

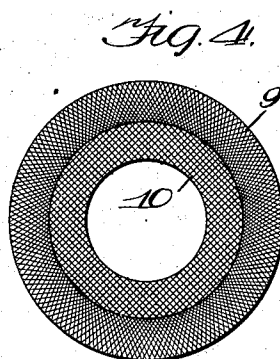
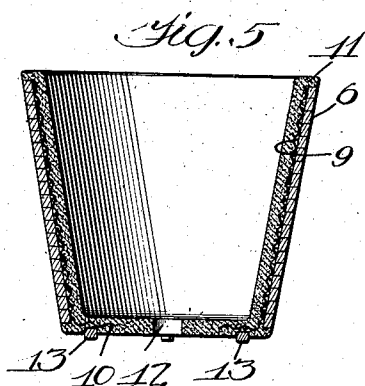
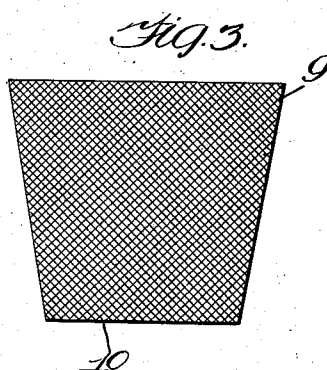
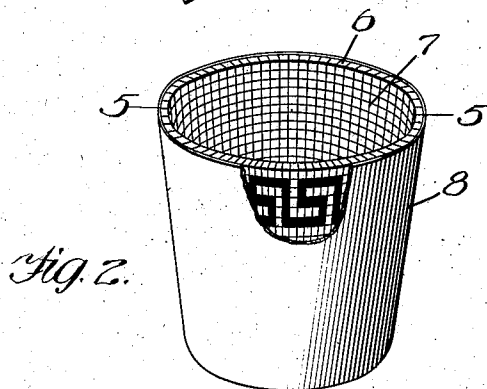
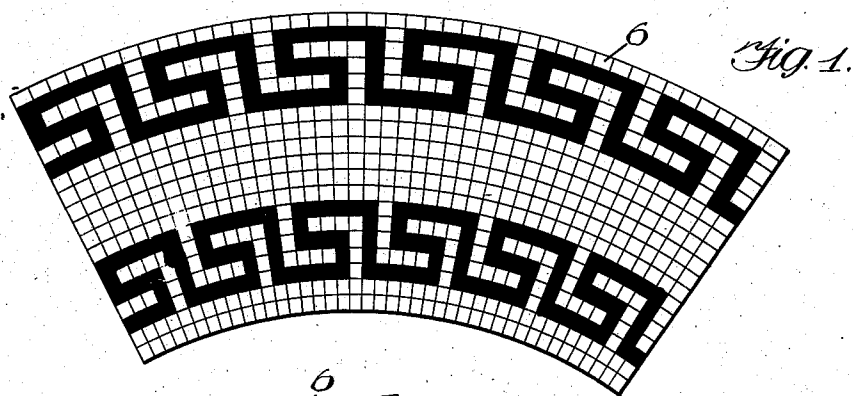
No. 858,499.

PATENTED JULY 2, 1907.

J. W. BIRD.

PROCESS OF MANUFACTURING POTS, VASES, &c.

APPLICATION FILED OCT. 29, 1906.



Witnesses:
Chas. D. Perry
Robert H. W. Kerr

Inventor:
John W. Bird
By Rulledge M. M. M. M.

UNITED STATES PATENT OFFICE.

JOHN W. BIRD, OF CHICAGO, ILLINOIS.

PROCESS OF MANUFACTURING POTS, VASES, &c.

No. 858,499.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed October 29, 1906. Serial No. 340,980.

To all whom it may concern:

Be it known that I, JOHN W. BIRD, a citizen of the United States of America, and a resident of Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Processes of Manufacturing Pots, Vases, &c., of which the following is a specification.

My invention relates to an improved process for manufacturing flower pots, jardinières and vases, and has for its object a method of producing articles of the class described by the use of cement and mosaic in any desired form and of any desired design.

A further object is the use of a process by means of which articles of the class described may be quickly and cheaply manufactured without the use of skilled labor.

The process by which the above objects, together with such other objects as may hereinafter appear are attained, is illustrated in the accompanying drawings, in which

Figure 1 represents a series of mosaic blocks arranged in a preferred design. Fig. 2 shows the blocks secured together and inserted within the forming receptacle. Fig. 3 represents the wire reinforcing frame. Fig. 4 represents a plan view of Fig. 3. Fig. 5 represents a cross-section on line 5—5 of Fig. 2, looking in the direction indicated by the arrows.

