

No. 742,022.

PATENTED OCT. 20, 1903.

J. N. HAHN.
PACKING CASE FOR TUMBLERS, BOTTLES, &c.
APPLICATION FILED DEC. 22, 1902.

NO MODEL.

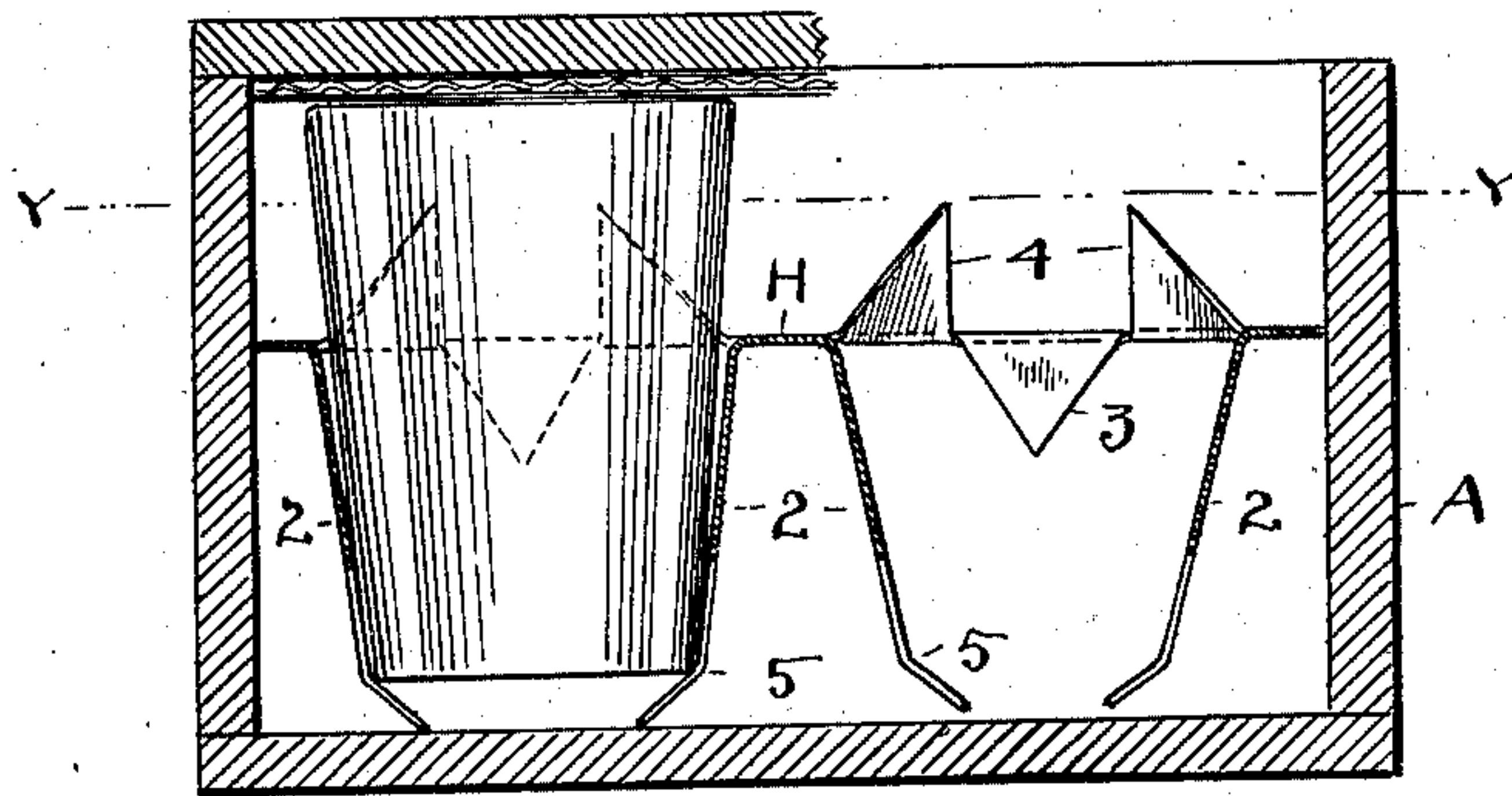


FIG. 1.

