

No. 703,290.

Patented June 24, 1902.

H. K. MULFORD.  
VACCINATION SHIELD.  
(Application filed Nov. 2, 1901.)

(No Model.)

Fig. 1.

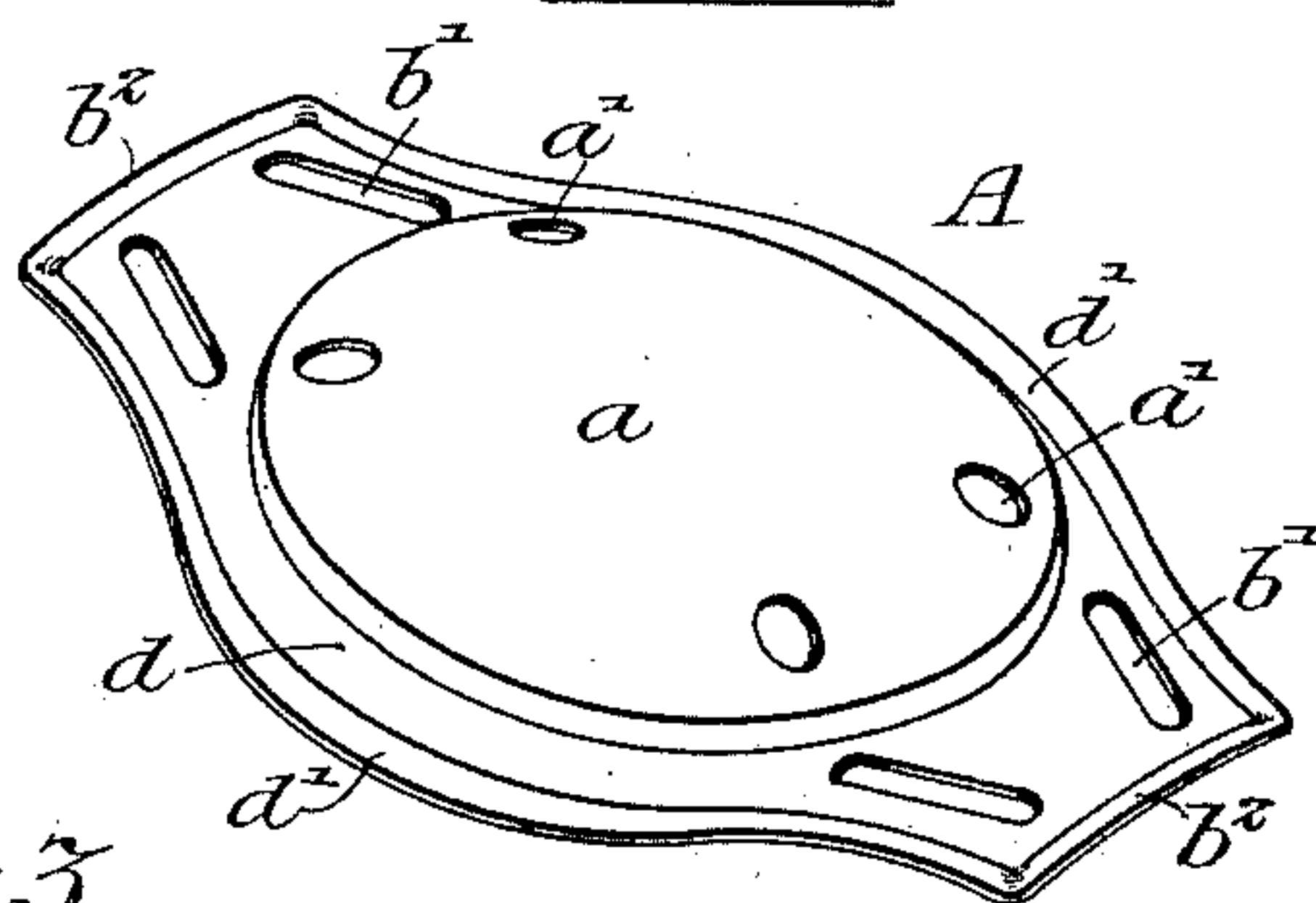


Fig. 3.

