

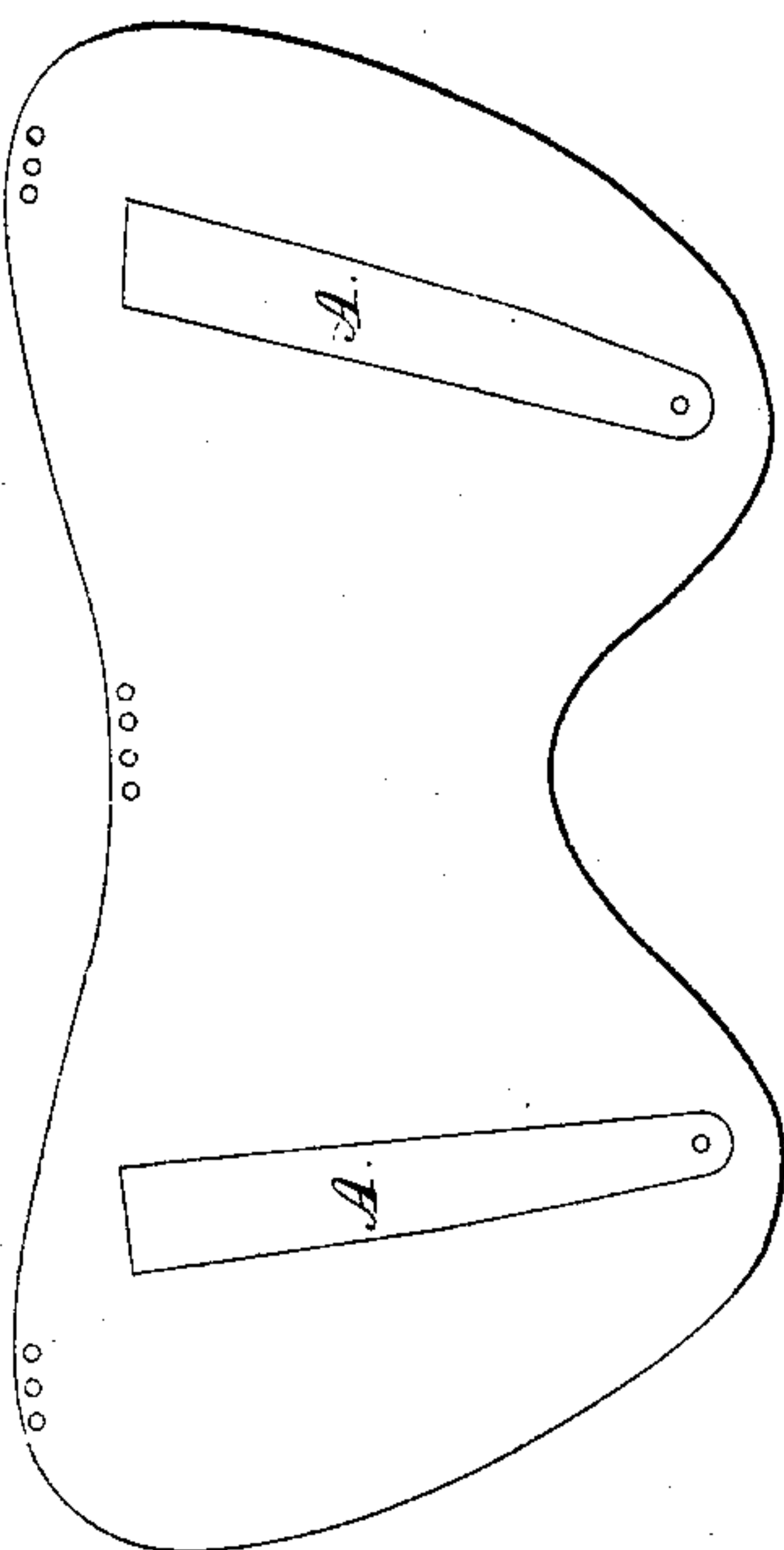
*L. D. Fleming,*

*Truss.*

*N<sup>o</sup> 4,336.*

*Patented Dec. 31, 1845.*

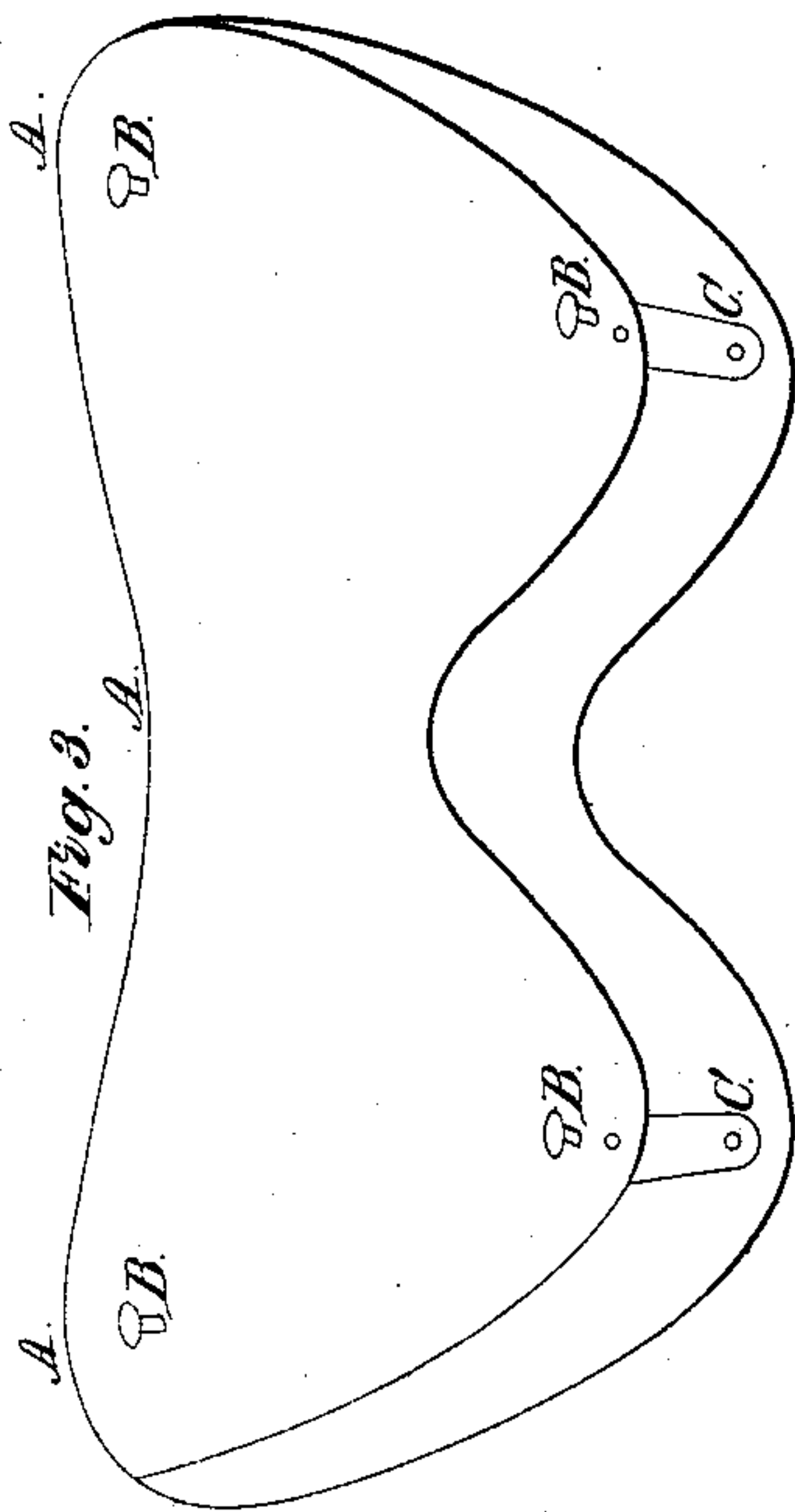
*Fig. 1.*



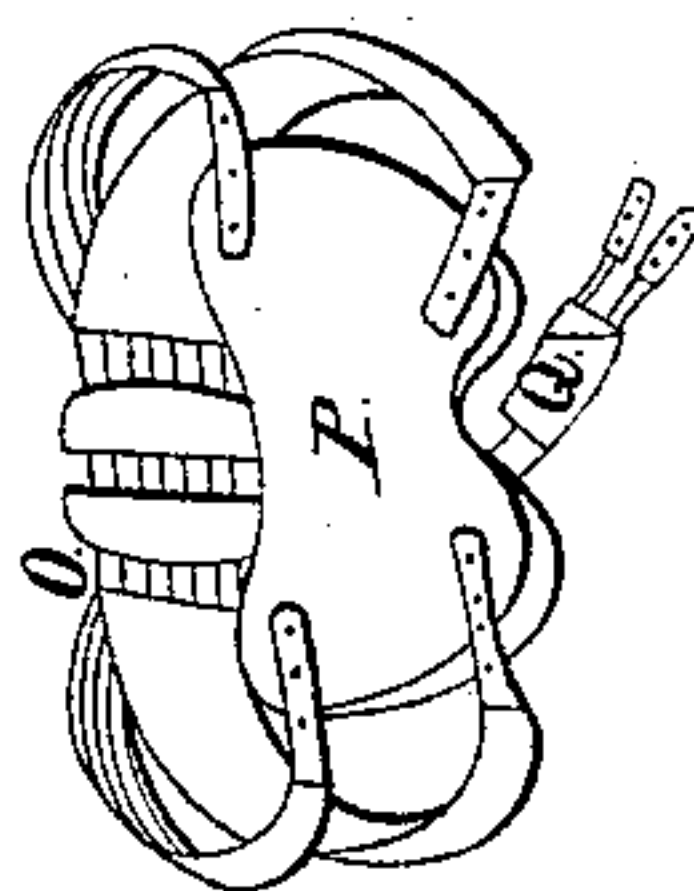
*Fig. 2.*



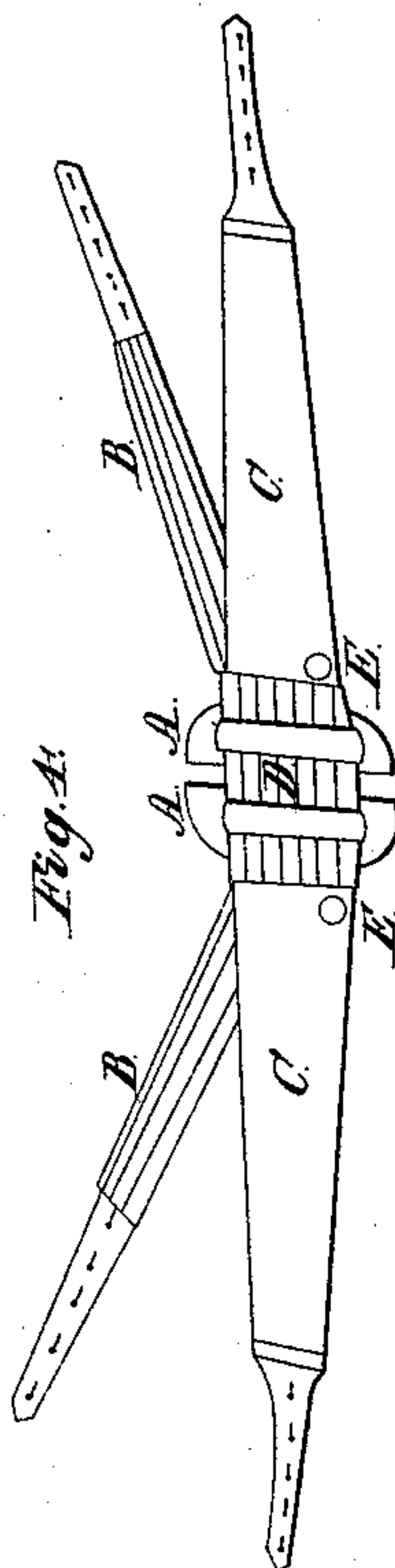
*Fig. 3.*



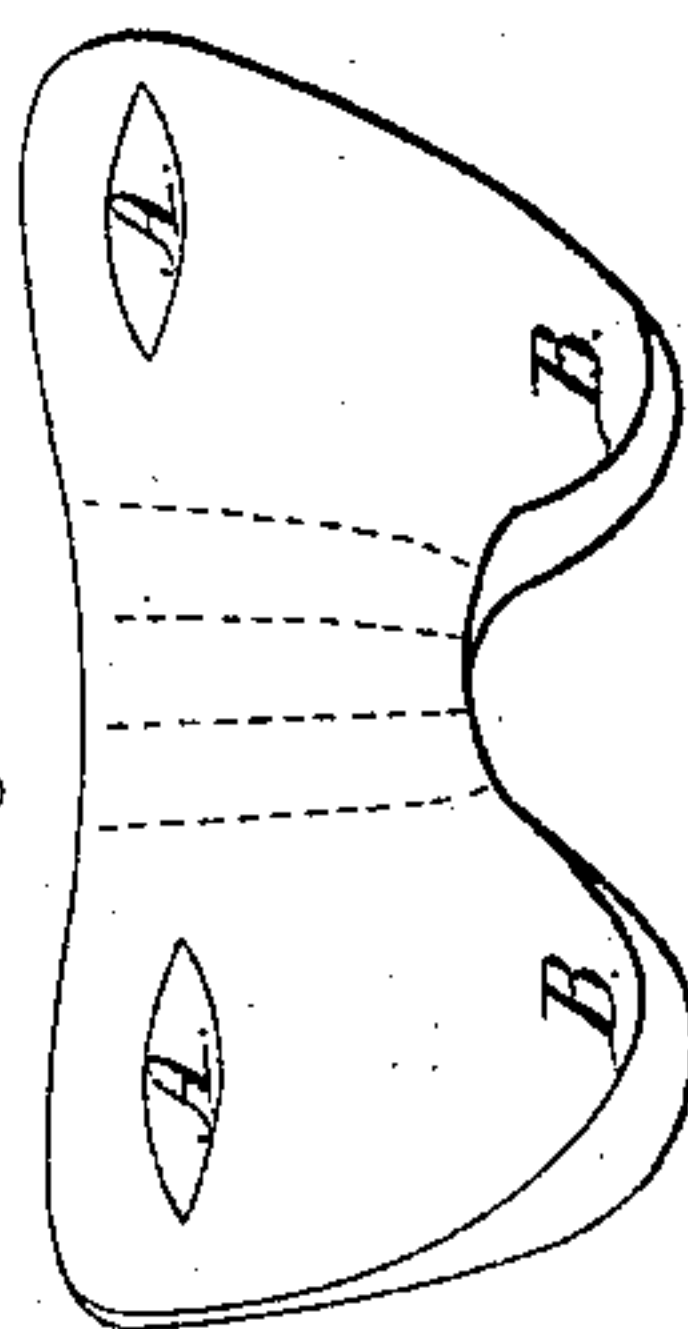
*Fig. 5.*



*Fig. 4.*



*Fig. 6.*



# UNITED STATES PATENT OFFICE.

L. D. FLEMING, OF NEWARK, NEW JERSEY.

## ABDOMINAL SUPPORTER.

Specification of Letters Patent No. 4,336, dated December 31, 1845.

*To all whom it may concern:*

Be it known that I, LORENZO D. FLEMING, of the city of Newark, in the county of Essex and State of New Jersey, doctor of medicine, have invented an improvement in the construction of instruments to be used for prolapsus uteri, hernia, abdominal weakness, and other similar affections; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings.

Figure I, represents the shape and full size of one section or plate of the front pad as ordinarily made. The pad consists of two plates of the same or similar size and form, made of tin or any other substance that will answer the purpose. Between these two plates are two steel springs, sections of which are represented