

UNITED STATES PATENT OFFICE.

OLIVER CHESTER LACEY, OF NEWPORT NEWS, VIRGINIA, ASSIGNOR TO
NEW YORK FIRE PROOF COMPANY, OF SAME PLACE.

FIREPROOFING COMPOUND.

SPECIFICATION forming part of Letters Patent No. 683,212, dated September 24, 1901.

Application filed February 27, 1901. Serial No. 49,134. (No specimens.)

To all whom it may concern:

Be it known that I, OLIVER CHESTER LACEY, a citizen of the United States, residing at Newport News, in the county of Warwick and State of Virginia, have invented certain new and useful Improvements in Fireproofing Compounds; and I do 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.

This invention relates to an improved fireproofing compound designed more particularly for rendering wood, fabrics, and other fibrous combustible material fireproof.

The object of the invention is to provide a very positive solution the elements of which will constitute when applied to a flammable object a fireproof coating or penetrating agent.

While many fireproofing compounds have been suggested, these are, as far as I am aware at the present time, more or less objectionable, owing in many cases to the nature of the ingredients used, which have a deteriorating effect on the material treated, and in other cases fireproofing is more or less ineffective as such.

My invention consists of a compound of few ingredients, all of which, however, I have found to be by extensive tests positive and effective.

The compound consists, essentially, of manganese chlorid, silicon, ammonium chlorid, and sulfate ammonia. These have been compounded in the following amounts: two

pounds of manganese chlorid, one-half pound of silicon, one pound of ammonium chlorid, and one-half pound of sulfate of ammonia. These have been usually associated and mixed with about two gallons of water, thus making a solution. The silicon is rendered soluble in the first instance, so that it may be forced into the wood by pressure. It is thereafter rendered insoluble by the addition of chlorid of ammonia. The proportions above stated, however, may be varied slightly.

In applying the compound any of the well-known methods may be resorted to, such as immersion. It has however been found more satisfactory in connection with wood to apply the same by forcing the compound into the grain or fiber by suitable pressure.

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

1. A fireproofing compound, consisting of manganese chlorid, silicon, ammonium chlorid, sulfate of ammonia and water, substantially as described.

2. A fireproofing compound, consisting of manganese chlorid two pounds, silicon one-half pound, ammonium chlorid one pound, sulfate of ammonia one-half pound, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

OLIVER CHESTER LACEY.

Witnesses:

D. G. SMITH,

J. E. B. CLAUSON.