## United States Patent Office.

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PROCESS OF MAKING ORNAMENTAL AND ADVERTISING ARTICLES.

SPECIFICATION forming part of Letters Patent No. 692,549, dated February 4, 1902.

Application filed November 8, 1901. Serial No. 81,579. (No specimens.)

To all whom it may concern:

Beitknown that I, WILLIAM SCHANZ, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, 5 have invented certain new and useful Improvements in Processes of Making Ornamental and Advertising Articles, of which the fol-

lowing is a specification.

The invention has reference to a process 10 for manufacturing artistic decorations—such as ornamental walls, panels, and other architectural ornaments, as well as bric-a-brac, advertising - signs, busts, medallions, boxes, caskets, and similar devices; and the object 15 of the invention is to produce articles of the character set forth that in addition to being light and durable will be capable of withstanding ordinary wear without cracking or breaking.

With this object in view the invention consists in the novel steps of the process, as will

be hereinafter set forth.

In carrying out the process referred to I first form a mixture of water, pulp, and a cem-25 entitious material. Preferably wood - pulp is employed, about forty per cent. of which is mixed with about sixty per cent. of water, and to the resulting mixture I add an equal quantity of some cementitious material, pref-30 erably plaster-of-paris. The mixture of the three ingredients thus formed is in a liquid state, and this I pour into a suitable gelatin mold to shape the mixture into the desired form. In cases where articles of simple for-35 mation are to be made the proportions of the ingredients may be varied, a greater proportion of the cementitious material being used and a less quantity of water, the resulting mixture being in a plastic state and the mold-40 ing or shaping being effected by hand. After the article has been properly molded or shaped and the mixture set it is placed in a | in presence of two witnesses. drier or kiln at a temperature of preferably 150° to 160° Fahrenheit and allowed to dry 45 from two to three hours. The article after being dried in the manner set forth is hard and very brittle and liable to break or crack when

subjected to ordinary wear. To obviate this defect, I treat the dried article with a glue solution, allowing the glue to permeate the ar- 50 ticle, which renders the latter sufficiently pliable and yielding to prevent its cracking. The glue may be applied to the article in various ways; but I preferably employ a gluebath, composed of glue and water in the pro- 55 portion of a half-pound of the former to a gallon of the latter, and dip the article therein. As a matter of preference the bath is heated and the article subjected to the action of the bath immediately after being dried and while 60 still hot. This, however, is not essential and may be dispensed with, if desired. After treating the article with the glue in the manner set forth it is again dried by placing it in a kiln at about the temperature before men- 65 tioned. After the final step of drying the ornamental article is in readiness for use, the product being hard and adapted to receive and retain a polish or to be otherwise ornamented with any metallic or mineral pigment. 70

What I claim as my invention is— 1. The herein-described process of manu-

facturing useful and ornamental articles, which consists in bringing together in a mixture water, pulp, and cementitious material, 75 in molding the mixture into the desired form, in heating the molded or shaped article, in then treating the article with a glue solution,

and finally drying the article.

2. The herein-described process of making 80 ornamental and advertising articles, which consists in forming a mixture of water, woodpulp and plaster-of-paris, in molding the mixture into a desired form, in heating the molded or shaped article, in then subjecting the 85 article while hot to the action of a hot gluebath, and finally drying the article.

In testimony whereof I affix my signature

WILLIAM SCHANZ.

Witnesses:

L. J. WHITTEMORE, H. C. SMITH.