

# United States Patent Office.

JOSEPH HECKEL AND MICHAEL EICHINGER, OF DECATUR, ILLINOIS.

*Letters Patent No. 76,443, dated April 7, 1868.*

## IMPROVED COMPOSITION FOR COVERING WOODEN BRIDGES, BUILDINGS, &c.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, JOSEPH HECKEL and MICHAEL EICHINGER, both of Decatur, in the county of Macon, and State of Illinois, have invented a new and improved Composition for Covering Wooden Structures, Bridges, &c.; and we do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable those skilled in the art to which our invention appertains to fully understand and use it.

The object of this invention is to protect wooden structures from fire, and to preserve them from decay, resulting from the weather, moisture, &c.

This invention is an improvement upon an invention for the same purpose, patented by Joseph Heckel, December 3, 1867, in which china-clay, oyster-shell lime, borax, litharge, and linseed-oil are the ingredients of the composition.

The present improvement consists in substituting plaster of Paris in the place of borax, and in a new method of preparing some of the ingredients, all of which we will now more particularly describe.

We first pulverize china-clay, and then burn or calcine it in the same manner as stoneware is burnt. If the shell-lime, previously to using it, has been exposed to the action of the atmosphere, this also should be burnt over again, the object of the burning each being to expel every particle of moisture, and thereby prevent any shrinking and cracking of the composition; it also dries better.

We then take the materials in the following proportions, viz: Ten per cent. litharge; twenty per cent. china-clay; thirty per cent. oyster-shell lime; forty per cent. plaster of Paris. Pulverize as fine as the finest flour, and thoroughly mix it with linseed-oil, until the composition attains the proper consistency. It is then run through a paint-mill, and should, when running through, be collected in the vessel for its reception in a little hill, and not run over its bottom.

If designed for fire and water-proof cement, it should be of the consistency of paste; if for paint, more oil is required, but as little as possible should be used of the latter.

The color of this composition, when made up in the above-named proportions, is a light brown. If a lighter color is desired, the proportions of shell-lime and plaster of Paris should be changed, taking less of the former and more of the latter, without producing any marked alteration in the effect.

Having thus described our invention, what we claim as new therein, and desire to secure by Letters Patent, is—

The composition above described, when compounded and used as and for the purposes specified.

JOSEPH HECKEL,  
MICHAEL EICHINGER.

Witnesses:

POLH B. ELY,  
S. W. GILLESPIE.