

No. 742,553.

PATENTED OCT. 27, 1903.

C. D. ARMSTRONG.

CORK WASHER OR DISK AND METHOD OF MAKING SAME.

APPLICATION FILED JUNE 17, 1903.

NO MODEL.

Fig. 3.

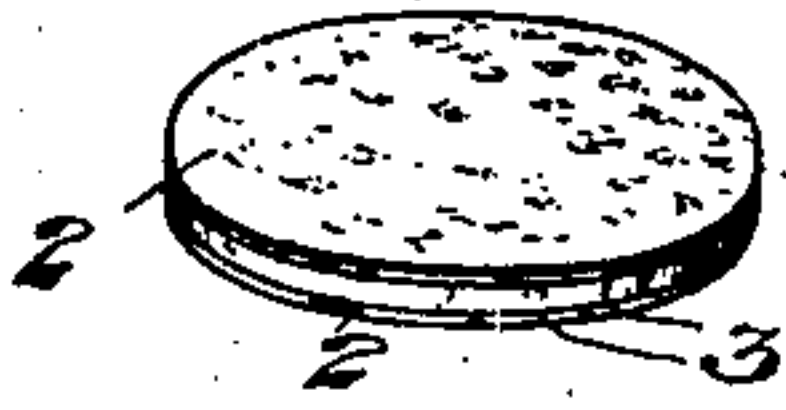


Fig. 4.

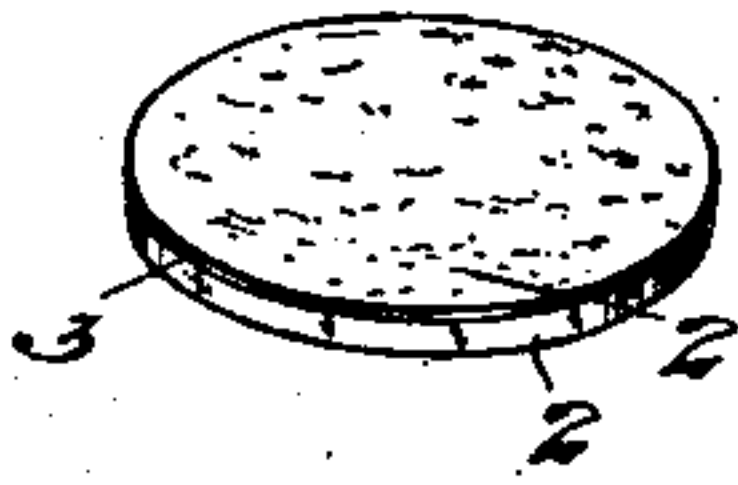


Fig. 1.

