

No. 721,730.

PATENTED MAR. 3, 1903.

P. J. McGUIRE.

ART OF CORING OPENINGS IN THE WALLS OF CAST HOLLOW WARE.

APPLICATION FILED AUG. 14, 1902.

NO MODEL.

FIG. I.

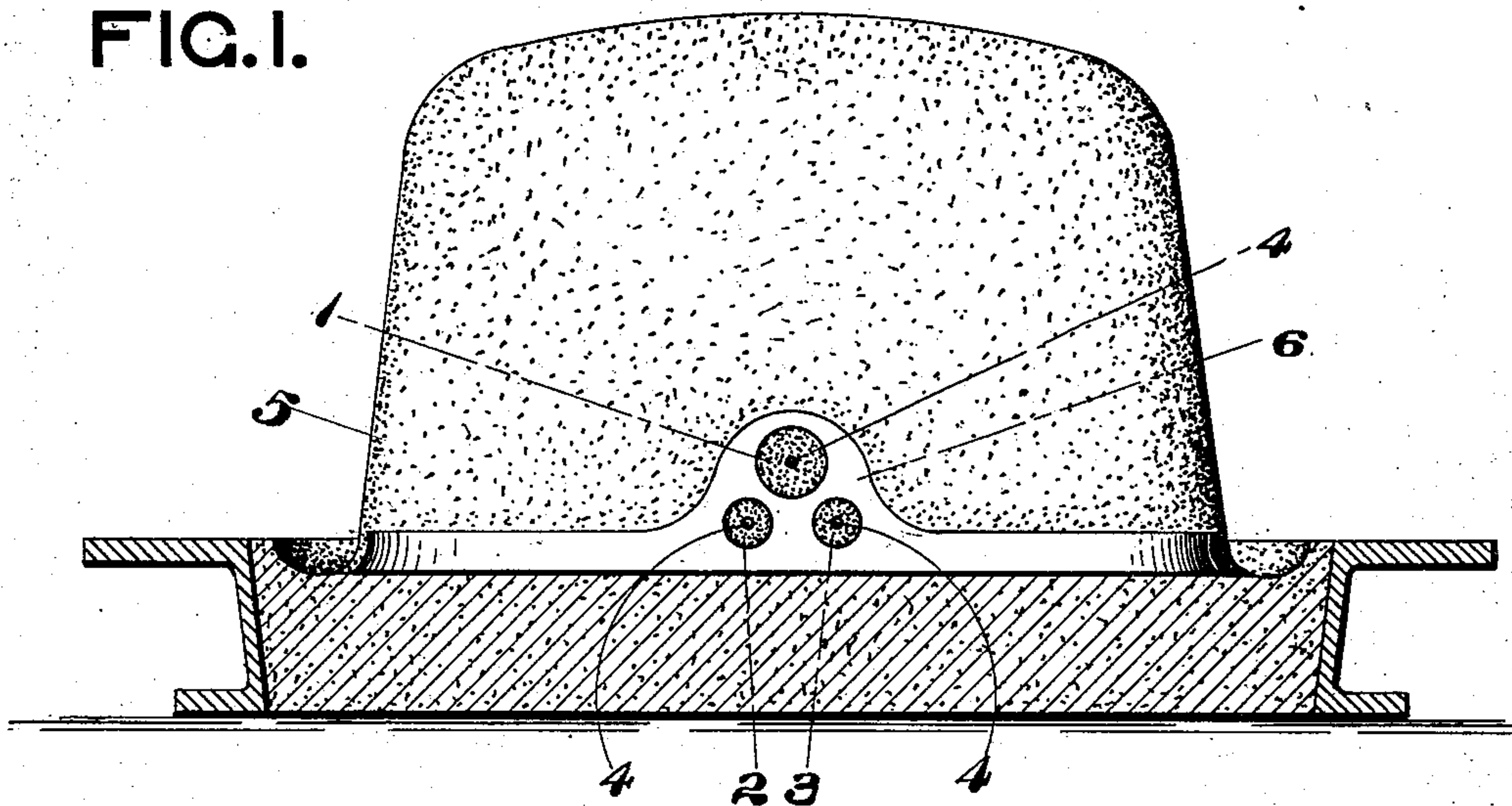


FIG. III.

