

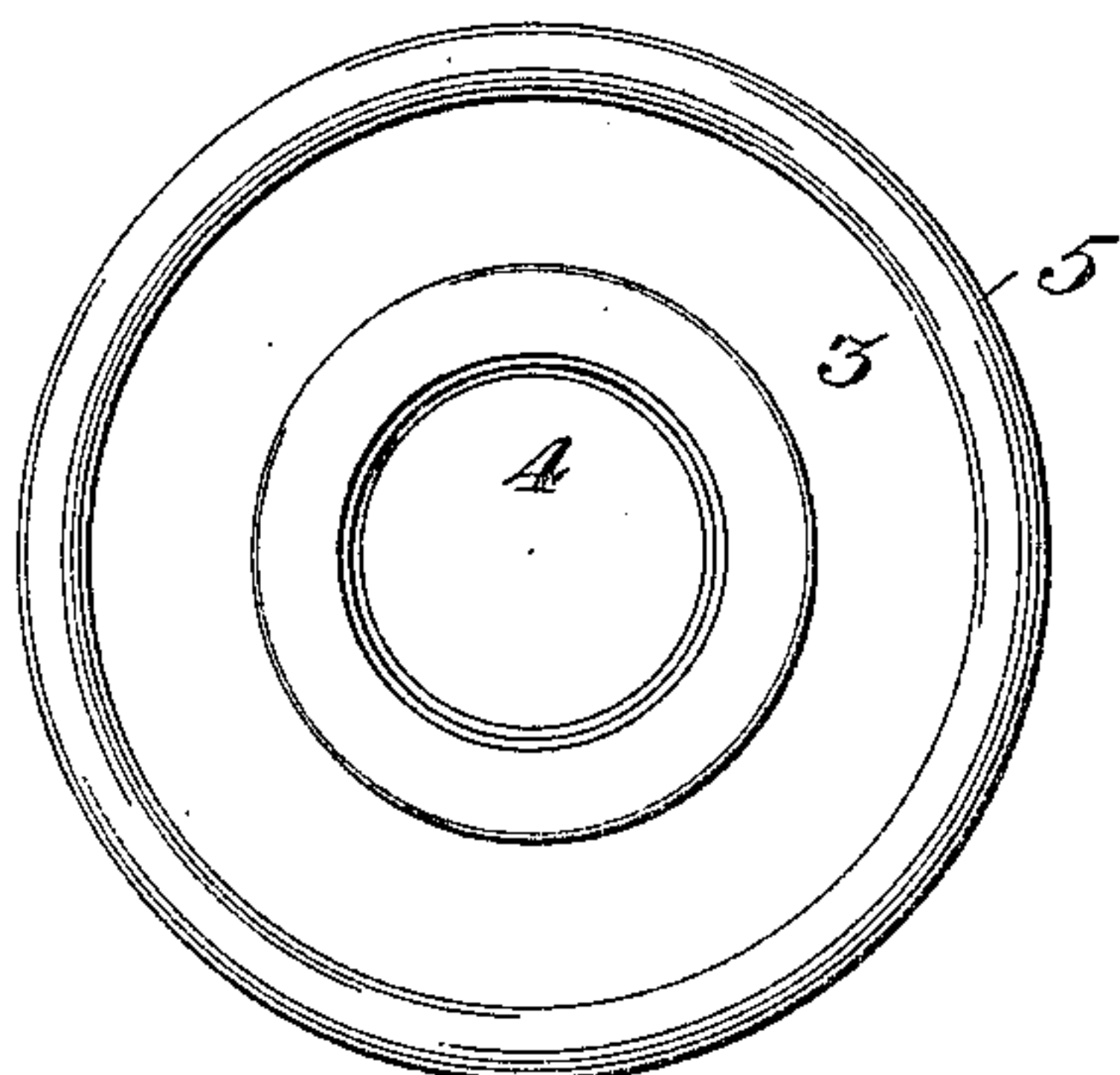
No. 804,222.

PATENTED NOV. 14, 1905.

