Sept. 22, 1925. 1,554,692

R. S. SHANE

OBSTETRIC DRAPE

Filed June 22, 1925

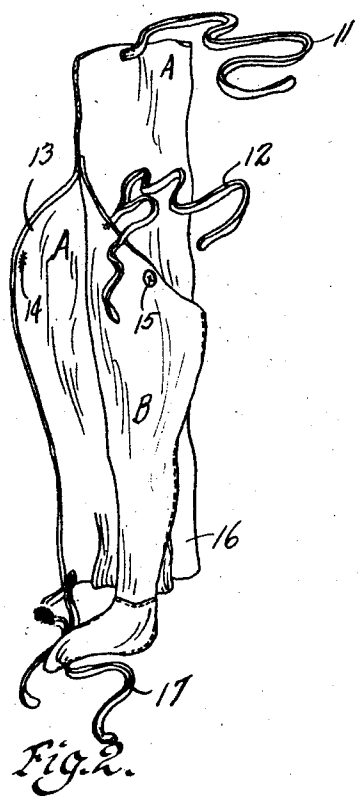

Fig. 2.

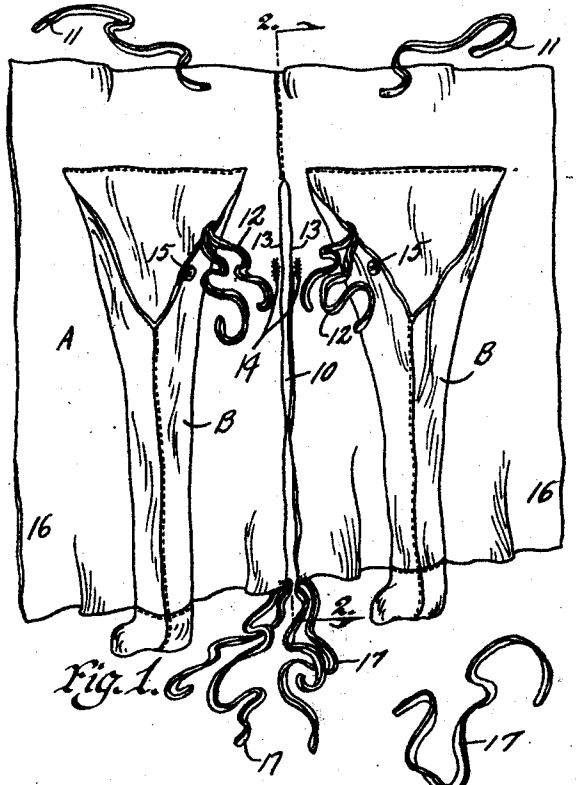

Fig. 1.

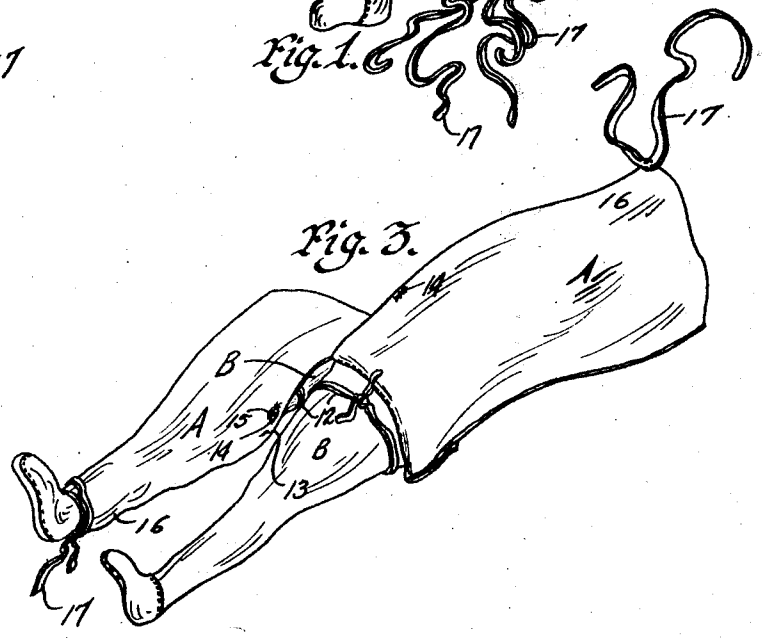

Fig. 3.

Witness

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UNITED STATES PATENT OFFICE.

ROBERT S. SHANE, OF PILOT MOUND, IOWA.

OBSTETRIC DRAPE.

Application filed June 22, 1925. Serial No. 38,727.

To all whom it may concern:

Be it known that I, ROBERT S. SHANE, a citizen of the United States, and a resident of Pilot Mound, in the county of Boone and State of Iowa, have invented a certain new and useful Obstetric Drape, of which the following is a specification.

My invention has to do with a drape or shield designed to cover the anterior part of the body of a woman in confinement.

The purpose of my invention is to provide such a drape whereby the body may be properly covered, which is provided with means for holding it properly adjusted and properly in place during labor without interfering with free motion on the part of the patient, and which further is provided with parts so arranged that one sterile surface may be exposed during the first stage of labor and another sterile surface may be exposed readily and easily during the second stage of labor without the necessity for removing or changing the drape.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my drape, whereby the objects contemplated are attained, as hereinafter more fully set forth, ponted out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1 shows a plan view of the inner or under side of the drape in one of its positions.

Figure 2 shows a side elevation of the same; and

Figure 3 is a perspective view of the front of the drape, a part thereof being shown in position for exposing one sterile surface and a part in position for exposing another sterile surface for illustrating the operative functions of the drape.

It is a known fact that thousands of women die and thousands more are seriously crippled for life or for a long time as result of infections occurring during childbirth.