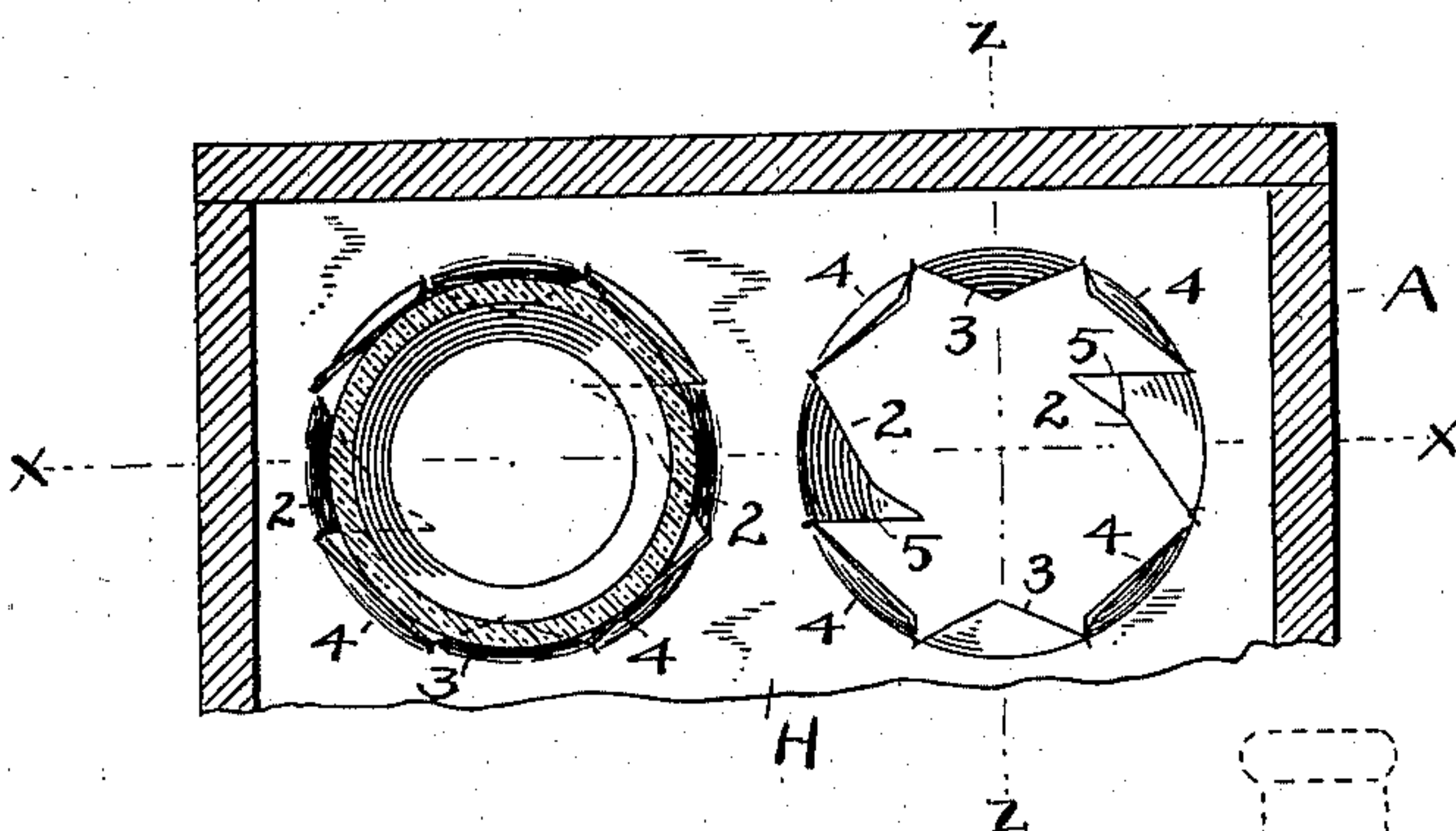


FIG. 2.

