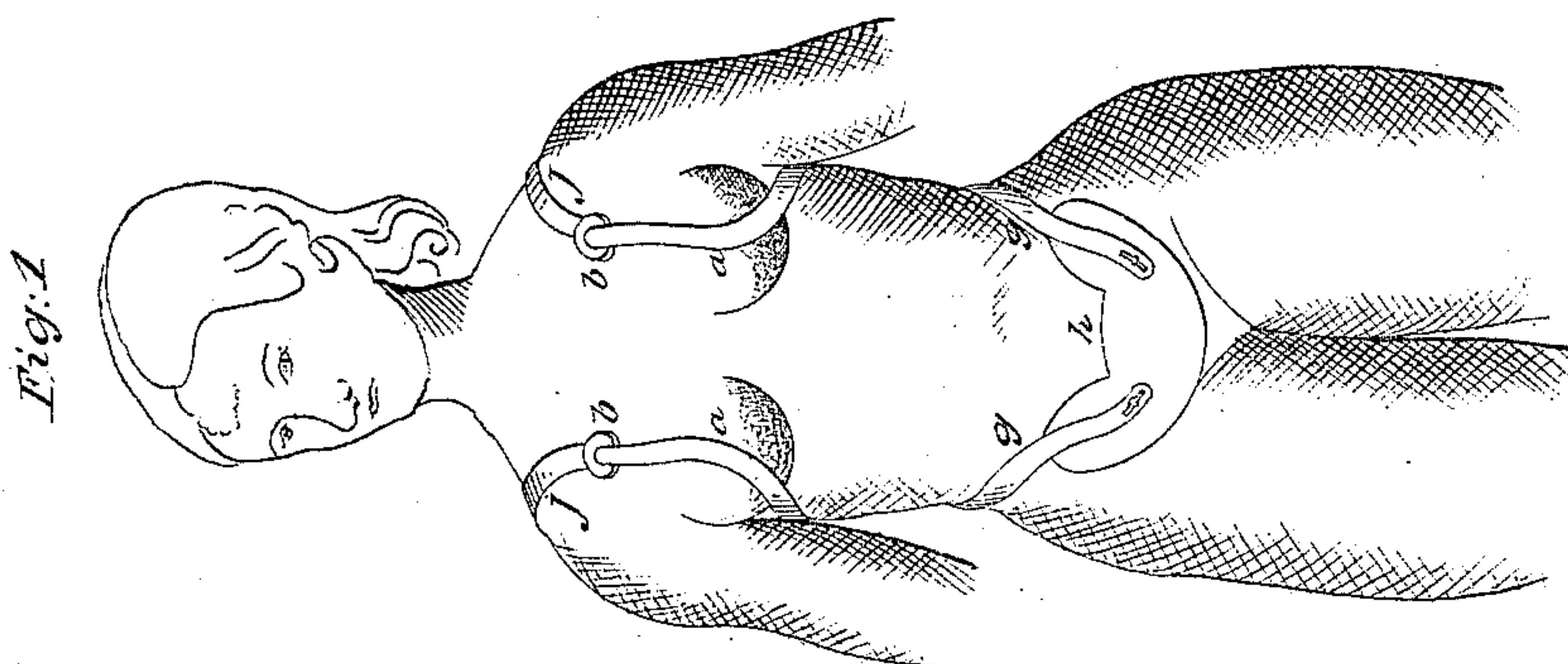
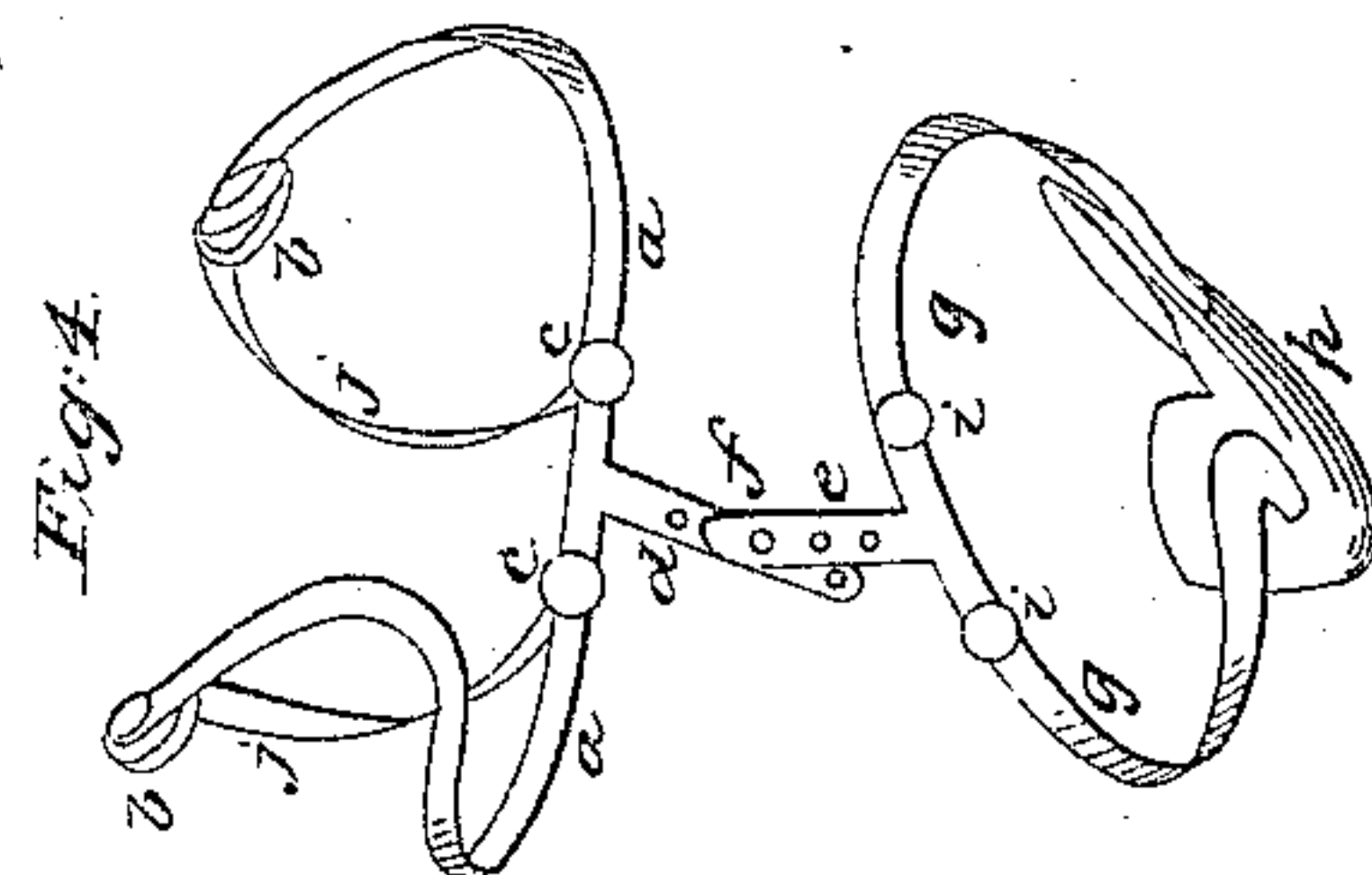