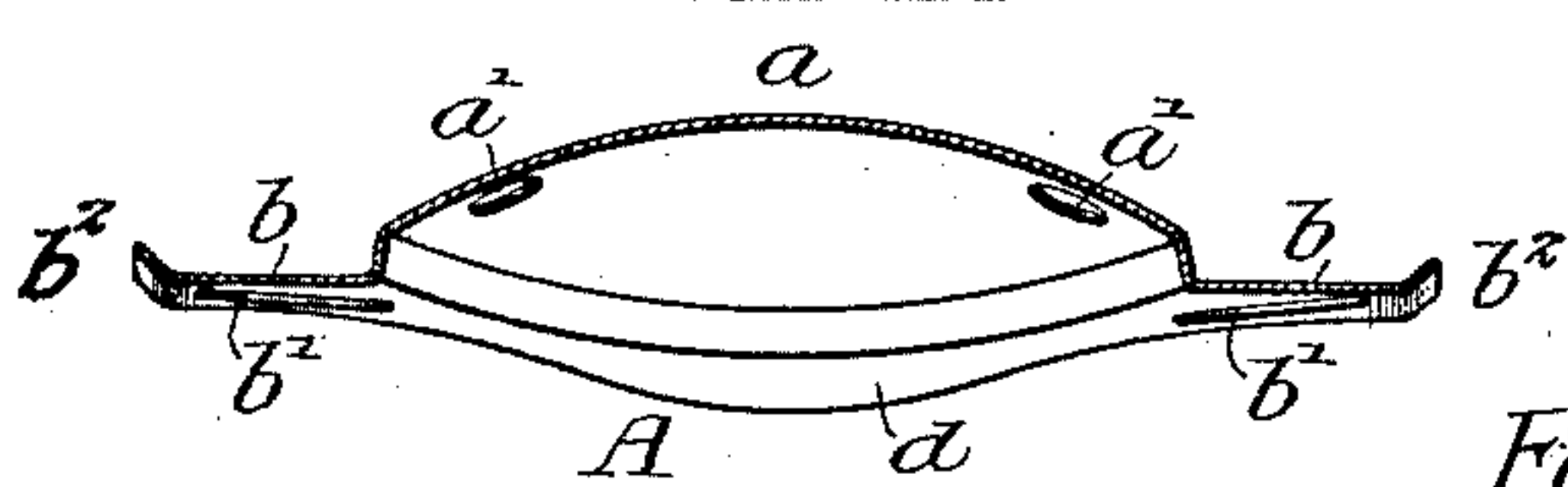


Fig. 4.