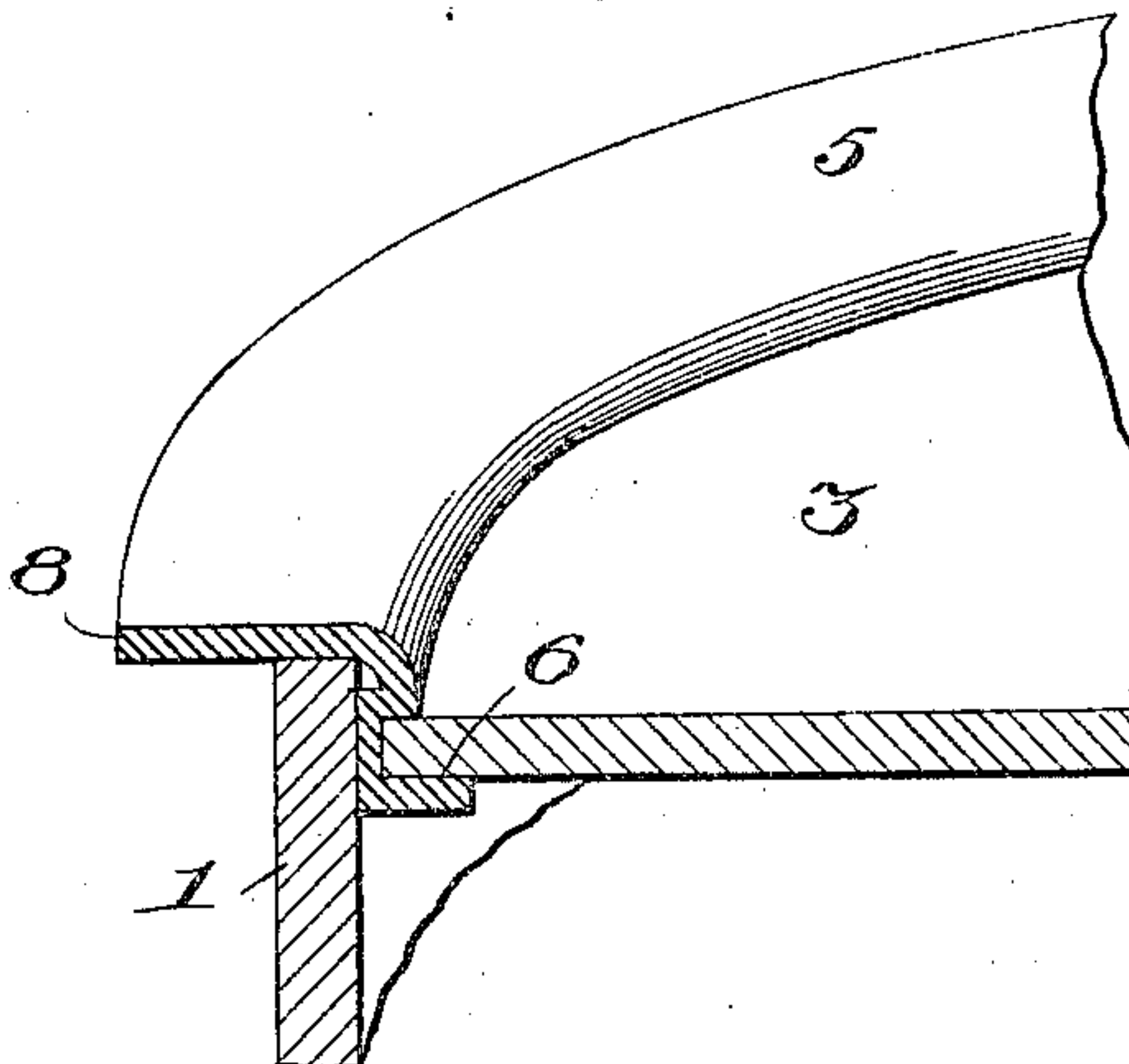
J. R. HARBECK.  
CONTAINER.

APPLICATION FILED OCT. 3, 1904.

