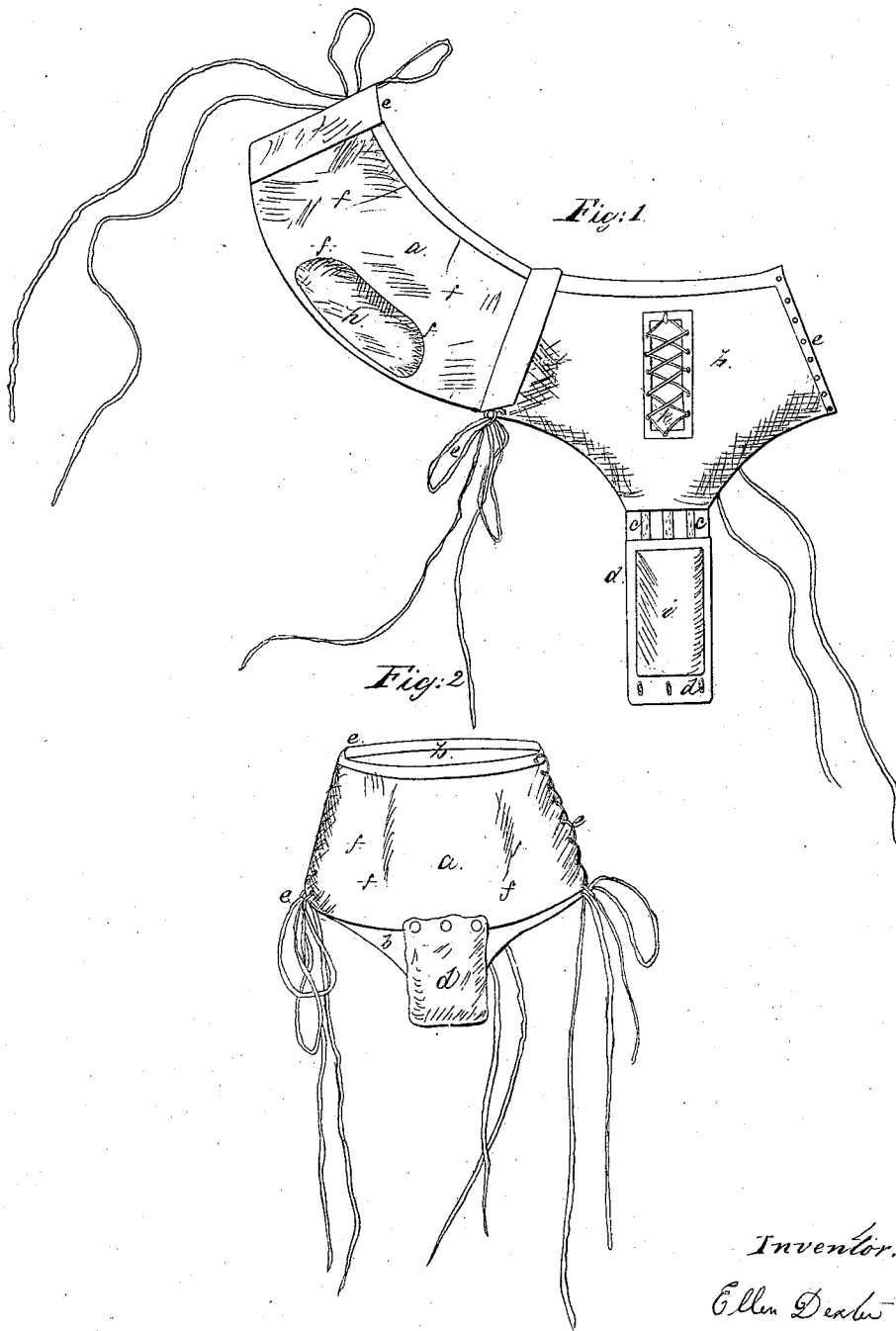


E. Dexter,

Abdominal Supporter.

N^o 55,252.

Patented June 5, 1866.



Inventor:
Ellen Dexter

UNITED STATES PATENT OFFICE.

ELLEN DEXTER, OF QUINCY, ILLINOIS.

IMPROVEMENT IN ABDOMINAL SUPPORTERS.

Specification forming part of Letters Patent No. 55,252, dated June 5, 1866.

To all whom it may concern:

Be it known that I, ELLEN DEXTER, of Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Abdomino-Uterine Supporters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, of which—

Figure 1 shows the interior side of the instrument when laid open by unlacing one side, and Fig. 2 is a perspective view, showing the supporter complete as when in use and fitted to the person.

The object designed by my improvements is to give the necessary support to the abdominal and pelvic viscera in certain distressingly painful displacements of the uterus in a more effective manner than has hitherto been accomplished by instruments of this nature, at the same time being so constructed as, while affording relief to the parts deranged, it divides or distributes the pressure so equably as to be worn with ease and comfort by the patient.

A brief explanation of the pathology of the several displacements of the womb intended to be relieved by the use of this instrument may be necessary in order to show its advantages and to explain its operation.

