No. 748,336. PATENTED DEC. 29, 1903.

C. BABION.

ABDOMINAL BANDAGE.

APPLICATION FILED MAY 12, 1903.

NO MODEL.

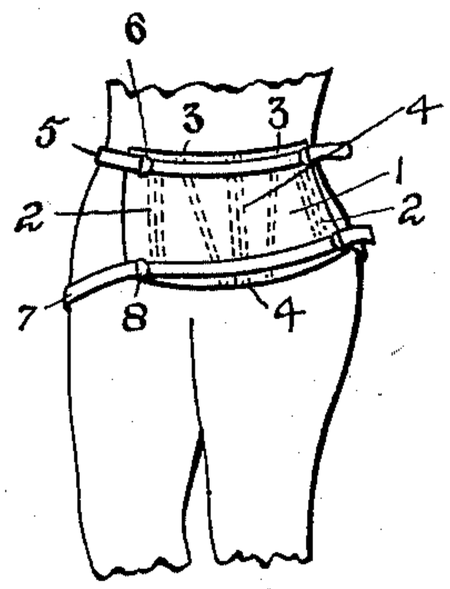

FIG. 1.

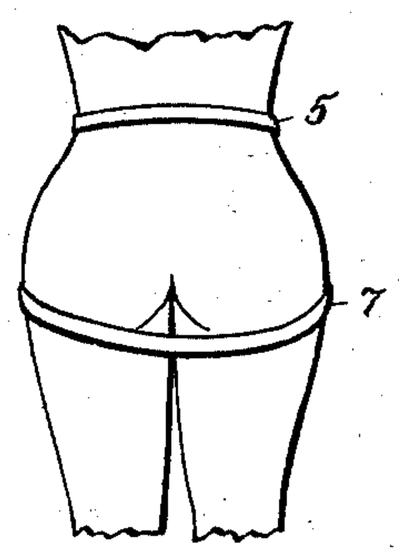

FIG. 2.

FIG. 3.

