

UNITED STATES PATENT OFFICE.

ROBERT EHRHARDT, OF AUGSBURG, GERMANY.

ANTISEPTIC SOAP.

SPECIFICATION forming part of Letters Patent No. 618,248, dated January 24, 1899.

Application filed February 23, 1898. Serial No. 671,398. (No specimens.)

To all whom it may concern:

Be it known that I, ROBERT EHRHARDT, manufacturing chemist, a subject of the King of Bavaria, residing at Volkartstrasse 12¹, Augsburg, Bavaria, Germany, have invented certain new and useful Improvements in the Manufacture of Antiseptic Soaps Containing Mercury Albuminate, of which the following is a specification.

10 Soaps containing mercury used for antiseptic purposes are commonly prepared by mixing solutions of bichlorid of mercury with the soap liquor. Since soluble salts of mercury are precipitated by alkali, the soap prepared in this way contains the mercury in an insoluble state, and therefore is not sufficiently effective.

My invention produces mercury soaps containing the metal in an easily-soluble form. 20 For this purpose I use mercuric casein, which I obtain by suspending forty parts of free casein in alcohol and boiling it with eight parts of mercury bichlorid at water-bath temperature.

25 Instead of mercury casein any other mercury albuminate soluble in alkali can also be taken.

The mode of operation is as follows:

30 Example 1: One hundred parts of cocoanut-oil are saponificated with fifty parts of caustic soda of 70° Twaddell, to which two parts of mercury albuminate have been added. For this purpose two parts of mercury albuminate are well mixed with ten parts of caustic soda of 70° Twaddell until a perfectly uniform paste is obtained, when forty parts of caustic soda of 70° Twaddell are added, and the mixture is then poured into one hundred parts of cocoanut-oil at a temperature of 35° centigrade. 40 Cochin fat and other oils can also be taken instead of cocoanut-oil. The mass is constantly stirred until the saponification is

complete and a uniform soapy mass is obtained, when the vessel is well covered and allowed to stand for some time. After two 45 days' standing the soap is ready for use.

Example 2: For some purposes concentrated aqueous solutions of soaps are required, in which case the more soluble potash soaps are preferable to sodium soaps. A potash 50 soap extremely soluble in water is obtained by the saponification of castor-oil with caustic potash. Three and one half parts of mercury albuminate are thoroughly mixed with thirty parts of caustic potash of a strength of 55 50° Twaddell to a perfectly uniform paste. One hundred parts of potash lye 50° Twaddell are then added, and the mixture is then poured into one hundred and fifty parts of castor-oil. In place of castor-oil linseed-oil, 60 cocoanut-oil, cottonseed-oil, and others can also be taken. The mixture is boiled while constantly stirring the mass, evaporated to about two hundred and fifty parts, and allowed to cool. 65

The sodium and potash soaps obtained in this way contain the mercury in a readily-soluble state and possess excellent antiseptic properties.

The percentage of mercury in the different 70 soaps can be altered *ad libitum* according to the quantity of mercury albuminate that is added to the alkaline lye.

I claim as my invention—

As a new article of manufacture a soap 75 containing as an antiseptic agent, mercuric albuminate or its described equivalent, substantially as set forth.

In witness whereof I have signed this specification in the presence of two witnesses. 80

ROBERT EHRHARDT.

Witnesses:

EDGAR GUGEL,
EMIL HENZEL.