

UNITED STATES PATENT OFFICE.

WILLIAM P. EMERY, OF TOPEKA, KANSAS, ASSIGNOR TO THE MANUFACTURING MECHANICAL AND CHEMICAL COMPANY, OF SAME PLACE.

COMPOSITION OF MATTER FOR RAILROAD-TIES, &c.

SPECIFICATION forming part of Letters Patent No. 495,581, dated April 18, 1893.

Application filed September 5, 1892. Serial No. 445,116. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM P. EMERY, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Composition of Matter for Railroad-Ties, Timbers, Building-Blocks, Paving-Blocks, Tiles, &c., of which the following is a specification.

My invention consists of a new composition composed of five ingredients, namely, paper pulp, sour milk, albumen, lime, and chloride of zinc.

In preparing the material the parts are mixed in about the proportions of four hundred and seventy nine parts of paper pulp, ten parts albumen, five parts of sour milk, one part of lime, five parts of chloride of zinc. The chloride of zinc is introduced in the pulp while the pulp is being made or it may be thoroughly mixed therein while the paper pulp is in a plastic state. The sour milk and albumen are then mixed together and the lime is added. This is then thoroughly mixed with the pulp into which has been incorporated the chloride of zinc, and the whole is then pressed or molded into the desired form and dried.

This material is impervious to water, thereby preventing decomposition or decay, has great tenacity and strength, is light and easily handled and is suitable for the manufacture of railroad ties, timber, building blocks, paving-blocks, tiles, and other useful articles.

I do not confine myself to the proportions given, as the same may be varied without departing from the spirit of my invention. Nor do I confine myself to the particular uses mentioned as the new material may be used for the manufacture of other articles.

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

The composition of matter consisting of paper pulp, sour milk, albumen, lime, and chloride of zinc mixed together in substantially the proportions named and substantially in the manner specified.

WILLIAM P. EMERY.

Witnesses:

W. MACFERRAN,
F. G. WILLARD.