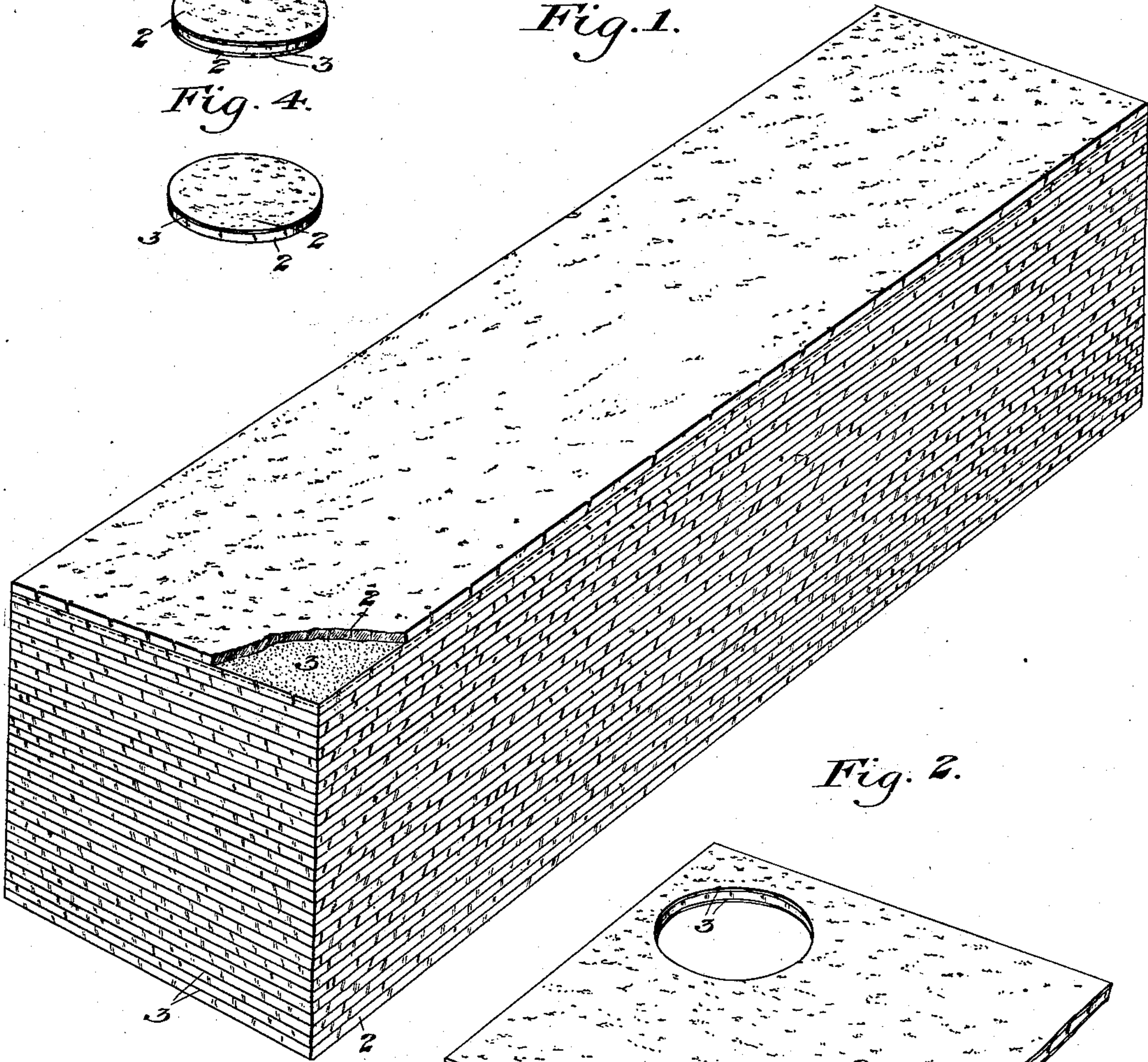
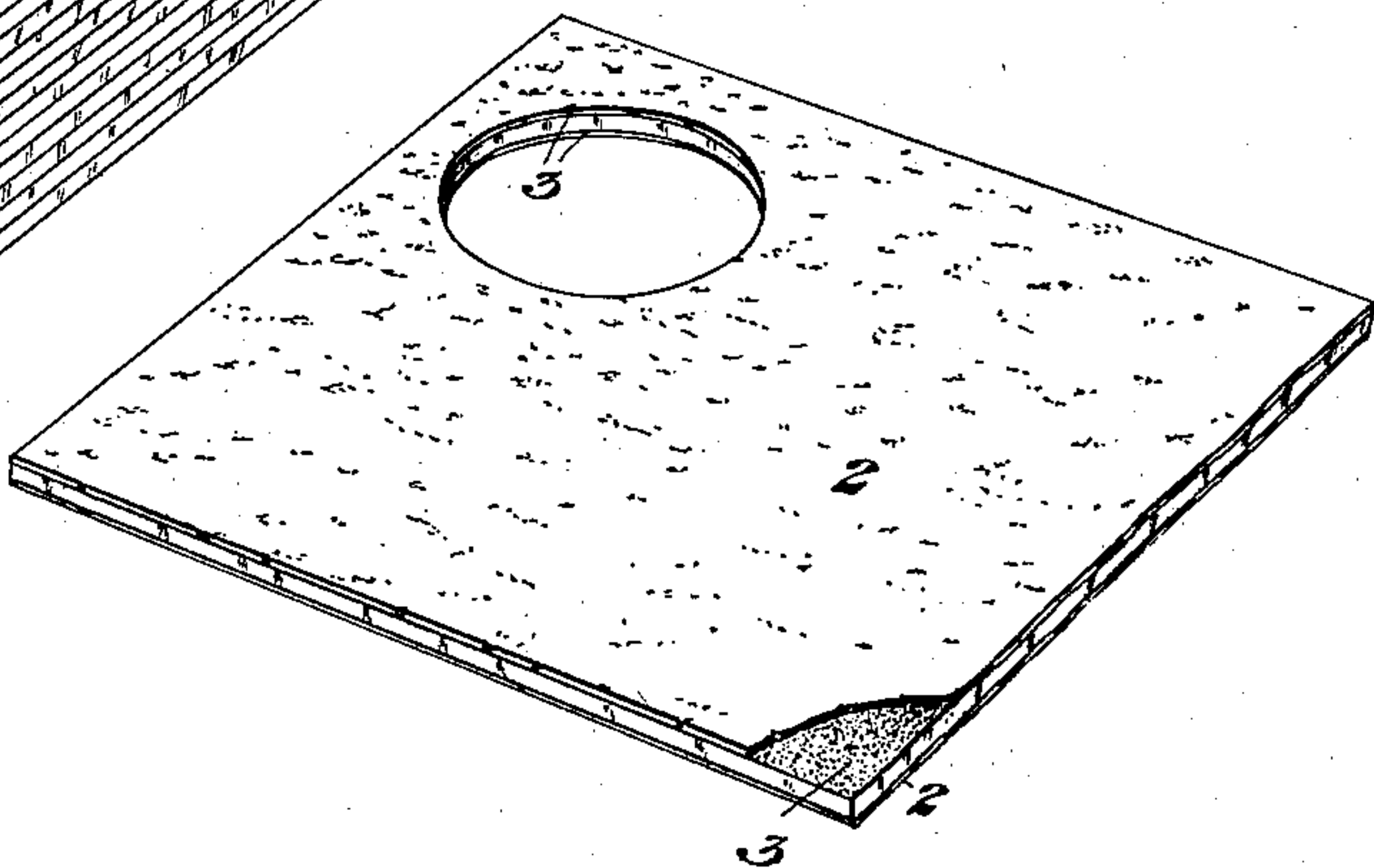


