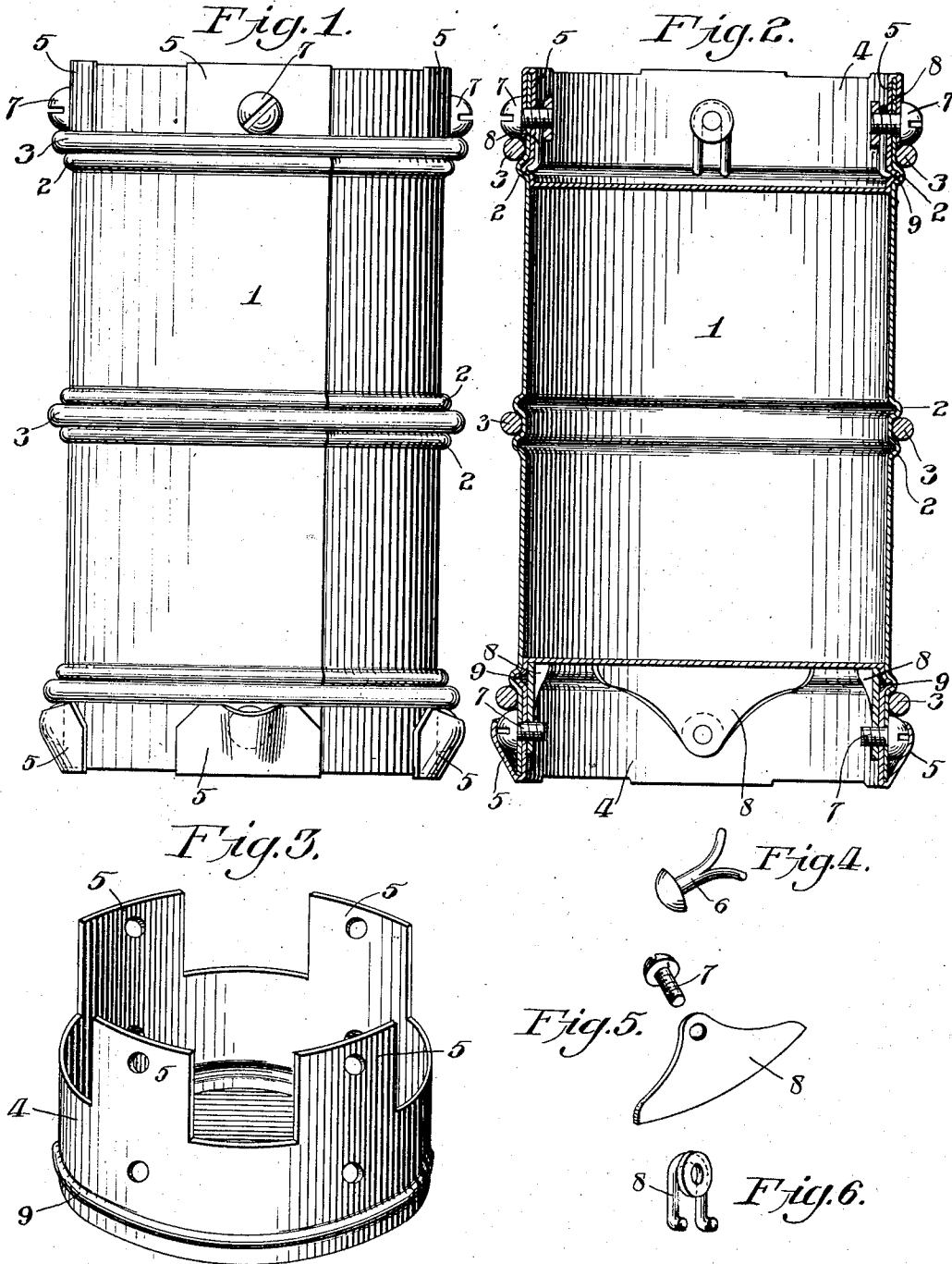


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 KNOCKDOWN SHIPPING PACKAGE.
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Patented May 27, 1913.



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KNOCKDOWN SHIPPING-PACKAGE.

1,062,878.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE S. BOWMAN, a citizen of the United States, and a resident of Lebanon, in the county of Lebanon and State of Pennsylvania, have invented certain new and useful Improvements in Knockdown Shipping-Packages, of which the following is a specification.

My invention relates to improvements in knockdown shipping packages and more particularly to improvements in knockdown shipping packages constructed of metal, and the objects of my invention are to furnish an efficient and inexpensive metallic shipping package which may be conveniently and quickly knocked down and which may be as easily and quickly assembled without the aid of any special tools.

My invention is illustrated in the accompanying drawings, forming part of this specification, and in which:

Figure 1, is a side elevation of my assembled shipping package: Fig. 2, a vertical central longitudinal section through the assembled package: Fig. 3, a perspective view of the head of the package before inserting it in the body of the package: Figs. 4, 5 and 6, perspective views of different means for securing the head to the body of the package.

