

# UNITED STATES PATENT OFFICE.

MARSHALL TURLEY, GEORGE W. CHAMBERLIN, AND PAYSON M. POMEROY,  
OF COUNCIL BLUFFS, IOWA.

## COMPOSITION OF MATTER FOR MORTAR.

**SPECIFICATION** forming part of Letters Patent No. 434,490, dated August 19, 1890.

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*To all whom it may concern:*

Be it known that we, MARSHALL TURLEY, GEORGE W. CHAMBERLIN, and PAYSON M. POMEROY, of Council Bluffs, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in a Composition of Matter for Plaster or Mortar; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improvement in plastering compounds, the object being to provide a cheap plaster capable of quick and easy application to walls or other surfaces and one possessing great durability and adhesiveness; and it consists in certain well-known ingredients having affinity for one another, combined in such proportions that a concrete mortar is produced which can be readily mixed and applied.

More specifically speaking, it consists of the following ingredients, mixed in substantially the proportions named: Coal-ash, five parts; sand, six parts; marble-dust, two parts; plaster-of-paris, five parts; fine shorts, one part; sugar or other saccharine matter, one-eighth part. In addition to the parts mentioned a small proportion of glue—say one-thirty-second part—may be used, and the whole is worked to the proper consistency by the use of water.

The ashes employed are such as are taken from stoves and furnaces possessing pyrites of iron, oxidized iron, slate, unconsumed bituminous matter, magnesia, a weak alkali quality, and unconsumed brimstone, each of which has affinity for the other components of the composition. These ashes are reduced to powder by any practicable and desirable

method. After the ashes are reduced to powder the marble-dust, shorts, plaster-of-paris, and sugar are added and thoroughly mixed together with a hoe, shovel, or by other means. Water is then added in sufficient quantity to render the mass thinner than necessary to apply, and finally the substance is brought to the proper consistency for application by adding sand.

To make the mortar set quickly or make it hard more plaster-of-paris is used. The shorts or other glutinous matter from the cereals—as flour, bran, rye-flour, or oil-cake meal—act as a bind, and also by increasing the quantity retards the setting of the plaster-of-paris and gives the workman more time in which to apply it. The marble-dust settles next to the lath and wood or wall and gives a firm compact concrete mass throughout.

This mortar is easily applied, working freely under the tools. The articles used are common to all countries and easily obtained and cheaply prepared for use.

Having fully described our composition of matter for mortar, what we claim as new, and desire to secure by Letters Patent, is—

A plastering compound consisting of ashes, sand, marble-dust, plaster-of-paris, shorts, and sugar or other saccharine matter, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

MARSHALL TURLEY.  
GEORGE W. CHAMBERLIN.  
PAYSON M. POMEROY.

Witnesses:

A. S. HAZELTON,  
GEO. HENAGUE.