UNITED STATES PATENT OFFICE.

THEODORE MOTT, OF ROCHESTER, MINNESOTA.

PAINT.

SPECIFICATION forming part of Letters Patent No. 555,221, dated February 25, 1896.

Application filed March 14, 1894. Serial No. 503, 586. (No specimens.)

To all whom it may concern:

Be it known that I, THEODORE MOTT, a citizen of the United States, residing at Rochester, in the county of Olmstead and State of Minnesota, have invented a new and useful

Paint Composition, of which the following is a specification.

This invention relates to the manufacture of paint compounds; and it has for its object

10 to produce a new and useful composition of this character especially adapted for use as a preservative of wood or metal to prevent the same from decaying or rusting.

To this end the invention primarily contem-15 plates a fire and water proof paint composed of such ingredients as will positively prevent the paint from cracking, peeling, or running in hot weather and which will cause the paint

 10 hot weather and which will cause the paint to always retain the same bright color and
 20 preserve its durable and lasting qualities. The invention essentially consists in a com-

bination of the ingredients proportioned as stated: yellow ocher, ten pounds; sulphur, ten pounds; brown mineral, ten pounds; salt, 5 ten pounds; rosin, ten pounds; coal-tar, one

barrel; and gasoline or kerosene, one pint. In the preparation of the paint all of the above-named ingredients, excepting the tar and gasoline or kerosene, are thoroughly

- 30 mixed together and then introduced into the barrel of coal-tar. Heat is applied to the mixture, and by stirring all of the ingredients are intimately commingled excepting the rosin, which is previously thoroughly pulverized
 35 and which floats on top of the mixture until
- 35 and which floats on top of the mixture until completely melted, after which, or at which stage, a further stirring of the mixture will intimately work the rosin therein so as to be thoroughly commingled with the other ingre-
- 40 dients composing the mixture. While in a boiling condition the paint is applied to the wood or metal surfaces and when cool forms itself into a hard-glazed water and fire proof surface.
- 45 In event of the paint beginning to foam while boiling a suitable quantity, preferably about a quart, of cold water is introduced to obviate this difficulty, and when the paint has been boiled sufficiently and is ready for use 5° about one pint of gasoline or kerosene is added
- to two gallons of the paint, which gasoline or

kerosene is used in the capacity of a drier to cause the paint to set.

In order to secure the results sought for great dependence is placed upon the qualities 55 of the several ingredients employed, and it is to be noted that the brown mineral, ocher, and salt are of the utmost importance in the composition.

The brown mineral is a stony or rocky for- 60 mation containing an excess or large percentage of iron oxide, which makes the mineral very desirable, in that it provides the composition with the quality of being impervious and unchangeable in all kinds of weather, 65 especially in hot weather, when most paints soften, while at the same time the said mineral imparts a high gloss to the paint. The combination of the ocher with the brown mineral provides a blending of colors which pro- 70 duces a very glossy and attractive paint.

The addition of the chloride or the salt to the composition is very important, in that the salt combines with the tar to form a compound not easily ignited and which is therefore al- 75 most fireproof. The combination of a chloride, and particularly salt or sodium chloride, with tar has been found to be more desirable for paint composition than the combination of tar with such oxides as lime, and, further- 80 more, by reason of the use of ordinary saltit is unnecessary to use in the compound other ingredients or compounds as combustion-preventives. In the last-named function of the salt it is to be further observed that the com- 85 bination of the same with tar provides the same results and a more readily-applied paint than those paints which employ additional insoluble substances, such as plaster-of-paris and asbestos, for the purpose of thickening 90 the paint and as combustion-preventers. Such insoluble substances are merely held in suspension in the composition and rather retard than enhance the even application or spreading of the paint. 95

It will be further noted that the sulphur and rosin are not employed as thickening agents, for the rosin especially has the effect of forming a glazed and hardened paint when the same cools and thereby effectually prevents 100 the paint from running in hot weather.

In using the paint the same is heated to a

higher degree of temperature when used on wood than when used on metal; but irrespective of the temperature to which the paint composition is heated the same will always 5 retain the desirable characteristics and properties herein fully referred to.

Having thus described the invention, what I claim is-

An improvement in the manufacture of fire 10 and water proof paint compositions which consists in intimately mixing together equal proportions of yellow ocher, sulphur, brown mineral, salt, and rosin, whereby the iron oxide of the brown mineral and the yellow 15 ocher will combine to impart an impervious

and bright glossy quality to the paint, then in-troducing the mixture of said several ingredients into a proportionately large quantity of coal-tar, and then boiling the tar and the mixture introduced therein until the rosin 20 has become completely melted, thereby completing a paint composition or mixture wherein the sodium chloride combines with the tar to form a compound not easily ignited, and the rosin combines with all ingredients to 25 form a glazed and hardened surface when the paint composition cools, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 30. the presence of two witnesses.

THEODORE MOTT.

Witnesses: S. T. LITTLETON, LIZZIE RICE.