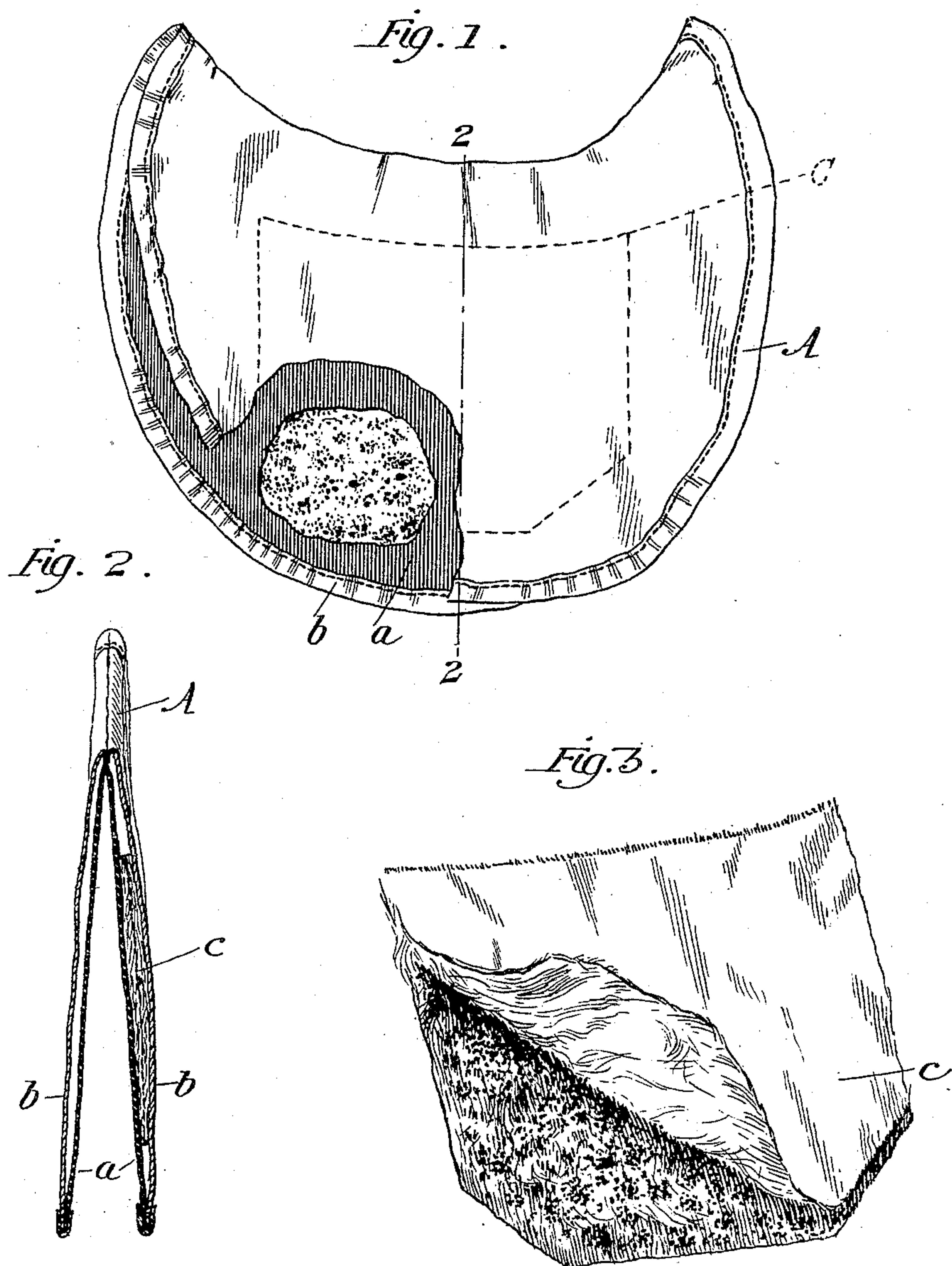


(No Model.)

