

UNITED STATES PATENT OFFICE.

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SOAP AND METHOD OF MAKING SAME.

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To all whom it may concern:

Be it known that I, GEORGE A. SCHMIDT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Medicated Soaps and Methods of Preparing Same; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel medicated soap and method of making same, the object being to produce medicated soap in which the medicaments are kept out of intimate contact with, and therefore out of the sphere of, chemical action of soap or its constituent substances.

My invention relates more particularly to that class of toilet soap known as "gritty"—that is, soap with which powdered or granulated pumice-stone, infusorial earth, fossil diatoms, tripoli, &c., are mixed, such combinations being better adapted to purify the furrows and recesses of the skin than ordinary soaps.

It is well known by scientists that a number of medicaments when mixed with soaps are subjected to chemical action which causes deterioration and frequently complete chemical transformation of such medicaments, thereby rendering them powerless to effect that for which they are intended. Furthermore, such medicaments are not brought into such intimate contact with the skin as to penetrate sufficiently, so that they are practically powerless to act. To overcome these difficulties, I prepare medicated soap in the following manner:

In order to maintain the effectiveness of the medicaments, I introduce the latter into the pores of the gritty material. This I effect by granulating material—such as pumice-stone, infusorial earth, fossil diatoms, tripoli, or any other suitable porous material—and thoroughly calcine the same by means of a high degree of heat. I then introduce such powdered granulated material into a vessel, which may be sealed hermetically, wherein the same is thoroughly mixed with solutions or extracts of anti-

septics, deodorants, &c., and then subjected to the action of air at a pressure preferably not less than fifty pounds, which serves to force such medicaments into the pores of said granules. Such pressure is maintained, preferably, for several hours and the entire mass stirred and agitated during this time to effect the best results. Said gritty substance is then dried and is now ready to be added to the soap. This may be done by mixing such gritty material directly with the soap while the latter is liquid, so that each granule becomes enveloped with a film of such soap, which by reason of its more viscous state does not readily penetrate the pores of said gritty material, and therefore cannot chemically affect the medicaments contained in such pores to any material extent, so that the latter and said soap are maintained out of intimate contact, so that their relative action on the skin is practically independent.

When using the soap, the added water while dissolving the soap also dissolves such medicaments out of the pores of the gritty granules; but the latter action is necessarily gradual and occurs during the time that such granules are rolled over the skin, and their sharp points penetrate all fissures and pores, thereby introducing such medicaments directly to the points at which they are most effective and before any chemical transformation or deterioration is effected. In fact, the chemical changes brought about when the soap, medicaments contained in the gritty material, and water meet in the minute recesses of the skin, where germs, microbes, and skin secretives accumulate, have the effect of detaching these to surround them with soapy solutions, and the added mechanical action of the gritty material forces them to the surface, whence they are easily removed. In immersing such gritty material entirely in the soap, so as to surround each granule entirely with a film thereof, a chemical transformation or deterioration of the medicaments on the surfaces of said granules is effected, and thus a part of the benefit thereof is lost, and to this end I prefer to prepare the soap for use in the following manner:

I coat sheets of stiff heavy paper, cardboard, or fabric of suitable kinds on one or

both sides with the soap while the latter is liquid and hot, and before said soap dries or coagulates I spread the medicated granules over the film of soap, so that they adhere thereto and are retained upon the sheets thereby. In this manner only a small portion of the area of each granule is brought into direct contact with the soap, so that the resulting deterioration or chemical transformation is proportionately reduced and effectiveness of the medicaments preserved in a correspondingly greater degree. The said sheets are then put up in packages in any suitable manner and are necessarily far more sanitary, inasmuch as each person uses a sheet, which is thrown away, so that the next person does not come in contact with soap previously used by another and all danger of infection from this source is avoided. Soap thus prepared retains its effectiveness indefinitely and exceeds all medicated soaps prepared in the usual manner in effectiveness to a great degree.

I claim as my invention—

1. The herein-described method of preparing medicated soap which consists in mixing calcined granulated porous gritty material with liquefied medicaments, subjecting such mixtures to the action of air under pressure in a sealed vessel, subsequently drying said gritty material, and mixing same with soap in liquid state.

2. The herein-described method of preparing medicated soap which consists in mixing calcined granulated porous gritty material with liquefied medicaments, subjecting such mixture to the action of air under pressure in a sealed vessel, subsequently drying said gritty material and mixing same with soap in liquid state.

3. The herein-described method of preparing medicated soap which consists in mixing calcined granulated porous gritty material with liquefied medicaments subjecting such mixture to the action of air under pressure in a sealed vessel, subsequently drying said gritty material, coating sheets of suitable material with soap in liquid form, and covering said coated surface with said medicated gritty material before said soap has coagulated.

4. The herein-described method of preparing medicated soap which consists in mixing calcined granulated porous gritty material with liquefied medicaments, subjecting such mixture to the action of air under pressure in a sealed vessel, subsequently drying said gritty material, coating sheets of suitable material with soap in liquid form, and covering the coated surface with said medicated gritty material before said soap has coagulated.

5. As a new article of manufacture, medicated toilet soap consisting of soap having mixed therewith granulated porous gritty material previously medicated, said gritty material being adapted to retain the medicaments out of the sphere of chemical action of the soap.

6. As a new article of manufacture, sheets of suitable material coated with soap, and having the coated surface covered with previously-medicated granulated porous gritty material.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. SCHMIDT.

Witnesses:

RUDOLPH WM. LOTZ,
F. SCHLOTFELD.