## UNITED STATES PATENT OFFICE.

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## IMPROVED COMPOUND FOR LINING TEXTILE HOSE.

Specification forming part of Letters Patent No. 97,486, dated December 7, 1869.

To all whom it may concern:

Be it known that we, Julius Dollmann and Frederick William Claessens, both of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Compound for Lining Textile Hose, so as to make it steam, water, and air tight; and we do hereby declare that the following is a full and exact description of the articles used, their proportion to each other, the preparation thereof, and the manner in which the compound is applied to textile hose.

The nature of our invention consists in the mode of manufacturing a compound out of the following articles—to wit, caoutchouc, gum-asphaltum, and benzine—and applying the same to the inside of textile hose, so as to make it steam, water, and air tight.

To enable others skilled in the art to make and use our invention, we will proceed to describe the articles, the proportions in which they are used, how we prepare the compound, and how we apply the same to the inside of the textile hose.

We use four (4) parts, in weight, of caoutchouc, and twelve (12) parts, in weight, of the gum-asphaltum and benzine.

## Preparation.

The caoutchouc is dissolved in benzine to the thickness of common sirup, in a cold state; also the gum-asphaltum is dissolved in benzine, in a cold state, to the thickness of sirup, after which we mix both together, and the compound is ready for use. Application of the Compound to the Inside of Textile Hose.

We either pour the compound, as already described, into the textile hose, one end of which is fastened, and when filled fasten the other end of it, and then compress the hose so filled until the textures of the hose are all filled with the compound, after which the ends are opened and the rest of the compound poured out, or we fasten one end of the hose to be lined, and force the compound into the same by means of a force-pump until the textures of the hose are closed up with the compound, after which we allow the rest of it, not taken up by the hose, to drop out, and the parts adhering to the inside of the hose form a coat or lining when dry.

For making textile hose water-tight we apply two coats, and for making it steam and airtight we apply four coats of the compound.

## Claims.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The manufacture of a compound composed of caoutchouc, gum-asphaltum, and benzine, in proportions as set forth, and prepared in the manner described.

2. Also, the application of the compound for lining textile hose, to make it steam, water, and air tight, substantially as described.

JULIUS DOLLMANN. F. W. CLAESSENS.

Witnesses: F. W. Wm. H. Stubbe, N. P. Merritt.