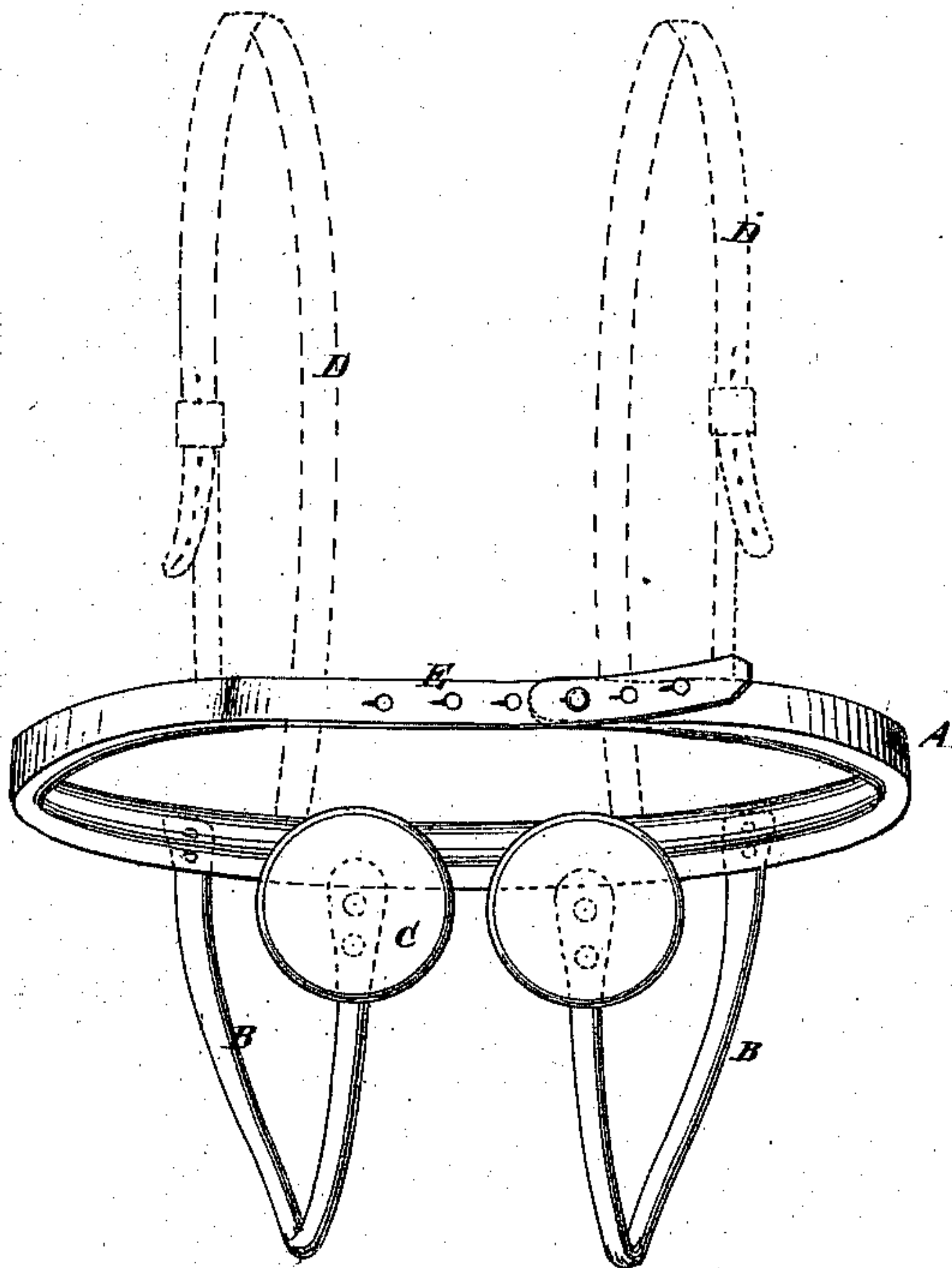


J. M. ZIRKLE.

Truss.

No. 162,990.

Patented May 4, 1875.



WITNESSES:

A. W. Almqvist
A. F. Terry

INVENTOR:

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UNITED STATES PATENT OFFICE.

JOSEPH M. ZIRKLE, OF NEW MARKET, VIRGINIA.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **162,990**, dated May 4, 1875; application filed April 3, 1875.

To all whom it may concern:

Be it known that I, JOSEPH M. ZIRKLE, of New Market, in the county of Shenandoah and State of Virginia, have invented a new and Improved Truss, of which the following is a specification:

A steel or iron belt about half an inch wide, and from eight to fifteen inches long, according to size of patient, with a steel or iron spring about the size of telegraph-wire, flattened at one end, riveted to the belt encompassing the body obliquely, so as to pass easily around and under the thigh, the spring so curved as when applied to the rupture it fits the part intended by a wooden bulb, and by its strong resistance will overcome all the weight and vermicular motion of the intestines, by which any protrusion can be effected. The belt fitting around the body is covered with leather, that may be stuffed, if necessary, as also the spring, and the instrument worn with suspenders fastened to the belt behind and before, each suspender in two detached pieces, to be united and worn by a buckle or button in front. The extremities of the covered belt are free, and fastened around the body by a buckle or button. The bulb of the instrument is fastened to the end of the spring with screws, and the same end may be flattened, and a corresponding flat steel plate, two inches long, with three or four holes in it, and same number in end of spring may be used, making a slide that will render the spring longer or shorter, and thus adapt itself to the different kinds of rupture, but this is not absolutely required, still it is embraced, for by giving the spring a difference of one or two inches, it will obviate a difficulty as to distance and situation of the tumor. By means, then, of the wire spring acting from below upward, and

the suspenders to be worn as mentioned, the instrument will be kept with its bulb upon the aperture so firmly that with all the varied motions of the body, and all the ordinary efforts of labor, the intestines will be held within the peritoneum, and such pressure exerted upon the ring or aperture as to excite irritation, and thus a certain reunion and cure will be brought about.

The same truss upon a small scale will act upon infants and children with proportionate benefit. They will be made for the right or left side, singly or double, and for any size or age.

The principle of action of this truss being from below upward, and held firmly to the part intended by the suspenders, it insures it to fulfill every indication required in the treatment of hernia.

The drawing is a front elevation of my improved truss.

A is the steel or iron belt encircling the body; B, the wire spring or springs attached to the belt at the back, and extending around and under the thighs; C, the pad; D, the suspenders, and E the straps buckling the ends of the belt together.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the belt A, arranged to encircle the body, one or more springs, B, attached to the back of the belt, and arranged to pass around underneath the thighs, one or more pads, C, suspenders D, and the straps E, all substantially as specified.

JOSEPH M. ZIRKLE.

Witnesses:

JOHN D. HENKEL,
CHARLES COYRUR.