My improved process is carried out as follows: If it is desired to manufacture an article such as a flower pot representing any shape, for example, the frustum of a cone, a form is laid out on a table or flat surface and a design worked thereon, in mosaic blocks 6—6. The blocks may, if desired, be of any shape or size, but I find the best results obtained from the use of the small square blocks such as are used in the laying of mosaic tiling. When sufficient blocks have been laid to fill the required space, a sheet of paper 7 is pasted or glued over the surface, and allowed to remain until the blocks are securely fastened to the paper. The paper is then taken up and rolled into the shape desired and inserted in a former or receptacle 8. This former will vary in shape, depending on the article desired to be manufactured. In Fig. 2, the former, which is preferably of zinc or tin, is in the shape of a flower pot or jardinière. When the rows of mosaic secured to the paper are firmly in place within the former, a reinforcement comprising a wire basket 9, conforming in shape to the article to be manufactured, is slipped within the receptacle, fitting closely against the backs of the mosaic blocks. This wire basket is preferably turned inwardly at the bottom, as shown at 10 in Fig. 4. All the parts are then forced snugly into position, and a cement grout is troweled or forced through the reinforcing means against the backs of the blocks and between the interstices between the individual blocks. This cement grout is made of a proper consistency so as to retain its position without running,

and after a sufficient amount has been forced through to completely cement the blocks together, more cement is added, completely covering the reinforcing basket, as shown at 11 in Fig. 5. The form is set on a circular peg projecting upwardly, so that an opening 12 is left in the completed article. I also find it advantageous to insert in the bottom of the receptacle, before the cement hardens, bearing pins 13, preferably of rubber or some like material, in order to prevent the finished article from scratching any smooth surface upon which it may be placed. These articles as ordinarily manufactured are not subjected to heat or baking, but are simply allowed to dry. When completed, the outer receptacle is removed and the paper washed off, and the operation is completed.

In the event that many articles of one shape are to be manufactured, it may be advantageous to have frames constructed of the desired configuration having surrounding edges, so that the blocks may be placed in the tray or form without any danger of becoming disarranged. Care must be taken, however, that the blocks are not packed in too tightly, as that would render it difficult to remove them after the paper is secured to the tops; and also if they are packed too closely together, sufficient cement will not be forced between the adjacent blocks to hold them securely in place. Very little difficulty is experienced with respect to this last objection, for the reason that the blocks as furnished by the trade are more or less irregular in shape, and consequently will not fit closely together.

By the use of my improved process, I am enabled to manufacture flower pots, jardinières, umbrella stands, vases,—in fact, anything of similar nature—cheaply and quickly, and the product thus formed has a very pleasing appearance to the eye, and the designs can never be removed. In addition to this, the use of the reinforcing basket or frame which may be of wire or expanded metal, or anything which will serve as a reinforcement, prevents the breaking of the article, unless subjected to very severe uses. In the event that the completed article receives a sudden blow or jar, the vibrations are not transmitted as quickly throughout the structure as in ordinary pottery, consequently there is less danger of the article becoming broken by use. The method of manufacture is such that by the use of standard frames or templets, and reinforcing baskets, the entire work, outside of the laying out of the design, may be performed by unskilled labor, and even this may be left to children provided a copy is placed before them to work from. This being the case, the articles can be constructed much more cheaply than those made of pottery, requiring the use of skilled labor.

I claim:

1. The process of manufacturing receptacles, consisting in imbedding reinforcing means within the cementitious

110

portion of said receptacles, and in securing an outer layer of relatively hard material to said cementitious interior.

2. The process of manufacturing receptacles, consisting in the arrangement of an outer layer of relatively hard material, the placing of a layer of reinforcing material on the interior thereof, and the introduction of cementitious material holding said outer layer together and surrounding said reinforcing material.

3. The process of manufacturing receptacles, consisting in the arranging of sections to form the outer shell in any desired form and design, the securing of said sections together, the placing of said shell within a forming receptacle, the placing of reticulated reinforcing means adjacent to the inner faces of said shell, the forcing of cementitious material about and through said reticulated means and between the interstices of said outer shell, the allowing of said cementitious material to harden and the removal

of the said receptacle from said retaining means and the removal of the securing means from the face of the outer shell, leaving the design exposed.

4. The process of forming receptacles, comprising the forming of the outer material into the desired shape and design, the securing of supporting means to the faces of said material, the placing of said material within a retainer of the desired shape, the insertion of reinforcing means inside of said material and the application of cementitious material within the interstices between the outer material and about the reinforcing means.

Signed by me at Chicago, Illinois, this 23rd day of October, 1906.

JOHN W. BIRD.

Witnesses:

F. H. DRURY,
J. NORBY.