

J. C. ZACHOS

Improvement in Abdominal and Spinal Supporters.

No. 129,202.

Patented July 16, 1872.

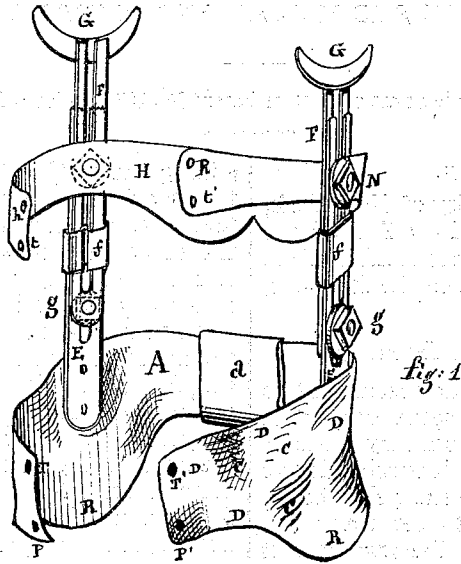


fig. 1

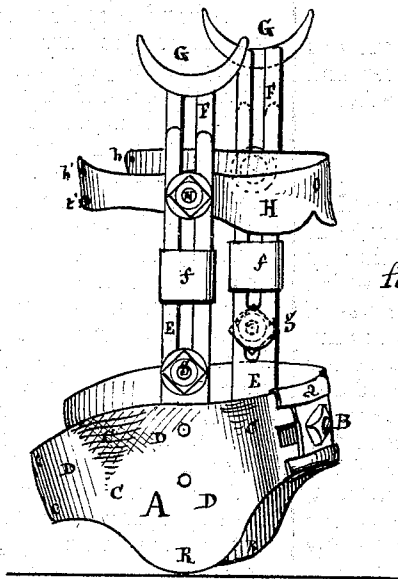


fig. 2.

Witnesses.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN ABDOMINAL AND SPINAL SUPPORTERS.

Specification forming part of Letters Patent No. 129,202, dated July 16, 1872.

### SPECIFICATION.

I, J. C. ZACHOS, of the city of New York, in the county and State of New York, have invented certain Improvements in Abdominal and Spinal Supporters, of which the following is the specification:

#### *Object and Nature of the Invention.*

This invention relates to an instrument to be used as an abdominal and spinal supporter, or, in certain cases, as an auxiliary mode of cure of spinal curvature; and it consists in the combination of a struck-up metal pelvic band, furnished with depressions to serve as pads, with adjustable crutches for the arms to rest upon.

#### *Description of Drawing.*

Figure 1 represents a perspective view of my improved abdomino-spinal supporter and spinal extensor, seen almost from the front; and Fig. 2 is a side view of the same.

#### *General Description.*

A is my pelvic band, which is composed of two sheets of metal, (preferably copper,) cut of the proper shape and jointed together by the sliding sleeve *a* and nut and screw B, which permits of adjusting the band to the size of the body. The band A is fitted exactly around the body of the patient in the region of the pelvis, and by making depressions, C, and elevations, D, in the metal the said band is made to bear on the soft and muscular parts of the body, and not on the prominent points of the pelvic bones. The band A has two parts, R, extending, in the shape of rockers, below the body of the patient when he sits down, whereby the weight of the band A is brought to rest upon the chair, thus relieving in great measure the pressure on the pelvis. The front part of the band A extends downward, and it is provided with holes, top and bottom, so that by giving more tension to the uniting ligaments, either between the holes T T' or P P', the band A may be made to exert its action upon the lower part of the abdomen in an inward and upward manner, to act as an abdominal supporter. The pelvic band, to be used as a spinal supporter or spinal extensor, is provided with crutches, G G, which are so mounted upon slotted standards, E and F,

sliding one on the other and retained in position by the pieces *f* and bolts *g*, as to be extended or shortened at pleasure, and be permanently fastened when required. H is a belt of metal closing in front of the chest of the patient by top and bottom ligatures at *h h'* and at *t t'*, so that the band H may be made to flare upward or downward at pleasure. The belt H may also be embossed so as to present prominent points, and it is fitted so as to be adapted to the desired place of the body upon the chest. The belt H is mounted upon two bolts and nut N, sliding on the standards E F of the crutches G, and it can be adjusted at any desirable height upon the chest.

#### *Operation.*

The band A rests with a broad surface and by a lateral pressure on the side, and not on the top of the pelvis, thus furnishing a surface of resistance, and not resting on a line or on points. It is adjusted entirely below the brim of the pelvis, and its action on the lower part of the abdomen, on which it presses upward and inward, renders it a complete abdominal supporter. Its use for extension and traction of the spine in cases of spinal curvature is by means of the crutches G, giving support to the shoulders. When the crutches are extended they can be made to lift the shoulders above the natural level, and an effort to bring the shoulders down exerts a strong pressure through the crutches upon the pelvic band, thus pushing the pelvis down and away from the shoulders, and the tractile force is brought on the spine. This operation is greatly facilitated by laying the patient on the back. Any continuous and strong pressure upon the pelvis, such as would be useful in extending the spine, can be made enduring only by the broad surface and exact fit and adaptation of the band A, and the same qualities make it useful as a support to the lower abdomen and to what is called "a weak back." The band H is intended as an auxiliary to the crutches, as a support to the body in sitting and standing, being pushed up to a snug place and being then fastened to the standard; but it has also an independent function in producing the restoration of symmetry in the curved spine by a gentle and continuous pressure on the displaced ribs and breast-bone. The bands A

and H, as well as the crutches, may be covered in any desirable manner to suit any taste or purpose.

*Claim.*

The abdominal and spinal supporter herein described, consisting of the band A, having

the depressions C, elevations D, and parts R, and of the crutches G, combined and arranged so as to operate in the manner and for the purposes set forth.

Witnesses:

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