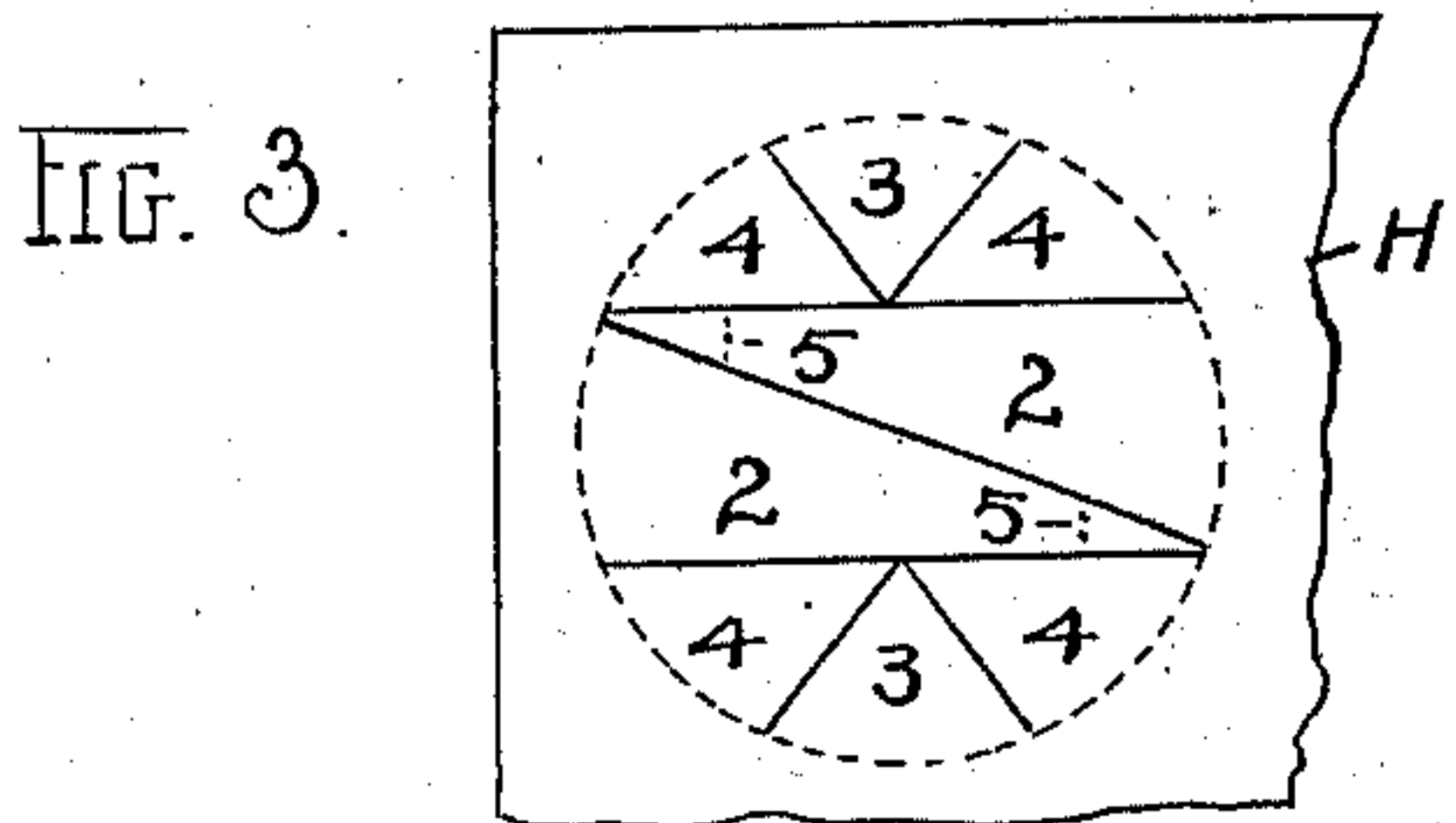


FIG. 3.