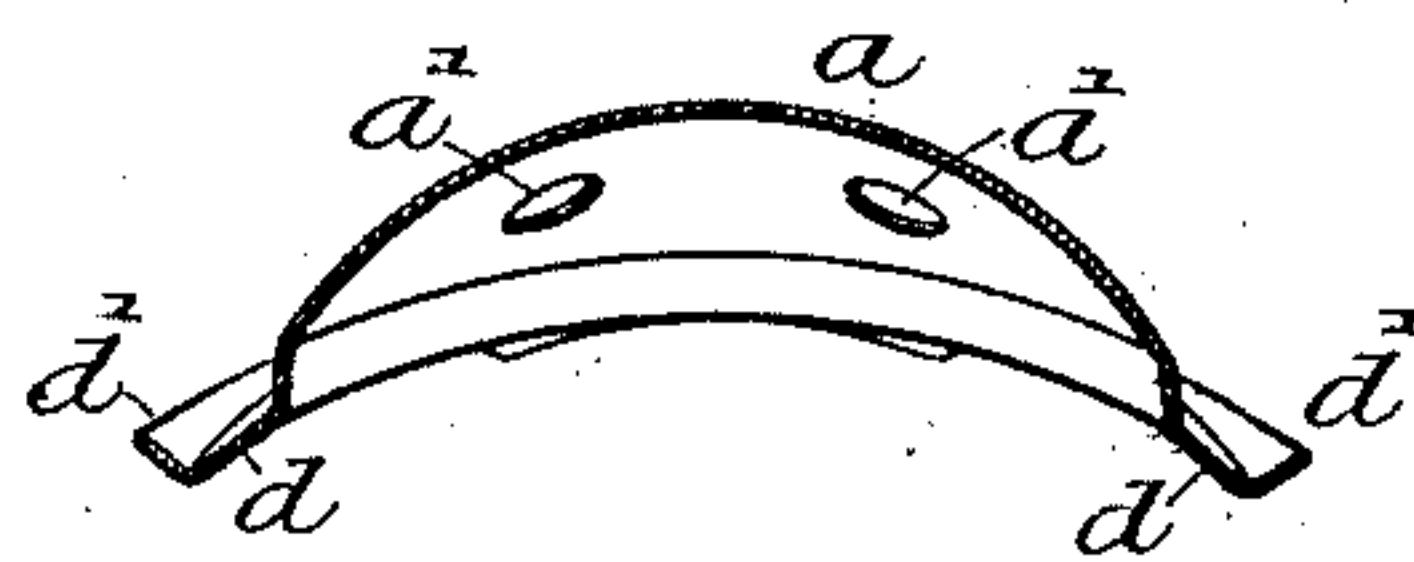


Fig. 2.