by A, A, and of the size and form represented by Fig. II. In some cases of hernia it is necessary to let the lower points or lobes of the inside plate, project half an inch more or less, below the outside one, with a corresponding length of one half of the spring.

Fig. II, represents the steel springs adopted by me, (although elliptic or spiral springs may be used) which are set in, as seen in Fig. I A, A, which exhibit one half of the springs.

Fig. III, represents the skeleton or metallic work of the spring pad. At A, A, A, the edges of the two plates are fastened together by wires, forming a kind of hinge. B, B, B, B, are knobs or buttons made of brass, for the attachments of the belt. At the lower edge the knobs answer the purpose of rivets, passing through the ends of the springs. Below the knobs, a rivet is put in, to make the springs more firm, and keep them from turning. C, C, are the ends of the springs, which open at the lower edge of the pad, from one, to one and a half inches. Fig. IV, represents the back pads and the belt. A, A, are the back pads, with loops, through which the belt slips so as to suit the pads to the case of the patient. B, B, are elastic straps designed to pass above the crista of the ilium or hip bones, and attach to the knobs on the upper portion of the front pad. C, C, represent the main belt, passing directly around the pelvis, and attaching to the knobs on the lobes, or lower edge of the front pad. D, represents a piece of elastic fabric in the back and center of the main belt. E, E,

refer to two buttons for the attachments of the perineal brace, which passes forward between the limbs, and attaches to the two lower knobs on the front pad. This brace is seldom needed.

Fig. V, represents the instrument entire. O is the belt and spinal pads as seen in Fig. IV. The spinal pads are made of tin or stout leather, faced and covered. P the front pad, the lower edge of which opens from one to one and a half inches, which is closed by a gore of water proof cloth, or silk, which is stitched to the facings of the pad. Q the perineal brace, the straps of which can be worn with or without the cushion. In the facings of the front pad, I construct pockets, (see Fig. VI,) running down to the lower points of the two lobes, so that when used in hernia, they may be supplied with rings, forming a concave surface by which to contract and excite the muscle in order to heal it. Or if indicated, the pockets may be supplied with blocks, wool, hair, or other substance, to adapt them to the rupture.

Fig. VI, represents the side of the front pad worn next to the person. A, A, refer to the entrance of the pockets, which run down to B, B. The dotted lines in the center show where the facing is stitched down to separate the pockets.

What I claim as new in the above described instrument is—

1. The construction of pockets in combination with an abdominal spring pad with descending lobes, by which it may be easily adapted to nearly all cases of inguinal hernia, securing a decided advantage over the common truss, by being much easier to the wearer,—suits it to double hernia—and preventing a rupture on the opposite side which often occurs by wearing the singles truss.

2. I also claim the employment of rings to be slipped into the pockets of the front pad, for encircling the ruptured spot, in order to contract and excite the muscle, thereby disposing the part to heal; the rings may be made of any shape, diameter or width that the form or nature of the rupture may require. The instrument I call "Dr. Fleming's spring-pad supporter and truss."

LORENZO D. FLEMING.

Witnesses:

ELIAS FREEMAN,  
C. B. TURNER.