Fig. 2.



WITNESSES

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CHARLES DICKEY ARMSTRONG, OF PITTSBURG, PENNSYLVANIA.

CORK WASHER OR DISK AND METHOD OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 742,553, dated October 27, 1903.

Application filed June 17, 1903. Serial No. 161,810. (No model.)

To all whom it may concern:

Be it known that I, CHARLES DICKEY ARMSTRONG, of Pittsburg, Allegheny county, Pennsylvania, have invented a new and useful Cork Washer or Disk and Method of Making Same, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the composite stick. Fig. 2 is a similar view of one of the strips cut therefrom. Figs. 3 and 4 are perspective views of the cork washers, showing the layers of which they are composed.

My invention relates to washers or disks of cork such as employed with bottle stoppers or closures, and is designed to provide a cheap sealing-disk which will prevent leakage. Heretofore these cork washers have been cut from a single layer of thin cork. In such cases the transverse pores or holes in the cork are liable to cause leakage, as they often extend through the layer and are liable to register with the edge of the bottle-mouth, in which case there is leakage and consequent damage to the bottle contents.

My invention overcomes this difficulty; and it consists in cementing or otherwise securing together several layers of cork and forming the disk or washer from this composite strip. It also consists in the new article thus produced.

In carrying out my invention I slice or cut up the cork-bark into a series of thin layers, the thickness of which is preferably less than one-half the thickness of the final washer or disk. These layers are then assembled, preferably turning part of them end for end, so that the pores of one layer will not be liable to register with those of the next. The layers are cemented together, preferably by waterproof cement, which may be applied to the faces of some or all of the layers. I preferably coat each layer on both sides with the cement, except the outside ones. A pile is thus built up which is preferably of much greater thickness than the thickness of the disk desired, such as from one to five or six inches thick. The pile is then placed in a press and is compressed and dried under pressure either with or without the use of heat, as desired, until the layers are firmly set and bound together by the waterproof cement. The composite stick thus formed is then sliced,

cut, or sawed into layers of the desired thickness for the washer, the cuts preferably being approximately parallel with the original layers. As the washers are preferably at least twice as thick as the original layers, each new strip thus cut will contain at least two of the original cork layers, and as the pores in these layers are not liable to be in registry the washers which are then punched out from this strip will be free from holes extending transversely through them. The use of the cement also aids in closing up pores between the layers and preventing leakage transversely through the washer.

The advantages of my invention will be apparent to those skilled in the art. The liability to leakage is practically eliminated, the disks may be made at low cost, and the waterproof cement is not liable to deteriorate under the action of the liquid in the bottles.

Many changes may be made in the form, size, and thickness of the washer, the number of layers, &c., without departing from my invention.

I claim—

1. The method of making thin cork disks consisting in cementing together a plurality of cork layers each layer being thinner than the final disk, forming a stick from the layers thicker than the final disk, and then cutting the thin disks from the composite stick thus formed; substantially as described.

2. The method of forming thin cork disks consisting in cementing together a plurality of cork layers, each layer being thinner than the final disk, thus building up a stick of greater thickness than the desired disk, slicing the stick substantially parallel with the layers into strips of the same thickness as the final disk, and then punching the disks from such strips; substantially as described.

3. As a new article of manufacture a thin cork disk or washer composed of thin cork layers cemented together, the upper and lower faces of the disk presenting a freshly-cut surface free from the cementing material; substantially as described.

In testimony whereof I have hereunto set my hand.

CHARLES DICKEY ARMSTRONG.

Witnesses:

F. B. FISHER,
J. S. LANAHAN.