UNITED STATES PATENT OFFICE.

JOSEPH B. MILLER, OF SEDALIA, MISSOURI.

FIRE-EXTINGUISHING COMPOUND.

SPECIFICATION forming part of Letters Patent No. 719,833, dated February 3, 1903.

Application filed November 3, 1902. Serial No. 129,858. (No specimens.)

To all whom it may concern:

Be it known that I, JOSEPH B. MILLER, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented a new and useful Composition of Matter to be Used for Extinguishing Fire, of which the following is a specification.

The object of my present invention, broadly speaking, is to provide a composition of matter which will extinguish fire when brought into contact therewith.

Another object is to provide a composition of matter for extinguishing fire composed of coacting and interdependent ingredients prepared and combined in proportions found to produce the most satisfactory results.

Another object is to provide a composition of matter for extinguishing fire which will not injure, deface, or mutilate the most fine or delicate fabric or furniture or injure the polish finish thereof.

Another object is to provide a composition of matter for extinguishing fire which will not become affected by the weather, will not harden or cake in the packages in which it is contained, and will be easily removed from its package when desired for use.

Another object is to provide a composition of matter for extinguishing fire which will not injure the health or will not be offensive to the person using it or to those who may come into contact with any of its particles.

Another object is to provide a composition of matter for extinguishing fire composed of a minimum of chemical ingredients combined to produce when heated gases destructive to fire.

Other objects and advantages will appear from the following specification and from the claims hereunto appended.

My fire-extinguishing compound consists of the following-named constituents prepared and combined in substantially the proportions stated—viz., bicarbonate of soda, thirty pounds; soda-ash, five pounds; sulfur, ten ounces; manganese, twenty ounces; slaked lime, five pounds; oxalic acid, one pound; meal-powder, ten ounces; saltpeter, eight ounces; sea-sand, eight pounds; pulverized soapstone, one pound. The bicarbonate of soda, soda-ash, sulfur, manganese, meal-powder, saltpeter, and oxalic acid should each be finely ground separately, after which they should be combined and thoroughly mixed, and the slaked lime, sea-sand, and pulverized soapstone should then be added, and the whole mass should then be thoroughly mixed together. During this latter mixing there should be added separately to the above the following: muriatic acid, one ounce; sulfuric acid, one ounce, and ammonia one ounce, or one or more of the last-named ingredients may be dispensed with, if desired.

This composition should be put up in long slender air-tight packages or tubes, preferably of tin, provided with a cap at one end which may be readily removed.

In the event of a fire the package containing a portion of the above-named composition may be taken in the hand, and after removing the cap the composition may be thrown into and on the fire. The action of the heat will cause the loose particles of the composition to permeate all portions of the room, and direct contact of the fire and the composition will produce highly-charged nitrogenous gases, expelling the oxygen and quenching the fire without adding thereto any combustible or heat-forming elements.

I have found that the lime and pulverized soapstone will resist moisture and prevent the composition from caking or packing together and that the soapstone will facilitate the action of the composition in sliding from the tube.

My invention is perfectly adapted to accomplish the results for which it is intended, and it is evident that changes in and modifications of the specific ingredients and proportions herein set forth may be made and that analogous ingredients and other proportions may be used to accomplish the same results without departing from the spirit of my invention or sacrificing any of its many advantages.

Having now fully shown and described my invention and the best mode for its preparation and use to me known at this time, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The herein-described composition of matter, consisting of bicarbonate of soda, soda-

ash, sulfur, manganese, meal-powder, saltpeter, slaked lime, oxalic acid, sea-sand, and pulverized soapstone, substantially as described and for the purpose specified and set forth.

2. The herein-described composition of matter, consisting of bicarbonate of soda, soda-ash, sulfur, manganese, slaked lime, oxalic acid, meal-powder, saltpeter, sea-sand, pulverized soapstone, muriatic acid, sulfuric acid, and ammonia, substantially as described and for the purpose specified.

3. The herein-described composition of matter, consisting of bicarbonate of soda, soda-ash, sulfur, manganese, meal-powder, saltpeter, slaked lime, oxalic acid, sea-sand, pulverized soapstone, and muriatic acid, substantially as described and for the purpose set forth.

4. The herein-described composition of matter, consisting of bicarbonate of soda, soda-ash, sulfur, manganese, meal-powder, saltpeter, slaked lime, oxalic acid, sea-sand, pulverized soapstone, muriatic acid, and sulfuric acid, substantially as described and for the purpose set forth.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH B. MILLER.

Witnesses:
C. W. TAYLOR,
T. C. HOLLAND.