(No Model.)

E. N. GAILLARD.

DRESS SHIELD.

No. 480,574. Patented Aug. 9, 1892.

Fig I.

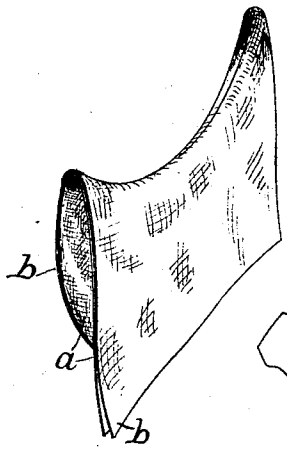


Fig II.

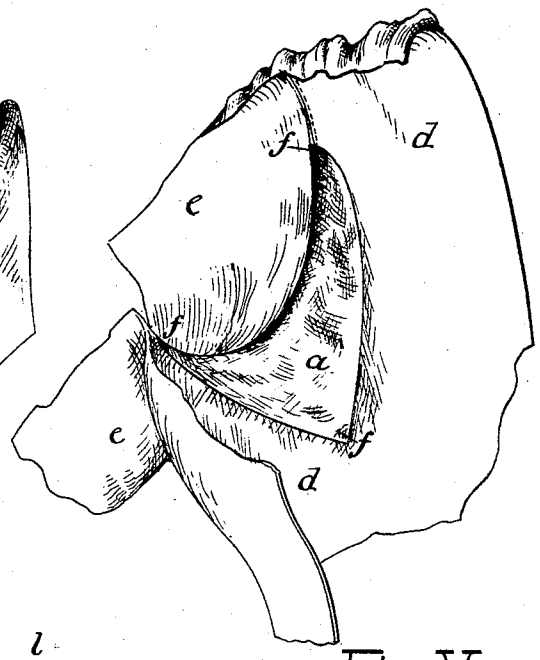


Fig III.

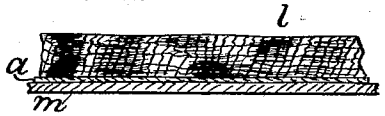


Fig IV.

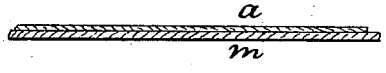
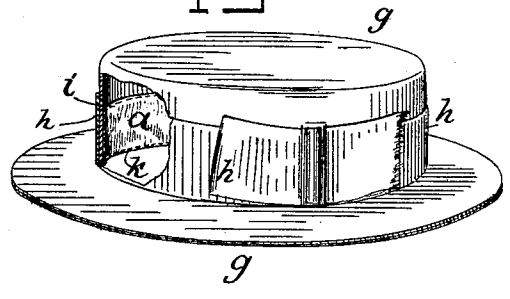


Fig V.



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UNITED STATES PATENT OFFICE.

ELLA N. GAILLARD, OF NEW YORK, N. Y.

DRESS-SHIELD.

SPECIFICATION forming part of Letters Patent No. 480,574, dated August 9, 1892.

Application filed May 10, 1892. Serial No. 432,436. (No model.)

To all whom it may concern:

Be it known that I, ELLA N. GAILLARD, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Dress-Shields; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to dress-shields which are worn to protect the clothing from perspiration. Heretofore india-rubber cloth and oiled silk have been used to intercept the passage of perspiration; but the india-rubber soon becomes very offensive from its inherent disagreeable odor, which is excited to unusual activity by warmth, and oiled silk becomes sticky in service, and the oil-scales off, rendering the silk pervious to perspiration and useless for this purpose. Neither india-rubber cloth nor oiled silk is ever entirely impervious to perspiration when in its best condition.

The object of this invention is to provide a dress-shield which shall be substantially impervious to perspiration when located between an article of clothing and the wearer, and which shall be light, flexible, yielding, smooth, inodorous, and agreeable to the wearer.

