

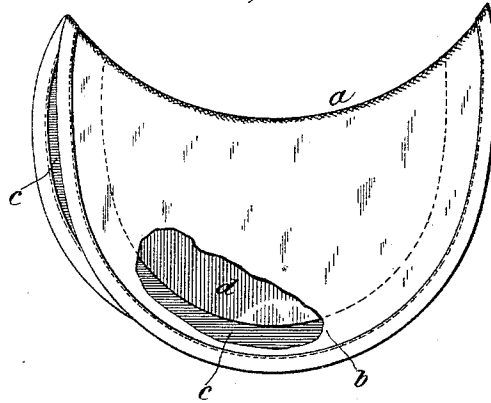
(No Model.)

E. E. PRAY.  
DRESS SHIELD.

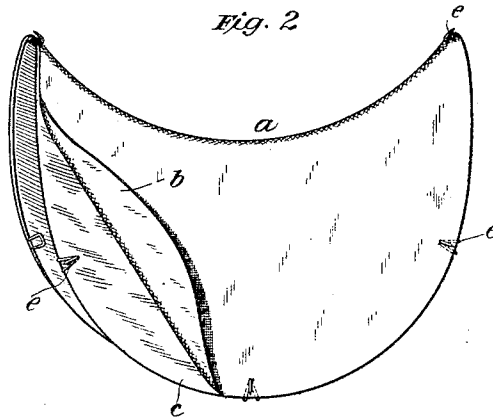
No. 467,898.

Patented Jan. 26, 1892.

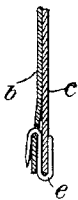
*Fig. 1*



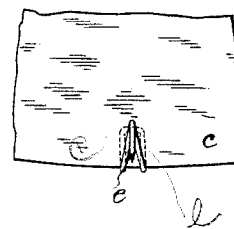
*Fig. 2*



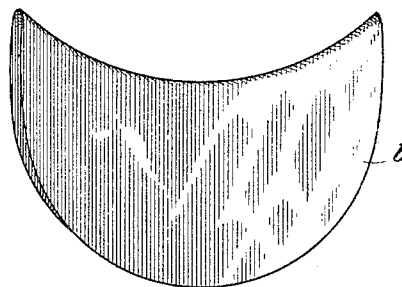
*Fig. 3*



*Fig. 4*



*Fig. 5*



Witnesses:

*Raphael Netter*  
*Charles H. Tucker*

*Edward E. Pray*  
Inventor.

*by Kerr & Curtis*  
Attorneys.

# UNITED STATES PATENT OFFICE,

EDWARD E. PRAY, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS,  
TO THE CROWN PHARMACAL COMPANY, OF NEW JERSEY.

## DRESS-SHIELD.

SPECIFICATION forming part of Letters Patent No. 467,898, dated January 26, 1892.

Application filed July 15, 1891. Serial No. 399,554. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD E. PRAY, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented a new and useful Improvement in Dress-Shields, of which the following is a specification.

My invention consists of a dress-shield having an odorless deodorizing antiseptic agent which is applied to or contained in the shield for the purpose of neutralizing or dispelling the disagreeable odor of perspiration, the said shield being also provided with an absorbent material which will absorb the moisture of the perspiration. Heretofore armpit shields have been saturated with deodorizing and perfuming substances, the perfume being used to suppress or conceal the odor of the deodorizing agent; but the resultant odor is often more offensive than that of perspiration and the article has not met public favor.

By my improvement I entirely suppress or obliterate all odor from the shield and preserve the shield in a pure and healthful condition. The absorbent substance is used on the side adjacent to the body of the wearer for the purpose of absorbing the moisture of perspiration and preventing it from running down on the inner garments. I prefer to use for this purpose sterilized absorbent cotton or lintine, such as is used in surgery, because of its freedom from microbes and on account of its great absorbent capacity. The deodorizing agent I prefer to use is boracic acid, because it is odorless and antiseptic and does not stain the garments nor produce any disagreeable or injurious medicinal effect on the wearer under the conditions of warmth and moisture incident to its use. On the contrary, it is non-irritant, and is used as a remedy for chafing. It is not subject to rapid or harmful chemical reactions or changes in this use and retains its efficiency as an odorless deodorizing agent for a long time. I can also use chloride of magnesia; but it is not as good as the boracic acid, because it is more liable to chemical reaction, not so enduring in its properties, and is slightly irritating.

