

UNITED STATES PATENT OFFICE.

GEORGE F. REESE, OF BROOKLYN, E. D., NEW YORK.

IMPROVEMENT IN PROCESSES FOR MAKING MOLDS FOR DENTAL PLATES.

Specification forming part of Letters Patent No. **200,761**, dated February 26, 1878; application filed August 1, 1877.

To all whom it may concern:

Be it known that I, GEORGE F. REESE, of Brooklyn, E. D., county of Kings, in the State of New York, am the inventor of an Improved Process or Method of Making Molds for Metal Dental Plates, and other similar castings, of which the following is a full, clear, and exact description.

My invention consists in the process of making a mold for casting metal dental plates, in which an inner mold formed in two sections, containing the matrix, is first formed of plaster and allowed to harden, and is then moistened and saturated with water, and then entirely enveloped in a casing of plaster, the whole being then dried, as hereinafter set forth, and more particularly recited in the claim.

In carrying out my process, I proceed as follows: I take a sufficient quantity of plaster-of-paris and form a mold, by pouring the plaster into a suitable frame, to give said mold proper exterior shape, around the wax model or impression, obtained in the usual manner. The matrix is thus formed in the mold, the said mold being formed in two sections—an upper and lower section, as is usual. Ingates are formed by means of wax stems laid in the plaster, in the customary manner. When the mold thus formed has set and hardened, I remove it from the frame, and immerse it in water until it is thoroughly saturated. I then entirely incase this mold in an envelope of plaster, by placing it centrally in a suitable frame, to give the said envelope a desirable exterior shape, and pouring the plaster about and around it. The running plaster will join itself to, and closely adhere to, the wet surface of the mold and seal it together, so that its two sections will be held securely in contact. When the plaster en-

velope has set and hardened, the completed mold is placed in a drying-oven and completely dried, when it is ready for use in casting.

By means of the mold thus produced I am enabled to always secure a perfect and complete casting, as the outer envelope of plaster operates to prevent the parting of the two sections of the inner mold by shrinkage, by action of the heat when the mold is drying. The plaster envelope shrinks down upon the mold, and holds it securely in its closed position when dried in the oven.

Ingates are formed through the plaster by means of wax stems extending outward from the ingates of the mold.

I do not intend herein to claim the mechanical structure of my improved mold; but I reserve that as the subject of a separate application for a patent. I desire to limit this application in its subject-matter to the process herein set forth of forming my mold.

What I claim, therefore, as my invention, and desire to secure by Letters Patent, is—

The process of fabricating a mold for casting metal dental plates, which consists in first forming of plaster, in the usual manner, the mold proper, in two sections, containing the matrix, and, when the same has hardened, thoroughly saturating the same with water, and then completely enveloping the same in a plaster casing, providing suitable ingates, and, when the casing is hardened, thoroughly drying the mold, all as described, and for the purpose specified.

GEORGE F. REESE.

Witnesses:

B. S. CLARK,
A. S. FITCH.