

UNITED STATES PATENT OFFICE.

MARSHALL TURLEY, OF COUNCIL BLUFFS, IOWA.

MORTAR OR COMPOSITION FOR COATING WALLS.

SPECIFICATION forming part of Letters Patent No. 348,644, dated September 7, 1886.

Application filed May 24, 1886. Serial No. 203,114. (No specimens.)

To all whom it may concern:

Be it known that I, MARSHALL TURLEY, of Council Bluffs, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in Mortar or Composition for Coating Walls; and I 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.

My invention relates to an improvement in mortar or composition for coating walls.

In the use of mortar composed of lime and sand as hitherto prepared it has been necessary to use great care in mixing, and the trouble of slacking the lime properly and caring for it before it is used, the introduction of hair of the proper quality and in the proper amount, and the securing of what is commonly termed "sharp" sand—viz., sand in which the grains have an angular shape rather than a rounded one—have been a source of anxiety and no inconsiderable expense to those having buildings erected.

The object of my present invention is to provide a mortar which shall have greater adhesive properties than any now in use, which will require a reduced amount of time, labor, and care to properly mix it and properly apply it, which will be more economical in the amount required to cover a given area, in its durability, and in its first cost.

With these ends in view my invention consists in a composition composed of flour, glue, sand, and water, combined as follows: Take two pounds of flour and twelve pints of sand and thoroughly mix the two together. Dissolve two ounces of glue in water. Warm or hot water may be employed, as it dissolves the glue more rapidly. Add to the dissolved glue enough cold water to bring the whole to the desired consistency when the mixed flour and sand shall have been added thereto. Care should be taken not to add too much cold water at first, as more may be added at any time during the process of mixing the flour and sand with the dissolved glue.

No heat is required in making the mixture other than that employed in dissolving the glue, and this is not absolutely necessary;

neither is there any heat developed during the process of mixing.

The amount of glue may be increased or diminished within certain limits, to increase or diminish the adhesiveness of the mixture; but the introduction of too much glue would give it a tendency to crack, while too little would reduce its adhesiveness below the practical point.

The cheaper grades of flour—"shorts," for example, which contains the greater amount of gluten—is preferred, and when employed the amount of glue may be reduced.

The sand may be either the sharp quality or the common fine round sand, the latter, particularly in one-coat plastering, where a finish is desirable, being preferable to the coarser and angular-shaped quality.

The above proportions give the amount of material required to cover one square yard of wall.

The adhesive property of the above composition is so great that it may be applied successfully to a smooth surface, and where lathing is employed as a foundation the laths should be placed close together to save the material, which would otherwise enter between the laths. In the application of ordinary mortar about one-third is forced between the laths to form "clinches." This amount may be saved to form a portion of the facing in my improved mortar. It forms a hard, smooth surface, pleasant to the eye, and is very durable, while the abundance, general distribution, and cheapness of the ingredients brings its cost and use within reach of the masses.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

Mortar or a composition for coating walls, consisting of flour, glue, sand, and water, combined in the proportions substantially as set forth.

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

MARSHALL TURLEY.

Witnesses:

I. O. TOSTEVIN,
F. M. HUNTER.