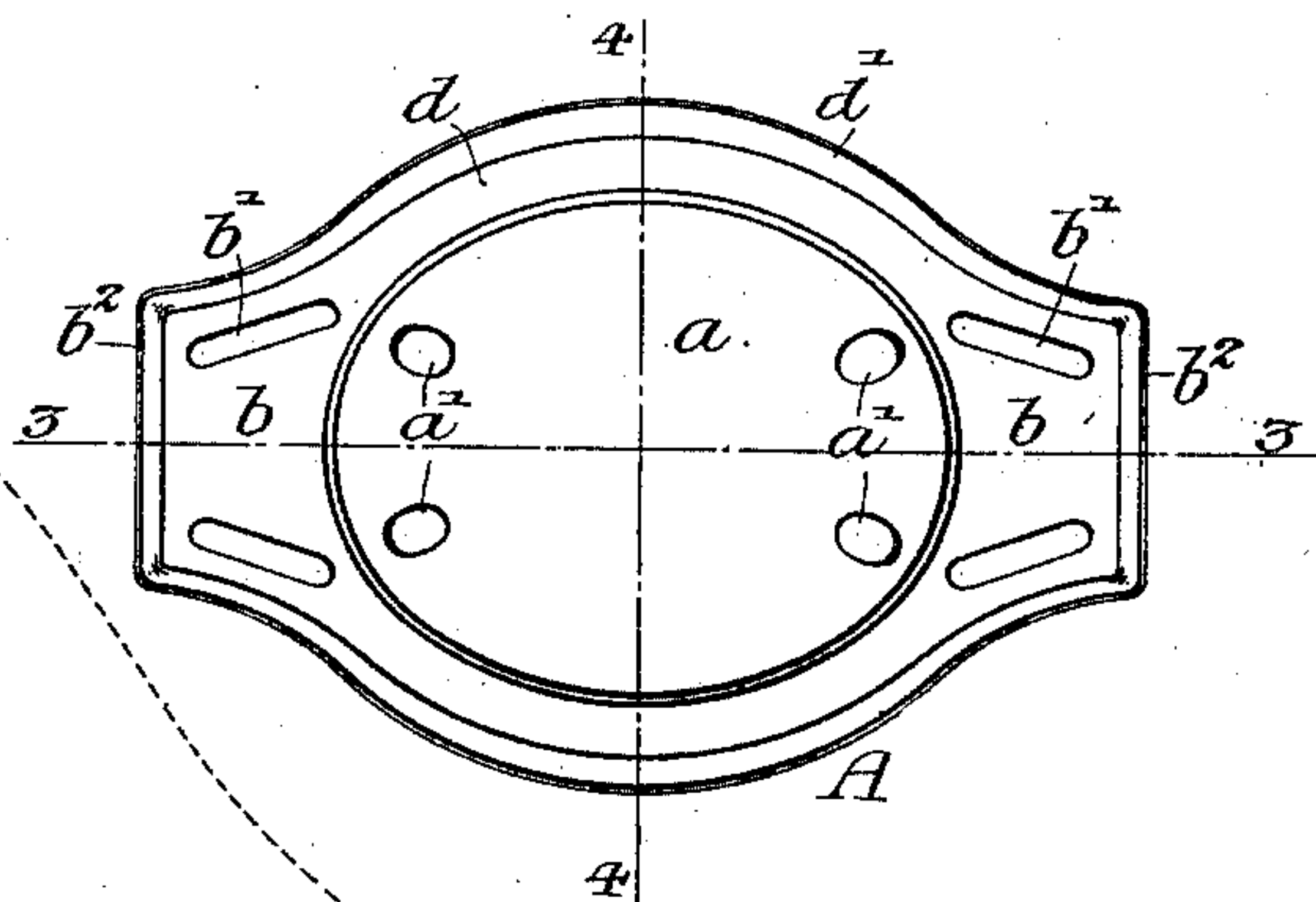
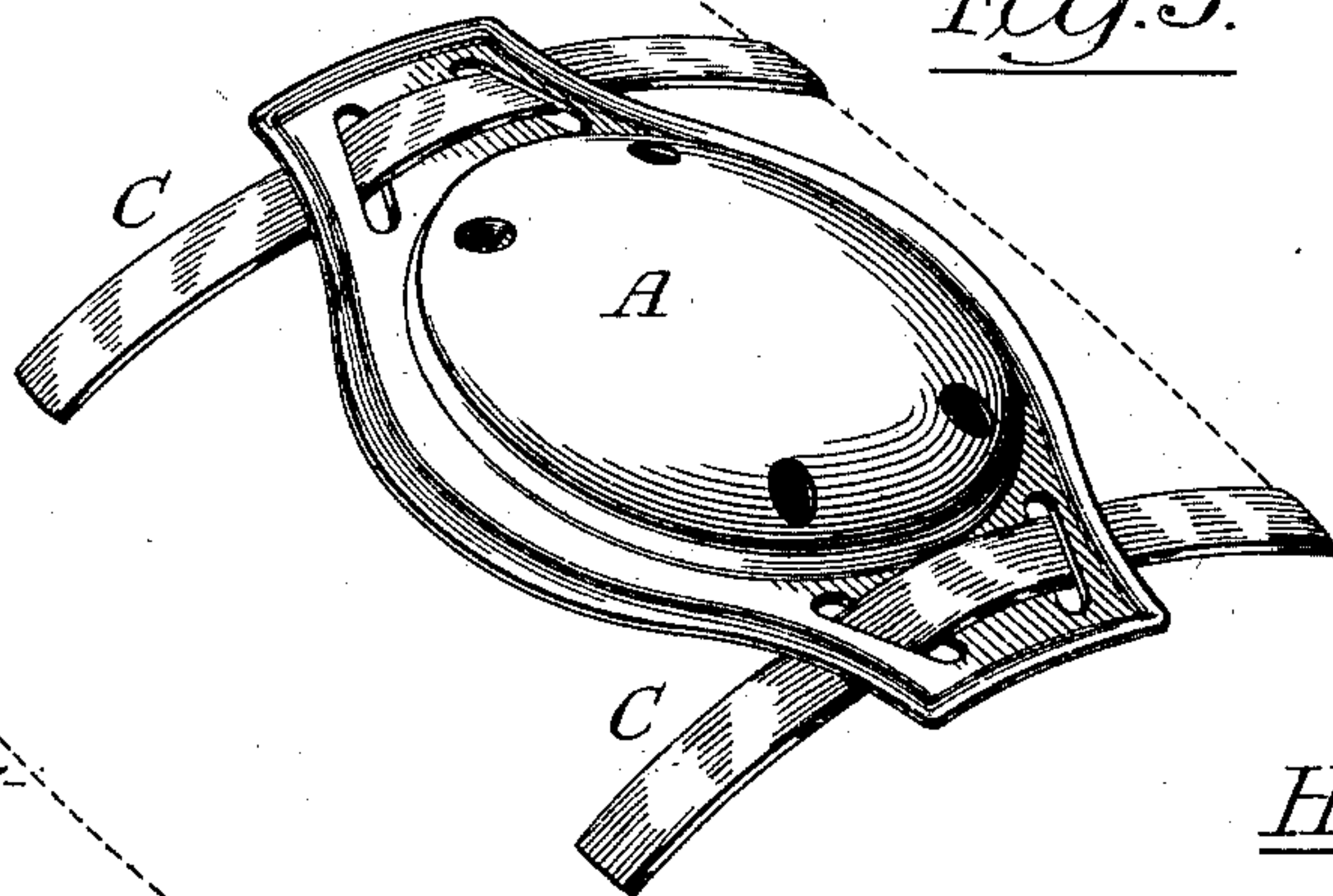


Fig. 5.



