

UNITED STATES PATENT OFFICE.

THEODORE H. VIDETO, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

WATER-PROOF GOSSAMER FABRIC.

SPECIFICATION forming part of Letters Patent No. 432,005, dated July 8, 1890.

Original application filed February 27, 1888, Serial No. 265,467. Divided and this application filed April 21, 1890. Serial No. 348,912. (No specimens.)

To all whom it may concern:

Be it known that I, THEODORE H. VIDETO, of South Framingham, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Water-Proof Gossamer Fabrics, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention is a division of the subject-matter set forth in my application, Serial No. 265,467, filed February 27, 1888, for patent on "water-proof fabrics and art of making the same;" and it consists in the improved rubber-coated and surface-printed fabric described in such former application. The other division of said case embraced the process therein set forth, said application having been subsequently renewed December 2, 1889, Serial No. 332,205, for improvement in "art of making gossamer water-proof fabrics."

My present improvement, the product of said process, is a new and useful water-proof fabric having a foundation of thin textile material with a velvety dull-finished surface of rubber compound as a background and a suitable contrasting figure in such compound superimposed and printed thereon, such compounds being subsequently vulcanized.

The novel feature of my process and fabric relates to the roller-printed figure upon the velvety surface of dull-finished gossamer goods, such goods either plain-surfaced or striped without such printed figure having been heretofore made by me. This supplemental printing operation transfers to the otherwise finished surface before vulcanizing any desired figure, the reverse of which is cut in the roller.

In the production of my improved fabric I proceed as follows: The web of textile fabric to be treated is in the form of an endless belt supported upon rollers which distend and move it, while a succession of extremely-thin films of rubber compound in solution are applied to the outer surface by means of a broad straight-edged knife in the manner generally practiced in coating gossamer goods. I then cover such coated surface thickly with powdered corn-starch or like farinaceous substance to obviate the tendency of the rubber

surfaces to adhere, and I speedily remove the farina first with a brush and afterward with a solution of paraffine in naphtha, as explained in my Letters Patent No. 375,234, granted December 20, 1887, for improvement in the art of making water-proof fabrics. This treatment, set forth in my said patent, was subsequent to the ornamentation or striping, and was the last act prior to removal of the fabric for vulcanization.

By my present improvement the product is changed in an important respect. After the surface has been cleansed by the bath of paraffine and naphtha and before vulcanization the desired ornamentation is given to the velvety dull-finished surface which the fabric then presents by printing the figure thereon with one or more revolving engraved rollers, after the manner of calico-printing. In this way an ornamental figure in one or more contrasting colors or shades of rubber compound in solution may be imprinted upon the dull-finished background, thus producing a very pleasing style of goods having the primary water-proof quality, and in addition thereto any desired figure in bright or dull colors imprinted with rubber in solution or with other vulcanizable printing compounds.

The printing operation is by preference performed before removal of the web from the rollers which support it while being coated; but when desired the goods may be removed and several pieces joined end to end run through the printing-machine, the non-adhesive surface permitting of rolling up and handling the fabric. After this the rubber compound is vulcanized either by solar or artificial heat and the fabric is ready for use.

My new fabric is readily distinguishable from that made by my former process and set forth in my patent No. 375,233, dated December 20, 1877, for water-proof fabric. The former article had its entire surface, including the ornamentation, dull-finished, while in my present fabric the imprinted figure is bright and contrasting, being applied after the farina treatment, and hence not dulled thereby.

I claim as my invention—

The improved gossamer fabric herein described, consisting of a foundation of textile

material having on one side a velvety dull-
finished coating of rubber compound with a
suitable bright or contrasting figure in such
compound imprinted and superposed thereon
5 and vulcanized, substantially as set forth.

In testimony whereof I have signed my
name to this specification, in the presence of

two subscribing witnesses, on this 20th day of
January, A. D. 1890.

THEO. H. VIDETO.

Witnesses:

A. H. SPENCER,
JAMES P. PRINCE.