E. WAITE. MANUFACTURE OF FELTED FABRICS.

No. 46,837.

Patented Mar. 14, 1865.



Witnesses J. P. Hale h. Frederick Eurlis Inventor Enoch Wait by his attorney R. U. Idely

UNITED STATES PATENT OFFICE.

ENOCH WAITE, OF SOUTH NATICK, MASSACHUSETTS.

IMPROVEMENT IN THE MANUFACTURE OF FELTED FABRICS.

Specification forming part of Letters Patent No. 46,837, dated March 14, 1865.

To all whom it may concern:

Beit known that I, ENOCH WAITE, of South Natick, in the county of Middlesex and State of Massachusetts, have invented an Improvement in the Manufacture of Felted Fabrics Having Elastic or Water-Proof Backing; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, which denotes a section of a piece of the fabric made in accordance with my invention.

The improved fabric may be said to be composed of two sheets of felt of equal or different thicknesses, laid one on the other, and connected with one another by a water proof composition or cement, and also with a backing made of india-rubber, in whole or in part, or a water-proof composition, or cloth, leather,

or its equivalent.

In the drawing, a and b represent the two sheets of felt, the first or upper being thicker than the second. Their connection by a waterproof film or sheet of cement is shown at cc, the backing or sheet of india-rubber or other suitable material being exhibited at d, as applied and connected to the lower face of the

The fabric may be made by a felting-mac'ine calculated to make two separate sheets of felt, and cement them together and to the backing, or it may be made by manual labor.

It has been found in the use of a single sheet of felt, provided with a water-proof backing,

that an injury or puncture of the latter would cause inconvenience or bad consequences—as, for instance, when the sheet of felt was employed as an inside sole for a shoe or as a means of applying a fomentation or hot liquid to the surface of the body of a person, and there should be a hole in the backing; such hole would be a means of conveying moisture or a liquid through the backing, and either into the felt or from the same to the clothes of the person. To prevent such results I make the fabric of two sheets of felt with a backing on one of them, and a sheet or film of water proof cement between the two. This interposed film is to arrest the flowage of liquid transversely through the two sheets of felt in case the backing may be injured. The thinner sheet of felt serves to prevent the backing, while being bent, from injuring the water-proof film between the two sheets of felt, and besides is advantageous in other re-

I do not claim a fabric composed of a single layer or mass of felt and a water-proof

backing applied thereto.

What I claim as my invention is— The improved felt fabric made of a backing and two sheets of felt, cemented together and arranged substantially as specified. ENOCH WAITE.

Witnesses:R. H. EDDY, F. P. HALE, Jr.