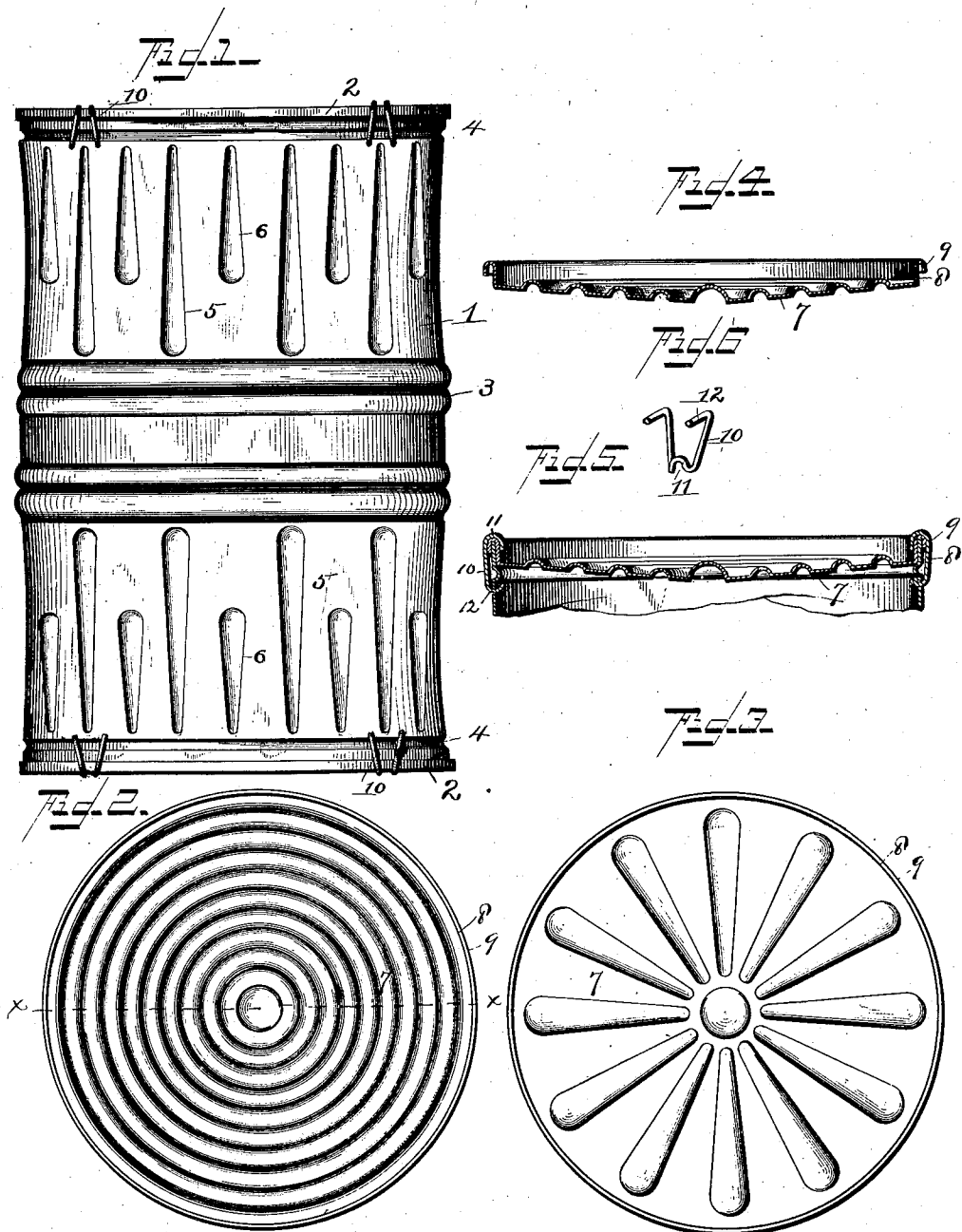


(No Model.)

A. O. & M. A. STIVSON.
METALLIC KEG.

No. 423,833.

Patented Mar. 18. 1890.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ANTHONY O. STIVESON AND MICHAEL A. STIVESON, OF MIDDLEPORT, OHIO.

METALLIC KEG.

SPECIFICATION forming part of Letters Patent No. 423,833, dated March 18, 1890.

Application filed December 10, 1889. Serial No. 333,232. (No model.)

To all whom it may concern:

Be it known that we, ANTHONY O. STIVESON and MICHAEL A. STIVESON, both residents of Middleport, in the county of Meigs and State of Ohio, have invented certain new and useful Improvements in Metallic Kegs; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in metallic kegs, barrels, and other similar cylindrical packing and storing vessels, and is designed more particularly for use in connection with dry or solid materials or substances, although the vessels may be employed for containing liquids or fluids.