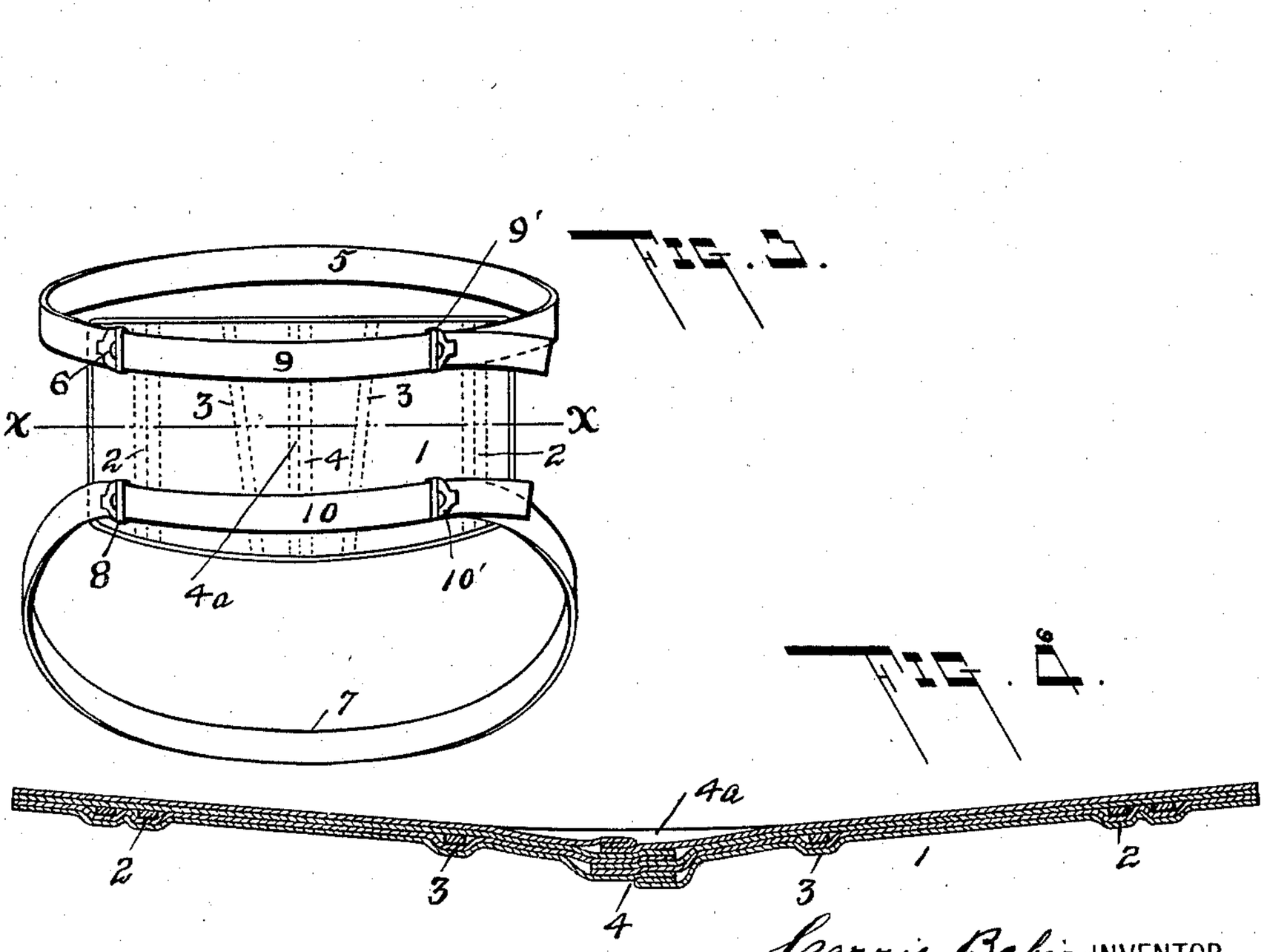

FIG. 4.

WITNESSES:

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No. 748,336. Patented December 29, 1903.

UNITED STATES PATENT OFFICE.

CARRIE BABION, OF CHESANING, MICHIGAN.

ABDOMINAL BANDAGE.

SPECIFICATION forming part of Letters Patent No. 748,336, dated December 29, 1903.

Application filed May 12, 1903. Serial No. 156,795. (No model.)

To all whom it may concern:

Be it known that I, CARRIE BABION, a citizen of the United States, residing at Chesaning, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Abdominal Bandages; 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 is an abdominal bandage; and its objects are to produce an abdominal support and bandage that shall be of light weight, simple in construction, and close fitting, to approach as near as is possible in an artificial appliance to the elastic supporting action of a natural healthy abdominal wall and skin, to permit freedom of movement of limbs and body without displacing, creasing, or rolling the bandage. This bandage is especially well adapted for use in caring for cases of laparotomy and colotomy. In colotomy cases the artificial anus frequently protrudes slightly, and this bandage embodies means for supporting with uniform pressure not only the curved surface of the abdomen, but also to support with the same amount of pressure the protruding artificial anus. Means is also provided for increasing or decreasing the uniform pressure of the bandage, as desired.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a front view showing the bandage in use. Fig. 2 is a rear view. Fig. 3 is an enlarged front view; and Fig. 4 is a horizontal section on the line *x x* of Fig. 3, enlarged to show the layers.

As is clearly shown in the drawings, the device consists in a support or shield 1 of cloth or other flexible fabric. This shield is preferably of approximately rectangular shape and of sufficient size to almost cover the abdominal area. It is made of two or more layers of cloth stitched together. Near the two upright edges are upright stiffening-strips 2 2 of featherbone or other equivalent material. These strips are stitched between the cloth layers and are sufficiently stiff to preserve the full spread height of the bandage and prevent its rolling in use, yet sufficiently flexible to conform readily to the curve of the abdomen. Other upright stiffening-strips 3 3, similarly secured between the cloth layers, are located near the middle of the shield. These strips are farther apart at their upper than at their lower ends to more readily conform to the abdominal shape and to preserve the smoothness and skin-like flexibility of the shield.

