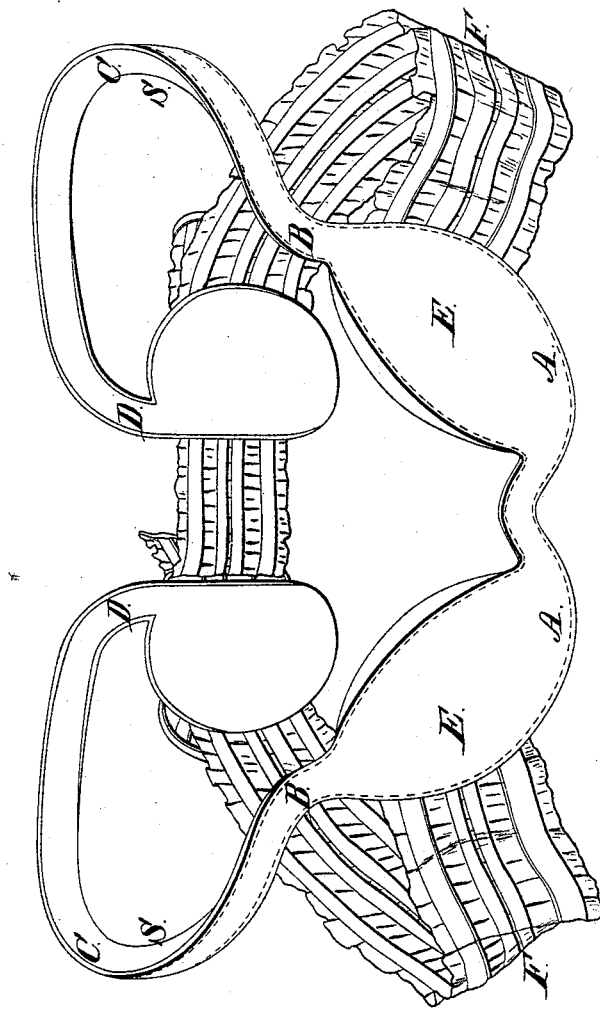


*J. W. Hood,*

*Truss.*

*Nº 5,395.*

*Patented Dec. 11, 1847.*



# UNITED STATES PATENT OFFICE.

JOHN W. HOOD, OF MOUNT STERLING, KENTUCKY.

## IMPROVEMENT IN ABDOMINAL-SUPPORTERS.

Specification forming part of Letters Patent No. 5,395, dated December 11, 1847.

*To all whom it may concern:*

Be it known that I, JOHN W. HOOD, of the town of Mount Sterling, in the county of Montgomery and State of Kentucky, have invented a new and useful instrument or improvement in the instrument denominated the "abdominal-supporter," with its appendages, and the proper method of applying the same as an indispensable assistant to the therapeutical agents in the cure of prolapsus, procidentia, retroversion, and all the other forms of displacement of the uterus; and I do hereby declare that the following is a full and exact description of the construction and operation of the said instrument as invented or improved by me.

The nature of my improvement consists, principally, in the peculiar formation of the spring which passes around the body in exact accordance with the form of the pelvic bones, and in the arrangement and form of the elliptical pads attached to its inguinal portions, which are in the form of the inguinal regions, giving the wanted support to those parts in the most effectual manner, for the form of the pads is such that the power of the rectus-abdominis muscle to displace the instrument in reaching up or lifting is entirely overcome. It will be obvious from an examination of the accompanying description and drawing that if the rectus-abdominis muscle were allowed to operate upon any part of the pads, so as to displace the instrument, it would in that proportion allow the viscera of the abdomen to encroach upon the organs of the pelvis. This occurrence is entirely prevented by the elliptical form of the pads, their increased fullness, and the intermediate space left between their anterior and internal edges.