The body 1 of my package is constructed from a piece of sheet metal of appropriate size and thickness which may be bent to a cylindrical form so that its ends may overlap sufficiently to prevent escape of the material that the package is designed to carry. Near the top and bottom of the body 1 the metal of which it is constructed is grooved so as to form outwardly extending beads or ridges 2 the purpose of which is to stiffen the body and to form a retainer for one side of rings or hoops 3 which encircle the body as shown. At points intermediate of the grooves 2 near the top and bottom of the body 1, may be, if necessary, other similar grooves forming outwardly extending beads or ridges 2 between which may be placed hoops or rings of metal 3 similar to those near the top and bottom of the package. To put the rings or hoops in place the sheet of metal forming the body is rolled so as to be of less diameter than the interior diameter of the hoops when the latter may be readily slipped in place when released. The expansion of the body will cause it to bear against the rings the diameter of which determine

the diameter of the package. The rings 3 being in place upon the body 1 the main portion of the package is formed and it only remains to insert and secure the heads to have the package complete.

The heads 4 are struck up in dies so that they have substantially the form shown in Fig. 3, that is to say they present the form of a short cylinder open at one end and closed at the other and are, preferably, furnished at the tops with ears 5. The heads 4 are of the same diameter as the diameter of the interior of the body 1 and are adapted to be placed, closed end downward, in the ends of the body and to be removably secured thereto by some form of fastening which will at the same time serve to engage the outer side of the rings or hoops 3 which are near the ends of the package to hold, in connection with the ridges 2 already described, these rings or hoops in place.

I prefer to use some sort of a beaded fastening for securing the heads 4 to the body 1, a split rivet 6 as shown in Fig. 4 the head of which would engage the side of the ring 3 and the split portion of which would be bent or clenched on the inside of the cylindrical part of the head, screws 7 adapted to enter keepers 8, Figs. 5 or 6 or any other suitable form of device for these purposes.

The rim or cylindrical part of the head 4 may be beaded, as at 9, near its inner, or closed, end and this bead may enter the groove formed by the beads 2 near the ends of the body 1 and thus form an additional fastening for holding the heads in place. If the beaded form of head be used the head would be inserted in the ends of the body 1 before the end rings 3 are put in place.

The ends of the body 1 and the cylindrical part of the heads 4 are perforated for the passage of the screws 7 or other fastenings. If screws be used I prefer that it be in connection with some form of keeper or nut which will serve as a reinforcement for the chimes of the package, such forms of reinforcement are shown in Figs. 5 and 6. If the head be formed with the ears 5 these latter would, after the head was in place, be bent down over the sides of the body 1, as shown at the upper parts of Figs. 1 and 2, to form three thicknesses of metal at the points through which the fastenings 7 pass or to form coverings for the outer parts of the fastenings, as shown at the lower parts of these figures.

Having thus described my invention I claim as new and desire to secure by Letters Patent:—

1. In a knockdown shipping package, in
5 combination, a body formed of sheet metal
rolled to form a cylinder and furnished with
circumferential ridges near its ends, hoops
or bands surrounding said body and held in
position, at one side, by said ridges, remov-
10 able heads closing the ends of said body, and
fastenings for securing said heads and body,
said fastenings holding said rings or hoops
upon the side opposite to that held by said
ridges.
- 15 2. In a knockdown shipping package, in
combination, a body with overlapping sides
and circumferential ridges near its ends,
cylindrical shaped heads with ridges adapt-
ed to interlock with the inside grooved part
20 of said first ridges, rings or hoops adapted to
encircle said body and to be held from move-
ment in one direction by said ridges on said
body, and beaded fastenings for securing to-
25 gether said body and heads and for holding
said rings or hoops against movement away
from said ridges.

3. In a knockdown shipping package, in
combination, a body with overlapping sides

and circumferential ridges near its ends, cy-
lindrical shaped heads adapted to enter the 30
ends of said body, rings or hoops adapted to
encircle said body and to be held from move-
ment in one direction by said ridges on said
body, beaded fastenings for securing to-
35 gether said body and heads and for holding
said rings or hoops in contact with the
ridges on the body, and a reinforcing keeper
for the chimes of said package held in place
by said beaded fastenings.

4. In a shipping package, in combination, 40
a body with overlapping sides and circum-
ferential ridges near its ends, cylindrical
shaped heads adapted to enter the ends of
said body, furnished at their outer ends with
ears that can be bent down along the outside 45
of the body, rings or hoops adapted to en-
circle said body, means forming part of said
body for preventing said rings from moving
inward on the same, and beaded fastenings
50 for securing together said body and heads
and for preventing an outward movement of
said rings or hoops thereon.

GEORGE S. BOWMAN.

Witnesses:

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