Witnesses:

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# UNITED STATES PATENT OFFICE.

HARRY K. MULFORD, OF PHILADELPHIA, PENNSYLVANIA.

## VACCINATION-SHIELD.

SPECIFICATION forming part of Letters Patent No. 703,290, dated June 24, 1902.

Application filed November 2, 1901. Serial No. 80,906. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY K. MULFORD, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain  
5 Improvements in Vaccine-Shields, of which the following is a specification.

The object of my invention is to make a shield for scarified or wounded surfaces caused by vaccination that will readily conform to the shape of the arm or other portion of the body to which it is applied and to provide means whereby the shield can be held in place by adhesive material applied to the skin distant from the vaccination or wounded area.

15 By my invention I dispense with all felt surfaces and make a shield that can be readily washed, quickly applied and removed, and which will allow for examination of the wound and also for thorough ventilation of the inclosure.

In the accompanying drawings, Figure 1 is a perspective view of my improved shield. Fig. 2 is a plan view. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse sectional view, and Fig. 5 is a view of the shield in position attached to the arm.

A is the body of the shield. This shield may be made of any suitable material, preferably of transparent celluloid, so that the  
30 scarified surface can be readily seen through the shield. The center portion *a* of the shield is dome-like and has perforations *a'*, so that the inclosure can be thoroughly ventilated. On each end of the shield are extensions *b b*, and in these extensions are slots *b'*, through  
35 which the securing-tapes C may be passed, as illustrated in Fig. 5. These tapes are preferably made of sticking-plaster or other adhesive material, so that they can be readily applied to the arm or other portion of the body where it is desired to use the shield. The tapes will hold the shield rigidly in position, and yet can be readily detached when it is desired to remove the shield. On each side  
45 of the shield is a flange *d*, which rests upon the arm, and the outer edge *d'* of this flange is turned up, so that the bearing edge will be rounded. The ends *b<sup>2</sup>* of the extension *b* are also turned up for a like purpose.

50 It will be understood that while I prefer to make my shield of transparent celluloid it may be made of any suitable material with-

out departing from the main feature of my invention.

It will be seen by referring to Fig. 5 that the points where the adhesive strips are attached to the arm are distant from the vaccinated area, so that by the use of my improved shield the irritation of the vaccinated area is not increased, and the small amount  
60 of skin-surface to which the adhesive material is attached lessens the inflammation of the vaccination.

The entire absence of felt and the material usually employed in the manufacture of shields is of the utmost importance, since they rub off and become a source of infection to the vaccination.

By the use of celluloid the shield can be readily washed and reapplied, and the wound, as well as the entire surface around it, can be examined without removing the shield.

While I have described my invention particularly as a shield for vaccinated surfaces, it will be understood that it can be used as a protector for other wounds or inflamed parts.

I claim as my invention—

1. As a new article of manufacture, an integral shield having a dome-like center with an inclined annular wall, end extensions to which securing means may be applied, said end extensions having slots arranged at divergent angles, substantially as described.

2. As a new article of manufacture, an integral shield having a dome-like portion with an annular inclined wall, end extensions to which securing means may be applied, said extensions having slots arranged at divergent angles for the passage or reception of such securing means, and an upturned flange at the outer ends of said extensions.

3. As a new article of manufacture, an integral shield having a dome-like center with an annular inclined wall, end extensions having divergent slots through which may be passed the securing means, and an upturned flange at the sides of said shield, said shield having a portion between the flange and the annular wall adapted to rest upon the body of the user.

4. As a new article of manufacture, an integral shield having a dome-like center with an annular inclined wall, end extensions having slots arranged at a divergent angle adapt-

ed to receive securing means, and an up-  
turned flange surrounding said shield, sub-  
stantially as described.

5 5. As a new article of manufacture, an in-  
tegral shield having a dome-like center with  
an annular inclined wall, end extensions hav-  
ing slots arranged at a divergent angle for the  
reception of securing means, said dome-like  
center having ventilating-openings adjacent  
10 to its annular wall, and said shield being

made of transparent celluloid, substantially  
as described.

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

HARRY K. MULFORD.

Witnesses:

WILL A. BARR,  
JOS. H. KLEIN.