The principal cause of displacements of the uterus is the undue and unnatural pressure of the abdominal upon the pelvic viscera. Now, the instrument, by affording proper support to the abdominal viscera, retaining them in the cavity of the abdomen, removes the cause, and of course the effect will cease. To make an application of this principle in question, whenever the cause which produces a displacement of the womb is removed, that organ, by the recuperative powers of nature, will return to its normal position. The elliptical cushioned front pads are designed to press upon the front wall of the abdomen and

force it back toward the promontory of the sacrum, thereby narrowing the space between these two points and making, as it were, an artificial floor for the contents of the abdomen to rest upon. The side straps are to be used when an increased force of the spring is required, or where the bones of the pelvis are relaxed at their junctions, or from this or any other cause require an additional support. The side straps may be fastened by studs or buckles and used or omitted, as the case requires. The back strap is designed merely as a fastening for the spring. The back pads are so constructed as to rest upon the back portions or costa of the ilium and not upon the sacrum, thereby preventing the unpleasant effects resulting from irritation of the spine as produced by wearing other instruments of this kind.

To enable others to make and use my said invention, I will proceed to describe its construction and application by means of the accompanying drawing.

The spring of my instrument, S S, is made of cast or other steel, such as is generally used for instruments of a like kind. I will take an ordinary-sized instrument for the sake of description.

For an instrument of ordinary size I take a strip or plate of steel—such as has been spoken of—about forty-five inches in length and from half an inch to an inch in width and about one-sixteenth of an inch in thickness. The pubic portions A A, I bend in the shape of those bones and these will take about four inches each; thence from the outer part of the pubic portion the spring mounts upward to gain the anterior superior spinous process of the ilium, constituting what I shall call the "anterior iliac portion," B B, and this is to be made to suit the shape of that bone. This will take up about four and one-half inches on each side. Then bending the spring in the shape of the crest of the ilium and extending it back to its junction with the sacrum constitutes what shall be called the "superior iliac portion of the instrument," C C. This will take up about eleven inches on each side. The spring is then to take a perpendicular direction downward corresponding with the junction of the sacrum and ilium posteriorly, which part I will call the "sacral portions," D D. This will take up about three

inches on each side, making up the entire forty-five inches given for the instrument. It is perfectly plain that no exact measurement will suit all cases, but that the measurement will be varied to suit each individual case.

The plates of the elliptical pads E E may be made of sheet-copper or of other suitable metal, that may be about one-twentieth of an inch thick and riveted to the pubic portions A A and to the anterior iliac portions B B. These plates are to be padded to the thickness of an inch or inch and a half and will then constitute the elliptical pads, which must extend from the crest of the pubic to near the superior spinous process of the ilium, and must likewise be made to correspond somewhat with that part of the abdomen which is under Poupart's ligament. The back pads, G G, are composed of the same kind of material and padding with the front ones and are riveted to the sacral portions of the spring D D. They constitute about three-fourths of a circle the diameter of which is about two and a half inches, and they are so fixed to the spring as to press upon the ilium and not upon the sacrum. The side straps, F F, originating from the anterior iliac portions B B, must be made of some firm or elastic substance and run back and be attached to the back by a buckle or stud.

The whole instrument thus described should be covered with buckskin and padded in the manner of other instruments for a like purpose, with this exception, that they must be made fuller than usual.

This instrument differs in its object from

those which have been denominated "uterine-supporters," it not being designed to support the uterus directly, but to support the viscera of the abdomen, which by their weight bring on displacement of that viscus.

Having thus fully described the manner in which I construct and arrange the respective parts of my improved abdominal-supporter, what I claim therein as new, and desire to secure by Letters Patent, is—

The particular form given to the spring, as represented, in combination with the padding, as described, whereby it is adapted to the support of the inguinal region for the purpose of preventing the descent of the organs, which would otherwise tend to press upon the womb, and which are in fact the principal causes of the displacement thereof, and by the particular form given to the instrument all the muscles that are themselves liable to misplace the said instrument are avoided, and in combination with the foregoing, I claim the manner of combining and arranging the back pads, so as to cause them to press upon the ilium, as set forth, and it is hereby to be distinctly understood that I do not intend by this claim to limit myself to the precise form and dimensions of the instrument as herein represented and described, but to vary these as may be deemed expedient, while as a whole it remains substantially the same, producing the same effects by analogous means.

J. W. HOOD.

Witnesses:

THOS. P. JONES,

WM. J. DONOHOO.