

(No Model.)

DE VER H. WARNER.
DRESS SHIELD.

No. 560,289.

Patented May 19, 1896.

Fig. 1.

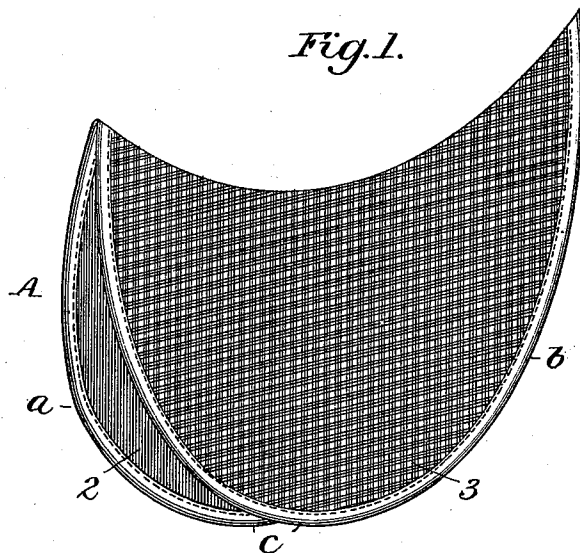


Fig. 2

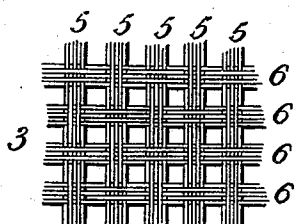


Fig. 3



Witnesses
John G. Hinkel
E. E. Ellis

Inventor
De Ver H. Warner
by *W. H. H. Warner*
Attorneys

UNITED STATES PATENT OFFICE.

DE VER H. WARNER, OF BRIDGEPORT, CONNECTICUT.

DRESS-SHIELD.

SPECIFICATION forming part of Letters Patent No. 560,289, dated May 19, 1896.

Application filed October 9, 1895. Serial No. 565,172. (No model.)

To all whom it may concern:

Be it known that I, DE VER H. WARNER, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Dress-Shields, of which the following is a specification.

As dress-shields are ordinarily constructed they consist of two crescent-like flaps connected together along one edge, each having an inner layer or fabric of rubber, gutta-percha, or other like tissue and an outer layer of plain muslin or linen fabric, the two layers being of the same shape and bound together at their meeting edges. There are objections to shields of this construction, which it is my object to overcome. In the first place, inasmuch as the muslin fabric is continuous and the same becomes wet with perspiration at any point, there is a tendency for the perspiration to travel by convection toward the edges of the fabric, and when in sufficient quantity to pass over and beyond the edges and to stain or wet the dress. This is a result of frequent occurrence. If the moisture collects, as it does at times, upon the face of the rubber tissue, it tends to run down to the lower edge of the shield and from the latter to the dress. Further, after the shield has become moist from perspiration, it takes a long time for it to become dry even after being removed from the person of the wearer. In order to overcome these objections and secure other advantages, I construct the shield as fully set forth hereinafter, and as illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a dress-shield embodying my invention, and Fig. 2 is a plan view of the fabric used in making the shields. Fig 3 is a cross-section showing an additional feature.

The shield A consists of the two sections a b, connected together and of the usual form. Each section a b consists of a tissue 2, of rubber or gutta-percha or equivalent waterproof material, and a fabric 3, the fabric and the tissue being bound together along the edge by the usual bindings c. The fabric 3, instead of consisting of a continuous sheet, as usual, is so constructed as to present a con-

stant succession of openings which break the continuity of the fabric. Thus, as shown, the warp-threads are divided into series 5 5 5, which series are separated by intervening spaces, and the weft-threads by series 6 6 6, likewise separated by intervening spaces, so as to constitute an open or net-like fabric. With a fabric of this character the shield has very important advantages over those of the ordinary construction. Thus if a drop of moisture and perspiration is deposited upon such a fabric at any point it has no tendency to run down toward the lower edge; but the openings in the fabric tend to retain it in the position where it was deposited, and by breaking the continuity of the fabric they also interfere with the convection of the fluid, so that there is much less tendency of the fluid to accumulate at any one point, and therefore it has less tendency to reach the edges of the fabric and run over the edges of the shield and spoil the dress. Further, I have also found that any perspiration deposited upon the face of the rubber film is much more readily taken up by the fabric having the series of openings as described than it is by a continuous fabric. As the movements of the wearer cause the fabric to move to and from the rubber tissue the air passes freely through the interstices, and there is a much more rapid evaporation than when the fabric is continuous, and I have further found that after the dress is removed this rapid evaporation causes the shield to become dry in a very short time, where otherwise it would remain damp or moist for hours after being removed from the person of the wearer.

Another advantage of the improved shield is its lightness, so that it is much less heating than one of the ordinary construction.

In this shield, as in others of ordinary construction, if it is desired to disinfect or sterilize or deodorize the perspiration I place a sheet x of fabric between the tissue and the fabric 3, which is impregnated with any suitable perfumery or disinfectant deodorizing material, and to fully carry out the purpose before set forth such sheet should be of like open-work as the fabric 3, being perforated or knit with open meshes, or woven with the cross-threads in series, as shown in the fabric 3.

Without limiting myself to the precise construction set forth, I claim as my invention—

A dress-shield having in each section a sheet or tissue of waterproof material, and
5 an open-fabric facing 3, at the side next the wearer, in which fabric the warp and weft threads are woven in separated series crossing each other to leave intervening spaces, whereby to prevent the rapid convection of
10 fluid along the fabric, facilitate evaporation,

and reduce the weight of the shield, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DE VER H. WARNER.

Witnesses:

F. S. ANDREWS,

G. S. HILL.