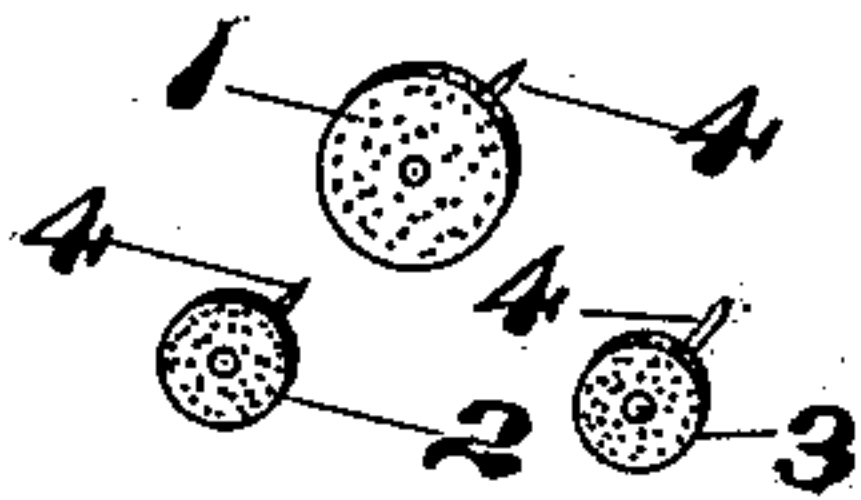


FIG. II.

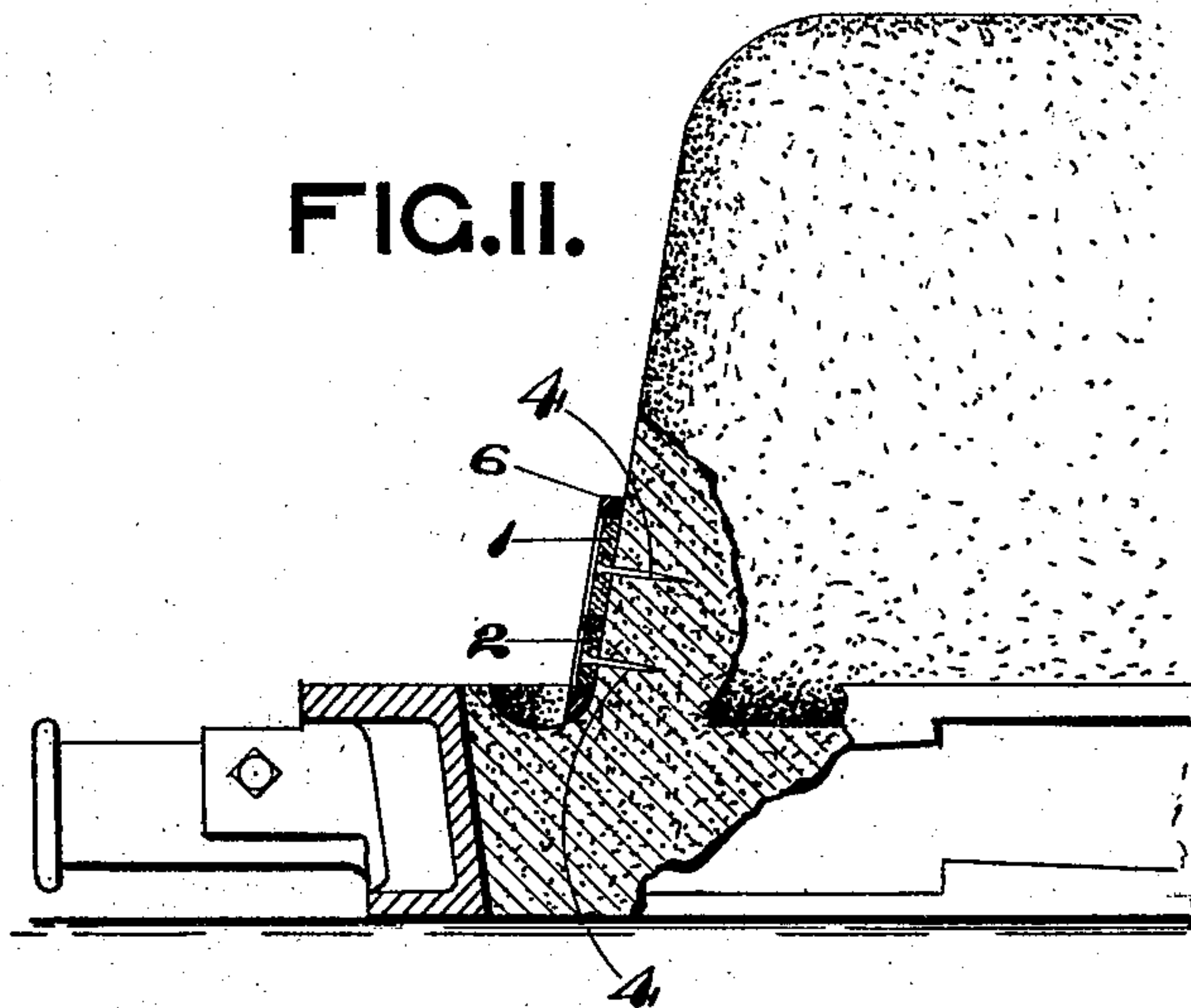


FIG. IV.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PETER J. MCGUIRE, OF BLAIRSVILLE, PENNSYLVANIA, ASSIGNOR TO THE CHAMPION SANITARY ENAMEL WARE CO., A CORPORATION OF PENNSYLVANIA.