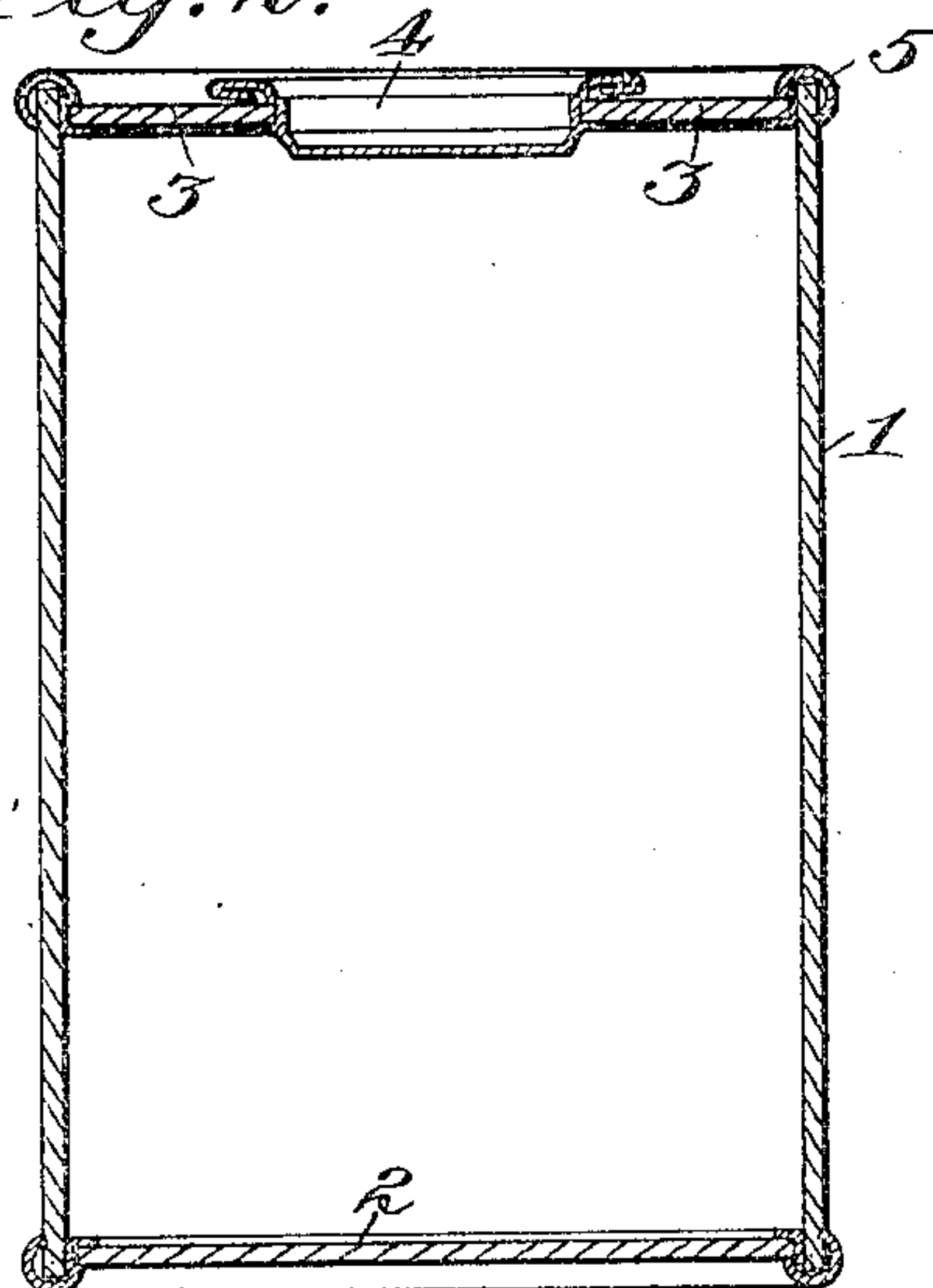
*Fig. 1.*



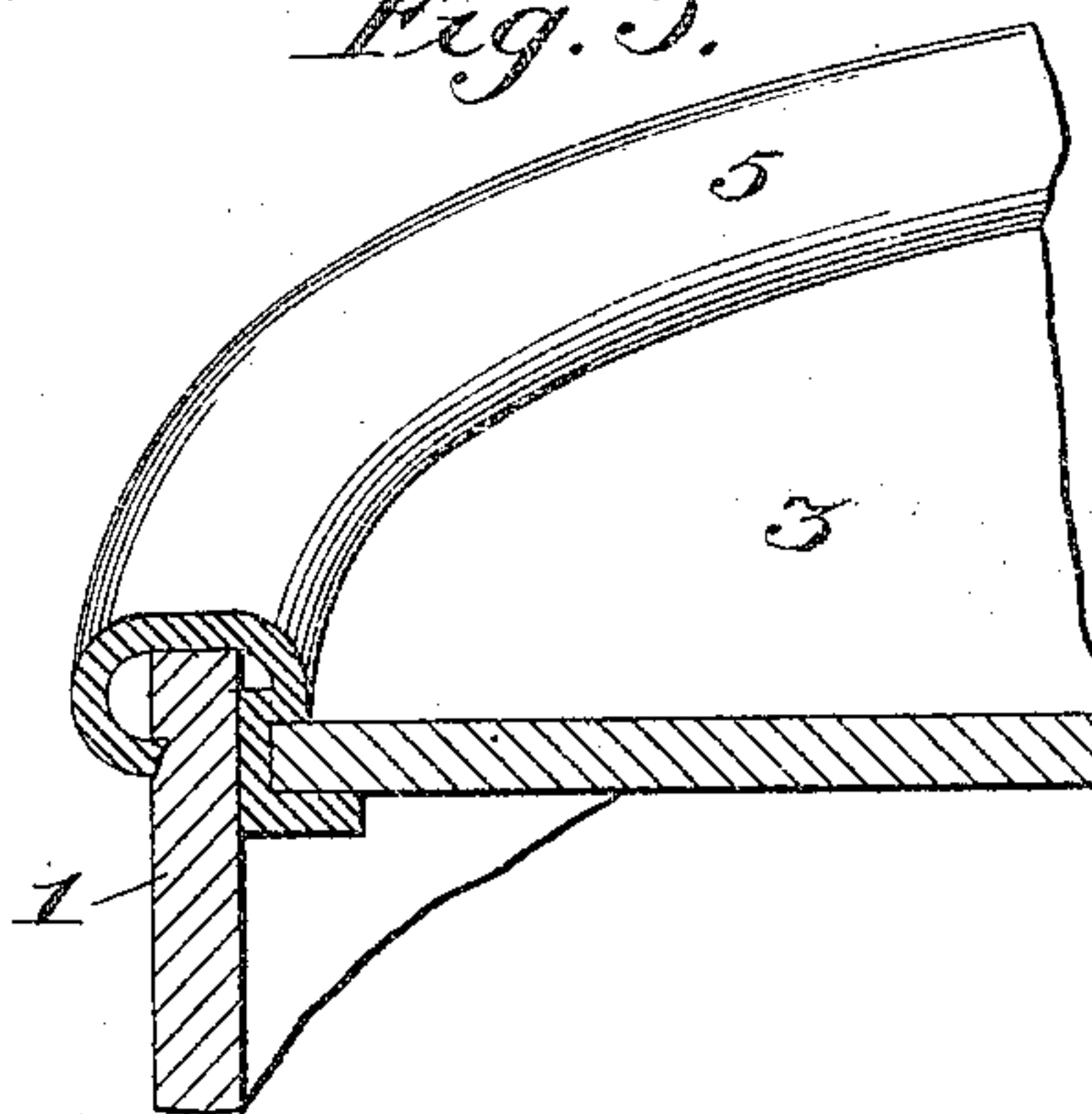
*Fig. 4.*



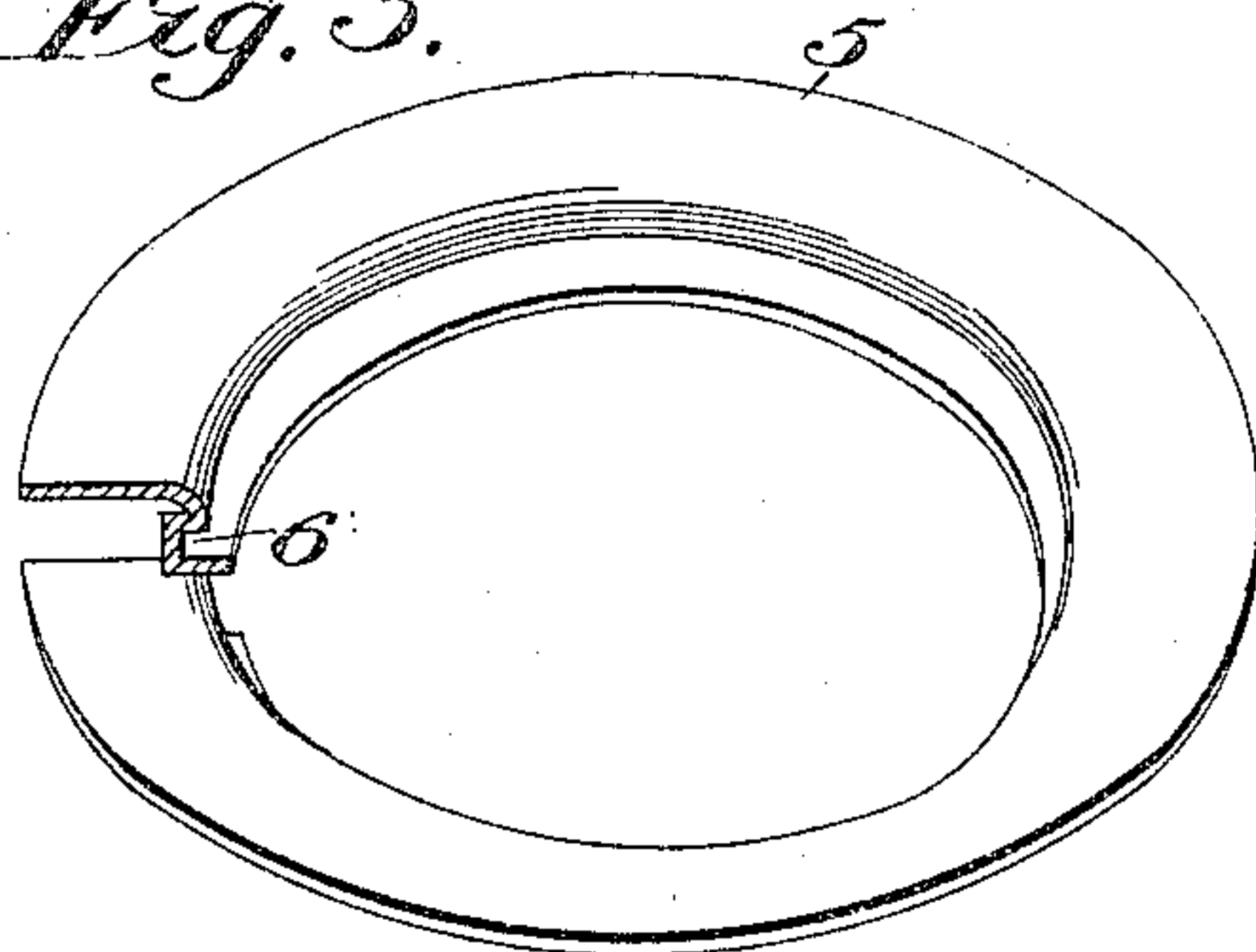
*Fig. 2.*



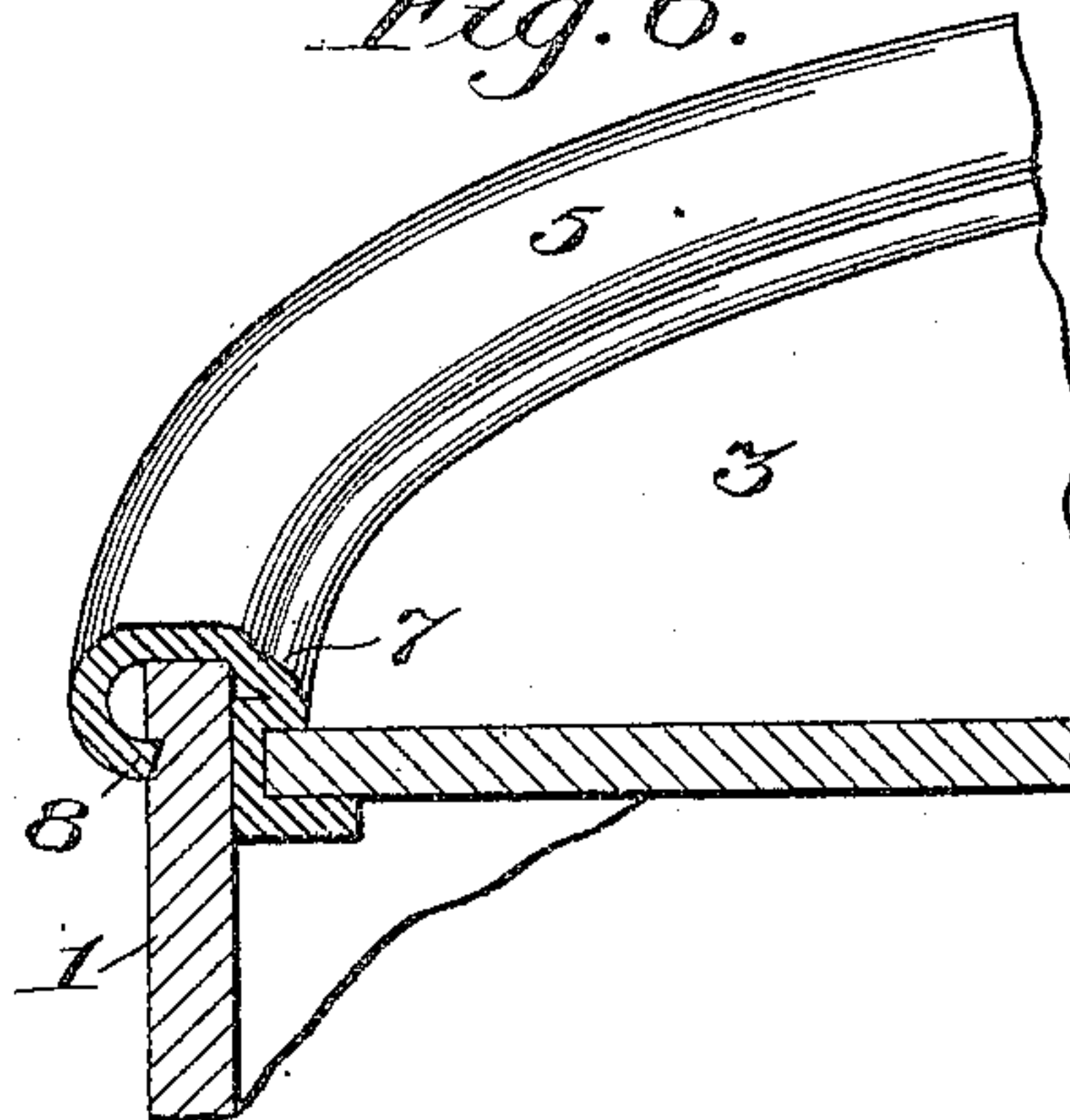
*Fig. 5.*



*Fig. 3.*



*Fig. 6.*



Witnesses:  
*A. J. Wiley*  
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J. R. Harbeck.  
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# UNITED STATES PATENT OFFICE

JERVIS R. HARBECK, OF DETROIT, MICHIGAN, ASSIGNOR TO GEM FIBRE PACKAGE COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

## CONTAINER.

No. 804,222.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed October 3, 1904. Serial No. 226,940.

*To all whom it may concern:*

Be it known that I, JERVIS R. HARBECK, a citizen of the United States, and a resident of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Container and a New and Useful Process for Forming the Same, of which the following is a specification.