It is assumed that in all cases of prolapsus, anteversion, or retroversion of the womb there exists a relaxed condition of the muscular fiber produced by general debility or violence. This debility or relaxation of the muscles of the abdomen, removing the natural support of the abdominal viscera, permits the bowels, when pressed down by the additional weight of the stomach, liver, and other organs, to sink too low in the pelvis, in turn pressing down the womb and putting the ligaments and vagina on the stretch, thereby rendering these organs, especially in their debilitated condition, unable to sustain the womb in its normal position. In consequence the womb is forced down in the pelvis so as to constitute the derangements known as "prolapsus uteri," "anteversion" or "retroversion" of the womb. From the situation of the womb, even in its normal state, immediately below the convolutions of the bowels, it is exposed in a remarkable manner to being affected by the impulses of the bowels, and when we bear in mind the

relation the womb sustains to them, and the fact that a relaxed or debilitated condition of the abdominal muscles permits the abdominal to press upon the pelvic viscera, as above indicated, the *modus operandi* of my improved supporter and its superior advantages over other instruments for the same purposes will be more apparent.

This supporter, like others of its class, is composed of three principal parts, which are shown opened out in Fig. 1 and closed as when in use in Fig. 2, the letters referring to like parts in both figures. The front piece, *a*, in depth extends from the waist to the os pubis in front, and longitudinally of nearly equal depth from hip to hip. To make it fit accurately to the conformation of the abdomen it is made with gores or darts at the four points marked *f*. The back piece, *b*, also extends from hip to hip, where it meets the front piece, and is of equal depth at their junctures. At the middle of the back it is of greater depth, and at the lower edge of this portion is attached, by elastic bands *c*, a strap, *d*, which when worn passes under the body and is fastened to the front piece, *a*, by buttons. The two pieces *a* and *b* are of such shape as when joined to completely envelop the abdomen from the waist downward. They are connected with each other by a lacing and eyelets, *e e*, at their juncture over each hip of the patient, the juncture being vertical.

This method of connection has important advantages over straps and buckles, buttons, or other fastenings, elastic or otherwise, such as are found in other supporters, inasmuch as the lacings, while affording a firm and unyielding attachment, at the same time adapt the instrument, by self-adjustment, exactly to the person of the patient, without drawing with greater stress on any one point than on others—an effect which cannot be produced by straps or elastics, the straps requiring a nice adjustment, besides leaving slack interstices between them, and springs in any form being objectionable in consequence of their drawing with the greater force on the parts most protuberant and exerting but little pressure on those less so, thus causing discomfort and fatigue of such parts as have to sustain an unequal share of the burden. Elasticity, where not necessary to permit motion of the limbs, is objectionable. The lacings also enable the wearer to gradu-

ate and determine the amount of pressure which shall be brought to bear, and they are not open to the objection which exists to metallic springs or elastic attachments—that of expanding or contracting according to the temperature of the body rather than the needs of the patient.

On the inside of the front piece, *a*, in the position shown in Fig. 1, is an oblong or narrow oval pad, *h*, the design of which, in connection with the other parts of the instrument, is that, while support is given by the enveloping portion to the walls of the abdomen, the pressure being exerted in such a direction as to elevate and sustain their contents, this pad is of such form and position as to exert a specific pressure just above and partly rest upon the os pubis, thus tending to reduce the antero-posterior diameter of the superior strait of the pelvis, so as to prevent the womb being displaced by ordinary influences, besides assisting the action of the other parts of the supporter, and rendering it more efficient in taking the weight of the abdominal viscera off of the uterus and sustaining it in its normal condition, while the muscles and ligaments have opportunity to regain their tone and vigor. It also relieves the pressure on the urethra.

On the inner surface of the strap *d* is a pad, *i*, which, when in place, gives support to the vagina and adjacent parts, and in cases of prolapsus guards against further displacement.

In the center of the rear piece, *b*, is an oblong

opening, *k*, which serves as a ventilator, the edges of which are held in suitable position by a lacing, which also affords an additional means of adapting the instrument to the person of the wearer.

The body of the supporter may be made of silk, linen, jeans, or other suitable material, and the pads are covered with oiled silk and stuffed with hair or cotton.

I do not claim the invention of a supporter constructed generally of the several parts above named, as such in various forms have been heretofore known and used; but

What I claim as a new improvement in abdomino-uterine supporters, and desire to secure by Letters Patent, is—

The combination of the supporter, substantially as described, with the pad *h*, the former so constructed as to envelop the entire abdomen and sustain it both vertically and horizontally, and operating in such a manner as while the pad exerts a special pressure immediately above the os pubis on the pelvic viscera, the lateral displacement of the same is prevented by the pressure of the supporter, and the adjacent parts of the abdomen are restrained from enlargement consequent on the pressure of the pad.

ELLEN DEXTER.

Witnesses:

EDWARD EVERETT,
CLARK H. CHARLES.