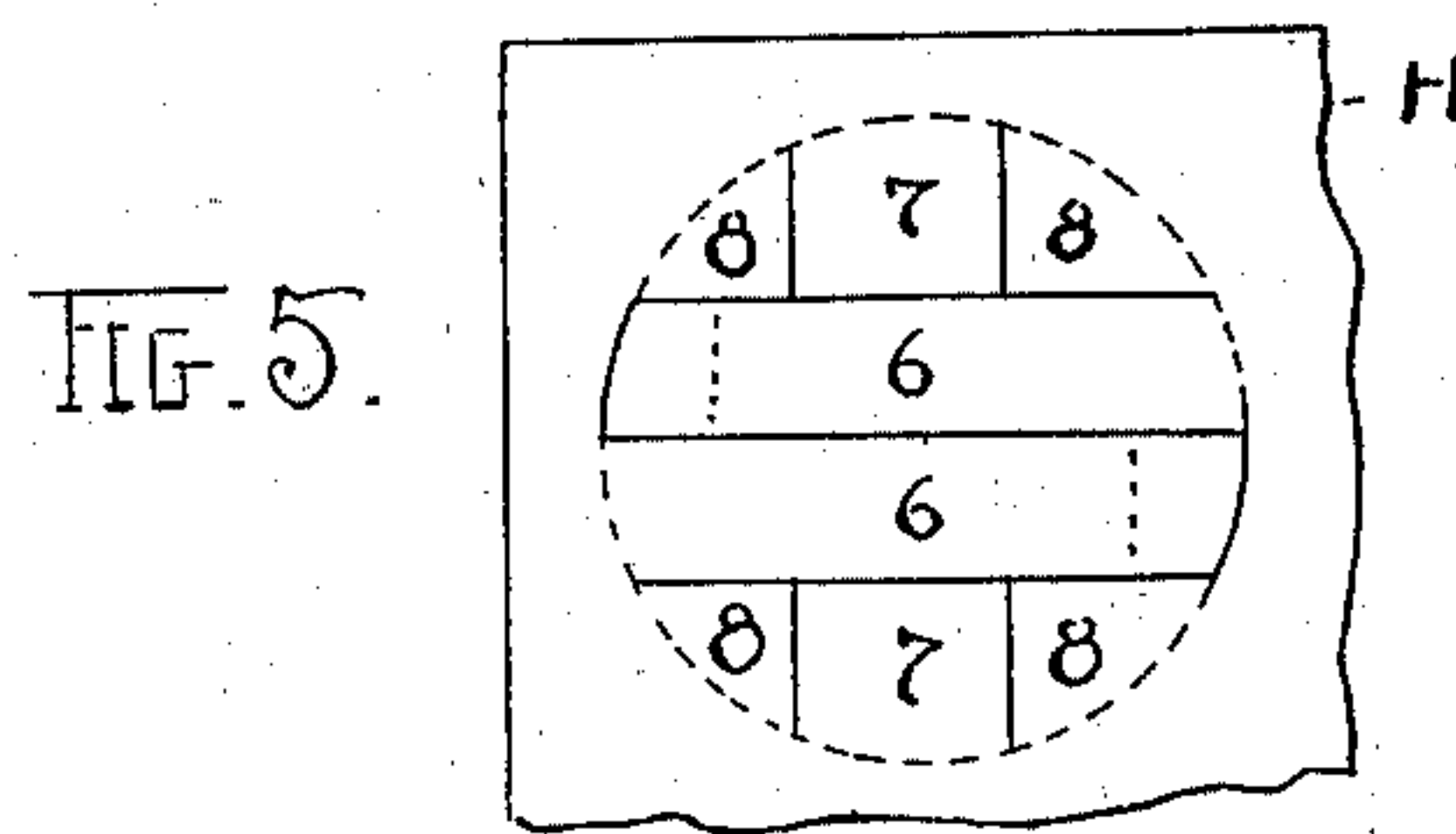


FIG. 5.

