## UNITED STATES PATENT OFFICE.

FRANK B. DUFFEY, OF HASTINGS, MICHIGAN.

IMPROVEMENT IN PLASTIC COMPOUNDS FOR MAKING ORNAMENTAL ARTICLES.

Specification forming part of Letters Patent No. 168,086, dated September 28, 1875; application filed August 24, 1875.

To all whom it may concern:

Be it known that I, FRANK B. DUFFEY, of Hastings, in the county of Barry and State of Michigan, have invented certain Improvements in Plastic Compounds, of which the following is a specification:

My invention consists of a plastic compound for the manufacture of ornamental and household articles, as hereinafter more fully de-

To construct my plastic compound I take of Paris Spanish whiting, three pounds; white lead, ground in oil, one pound; coach varnish, six drams; Dammar varnish, six drams; Japan drier, three drams; boiled linseed-oil, ten ounces. These ingredients are to be thoroughly mixed and worked together, together with a small quantity of burnt umber or similar pigment, to impart to the mass such shade or color as may be desired. In order to get it in the best condition for successful working the mass should be allowed to stand for three or four days, it being worked or kneaded thoroughly at least once each day.

This material, thus prepared, can be formed into any style of ornamental article desired by pressing it in molds or by any other suitable means. It is specially well adapted for making rosettes and all styles of ornaments for attaching to furniture; also picture-frames, letters for signs, door-plates, &c., brackets, and all similar articles, it being soft and very easily worked, and when dry is very strong and tough, and does not check or crack. When finished, the articles should be coated with varnish to give them a neat appearance, though this may be omitted, if preferred.

In making picture-frames, boxes, brackets,

&c., it should be secured upon a foundation or body of pasteboard; or, if the article be a large one, it may have its body formed of wood. It adheres readily to pasteboard, wood, glass, metal, or almost any solid material, and when thoroughly dried its tenacity is very great, thus enabling it to be readily and permanently secured to any desired object.

By properly working and mixing together different colors or shades of the compound any style or grain of wood may be most perfectly imitated, as may also the various veins of different kinds of stone.

The compound is cheap, its preparation and manipulation very simple, and the articles formed of it are strong and durable.

The proportions herein named may be varied somewhat without materially affecting the compound.

To enable the public generally to prepare the compound, I will state that one dram is equal to two-thirds of an ordinary tea-spoonful, and that, consequently, the six drams of coach and Dammar varnish will be equal to fourtea-spoonfuls of each, and the three drams of the Japan drier will be equal to two teaspoonfuls of the same.

Having thus described my invention, what I claim is—

The plastic compound for the manufacture of ornamental articles, consisting of Spanish whiting, white lead, coach-varnish, Dammar varnish, Japan drier, and linseed-oil in the proportions substantially as herein described.

FRANK B. DUFFEY.

Witnesses:

W. C. DODGE, Jos. T. K. PLANT.