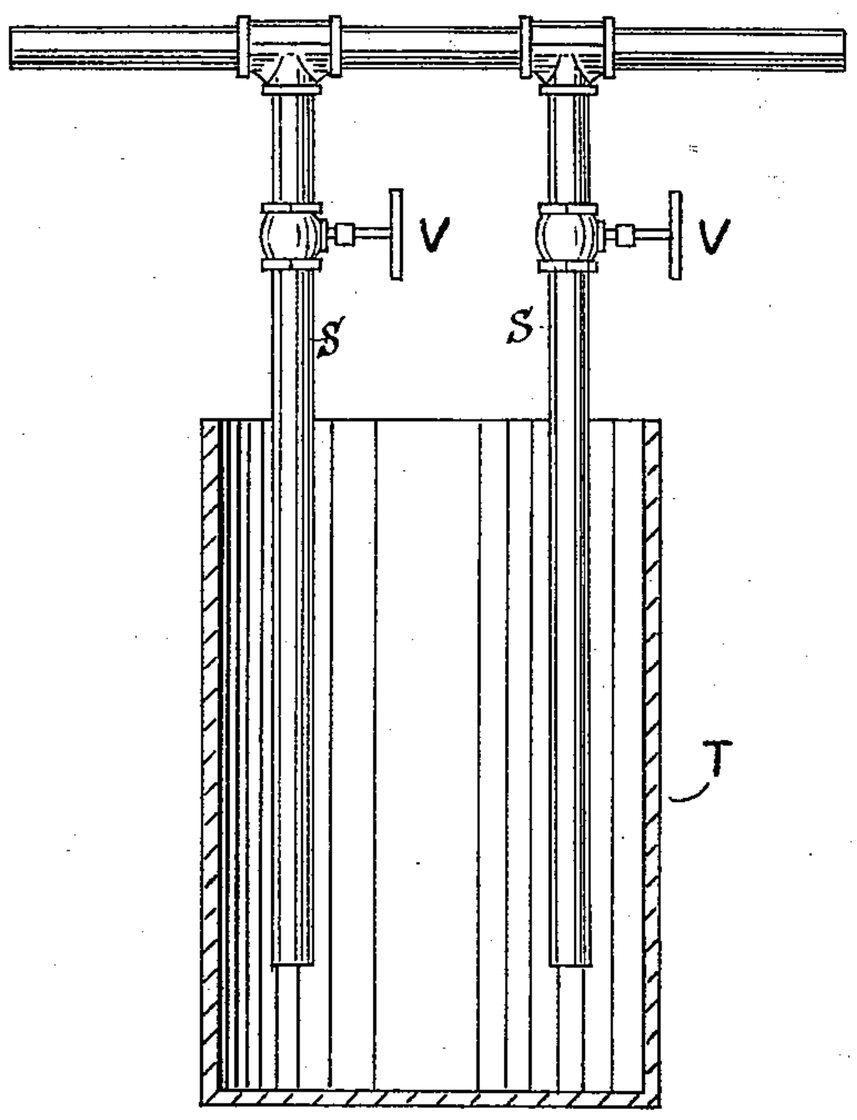
(No Model.)

J. W. SCHOONMAKER.

COMMINUTED COMPOUND PASTE.

No. 451,077. Patented Apr. 28, 1891.



WITNESSES:

Juan B. C. Phillips

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INVENTOR

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UNITED STATES PATENT OFFICE.

JOHN W. SCHOONMAKER, OF BROOKLYN, NEW YORK.

COMMINUTED COMPOUND PASTE.

SPECIFICATION forming part of Letters Patent No. 451,077, dated April 28, 1891.

Application filed July 7, 1890. Serial No. 358,000. (No specimens.)

To all whom it may concern:

Be it known that I, JOHN W. SCHOONMAKER, a citizen of the United States, residing in Brooklyn, county of Kings, State of New York, have invented a new and useful article of manufacture consisting of a Comminuted Compound Paste, of which the following is a full, clear, and exact description, which will enable others skilled in the art to which it appertains to make and use the same.

My formula consists of the following ingredients, although I do not confine myself strictly to these exact proportions: starch or flour, fifty pounds; ground glue, ten pounds; pulverized alum, three pounds; glycerine, one pound; pulverized rosin, three pounds.

The above are thoroughly incorporated by mixing and passing through a fine wire sieve placed in an iron tank or cask made for the purpose, with one or more steam-pipes running in from the top and pointing downward, forcing the steam through the ingredients, which cooks them in a few minutes, as fully illustrated in the accompanying drawing, of which the figure shows a sectional view of a tank T, in which the ingredients are placed.

S S are steam-pipes running in from the top and pointing downward, open on the bottom end, and each fitted with a cock or valve V, through which the steam may be turned on or off as needed, the ingredients being agitated in any convenient manner while the steam is turned on, thoroughly cooking the paste in a few moments with little or no accumulation of water. I then remove the material from the tank and dry it, which I accomplish by placing it in a warm room or oven of 100° Fahrenheit or more of heat. It can be dried in the open air or sun, but not so expeditiously as in the former manner. I then crush and comminute it in an ordinary color-mill, when it is ready for use by simply mixing with cold water. By this process I save a large amount of labor and machinery, and a consequent reduction of cost.

I cook by steam so as to cook evenly and quickly, and avoid the accumulation of water as much as possible, and do not boil in water, which is the ordinary way of making paste. I use no alcohol, spirits, or alkali in its manufacture, all of which are dangerous to use in many ways, the alkali—such as soda or potash—being very liable to eat or damage a paper or other fabric on which it may be used. The alum prevents the paste from getting sour or moldy after being mixed ready for use. The rosin, being of a very tenacious nature, increases the adhesive properties of the paste and insures the holding of heavy papers, such as lincrusta Walton, pressed paper, or wood veneers to hard finished, painted, or lime-washed walls without the use of sizing, which must always be done where an ordinary flour paste is used. It will also hold labels permanently to tin, steel, iron, and all polished surfaces, which an ordinary flour paste made of flour, glue, and alcohol, or an alkali will not do unless the label be lapped on the end.

The glycerine makes the paste more transparent and prevents its drying too quickly, and if the paper or other fabric be smeared or daubed on its face while handling it dries transparent and does not show.

I am aware that a dry paste is manufactured of flour in combination with a strong alkali, for which a patent was granted to M. W. Marsden, of Connellsville, Pennsylvania, No. 376,445, dated January 18, 1888. I am also aware that a "dry paste" is manufactured of flour, glue, and alcohol, for which patents were granted to John H. Day, of Albany, New York, Nos. 406,270 and 406,631, dated, respectively, July 2, 1889 and July 9, 1889; but I am not aware that either rosin or glycerine has ever been used in the manufacture of paste in any form, or that a dry paste has ever been manufactured without the use of alcohol, spirits, or an alkali.

What I claim as my invention, and desire to secure by Letters Patent, is—

A comminuted paste composed of flour or starch, alum, glue, rosin, and glycerine, as herein specifically described.

JOHN W. SCHOONMAKER.

Witnesses:
CHARLES J. DARIS,
JUAN B. C. PHILLIPS.