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FUNGICIDAL SOAP

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2 Claims. (Cl. 167—58)

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This invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention which is a continuation in part of my pending application, Serial No. 747,215, filed October 6, 1934, for Fungicidal soap, relates to a soap preparation for the treatment of fungus infections, more particularly it is directed to a treatment for those infections produced by the fungus trichophyton which have been classified as tinea circinata, tinea capitis and barbae, in other words trichophytosis of the body, scalp and beard.

One object of this invention is to provide a simple and inexpensive preparation in the nature of a self administered fungicide, through the instrumentality of which the various infections caused by the fungus trichophyton and especially the eczema like eruption or dermatophytosis of the feet, commonly referred to as "athlete's sore foot", may be prevented or effectively treated by destruction of the fungus responsible for the infection.

Another object of this invention is to provide a trichophytic preparation in the form of a copper sulphate sodium thiosulphate soap which will penetrate the minute crevices of the skin and establish intimate contact with the mycellium and spores of the fungus to root out the cause of the infection and thus quickly restore the affected part to a normal healthy condition.

Another object of this invention is to provide a prophylactic preparation against fungus infection which may be employed as a bath soap so that in the bathing process the bather by a single operation will be cleansed and protected against the danger of fungus infection so frequently acquired in public baths, military barracks, gymnasiums and the like.

Other objects of this invention are to provide a fungicide in the form of a sodium thiosulphate copper sulphate soap, which not only destroys the fungus trichophyton but also functions as a solvent for the fatty substances produced by secretions which soon form a highly protective covering for the fungus, and to furnish a single remedial agent which may be successfully employed both as a preventative and a remedy against infections produced by the fungus trichophyton.

Certain varieties of trichophytic infection are very obstinate and have required special treatment, as for instance tinea capitis or ringworm of the scalp. With cases of this kind, in order to obtain satisfactory results it has been necessary to utilize the X-ray, but this treatment has been found to be more or less objectionable, be-

cause of its danger to children where the anterior fontanelle has not yet closed and the epilation which the action of the X-ray brings about. Likewise treatment of the eczema like eruptions or dermatophytosis of the feet, known as "athlete's sore foot", has involved the use of special equipment in the nature of one or more tubs containing a suitable fungicide, but this treatment has also been found to be objectionable because of the possibility of transmitting other skin diseases through the medium of the tub solutions. It is therefore the aim and purpose of this invention to provide a fungicide which will replace these various special treatments and afford in conjunction with any of the standard soap mixtures an effective remedy and preventative for the fungus infections specified.

Coming now to the present invention to prepare the fungicide constituting the subject matter of this application, a suitable soap formula is selected, such as that used in the production of ordinary castile, white soap or the like and to this is added a 5 to 10 percent solution of sodium thiosulphate and approximately one percent copper sulphate, for instance, white castile soap as described in the U. S. Pharmacopeia and prepared from sodium hydrate and olive oil when mixed with from 5 to 10 percent of sodium thiosulphate and one percent copper sulphate, gives excellent results. However, it is to be understood, that any of the formulae, for making the standard soaps now on the market may be employed and when mixed with sodium thiosulphate solution and copper sulphate within the percentage range stated, will provide an efficient treatment.

A soap mixture of the preceding character will penetrate the minute crevices of the skin and by virtue of its saponifying action will remove the fatty secretions protecting the fungus and expose the latter to attack and destruction. It will also afford, in a single agency the detergent action of a soap and the protective effect of a fungicide.

Having described my invention, what I claim as new and wish to secure by Letters Patent is:

1. A prophylactic for the treatment of infectious diseases produced by the fungus group, consisting of a cake of soap prepared from a soap formula to which has been added sodium thiosulphate and a relatively small amount of copper sulphate.

2. A prophylactic for the treatment of infections produced by the fungus group consisting of a cake of soap prepared from a soap formula to which has been added sodium thiosulphate and approximately one percent of copper sulphate.

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