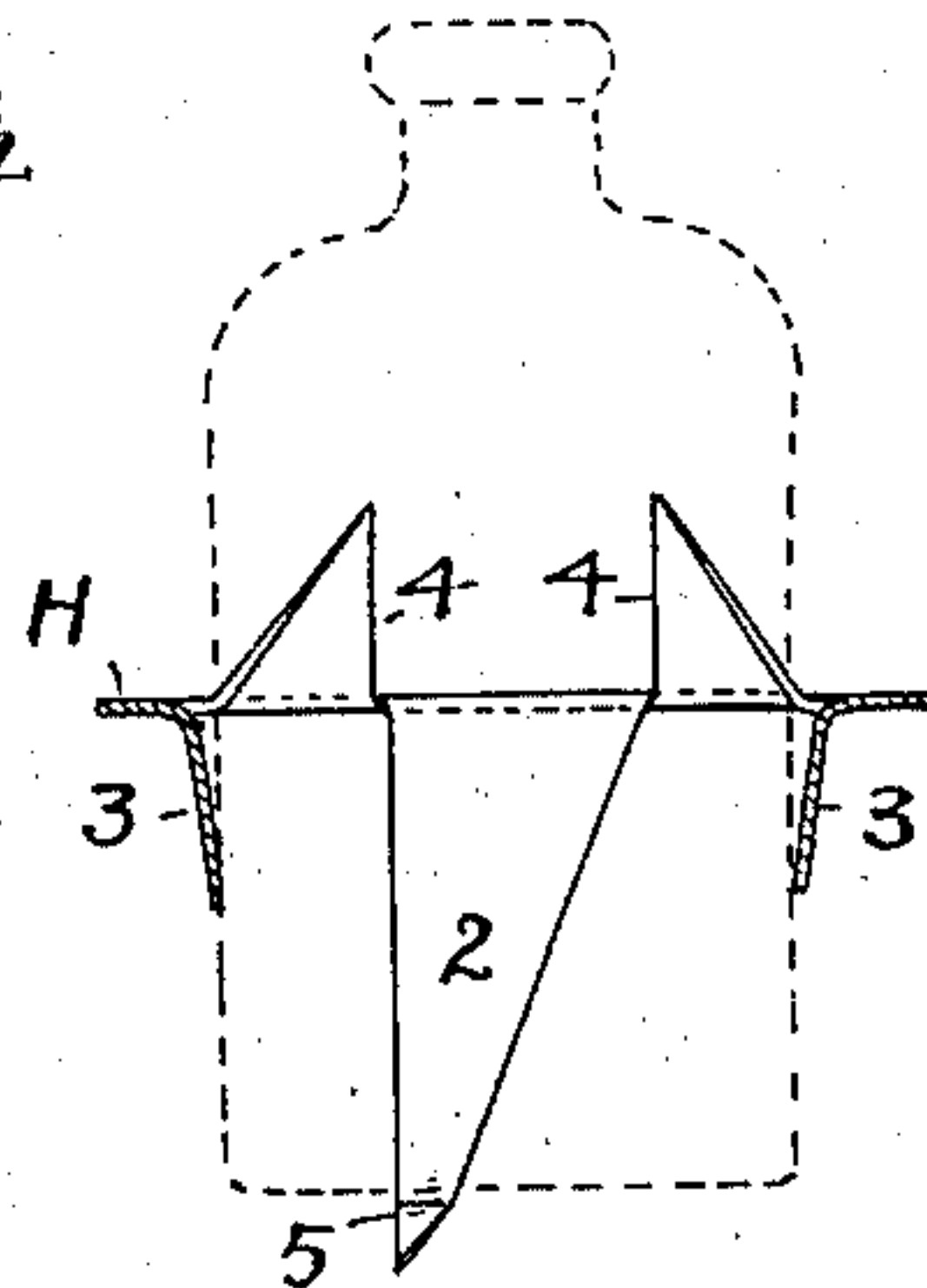


FIG. 4.