ART OF CORING OPENINGS IN THE WALLS OF CAST HOLLOW WARE.

SPECIFICATION forming part of Letters Patent No. 721,730, dated March 3, 1903.

Application filed August 14, 1902. Serial No. 119,606. (No model.)

To all whom it may concern:

Be it known that I, PETER J. MCGUIRE, a citizen of the United States, residing at Blairsville, in the county of Indiana and State of Pennsylvania, have invented a new and useful Improvement in the Art of Coring Openings in the Walls of Cast Hollow Ware, of which improvement the following is a specification.

10 This invention relates to improvements in the art of coring the overflow and water-service openings in the rear of cast bath-tubs.

Heretofore it has been the custom to form green-sand cores upon the rear end wall of the drag member of the sand mold which forms the interior of the tub after said mold member has been formed, which was practiced in the following manner: A gage or templet provided with openings of the size and character desired was placed in position upon the rear end of the mold member and a portion of the sand "dug out" from the said wall through the openings of the gage where the cores were to be formed. These dug-out places were then filled with green sand and slicked off flush with the outer surface of the gage, after which operation said gage is carefully removed, leaving the projecting cores of green sand. This manner of forming the cores has its attending disadvantages, in that the removing of the gage must be accomplished with the greatest of care and by a skilled workman or portions of the cores thus formed will be broken away by the sand sticking to the openings in the gage, or if the workman be nervous the least tremor will suffice to damage the cores in removing the gage, which in either case will require dressing up of the cores. This dressing up of the cores will in many instances be required of the workman, no matter how skilled in the art he may be, thereby consuming time and increasing the cost of production. Furthermore, green-sand cores which are of comparative small area and having sharp edges dry out quickly and crumble away if exposed for any length of time to the heated atmosphere, thereby making an imperfect opening in the casting.

With my improvement in the art I am en-

abled to produce bath-tub castings having 50 clean-cored openings therethrough, avoid the disadvantages heretofore encountered in green-sand cores, and consequently reduce the labor and expense of manufacture.

In the accompanying drawings I have illustrated the manner and means employed in carrying out my improvement, in which drawings—

Figure I is an end view of the drag portion of the mold, partly in section, showing the practice of my invention. Fig. II is a side view of a portion of the same, also partly in section. Fig. III is a perspective view of the cores, and Fig. IV is a plan view of the gage or templet for setting said cores.

In the practice of my invention I provide baked cores 1, 2, and 3 of the required diameters and thickness, through each of which is inserted a nail or pin 4. I then apply to the end of the mold 5 the gage or templet 6, which is provided with openings of such size as to permit an easy insertion of the cores therein. The cores are then inserted in said gage-openings and the nails or pins forced into the mold-wall flush with the outer surface thereof, after which the gage is removed without the least difficulty, leaving the cores in position upon the mold-wall.

It is readily apparent from the foregoing description that this manner of coring the openings in the tub is accomplished in much less time and at less expense than in the manner heretofore practiced and produces much more perfect openings, that the cores will not crumble from exposure to the heated atmosphere by the removal of the gage or by the closing of the other mold member thereover, and that one not skilled in the art may as easily and quickly set the cores as one who is skilled.

Having thus fully described my improvements, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described method of coring openings in the walls of cast hollow wares, which consists, after the mold members have been formed and removed from the pattern, in temporarily applying a gage to the wall of

one of said mold members to determine the position of said cores relative to the mold, and then securing baked-sand cores to said mold at the points so determined by said gage.

5 2. The herein-described method of coring openings in the walls of cast hollow wares, which consists, after the mold members have been formed and removed from the pattern, in temporarily applying a gage to the wall of
10 one of said mold members to determine the

position of said cores relative to the mold, and then pinning baked-sand cores to said mold at the points so determined by said gage.

In testimony whereof I have hereunto signed my name in the presence of two sub- 15 scribing witnesses.

PETER J. MCGUIRE.

In presence of—

COULTER WIGGINS,

D. M. KIER.