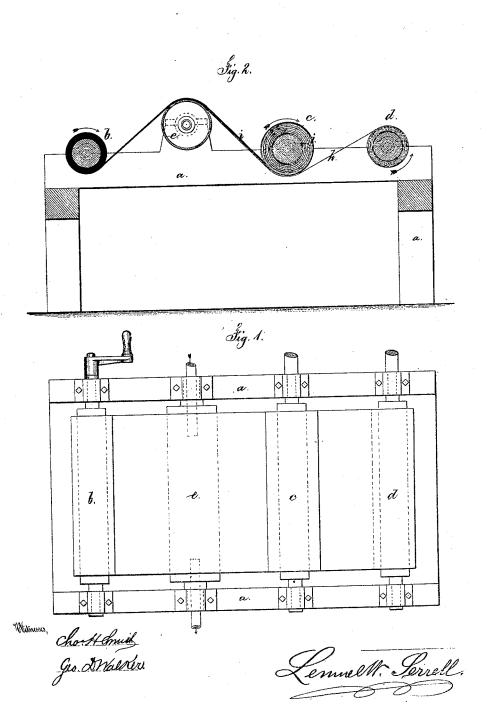
I.S. Schuelte Coating Faper. No. 108.192. Fatentea. Oct. 11.1870.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

ERNST A. SCHUETTE, OF NEW YORK, N. Y.

Letters Patent No. 108,192, dated October 11, 1870.

IMPROVEMENT IN APPARATUS FOR WATER-PROOFING FABRICS WITH GUTTA-PERCHA.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, ERNST A. SCHUETTE, of the city and State of New York, have invented an Apparatus for Water-proofing Fabrics; and the following is declared to be a correct description thereof.

This invention is to facilitate the union of two fabrics by an intervening sheet of gutta-percha, which simultaneously renders the fabrics water-proof.

Difficulty has heretofore arisen in making the union of two fabrics perfect, and keeping the fabrics themselves flat and smooth, when united by a sheet of guttapercha under an ironing operation performed by hand.

In the drawing-

Figure 1 is a plan of the machine made use of by me for water-proofing the sheets of fabric, and

Figure 2 is a vertical section of the same longitu-

dinally.

The frame a of the machine sustains, by journals and boxes, the rollers b c d, and also the convex heater, e, or roller, that may be fitted to revolve or to remain stationary. In either case, however, the heater e is to be warmed (preferably by steam) to a temperature sufficient to soften the sheet of gutta-percha.

The lining h, or fabric wound upon the cylinder d, passes beneath the roller c, and over the heater e, to

the roller b; and upon the roller c the cloth i and the sheet of gutta-percha are to be wound, the two thicknesses being supplied together, so that the guttapercha will come between the lining h and cloth i, and hence the heat of e will cause the two thicknesses of fabrics to be united, and rendered water-proof by the intervening sheet of gutta-percha.

The roller b is employed for winding the water-proof fabrics upon, and, by employing a slight frietion to detain the rollers c and d, the proper tension will be obtained for making the fabrics smooth as they pass over the heater e, and the two fabrics are firmly united by the gutta-percha, that is softened by said heater, and the fabrics pressed upon the same by being wound upon the roller b.

I claim as my invention-

The heater e and rollers b c d, arranged and acting in the manner specified, to unite and render waterproof two fabries by gutta percha, as set forth.

Signed this 6th day of September, 1870. E. A. SCHUETTE.

Witnesses:

CHAS. H. SMITH, GEO. T. PINCKNEY.