Our invention has for its object to provide a metallic keg, barrel, or similar article which can be expeditiously and economically manufactured, which shall be extremely light, which shall be very strong, and which shall be very durable in use.

To such ends the invention consists in a metallic packing and storing vessel constructed and combined as hereinafter fully described, and definitely pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a side elevation of a keg or barrel constructed according to our invention. Figs. 2 and 3 are plan views of the heads of the barrel, showing two different forms or styles of corrugations. Fig. 4 is a section on the line xx of Fig. 2, the head being detached from the barrel. Fig. 5 is a similar view with the head attached. Fig. 6 is a perspective view of one of the hooks for retaining the head in place.

In the said drawings, the reference-numeral 1 designates the body of the keg or barrel, and 2 the heads thereof. This body portion 1 is provided at or near its center with a number of peripheral or circumferential corrugations 3, and near each end with a similar corrugation 4, somewhat smaller than the corrugations 3. The body portion 1 is concaved or inwardly bulged between the corrugations 3 and 4, by which the keg is strengthened against inward pressure and can be more easily retained upon a pair of skids than if the walls were perpendicular. The corruga-

tions serve to strengthen the barrel against inward pressure, and also stiffen it, so as to enable it to withstand the shocks and knocks to which such articles are usually subjected. The end corrugations 4 also serve as stops to limit the inward movement of the heads of the barrel, and also to form a tight joint therewith when said heads are forced down into place.

For the purpose of strengthening the quarter-bilges of the barrel we provide a number of parallel corrugations 5 5, which extend from the corrugations 4 to the corrugations 3. These corrugations 5 gradually taper outwardly from their outer to their inner ends—that is to say, they are larger at their inner than their outer ends, as will be seen in Fig. 1. We also provide the outer portions of the body with a series of shorter corrugations 6, arranged alternately with the corrugations 5. These corrugations 6 are identical with corrugations 5, except that they are shorter, being only a little more than half the length of corrugations 5.

The head 2 of the keg or barrel is made from a single piece of sheet metal by stamping, spinning, or otherwise, and is preferably formed with a concavo-convex bottom 7, as seen in Figs. 4 and 5, an upwardly-projecting rim or wall 8, and a downwardly-turned flange 9. The bottom 7 and rim 8 are of such a diameter as to fit snugly within the end of the body 1 and rest upon the corrugation 4, which limits their inward movement therein. The flange 9 fits snugly over the chine, so that there will be three thicknesses of metal at this point, as seen in Fig. 5, making it very strong and stiff.

For the purpose of holding the head 2 in place and keeping its bottom securely down upon or in contact with corrugation 4, so as to insure a tight joint and prevent leakage of the contents of the barrel, we have devised the fastening or securing devices shown in Fig. 6. These fastening devices consist of a piece of wire bent over upon itself at its center, so as to form two diverging arms 10 10, the said center portion being bent over at right angles to the arms 10 to form a hook 11 and the ends 12 12 inserted in apertures in the barrel just inside the corrugations 4 and bent over to form hooks to prevent their displacement.

These fastening devices should be of such a length that when they are turned up to engage with the upper edge of the rim 8 of the head 2 they will bear firmly thereupon and hold the said head securely in place and upon the corrugation 4. When it is desired to remove the head 2, the fastening devices can be readily turned back out of engagement therewith.

10 The fastening devices are to be composed of spring-wire, so that the tension thereof will hold them in position when they are turned up to engage the heads 2. Any number of these fastening devices may be employed that
15 may be desired; but four for each head will in practice be found effectual.

From the above description it will be seen that by our invention there is provided a metallic keg or barrel which is very strong,
20 light and durable, and by the peculiar construction of the heads and fastening devices a very strong and stiff chine and a tight joint between the heads and corrugations 4 are produced and a ready means provided for removing and replacing the heads with ease
25 and facility. The barrel possesses sufficient strength to withstand considerable internal

pressure, and is not liable to be injured or damaged by blows and knocks and the rough usage to which such articles are generally subjected.

Having thus described our invention, what we claim is—

A metallic packing and storing vessel consisting of the cylindrical body 1, having a number of peripheral corrugations 3 4, and concaved or bulged inwardly at each end intermediate of said corrugations, and provided with a series of alternately-arranged long and short tapering corrugations 5 6, the head 2, having a concavo-convex bottom 7, an upwardly-projecting wall or rim 8, and a downwardly-turned flange 9, the bottom of said head resting on the corrugations 4 and the turned-down flange fitting over the chine, substantially as described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

ANTHONY O. STIVESON.
MICHAEL A. STIVESON.

Witnesses:

JOHN C. McELHINNY,
WILLIAM O. SILVEY.