

# UNITED STATES PATENT OFFICE.

SOLOMON D. HOFFMANN, OF MOSCOW, RUSSIA.

COMPOSITION FOR AND METHOD OF MAKING HEADS AND LIMBS OF DOLLS.

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*To all whom it may concern:*

Be it known that I, SOLOMON D. HOFFMANN, a subject of the Czar of Russia, formerly of Moscow, Russia, at present residing at Brooklyn, in the county of Kings and State of New York, United States of America, have invented a new and useful Improvement in Compositions for and Methods of Making Heads and Limbs of Dolls, of which the following is a full, clear, and exact description.

My invention relates to a composition of matter for dolls' heads, limbs, and for other purposes, but relates especially to a mask for use in the construction of the head, feet, and lower limbs of dolls.

The object of the invention is to provide a mask which will be exceedingly light, practically indestructible, and which, withal, will be to a slight degree elastic.

Another object of the invention is to so produce the mask that it will be exceedingly economic and may be readily molded in any desired shape, either solid or hollow.

The invention consists in the novel features of the mask as a composition of matter and also in the method of treating the mask in forming an object.

The component parts of the mask are glue, glycerine, zinc oxide, (white,) and Japanese wax. These ingredients are compounded in substantially the following proportions: one hundred parts of glue and twenty-five parts each of glycerine, zinc oxide, and Japanese wax. These ingredients are mixed with a suitable quantity of water and are heated until they are thoroughly commingled and assume a liquid state. At this stage a suitable pigment may be added, ground, however, exceedingly fine. After the mixture has attained, for instance, about 75° Fahrenheit, it is poured into suitable molds or a mold to produce a doll's head, for instance, and after the poured material has become set and hardened it is smoothed or polished by the

use of any approved tools—for example, sand or emery paper.

In the manufacture of dolls' heads and limbs it is desired that the molded article should have a finish-coating, and this coating is produced by immersing the head or the limb in a bath composed of glue, glycerine, zinc oxide, Japanese wax, and a color to produce a flesh-tint. After this coating has properly dried, the eyelashes, eyebrows, mouth, and nostrils are painted upon the face, if a doll's head is being made, and the cheeks are colored properly. Finally, to prevent the possibility of the colors rubbing or running, the cast head is immersed in a thin collodion bath—that is to say, collodion of commerce thinned with ether.

When dried, a mask produced by the ingredients above set forth is practically indestructible, and when the object is cast hollow and the mask is used in casting the mask will possess a certain degree of elasticity.

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

1. The herein-described composition of matter, consisting of glue, glycerine, zinc oxide, and Japanese wax, in substantially the proportions set forth.

2. The herein-described method of producing the heads and the limbs of dolls, which consists in reducing glue, glycerine, zinc oxide, and Japanese wax to a liquid state, pouring the liquid into molds, smoothing the molded mask, dipping the mask in a bath of glue, glycerine, white zinc oxide, Japanese wax, and coloring-matter reduced to a thin liquid, and finally decorating the molded article and immersing it in its decorated state in a bath of collodion, as herein set forth.

SOLOMON D. HOFFMANN.

Witnesses:

J. FRED. ACKER,  
LEON BLUMENFELD.