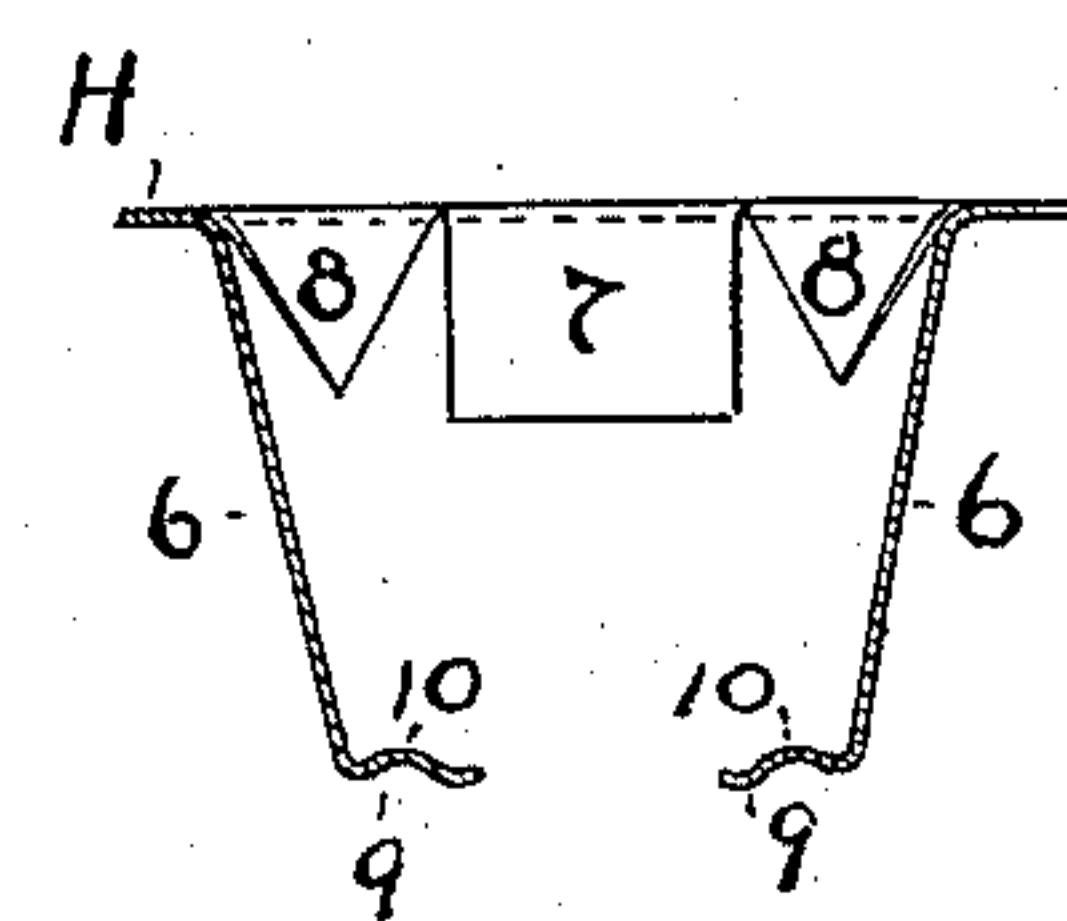


FIG. 6.

ATTEST.
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JOHN N. HAHN, OF CLEVELAND, OHIO.

PACKING-CASE FOR TUMBLERS, BOTTLES, &c.

SPECIFICATION forming part of Letters Patent No. 742,022, dated October 20, 1903.

Application filed December 22, 1902. Serial No. 136,131. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. HAHN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Packing-Cases for Tumblers, Bottles, and the Like; and I do 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.

My invention relates to improvements in packing-cases for tumblers, bottles, and other articles, all substantially as herein shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional elevation of a case with my new and improved holder located therein and showing a tumbler supported in one portion thereon. Fig. 2 is a plan view on line *y y*, Fig. 1. Fig. 3 is a plan view of one end of the holder, showing the same after it has been cut and is in readiness to have the points thereof bent into position for use as seen in Fig. 4. Fig. 4 is a cross-section of the holder on a line corresponding to *z z* of Fig. 2, but without box or case, and showing in addition a bottle in dotted lines. Fig. 5 is a plan view corresponding in development to Fig. 3 and showing a modification of the long spurs or spring-supports of the holder. Fig. 6 is a sectional elevation of the holder shown in Fig. 5 with all the spurs turned downward.

Hitherto it has been the practice to support tumblers, bottles, jars, and other like fragile and easily-broken articles upon cushion-supports placed directly upon the bottom of the box or case A. Generally this cushioning has been of some simple form, such as crimped or corrugated cardboard or its equivalent, and I have also known specially-prepared metallic spring-cushions to be used for the same purpose. By my present construction of holder I am enabled to do away with all other means for holding and cushioning the tumbler or other article and construct the holder itself in such manner that it is made to serve as its own support downward and also as a spring cushioning-support for the tumbler both downward and

