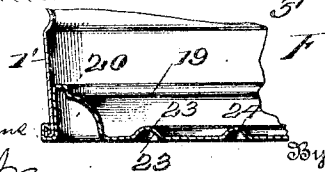
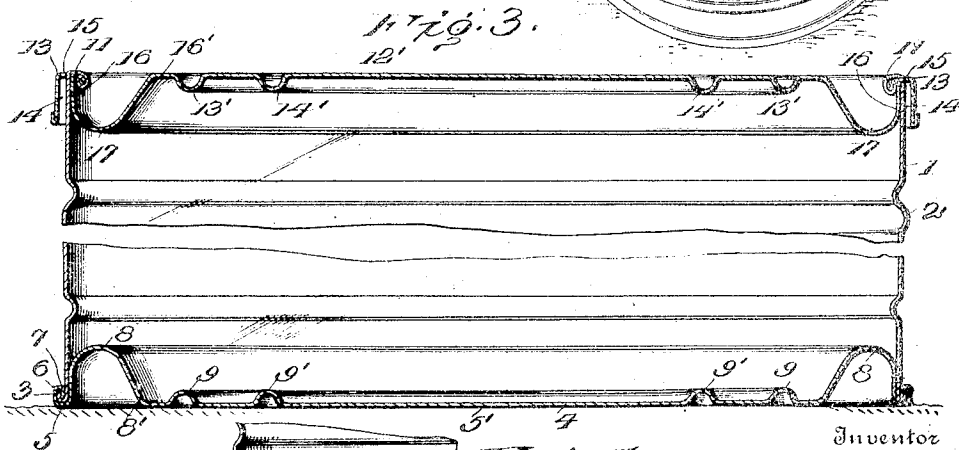
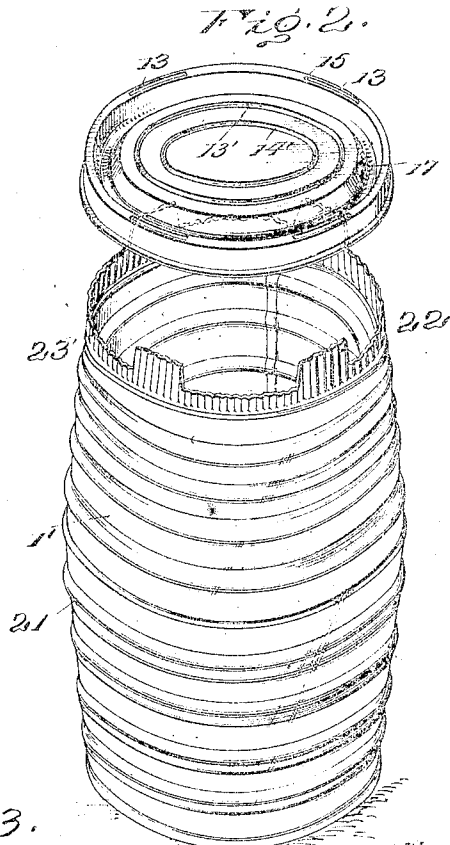
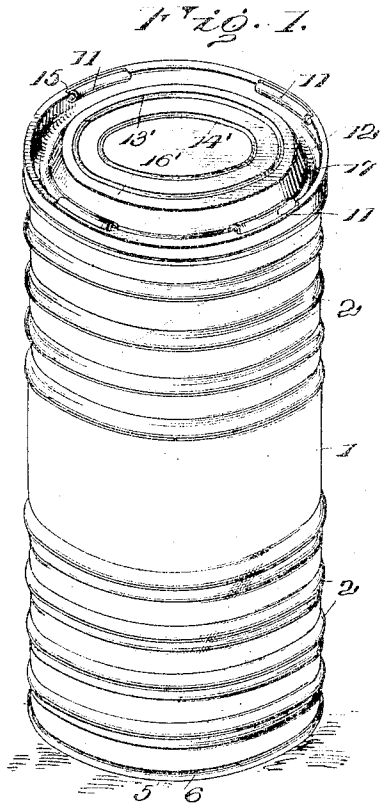


G. E. MITTINGER, JR.
METAL KEG.
APPLICATION FILED MAR. 5, 1912.

1,045,055.

Patented Nov. 19, 1912.



Witnesses
W. A. Williams
C. P. Wright, Jr.

G. E. Mittinger, Jr.
Attorney

UNITED STATES PATENT OFFICE.

GEORGE E. MITTINGER, JR., OF NEW CASTLE, PENNSYLVANIA.

METAL KEG.

1,045,055.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed March 5, 1912. Serial No. 681,712.

To all whom it may concern:

Be it known that I, GEORGE E. MITTINGER, Jr., a citizen of the United States, residing at New Castle, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Metal Kegs, of which the following is a specification, reference being had therein to the accompanying drawing.

10 My invention relates to improvements in metal kegs.

The object of my invention is to provide a metal keg, which is lighter than the ordinary wooden keg and which can be cheaply manufactured and at the same time have the necessary strength and durability to withstand the strain to which kegs of this character are subjected.

Another object of my invention is to provide a metal keg in which the head is readily applied and when locked in position forms practically an airtight keg.

In the accompanying drawing—Figure 1 is a perspective view of a cylindrical keg showing the head clamped thereon. Fig. 2 is a perspective view of a barrel-shaped keg with the head above and showing corrugated lugs for securing the head upon the keg. Fig. 3 is an enlarged vertical transverse sectional view, partly broken away, of Fig. 1. Fig. 4 is a detail sectional view showing the manner of securing the bottom to the keg, of the form shown in Fig. 2.

