No. 723,301. PATENTED MAR. 24, 1903.

J. PFEIFFER.

SEAMLESS RUBBER GLOVE.

APPLICATION FILED JULY 25, 1901.

NO MODEL.

FIG. 1.

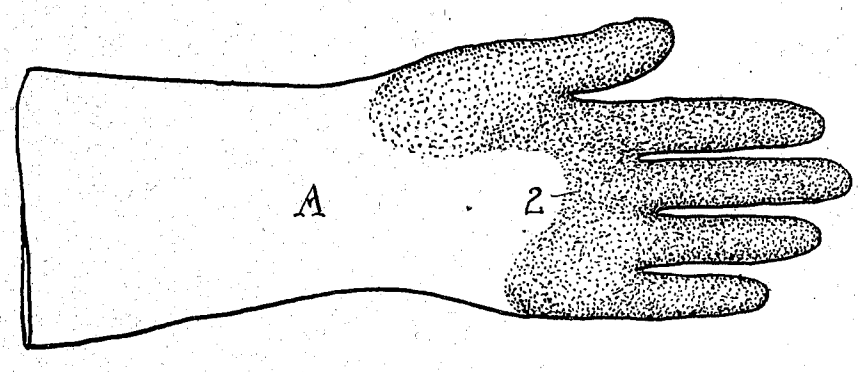
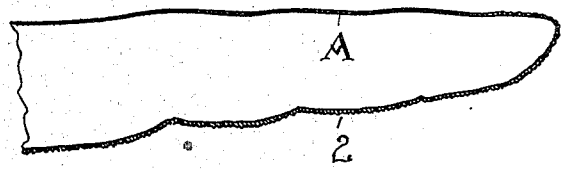


FIG. 2.



ATTEST

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UNITED STATES PATENT OFFICE.

JACOB PFEIFFER, OF AKRON, OHIO.

SEAMLESS RUBBER GLOVE.

SPECIFICATION forming part of Letters Patent No. 723,301, dated March 24, 1903.

Application filed July 25, 1901. Serial No. 69,614. (No model.)

To all whom it may concern:

Be it known that I, JACOB PFEIFFER, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Seamless Rubber Gloves; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to seamless rubber gloves and like articles; and in one of its chief embodiments the invention consists in a glove constructed more especially for use by surgeons and physicians and which is adapted for all operating purposes wherein a more or less roughened surface is needed on the face of the fingers and which resembles the natural roughness of the naked fingers in quality, thus giving the operator means that act naturally and enable him to accomplish by the use of a rubber-gloved hand what has hitherto been practically impossible with rubber gloves.

The kind of glove in which my invention is embodied is what is known in the trade as "dipped" gloves in contradistinction of molded gloves or goods; but the method of making does not enter into this application and is held as subject-matter for a separate application and patent. However, the style of glove produced by this method is seamless and elastic and fits snugly on the hand, and always being exceedingly thin and without seam or rib it is practically like a natural skin drawn over the hand; but in performing operations when the hands become bloody and the fingers are required to do a specific work it is found to be practically impossible to accomplish anything satisfactorily or successfully without a finish on the fingers which will enable them to lay hold upon and seize that which for the time they are endeavoring to handle. The lack of this positive gripping element or quality in the old style of smooth-surfaced glove often rendered it necessary for an operator to remove his glove, notwithstanding the danger from blood-poisoning, in order that he might accomplish by the naked hand what he could not possibly do with the gloved hand. Hence I have sought to overcome this very serious defect in gloves as hitherto made and used and do overcome the same by producing a glove with a distinct and positive gripping-surface, the same being constructed and adapted to operate substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a face view of a rubber glove or gauntlet containing my invention. Fig. 2 is a longitudinal sectional elevation of a finger of the glove shown in Fig. 1.

In the glove thus shown and described I have somewhat magnified the prominence of the roughness of the facing 2 as compared with the thickness of the glove A in order that the fact of the invention may be made more clearly apparent in the drawings than could otherwise occur. Obviously the said surface need not be either conspicuous or prominent so far as disclosure to the eye is concerned, and it were better manifested to the touch than otherwise; but in this instance the said surface 2 is brought out for the purpose described. The means for producing said surface may, of course, be very considerably varied and yet remain within the domain of my invention, and for the purposes of this application they need not be considered as material, except that they must be such as to afford the uneven, roughened, or possibly granulated exterior which the gloves must have to give them the gripping and holding quality and which differentiates them from the style of gloves which have a smooth and slippery surface on the working surface of the fingers. One way of doing this is to sift fine particles of rubber or its equivalent in other material over the face of the fingers and thumb and the palm of the hand, if wanted, and then by further dipping or otherwise treating said surface incorporating these particles therewith as completely as if they were produced in the glove during its own manufacture. In the production of such roughened surface by my method all harshness of the particles to the touch must of course be avoided and their incorporation made complete, and hence the manufacture should be such as to make such surface a homogeneous part of the glove rather than a

distinctly outside formation, like something attached and which is liable to be disintegrated or worked off in use.

Obviously a single finger, or what is known as a "finger-cot," can be produced with the roughened surface I have described and is within my invention and claims, and my method of manufacture is not limited to gloves and finger-cots, but is employed in the production of sundry articles in which a thin or film-like rubber body with such a surface as I provide is desirable, the special method to which I refer being first by dipping to get the body of the article and then giving the article the roughening treatment as a distinct and separate step in the manufacture. This, too, involves dipping, as already described, and it is only by dipping that my invention is possible.

The equivalents for free particles of rubber herein referred to are more especially understood as comprising what is known to the trade as "rubber substitutes," of which there are several manufactures and which are well known to the trade and to manufacturers of rubber articles.

In the use of the term "light cement" I have reference to a cement made of naphtha, benzol, or any of the solvents of rubber, and by the word "light" I mean that less rubber is used than in the cement with which we ordinarily work.

What I claim is—

1. As a new article of manufacture, a dipped seamless rubber article with a smooth exterior and having a working surface coated over with foreign particles adhered thereto, substantially as described.

2. In dipped rubber goods, an article having a finger with an otherwise smooth seamless surface and having its front surface covered with free granulated particles adhered thereto and coated over with rubber, substantially as described.

3. A dipped seamless rubber glove having free particles of rubber or their equivalent incorporated with its working surface and roughening said surface to the touch, substantially as described.

Witness my hand to the foregoing specification this 10th day of July, 1901.

JACOB PFEIFFER.

Witnesses:
R. B. MOSER,
H. T. FISHER.