.

The head and body of the barrel are each provided with a cap-head 9, having a screw-threaded opening adapted to receive and contain a threaded plug 10. The cap-head 9, is provided with an annular welding

flange 11, the outer edges 11ª, thereof forming a convenient welding line for welding said cap-heads to the adjacent metal.

The plug 10, is provided with a flange 12, adapted to fit down upon a washer 13, interposed between the same and the face of said cap-head.

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, 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. In a metallic barrel, a cylindrical body, a head provided with an upturned rim abutting against the marginal end of said cylindrical body one of said abutting members being provided with an annular outwardly-extending portion taking over and extending flush with the other or opposite member, and a chime-band provided with an off-set recess containing said abutting members and secured to the edges of said outwardly-extending portion and opposite member by a peripheral welding formed along the base portion of said off-set recess.

2. A metallic barrel, comprising a cylindrical body, heads mounted therein and provided with upturned rims terminating in radially-extending portions resting upon the marginal ends of said cylindrical body, and inner chime-bands provided with peripheral off-set recesses containing said marginal ends and radially-extending portions and united thereto by a peripheral welding extending along the base portions of said peripheral recesses.

3. In a metallic barrel, a main body portion, a head having an upturned rim mounted within the marginal end of said main body portion and terminating in a peripheral outwardly-extending portion resting on said marginal end and extending flush with the outer periphery thereof, and an inner chime-band extending in a plane with said marginal end and provided with a peripheral off-set recess containing said upturned rim and marginal end, said outwardly-extending portion abutting against the base of said off-set recess and having its exposed edge united thereto and to said marginal end by a peripheral welding.

4. In a metallic barrel, a main body portion, a head having an upturned flange within the marginal end of said main body portion and provided with a radially extending portion abutting against said marginal end and extending flush with the outer periphery thereof, and a chime-band provided with a peripheral off-set recess containing said upturned flange and marginal end, said radially-extending portion and marginal end being united to each other and to said chime band by a peripheral welding.

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

ALFRED T. KRUSE.

Witnesses:
E. J. ALLEN,
M. PARTEE.