My improved keg is designed more particularly for shipping nails, rivets, washers, bolts, railroad spikes, wire and many other varieties of metal products, and by forming the keg of sheet-metal it is made practically airtight, which prevents moisture, etc., from entering the keg and causing the rusting of the articles therein. In the shipping of such articles, as heretofore stated, and especially where they are exposed to the salt air, it has been found that they readily rust and become worthless. It has also been found that such wooden kegs, as heretofore used, when stored for any length of time, dry out and when handled they often collapse, requiring re-coopering, which adds greatly to the cost of handling of such articles. My improved keg obviates all these difficulties and is also from two to three pounds lighter than the ordinary keg now used in shipping such articles. This keg having corrugations on its outer periphery and also having a corrugated bottom and

head, forms a keg double the strength of, if not stronger, than the ordinary wooden keg now in use.

Referring now to the drawings, 1 represents the body-portion of a cylindrical keg embodying my invention. This keg, as shown, is provided with a series of corrugations or ribs 2, which extend circumferentially around the same and which greatly strengthens the keg. The lower end of the keg is provided with an upwardly turned annular portion 3 surrounding the entire keg. The bottom 4 snugly fits within the bottom of the body-portion and has the outwardly turned portion 5, which is turned upwardly at 6 and downwardly at 7 between the body-portion and the upwardly turned annular flange 3 of the body-portion.

The bottom 4 is thus firmly clamped to the keg and it will be seen that it is impossible for the bottom to be forced from the body-portion. By having this joint between the body-portion and the bottom, it will be seen that there are five thicknesses at the lower end of the keg, which greatly strengthens the same and the lower end of the keg being the portion receiving the greatest abuse the keg cannot be readily broken or collapsed. The bottom 4 of the keg is provided with the annular upwardly curved portion 8 which forms a chime at the lower end of the keg whereby the fingers may be passed under the lower end of the keg for handling the same. The inner end 8' of the curved portion terminates in a flat horizontal central portion 5' flush with the portion of the edge, whereby the edge of the keg is relieved of a great part of the weight of the keg. The bottom of the keg on the inside of the curved portion 8 is provided with annular ribs 9 and 9' which are formed of the metal of the bottom and which greatly strengthen the bottom of the keg.

The upper end of the keg has formed integral therewith and as a continuation thereof, the upwardly extending lugs or ears 11. The head 12, as shown, is of a circular form having adjacent its outer end the upwardly and downwardly turned portion 13, forming an annular narrow space 14, entirely around the head. In communication with the upper end of the space 14, the head is provided with a series of openings 15 through which the lugs or ears 11 extend, whereby when the head is on the keg the upper end of the keg extends within the space 14 and

forms practically an air-tight joint with the keg. The ears 11 are bent over and preferably rolled over upon the head 12, locking the head upon the keg and drawing the upper end of the keg against the wall 16 of the cover so as to form a tight joint with the head. The head 12 is curved downwardly at 17 to form a chime around the upper end of the keg to receive the finger for handling the keg. The wall 16 of the head is curved as clearly shown in Fig. 2 of the drawings and has its inner end 16' flush with the portion 13 of the head so that a great portion of the weight of the keg will be taken off of the edge thereof and be on the head of the keg. The said head on the inside of the portion 16' terminates in the flat horizontal portion 12' flush with the portion 13 and is provided with the annular ribs 13' and 14' which are formed of metal of the head and which greatly strengthens the same.

In the modification shown in Fig. 2 the body-portion 1' is made of slightly tapered form from the center toward each end. The bottom 19 is formed of slightly different contour having the annular bulged portion 20, adjacent the sides of the keg to strengthen the keg above its lower end and the annular ribs 23 and 24. The specific means of attaching the bottom 19 with the body-portion of the keg is exactly the same as that shown in Fig. 2, and like reference numerals refer to similar parts. In this modification the body-portion is provided throughout its entire length with a series of circumferential corrugations 21, which greatly strengthen the keg. The extreme upper end of the keg is provided with upwardly extending ears or lugs 22, which are formed integral and as a continuation of the body-portion of the keg. The extreme upper end of the body-portion is vertically corrugated at 23', said corrugations extending into the lugs or ears 22.

The head in the modification shown in Fig. 3 is formed exactly like that shown in Fig. 1, and the same reference numerals apply thereto.

The corrugations greatly strengthen the outer end of the keg and also the ears so that after they have been bent over or rolled on the head it is impossible to cause them to straighten out by the weight of the keg should the keg be inverted.

While I have shown these two forms of kegs, it will be understood that the general contour of the keg can be varied and it has been found very convenient for shipping to make the kegs slightly tapering so that they will nest together, thus requiring less space in shipping.

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

A metal keg comprising a body portion, the upper end having upwardly extending lugs formed integral therewith, said body portion being corrugated vertically and said corrugations extending into the lugs, a head within the body portion having a flat central portion and having a downwardly extending flange on the outside and an annular groove forming a chime, the outer wall of which bears against the inner periphery of the body portion, said head having openings through which the lugs extend and are rolled within the annular groove, whereby the outer face of the lug is flush with the chime and with the center of the head on the inside of the annular groove.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

GEORGE E. MITTINGER, JR.

Witnesses:

W. D. WALLACE,

WILLIAM McELWEE, JR.