Between strips 3 3 is a vertical plait 4, stitched in the fabric. The plait has a little extra fullness in the middle of its length, producing a slight concavity 4^a in the shield between the strips 3 3 to fit the artificial anus produced by colotomy. The plait 4 also imparts required additional stiffness over the annular opening.

The manner of fastening the shield in place is as follows: An elastic band 5 is fixed at one end to an upper corner of the shield and passing around the waist is secured with any desired degree of tension to the opposite corner of the shield by a suitable clamp or buckle 6. An elastic band 7, fixed at one end to a lower corner of the shield, is passed around the hips beneath the buttocks and secured to a clamp or buckle 8, fixed to the opposite lower corner. It is found in practice that band 7 passing beneath the buttocks is not at all liable to displacement and that its tension, and consequently its pull, on the lower corners of the shield remains practically uniform regardless of the position or movement of the wearer's body.

To further assist in imparting to the shield structure ability to exert uniform yet yielding pressure as nearly as possible resembling the natural restraining tension of the natural abdominal wall and skin, I provide means for yieldingly reinforcing the upper and lower edges of the shield, as follows: An elastic band 9, extending across the upper edge of the shield, is secured thereto at both ends, the middle part of the band being free. The lower band 10 is similarly placed. The local tension in bands 9 and 10 can be adjusted by securing one end in a clamping-buckle 9′ or 10′, fixed to the shield. The bands 9 and 10 may be independent of the body-bands 5 and 7, if desired; but I prefer to make bands 5 and 9 in one piece and bands 7 and 10 integral. With this preferred construction the

band 5 is clamped by buckle 6 to maintain the desired tension around the waist, and its end 9 may then be secured to buckle 9′ to give the same or any other desired tension across the upper edge of the shield. The lower band, which may be similarly adjusted, serves not only to hold the shield in place, but also by the part 10′ acts as an upward support for the weight of the abdomen.

What I claim as my invention, and desire to secure by Letters Patent, is as follows:

1. An abdominal bandage comprising a rectangular shield of flexible material adapted to cover the abdominal area, said shield comprising layers of material stitched together; upright strips of flexible material sewed between said layers near the side edges of said shield; a pair of diagonally-arranged strips of flexible material sewed between said layers near the middle of the shield, the upper ends of said strips being farther apart than the lower ends; an upright stiffening-plait formed in the shield between said diagonal strips, the plait being fuller in the middle than at its ends to form a concavity in the shield; together with an elastic waistband, adjustably secured to the upper corners of the shield; an elastic band integral with the waistband and extending across the upper face of said shield; clamps for fixing its tension independent of the waistband; an elastic band adjustably secured to the lower corners of the shield and adapted to pass around beneath the buttocks; and an elastic band integral with the buttock-band and extending across the lower face of the shield; and a clamp for said band to hold it in tension independent of the buttock-band.

2. In an abdominal bandage; a rectangular shield of flexible material comprising layers of material stitched together; upright strips of flexible material fixed to the shield near its sides; diagonally-arranged strips of flexible material fixed to the shield near its middle; an upright stiffening-plait; a concavity in the shield formed by said plait; a waistband and a buttock-band; elastic bands stitched across the upper and lower faces of said shield and having their ends respectively secured thereto.

3. In an abdominal bandage, a shield of flexible material composed of layers of material stitched together; upright strips of flexible material sewed into the shield near its sides; diagonally-arranged strips of flexible material sewed into the shield near its middle; an upright stiffening-plait between said diagonally-arranged strips; a waistband and a buttock-band each having extended ends adapted to be stretched across the upper and lower faces of said shield, and clamps carried by the shield whereby the tension of said ends may be regulated independent of the waist and buttock bands.

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

CARRIE BABION.

Witnesses:

CHAS. W. CHEENEY,

P. J. BABION.