It is my purpose to reduce the danger and likelihood of such of infections by providing an obstetric drape of a construction, which will now be described and having advantages in its shape and manner of use, which will be hereinafter explained.

The drape comprises what may be called an apron portion indicated generally by the reference character A and leg or shield portions indicated generally by the reference character B.

The apron A has its upper portion adapted to drape the upper abdomen and is slit for the greater portion of its lower length, as indicated at 10 in Figure 1.

Some suitable means is provided for securing the upper portion of the apron to the patient at the waist. In the particular form of the invention illustrated in the drawings, I have shown secured to the upper portion of the apron A, strings or braids or the like 11, which may be conveniently tied around the waist.

Secured to the under side of the apron on opposite sides of the vertical center thereof are the upper parts of legs B, which form protecting shields for the entire anterior lower extremities of the patient.

It will be noted that the anterior parts of the upper edges of the legs or shields B only are secured to the posterior surface of the apron portion A.

The shields or legs B may be open at their rear parts at their upper ends for some distance from the top as shown in Figure 1.

It is of considerable importance that the drape should be snugly secured around the thighs at the groins in order to prevent its displacement and for this purpose suitable tie strings 12 are provided. These tie strings may be differently attached and arranged, but should be so secured to the drape that it may be snugly secured to both thighs at the groins. In the particular form here shown, the tie strings 12 are secured to the inner upper parts of the shield B.

I preferably provide some means for connecting the edges 13 of the apron portion A near the upper end of the slit 10 to the shields B. As here shown, the apron portion is provided with buttonholes 14 and the shields B with the buttons 15.

The lower portions of the apron part on opposite sides of the slit 10 are indicated generally in the drawings by the reference numeral 16.

These lower portions of the apron A are also provided with means by which they may be fastened to the patient, such for instance as the tie strings 17.

The construction of the drape will be made clearer and its advantages will appear from the following description of the practical use of the drape.

In the use of this drape, the drape is placed over the anterior body of the patient and the tie strings 11 are carefully and snugly tied around the waist with the feet, legs and thighs covered by the shields B.

The tie springs 11 are preferably so arranged that they are tied or knotted at the patient's left side.

The tie strings 12 are tied around the respective thighs.

The portions 16 of the apron member A are left in their lower position and are snugly tied around the ankles of the patient by means of the tie strings 17 as shown at the left-hand part of Figure 3.

The inner edges of the portions 16 near the upper end of the slit 10 may be fastened back to the shields B by means of the buttons 15 and buttonholes 14 as illustrated at the left-hand part of Figure 3.

Thus the entire lower, anterior part of the patient is covered and protected.

It will be noted that there are a number of advantages of construction in this drape and the manner of securing it to the body.

During the first stage of labor, the motions of the patient tend to throw off any ordinary drape and tend to drag the drape from the unsterilized area onto the external parts that have been sterilized thus causing contamination and causing extra work to prevent infection.

It is therefore seen that this drape snugly secured at the waist, at the thighs, and at the ankles will be held in place against any accidental displacement during the first stage of labor and yet will not interfere with the free movement of the patient.

At the same time, it will be seen that the lower anterior portion of the body of the patient is entirely covered by sterilized drape.

During the first stage of labor, frequently the exposed surface, which is the outer side of the apron may become contaminated.

It is highly desirable that a fresh, completely sterile surface should be provided and exposed for the second stage of labor, and that any contaminated surface should be removed from where it is likely to cause infection, without the necessity of removing or changing the drape.

These desirable results are secured with my drape in the following manner:

At the proper time, the upper central portions of the parts 16 are unbuttoned, the tie strings 17 are untied, and the portions 16 are simply swung up over the upper body of the patient and the tie strings 17 may be fastened around the neck to hold the portions 16 up and out of the way.

A fresh untouched sterile surface is then exposed over the upper part of the body of the patient and the uncontaminated surfaces of the shields B are then exposed over the lower extremities.

Thus fresh, sterile surfaces of the drape are afforded and are exposed just at the beginning of the second stage of labor and the delivery can be completed with a minimum danger of infection.

This drape is a single complete unit, very compact for transportation and storage so that it has advantages over the numerous sterile sheets, leggings and napkins ordinarily carried to the home or lying-in hospital, in the saving of time, space and the handling of many supplies.

Another advantage in this drape is that it is very inexpensive. It can be sterilized and used over and over again. Only one article need be sterilized for affording complete protection during confinement.

It would be possible to embody the vital features of this invention in a drape modified as to details with relation to the particular form of drape illustrated in the drawings, and it is my purpose to cover by my claims, any structure, however, modified, which embodies the real spirit and purpose of the invention here disclosed.

I claim as my invention:

1. In an obstetric drape, an apron portion having a central, vertical slit in its lower part, leg and thigh shields secured at their upper anterior parts to the posterior side of the apron portion, means for securing said drape to the patient at the waist and at the groins, and means at the lower ends of the apron parts for securing said parts to the patient, whereby said parts may be secured to the ankles of the patient or to the upper portion of the body of the patient.

2. In an obstetric drape, an apron portion bifurcated to provide two lower parts, leg members secured at the anterior parts to the posterior side of the apron portion, means for securing the upper part of the apron portion to the waist of a patient, means for securing said drape to the patient at the groins, and means whereby the bifurcated parts of the apron may be secured to the ankles of the patient covering said legs or may be secured to the upper portion of the body of the patient.

3. In an obstetric drape, an apron portion, bifurcated to provide two lower parts, leg members secured at the upper anterior parts to the posterior side of the apron portion, means for securing the upper part of the apron portion to the waist of a patient, means for securing said drape to the patient at the groins, and means for detachably connecting the bifurcated parts of the apron at their inner edges to said legs.

Des Moines, Iowa, June 11, 1925.

ROBERT S. SHANE.