M. E. CRANDAL & E. B. REEME.  
DRESS SHIELD.

No. 409,173.

Patented Aug. 20, 1889.



Witnesses:  
Harry T. Jones  
Albert H. Adams.

Inventors:  
Mary E. Crandal  
E. B. Reeme.

# UNITED STATES PATENT OFFICE.

MARY E. CRANDAL, OF HYDE PARK, AND EFFIE B. REEME, OF CHICAGO,  
ILLINOIS.

## DRESS-SHIELD.

SPECIFICATION forming part of Letters Patent No. 409,173, dated August 20, 1889.

Application filed April 25, 1888. Serial No. 271,782. (No model.)

*To all whom it may concern:*

Be it known that we, MARY E. CRANDAL, of Hyde Park, Illinois, and EFFIE B. REEME, residing at Chicago, in the county of Cook  
5 and State of Illinois, and citizens of the United States, have invented a new, useful, and Improved Dress-Shield, of which the following is a specification, reference being had to the accompanying drawings, in which—

10 Figure 1 is a side elevation with the front side partly broken away to show the inner face of the opposite side, which is also partly broken out. Fig. 2 is a section at line 2 2 of Fig. 1. Fig. 3 is a detail showing the manner of filling the pad with the mixture or  
15 powder.

This invention relates to shields to prevent discoloring or soiling of the garments at the armpits by perspiration. Heretofore shields  
20 have been made of rubber; but the use of rubber has been found very objectionable on account of its offensive odor, which is greatly intensified by perspiration and the heat of the body.

25 The object of this invention is to overcome the objection to the use of shields as heretofore made.

The object of our invention we accomplish in the manner and by the means hereinafter  
30 described and claimed.

In the drawings, A represents the shield, made, as shown, of two semicircular or crescent-shaped halves or divisions, joined together at the top, as shown in Figs. 1 and 2.  
35 Each half or division is made in a sack or bag form. The inner side *a* of each sack or bag is made of rubber or rubber-cloth, and the outer side *b* of each sack or bag can be made of rubber or of any textile fabric, the two  
40 sides *a b* being sewed or secured together at their edges.

An odorous compound, hereinafter described, is placed in the sacks or bags forming the shield A, which can be loosely in-

closed, as shown on the left-hand side of Fig. 45 2, or can be applied to a pad *c*, made of cotton-batting or other suitable material, which can be removably secured in the sacks or bags. The compound is best applied to the pad *c* by opening and putting the compound  
50 in the pad, as shown in Fig. 3. By putting the powder or compound in the pad *c* it is less liable to mass at the edges of the sack.

We use a compound that will volatilize at the temperature of the body; and for the best  
55 results we use the following composition, in about the following proportions: sandal-wood, one pound; cascarilla, one-half pound; vetivert, one-eighth pound; benzoin, one-half pound; myrrh, one-fourth pound; tonqua, one-  
60 eighth pound. To this we add the following ingredients to produce the desired odor, to wit: musk, (optional,) fifteen grains; rose-oil, three drops, and merole-oil seven drops.

In use, the heat of the body volatilizes the  
65 odorous principles of the compound, which neutralizes the odors of the perspiration and of the rubber of the shield. The odor of the composition may be varied by changing the  
70 essential oils used.

The shield shown is the best form known to us; but we do not confine ourselves thereto, nor do we confine ourselves to the exact proportions of ingredients mentioned.

What we claim as new, and desire to secure  
75 by Letters Patent, is—

As an improved article of manufacture, a dress-shield containing a volatilizable compound of sandal-wood, cascarilla, vetivert, benzoin, myrrh, tonqua, and essential oils to  
80 neutralize the odors of the perspiration and of the material of the shield, substantially as described.

MARY E. CRANDAL.  
EFFIE B. REEME.

Witnesses:

HARRY T. JONES,  
ALBERT H. ADAMS.