

UNITED STATES PATENT OFFICE.

GEORGE LIGOWSKY, OF CINCINNATI, OHIO.

ART OF MOLDING POTTERY.

SPECIFICATION forming part of Letters Patent No. 318,917, dated May 26, 1885.

Application filed August 29, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, GEORGE LIGOWSKY, of Cincinnati, county of Hamilton, and State of Ohio, have invented certain new and useful
5 Improvements in the Art of Molding Pottery, of which the following is a specification.

Pottery molded by the usual process is defaced by seams at the line of junction of the different sections of the mold, which mar the
10 effect and reduce the value of all pottery, and especially of art-pottery. Much time and skill are expended in reducing these seams, which cannot be wholly obliterated.

My invention has for its object the production of pottery in which all or a part of these
15 seams are done away with; and I accomplish this as follows: In a mold made in sections in the usual way I cast an intermediate or last pattern of sulphur or other frangible material
20 which will form a hard deposit upon the surface, making a thin shell, or of rubber or other elastic material, in which case it will be cast around a suitable core. When the mold is taken off, it leaves a hollow pattern, which is
25 the reverse of the mold, and has the seams which would ordinarily appear upon the pottery. These seams are then cut away and made invisible, which is readily done, the material of which the secondary pattern is made
30 being easily worked. Upon the pattern so prepared I cast another and seamless mold. The pattern, if of frangible material, is broken away; but if of elastic material the core is removed and the elastic jacket is readily taken
35 out. The casting is then made in the secondary or working mold.

In order that the mold may deliver freely when the design is in relief or the mold undercut, I use clay, which contracts considerably as it hardens, thus drawing away from the
40 depressions or undershot portions of the mold.

In this way seamless pottery may be obtained when the shrinkage is equal or a little

more than equal to the difference between the greatest internal diameter of the mold and its
45 diameter at the point of delivery. When the difference in diameter of the proposed casting at different points is too great to allow of its being cast in a solid mold, as above described, the same process may be used to reduce the
50 number of seams.

It is often possible to make a horizontal seam coincide with the design in such a way that the seam does not injure the appearance
of the product; but this can rarely, if ever, be
55 done with vertical seams. By taking advantage of this fact and by the use of the above-described process most, if not all, desirable forms of pottery whose proportions are such that they cannot be cast from an integral mold
60 can be produced with but one seam, which may be horizontal and correspond with an offset in the design in such a manner as to preserve the symmetry of the product.

This process will be found especially advantageous in the manufacture of art-pottery with
65 designs in relief.

I claim—

1. The above-described process of molding pottery, consisting in casting from the original
70 mold an intermediate or last pattern of readily-removable material, reducing the seams upon said intermediate pattern, casting a working mold thereon, and molding therefrom.

2. An intermediate or last pattern composed
75 of an integral shell of cohesive frangible material, substantially as and for the purposes described.

3. A waste or last pattern composed of a thin integral shell of sulphur, substantially as
80 and for the purpose specified.

GEORGE LIGOWSKY.

Witnesses:

S. S. CARPENTER,

GEO. B. PARKINSON.