

UNITED STATES PATENT OFFICE.

JOSEPH LORENZ SPORER, OF NEW YORK, N. Y.

DUSTLESS CLOTH.

1,056,067.

Specification of Letters Patent.

Patented Mar. 18, 1913.

No Drawing.

Application filed February 26, 1912. Serial No. 679,859.

To all whom it may concern:

Be it known that I, JOSEPH LORENZ SPORER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Dustless Cloth, of which the following is a full, clear, and exact description.

My invention relates generally to a dustless cloth and more particularly it is directed to one especially intended for dusting purposes, the principle of operation involved being new and improved and providing an article especially adapted for sanitary use.

The principal object of my invention is to provide a cloth impregnated with a suitable germicidal compound whereby the cloth, when in use, will collect the dust and any germs present may be rendered harmless, the germicide being kept in solution and the cloth being kept in a moist condition by means of a suitable deliquescent substance.

A further object of my invention is to provide a dust cloth which will be moist, whereby dust may be collected, and which will be germicidal at the same time, whereby the germs retained by the cloth may be destroyed by the germicide.

As far as the cloth itself, which is, in effect, a vehicle, is concerned, it may be of any desirable and suitable material adapted to dusting purposes, the germicidal element present therein being capable of choice from a variety of such compounds, the preferred being mercuric chlorid, to which formaldehyde may be added, if so desired. This germicidal element is applied to the cloth in any desirable manner, it being clear, however, that unless steps are taken to maintain the cloth in a moist condition, that the germicide will be of no effect. It is also desirable that the cloth when in use be damp or moist in order that the dust may be collected and prevented from spreading; I find that by adding to the cloth a suitable deliquescent that a twofold function is obtained thereby, namely, a damp or moist cloth, together with a cloth having the germicidal substance maintained in solution therein. The deliquescent substance or sub-

stances may be chosen from a number of such, the preferred being magnesium chlorid, to which ferric chlorid or copper nitrate may be added; a particularly desirable result which follows the use of copper nitrate is that the copper salt, in addition to its deliquescence, is also a germicide for the typhus germ.

The manner in which the deliquescent substance and the germicide are applied to the cloth may be determined largely by the method of making the article, the substances being mixed and the cloth then impregnated being the preferred form.

It is desirable that the cloth, after being impregnated and dried, have a suitable amount of ordinary kerosene oil applied thereto, after which the cloth is again dried. The cloth, thus treated, when kept in a warm, dry room is dry, but, when carried into the air and into moist places, becomes damp and moist, due to the deliquescence of the chlorids, the germicidal compounds present being thereby kept in solution. In very moist or damp weather, the deliquescence of the substances present may be excessive, thereby making the cloth gummy, the purpose of the kerosene or equivalent substances being to overcome or prevent this gummy result.

The materials mentioned are the preferred substances for making the dustless cloth, it being apparent that equivalent compounds may be used, which are deliquescent in their nature, and that other germicidal compounds may also be used in order to arrive at the same result which embodies a dust cloth in which a germicide is maintained in solution by the same substance which keeps the cloth moist or damp.

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

1. A cloth impregnated with a deliquescent substance, a substance having germicidal properties, and another substance for preventing the cloth becoming gummy, due to excessive deliquescence.

2. A cloth impregnated with a deliquescent substance, and a deliquescent germicidal nitrate together with a substance hav-

ing general germicidal properties, and an oil for preventing the cloth from becoming gummy.

3. A cloth impregnated with a deliquescent salt and with copper nitrate, together with a substance having germicidal properties, and kerosene oil for preventing the cloth from becoming gummy.

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

JOSEPH LORENZ SPORER.

Witnesses:

PHILIP D. ROLLHAUS,
LAURENCE J. GALLAGHER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."