My improvements relate to containers and the process for making the same; and the objects of my improvements are to provide a process whereby containers may be quickly and cheaply constructed, to provide a container that will be strong, durable, and cheap, and to provide a container made of cheap material that will have the advantages of one made of tin or other sheet metal. I attain these objects by the process hereinafter described and the construction illustrated in the accompanying drawings, in which—

Figure 1 is a plan, and Fig. 2 is a vertical central cross-section, of my improved container. Fig. 3 is a view of the ring for securing the heads to the body of the container. Figs. 4, 5, and 6 are enlarged views illustrating three steps in the process of securing the heads to the body of the container.

Similar reference characters refer to like parts throughout the several views.

Heretofore containers have usually been constructed with bodies, tops, and bottoms of tin. To avoid the great cost of the tin, bodies of wood veneer, strawboard, and heavy paper are substituted wherever possible. Heads of paper or strawboard may sometimes be substituted for those of tin; but the strength of the container in such cases depends upon that of the cement uniting the heads and bodies. By the construction shown in the drawings a container is produced whose heads have the same advantages as when made entirely of tin and the further advantage of great cheapness, only sufficient metal being used to form a strong union between the heads and the body, the greater portion of the head being of cheap material.

As shown in the drawings, the bottom 2 and the top 3 are secured to the body 1 by means of the metal ring 5. If it is desirable, the top may be provided with an opening in which fits the closure 4. As will be seen by Fig. 1, the amount of metal in the rings 5 is very small.

The process of constructing the container is as follows: A narrow strip of tin or other sheet metal is fed through between rolls and formed to a cross-section similar to that of 5, Fig. 4, and given a circular curve, as shown in Fig. 3. The strip may be cut to the proper length before being fed into the rolls or be cut off after being given the correct shape. The head of the container is then placed into the groove 6, formed in the ring 5, and the ring and head placed in position in the container, as shown in Fig. 4. The length of the strip may be such that its ends may overlap or the ends may abut. The container is then placed into the crimping-machine, where the usual rollers turn down the projecting flange into the upper edge of the body 1, as shown in Fig. 5. The other head is then secured to the body in a similar manner. To cause the union between the body, ring, and head to be more secure, as is necessary where flexible heads are used, a second roller may be used, which will change the shape of the bead 7 to that shown in Fig. 6. By thus pressing down this bead the groove 6 is narrowed somewhat and the edge of the head tightly gripped and the outer edge 8 of the ring forced still farther into the body of the container. The process requires a machine to roll the strips of sheet metal into rings and a crimping-machine to roll the flange downward and inward, one or two rolls or sets of rolls being required.

The cross-section of these rings for uniting the body and heads of containers may be varied by those skilled in the manufacture of such articles without departing from the spirit of my invention; but I prefer it to be substantially S-shaped.

Having now explained my improvements, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a container, the combination of a cylindrical fibrous body, a flat circular fibrous head, a split ring of sheet metal formed with two grooves to receive one edge of the body and the edge of the head, the metal of the grooves being pressed into the fibrous material of the head and body to form an engagement sufficiently strong to secure the body and head together.

2. In a container, the combination of a cylindrical body, a flat circular head, and a loop of sheet metal shaped to form continuous

grooves at right angles to each other into which the edges of the head and the body may extend.

3. In a container, the combination of a  
5 body, a flat circular head, and a fastener comprising a ledge for the head to rest upon, a continuous flange extending over the edge of the head and an upwardly, outwardly and downwardly extending portion bent around  
10 the edge of the body of the container.

4. In a container, the combination of a cylindrical body, a circular head, and a strip of metal bent to form an annular fastener hav-

ing grooves at right angles to each other to receive the edge of the head and the upper 15 edge of the body, the metal of the fastener being firmly compressed around the edges of the head and body.

In testimony of which I have signed my name to this specification in the presence of 20 two subscribing witnesses.

JERVIS R. HARBECK.

Witnesses:

FRANCES T. DISSETTE,  
H. K. WHITE, Jr.