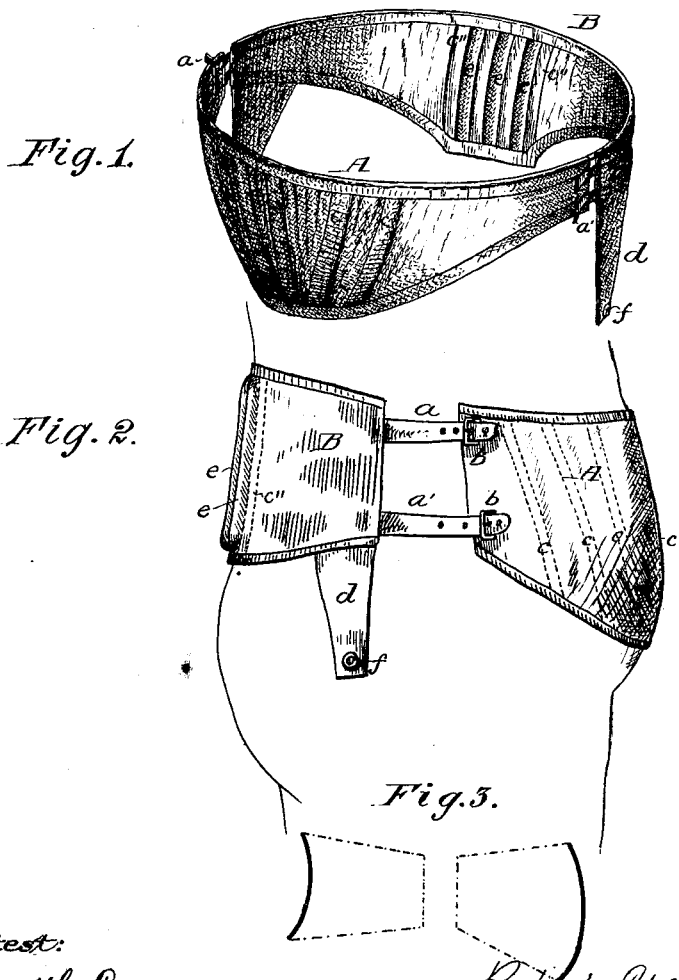


R. W. GRAY & T. S. FOSTER.
Abdominal Supporter.

No. 198,198.

Patented Dec. 18, 1877



Attest:

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UNITED STATES PATENT OFFICE.

ROBERT W. GRAY AND TIMOTHY S. FOSTER, OF LACONIA, N. H.

IMPROVEMENT IN ABDOMINAL SUPPORTERS.

Specification forming part of Letters Patent No. **198,198**, dated December 18, 1877; application filed June 16, 1877.

To all whom it may concern:

Be it known that we, ROBERT W. GRAY and TIMOTHY S. FOSTER, both of Laconia, in the county of Belknap and State of New Hampshire, have invented a new and Improved Abdominal Supporter, for the purpose of supporting and strengthening the bowels and back, of which the following is a specification:

The object of our invention is a supporter constructed, as fully described hereinafter, to fit closely to the body of the wearer, yield readily to the movements of the body above, but maintain a firm unyielding pressure below, the abdomen.

In the drawings, Figure 1 is a perspective view of our abdominal supporter; Fig. 2, a side view, showing the application of the same; and Fig. 3 is a diagram of the same.

The supporter consists of the front section A and rear section B, connected opposite the hips by straps *a a'* and buckles *b*. The section A is widest at the center, where it is provided with a series of radiating pockets, *c c'*, in which are inserted whalebones. The pocket *c'* is directly in the center, and the pockets *c* converge toward the lower ends, each pocket having a curve increasing toward the lower end. The bone of each pocket is formed with a permanent inward curve toward the lower end, and the sections of which the front piece A is composed are so shaped that, in connection with the bones, they form a hollow zone for receiving the abdomen.

Owing to the curves of the pockets and bones, and to the construction of the portion A, as described, the latter has no tendency to flatten, but preserves its hollow form without wrinkle or protuberance, while the downwardly-extended lower edge presses inward below, and supports the abdomen in proportion as the lower strap *a'* is tightened. The separation of the bones at the upper edge of the section permits the latter to yield readily to the movements of the body at the waist, while their closer proximity at the lower edge imparts greater rigidity at the point where the greatest firmness and no movement are required.

It will be apparent that by adjusting the straps *a a'* the pressure at either the waist or at the lower edge may be regulated. The rear section B has its bearing at the hollow of

the back, and is provided with pockets *c''*, in which are placed bones, set with an inward curve to fit and support the back, thereby, in connection with the inwardly-curved bones at the front, maintaining the section in place without fatiguing or chafing the wearer, as shown in the diagram, Fig. 3.

In order to avoid the heating resulting from the contact of so large a bandage, the spaces between the bones are formed into pockets of such a size as, when filled with wool or other material, to form vertical ribs *e e*, which bear on the back, while the bones maintain the rigidity of the intermediate parts, leaving air-spaces between the ribs.

To prevent the tendency of the supporter to rise—which almost invariably results unless there is a perfect fit—we provide the same with tongues *d* and attachments *f*, for the stocking-supporters, said tongues permitting the attachment of the supporters without removing the clothing, which would not be possible if the connection were made to the bandage itself, which is at the waist, where the clothing is tightly drawn around the body.

We are aware that in corsets extending to the breasts, bones have been used having permanent curves; but such corsets cannot slide upward, while in a bandage the liability to rise is one of the greatest difficulties to overcome—a difficulty we obviate by giving a permanent curve to both the front and back bones, so as to insure a perfect fit and retain the bandage in place without strapping it down.

We claim as our invention—

1. The combination, in an abdominal bandage consisting of sections A B, covering the waist and abdomen, of bones at the back having a permanent inward curve, and bones at the front converging and having a permanent inward curve at the lower ends, whereby the bandage is prevented from rising, as set forth.

2. The supporter provided with parallel bones, curved inward to fit the back, and separated by projecting ribs *e*, as specified.

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Witnesses:

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