To this end my invention consists in a dress-shield made of such intestinal membranes of animals as may be dressed to a consistency like "gold-beater's skin," as hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure I represents a shield according to my invention adapted to be worn at the armpit. Fig. II represents my dress-shield in its simplest form located upon a fragment of a dress at the armpit. Fig. III represents in cross-section a portion of my dress-shield with the shield proper interposed between a cushion of absorbent material and a backing. Fig. IV is a cross-section of a portion of any dress-shield with the shield proper above the backing. Fig V represents a hat with a portion broken out to expose my shield, serving as a hat-lining.

The animal membrane with which I have experimented successfully is commercially known as "gold-beater's skin," which is described in Webster's dictionary as "the prepared outside membrane of the large intestine of the ox, used for separating leaves of metal in the process of gold beating." It is well known that portions of other internal organs besides the large intestine have been thus treated and used and that the intestines of calves and various animals other than the ox have served the same purpose, and I propose to use any intestinal membrane of animal kind which when properly treated shall prove suitable for dress-shields. It is a known property of such membrane that it permits to some extent the passage of moisture one way through it, and resists its passage the other way through, and I propose to apply this membrane to clothing with that side next to the wearer in which it will resist the passage of perspiration from the person to the clothing, thus forming a shield for the dress against perspiration. This membrane is a mere tissue so extremely thin and flexible that it requires some kind of a supporter to hold it extended in service.

In Fig. I, *a* represents the membrane or shield proper, and *b* is the supporter consisting of a covering of cloth secured to the membrane all around the edges. At one corner the drawings show the parts separated.

In Fig. II a portion of a dress in which *d* is the body and *e* the sleeve is shown with a piece of the membrane *a* secured over the region of the armpit by being tacked to the dress with stitches at the corners *f*. In this case the dress keeps the membrane extended in place.

In Fig. V, *g* represents a hat provided with the usual band *h* and with one of my protecting-membranes *a* to serve as a lining. In this case the membrane is held extended by the hat to which it is stitched at its upper edge *i* and lower edge *k*.

In some articles it is advantageous to interpose a sponge or cushion of absorbent material *l*, Fig. III, between the membrane *a* and the wearer, and a backing *m* may also be used, or the shield *a* may be placed next to the wearer and a backing *m* used to distend it; but in all cases the membrane is to be placed between the source of moisture and the clothing, with its resisting side outward or away from the clothing, to prevent the pas-

sage of moisture to the clothing. I do not believe that the skin or external covering of an animal is suitable for this purpose, and I do not claim it as my invention. Neither do I claim any animal membrane which has been so treated as to be or to become stiff, like parchment, in service. This prepared membrane is soft, flexible, entirely inoffensive, and conducive to health, emitting no perceptible odor, and causing no itching or irritation when worn against a person's skin, as in hat-linings, and its smoothness renders it an excellent shield to interpose where the clothing chafes the wearer, because it prevents the clothing in such places from becoming wet and stringy.

For the purposes of my claim in this case I term the described membrane as "gold-beater's skin," because in practice that article would probably be the most generally used for these dress-shields, and by the term "gold-beater's skin" I mean any membrane of animal kind, which is like gold-beater's skin in respect to the qualities hereinbefore described as desirable in a dress-shield, and by a "supporter" I mean anything which will keep the membrane extended in position for service, and by the "resisting side" I mean that side of the membrane which when turned outward or toward the moisture, causes the membrane to resist the passage of moisture through it.

Having thus fully described my invention, what I believe to be new, and desire to secure by Letters Patent, is the following:

1. In a dress-shield, a supporter and gold-beater's skin attached thereto with the resisting side outward, substantially as described.

2. In a dress-shield, a supporter and gold-beater's skin attached thereto with the resisting side outward, and a cushion of absorbent material on the outer face of the skin, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ELLA N. GAILLARD.

Witnesses:
E. G. HARRISON,
W. REESE YOUNG.