In using the boracic acid, I make a saturated solution and immerse the pad or piece of absorbent material therein and then dry it

before it is inserted in the shield. The absorbent material, when used as a vehicle for the antiseptic agent alone, may be of any suitable fabric or material which will take up and hold the agent in sufficient quantity to deodorize the perspiration; but when it is designed to possess the additional function of absorbing and retaining the moisture its absorbent properties must be increased accordingly. It is better that the absorbent material should be sterilized.

I propose to use my improvement in armpit-shields, chest-protectors, and other forms of protectors for use with the garments of both sexes and for lining garments generally.

I do not desire to limit myself to the use of the odorless deodorizing agents I have mentioned as examples, but to include other like agents as are useful for that purpose.

To illustrate the application of my invention to a useful form, I will now describe it by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of an armpit-shield, partly cut away, illustrating my invention; and Figs. 2 to 5 illustrate the use of a detachable absorbent pad or layer.

In Fig. 1 the shield *a* is of a common form, having an outer side or layer *b* of linen or other suitable material and an inner side or layer *c* of rubber or other material impervious to moisture. It will be understood that the side *b* is adjacent to the body of the wearer and the side *c* to the outer garment. Between the layers *b c* I place a layer or piece *d*, of any suitable fabric or other absorbent material, which is impregnated with an odorless deodorizing agent. If preferred, however, the layer *d* may be omitted and the layer *b* composed of a proper absorbent fabric or material and saturated or impregnated with a deodorizing agent, as described.

In Figs. 2 to 5 I illustrate a shield in which the absorbent pad is detachable from the impervious or rubber layer, in order that it may be exchanged for a fresh pad or be removed in order to be again impregnated with the deodorizing agent in case the latter should, by continued use, lose its deodorizing efficiency. In these figures I show the impervious layer *c* as provided with permanently-se-

cured sharp hooks or pins *e* or other suitable fastening devices. The inner layer *b* is composed of a suitable absorbent material impregnated with the odorless deodorizing agent and is secured to the layer *c* by securing its edges on the fastenings *e*. I do not limit myself to securing the layer *b* to the layer *c* in this way, because it may be secured by pinning, basting, lacing, or in other detachable ways. With this construction the layer *b* may be renewed as often as desired, and, if preferred, the layer *c* may be sewed or otherwise secured to the dress or other garment, so as to remain permanently in place.

15 If the absorbent material is designed to have the additional function of taking up and retaining the moisture of perspiration, and thereby protecting the inner garments of the wearer, the absorbent layer should have a correspondingly-increased power and capacity of absorption. In this case I prefer to use a sterilized material, such as sterilized absorbent cotton or lintine or other similar material.

25 What I claim as my invention is—

1. A shield for protecting garments, provided with an odorless deodorizing antiseptic agent, substantially as and for the purposes described.

2. A shield for protecting garments, having a layer of material impervious to moisture and a layer of absorbent material impregnated with an odorless deodorizing agent or substance, substantially as and for the purposes described. 35

3. A shield for protecting garments, having a layer of absorbent material impregnated with boracic acid, substantially as and for the purposes described.

4. A shield for protecting garments, having a layer of material impervious to moisture and a layer of sterilized highly-absorbent material impregnated with an odorless deodorizing agent, substantially as and for the purposes described. 45

5. A shield for protecting garments, having a layer of material impervious to moisture and a detachable layer of absorbent material impregnated with an odorless deodorizing agent or substance, substantially as and for the purposes described. 50

In testimony whereof I have hereunto set my hand this 13th day of July, 1891.

EDWARD E. PRAY.

Witnesses:

ROBT. F. GAYLORD,  
THOMAS B. KERR.