

UNITED STATES PATENT OFFICE.

CHARLES RATH, OF NEW YORK, N. Y.

COMPOSITION OF MATTER.

SPECIFICATION forming part of Letters Patent No. 619,615, dated February 14, 1899.

Application filed January 14, 1898. Serial No. 666,682. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES RATH, a subject of the Emperor of Austria-Hungary, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Composition of Matter, of which the following is a full, clear, and exact specification.

My invention relates to composition of materials for rubbing implements, more especially of those used in therapeutic treatment of sick persons, massage, and the like; and it consists of the hereinafter-described composition of material possessing such peculiar and desirable qualities as are required in the use of such implements.

To obtain the best result from treatment of the body of the patient, it is necessary that the material of which the implements are made be of certain hardness and elasticity; further, that its surface shall be smooth, in a certain degree glossy, to enable the tool or implement to glide over the skin of the person receiving the treatment with the least possible friction. I have made extensive experiments during a long period of time with such implements produced of different materials, particularly of so-called "artificial wood," polished and otherwise prepared rubber of varying hardness, of celluloid, and of compositions of mineral substances, and found that any and all of these materials are inadequate for the purpose in that they do not possess such grade of hardness, or rather softness, combined with elasticity and smoothness of surface, as such implements must necessarily possess to be capable of use for such service.

Experimenting with different compositions of my own devising I have found that a material composed of soft india-rubber, bran of almonds, and calcined chalk possesses all the requisite qualities. It combines moderate hardness with elasticity, possesses a smooth glossy surface, and, besides this, being moderately porous, it readily absorbs a suitable

lubricant, and consequently tools or implements produced of this material can be readily used with the best effect either dry or in bath. In preparing this composition of material the rubber is first moderately heated, and the other ingredients are successively combined with it by kneading, and the material while in a plastic state is then shaped by pressing it into suitable forms. The relative quantities of the ingredients may be varied according to the intended use. For the implements for rubbing and massage apparatus generally a proportion of seventy-six parts of rubber, seventeen parts of bran of almonds, and seven parts of calcined chalk will give best results. This material may be used with excellent results for all kinds of tools and implements for electrotherapeutic treatment. In reference to the latter use it is to be stated that the material is absolutely insulating and may in many instances for this purpose be advantageously substituted for rubber.

In preparing the composition some cosmetic may also be added. It, however, is merely an ingredient of taste and not otherwise required.

I claim as my invention—

1. A composition of matter comprising pure soft india-rubber as the preponderating ingredient, bran of almonds and chalk thoroughly mixed and kneaded together.

2. A composition of matter comprising about seventy-six parts of soft pure india-rubber, about seventeen parts of bran of almonds and about seven parts of calcined chalk all combined together by kneading, while the rubber is in soft plastic state.

In witness that I claim the improvements described in the foregoing specification I have signed my name in the presence of two subscribing witnesses.

CHARLES RATH.

Witnesses:

HARRY CALHOUN,
ROBERT VALENTINE MATHEWS.