laterally. I have also found that all this can be developed from the opening or hole formed in the holder H for the tumbler, bottle, jar, or other vessel to be supported therein, thus working very material economy in the original cost of the packing means as well as very great convenience and simplicity for the packer, because with this construction there are only two things needful in preparing a package for shipment—namely, the box or case and the single holder H, which supports and in itself provides cushioning for all contents of the box. Thus referring to Figs. 1 and 3 it will be noticed that the holder H originally is a plain sheet of suitable metal of comparatively inexpensive kind and light as respects weight, but of a springy nature. This sheet is cut or slit on the lines indicated in Fig. 3, so as to form what may be denominated a “spring-support” 2 and the series of spurs or tongues 3 and 4. It will be noticed that the supports 2 are in this instance cut diagonally and extend across the full width of the hole for the tumbler or other article and that they have pointed extremities which in the course of construction are bent inwardly at the dotted lines 5, as also plainly seen in Fig. 1. This also forms shoulders at 5, Fig. 1, upon which the tumbler or other vessel is adapted to rest, while the projection beneath the same constitutes springs therefor and cushions the vessel against all injury in shipment and in the usual handling of the case. It will also be noticed that these several supports 2 constitute the only support in the case for plate H, and no other is needed, because they are ample and sufficient in themselves. In fact, the weight of the vessel does not really come upon the plate itself, but upon the shoulders 5 beneath, and the plate is supposed to fill the case comfortably about its edge and get its lateral support in that way.

The several spurs or tongues 3 and 4 may be bent alternately upward and downward, as in Figs. 1, 2, and 4, or all the spurs may be bent downward, as in Fig. 6, or they may all be bent upward, according as may be found best adapted to the character of the vessel placed therein. If it be a tall bottle or jar, it may be found preferable to throw all the spurs upward.

A further modification of the invention is

shown in Fig. 5, in which the spring-supports for the vessel and the holder H are indicated by 6, with spurs 7 and 8 between the same. In this instance the supports 6 are formed with parallel sides and are of equal width their entire length and bent down from opposite edges of the opening, as in Fig. 3. If for any reason it be found that the metal plates H are defective in quality and do not afford the requisite spring-support at their extremities when cut as in Fig. 3, a stronger and more serviceable support is obtained by cutting said supports after the style shown in Fig. 5. This brings more of the metal at the point where there is the greatest strain, while it does not rob the supports of requisite strength in other portions, and an altogether efficient and very desirable form of holder is provided in this way. Fig. 6 is an embodiment of this idea and in which the said supports are bent at the point 5, as in the other construction; but the extremities 9 beyond this bend have an additional bend 10, on which the vessels rest.

Obviously the spurs or tongues 3 and 4 and 7 and 8 might be subdivided or split, if desired, without in any sense deviating from the invention, and the invention is understood as comprising all equivalent constructions of spurs and supports as the law and practice allow.

Heretofore when cleats were used the holders had to be fastened thereto to secure them when the box was inverted; but with my construction there are no cleats needed, and the holders are secured in place by their own construction and engaging members or portions in which the supports 2 and 6 are alone sufficient to prevent the holder from displacement when inversion of the box or crate occurs.

What I claim is—

1. As a new article of manufacture, a shipping-holder for tumblers and other fragile articles consisting of a sheet of metal having an opening to receive the article and supports for the said article struck from said opening and integral with the edge thereof and fashioned at their lower ends to engage beneath the article carried and afford a spring-support, substantially as set forth.

2. A holder in sheet form for vessels of different kinds provided with an opening and supports for a vessel struck from said opening and having their lower ends bent to form shouldered springs on which the vessels are adapted to rest, substantially as set forth.

3. In means for shipping fragile articles, a holder in sheet form having an opening and bottom supports for a vessel struck from said opening and having their lower ends bent to form springs, and spring-spurs integral with said holder between said supports and adapted to engage about the side of the article, substantially as set forth.

4. The combination of a shipping-case, with a vessel-holder formed of a flat sheet of springy material provided with an opening in the body thereof to receive a vessel and downwardly-projecting supports struck from about said opening and having their lower ends bent to rest the vessel thereon, and spurs integral with said holder struck from between said supports and substantially in the same vertical plane therewith, substantially as set forth.

Witness my hand to the foregoing specification this 17th day of December, 1902.

JOHN N. HAHN.

Witnesses:

R. B. MOSER,
R. ZBORINK.