

UNITED STATES PATENT OFFICE.

MELCHIOR CASTENHOLZ, OF COLOGNE, GERMANY.

PROCESS OF MAKING SOAP IN THE FORM OF TABLETS OR THE LIKE.

1,057,931.

Specification of Letters Patent.

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No Drawing.

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To all whom it may concern:

Be it known that I, MELCHIOR CASTENHOLZ, a citizen of the German Empire, and residing at Cologne-on-the-Rhine, Germany, have invented a certain new and useful Improved Process of Making Soap in the Form of Tablets or the Like, of which the following is a specification.

My invention relates to the manufacture of soap in the form of tablets and the like, and a primary object is to make soap-powder for personal use in a suitable form, *e. g.* that of a tablet, ball, cylinder and so on, each tablet or the like being of such a size that it just suffices for being used once. My soap-powder differs from the pieces of solid soap in the form of tablets hitherto employed for such personal use in the lavatories of railroad-cars, restaurants, hotels, places of amusement and so on, in that when in contact with the water employed for washing it is immediately and wholly converted by the pressure of the palms of the hand into a light foamy lather, and can thus be completely utilized.

The mode of making my soap not only enables pieces of soap to be made from soap-powder which are comparatively light but nevertheless large enough to be felt by the hand, and therefore cause no loss of soap during the act of washing, but also supplies a convenient form of soap for disposal and carriage or for application to particular purposes and requirements. The formation of soap-powder into tablets by applying pressure is a process known *per se*. Such soap-containing bodies as have been produced by known processes have however not the same important property as that desired and completely obtained by my process, *i. e.* the property of becoming immediately reconverted into powder when brought into contact with water and subjected to slight pressure by the palms of the hands, in other words, the property of dissolving into an easily manipulated lather without loss of soap and without a vestige of such remaining. Known soap-containing bodies, on the other hand, remain as firmly adherent pieces of soap or, under the most favorable conditions, crumble, whereby they feel uncomfortably rough to the palms of the hands and are moreover wasteful because the crumbled particles are carried away by the water. Known commercial soap-powders which contain a large per-

centage of soda and are formed into tablets and the like, are by no means adapted to dissolve into a lather leaving no remnant of soap when coming in contact with water in the manner described.

My process of producing a soap-powder suitable for being molded in the manner described consists in first adding to a dephlegmated soda or potash soap at least an equal quantity by weight of dephlegmated powdered borax, in then adding in known manner a small quantity of a good vegetable oil—with the addition, according to desire or requirement, of medicaments, antiseptics, coloring agents, scents, and so on—in then heating the composite mass to the boiling point, stirring it around in the meantime until a homogeneous paste is formed which is then poured out onto a suitable support and then dried. During and after drying the paste formed as described breaks up into powder. The latter is thereupon further reduced to a very fine, loose powder which is then inserted into molds, wherein a light pressure exercised by a press forms the mass into tablets, balls, pellets, rods and the like. It is admitted that it is also known to employ a borax admixture when manufacturing soap-powders. Such admixtures of powdered borax have, however, heretofore been expressly employed for their medicinal effects; such powders have been intended to be rubbed on the surface of the body to enable the borax admixture to penetrate the pores of the skin and so produce a remedial effect. The previous admixture of borax has, moreover, hitherto been so insignificant, that it has not been able even in an approximate degree to produce the effect I obtain, *viz.* that the tablets when coming into contact with water resolve into lather, and this is because I require a minimum admixture to the potash or soda soap of about half of the quantity by weight of dephlegmated powdered borax. The action I desire becomes, however, perfect as soon as an equal quantity of dephlegmated powdered borax has been added to the potash or soda soap. The dephlegmation of the powdered borax is effected by spreading the same over moderately heated pans until the mechanically—not chemically—bound water contained in the powdered borax is evaporated.

I claim:—

A process of making soap in the form of

readily dissoluble tablets, consisting in adding to dephlegmated alkaline soap at least an equal weight of dephlegmated powdered borax, in adding a small quantity of a vegetable oil thereto, in heating the mixture thus obtained to the boiling point whereby a paste is obtained, in drying the paste and thereby obtaining a powder, in reducing the powder thus obtained to a finer powder, and in sufficiently compressing the fine powder in

molds into the form of tablets which immediately disintegrate under light pressure when being used.

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

MELCHIOR CASTENHOLZ.

Witnesses:

ELLI WOITMANN,
OSCAR DEPNER.