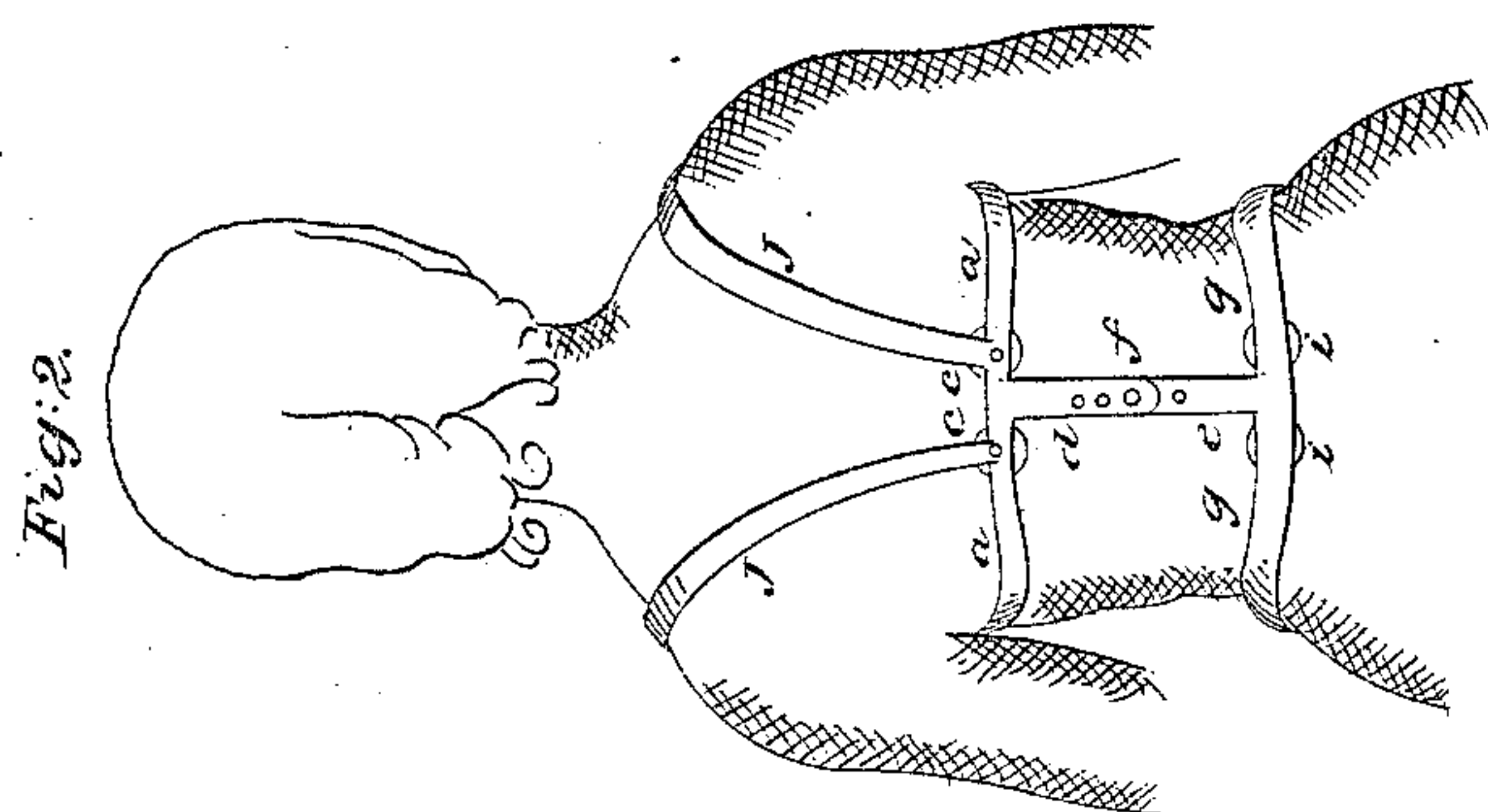
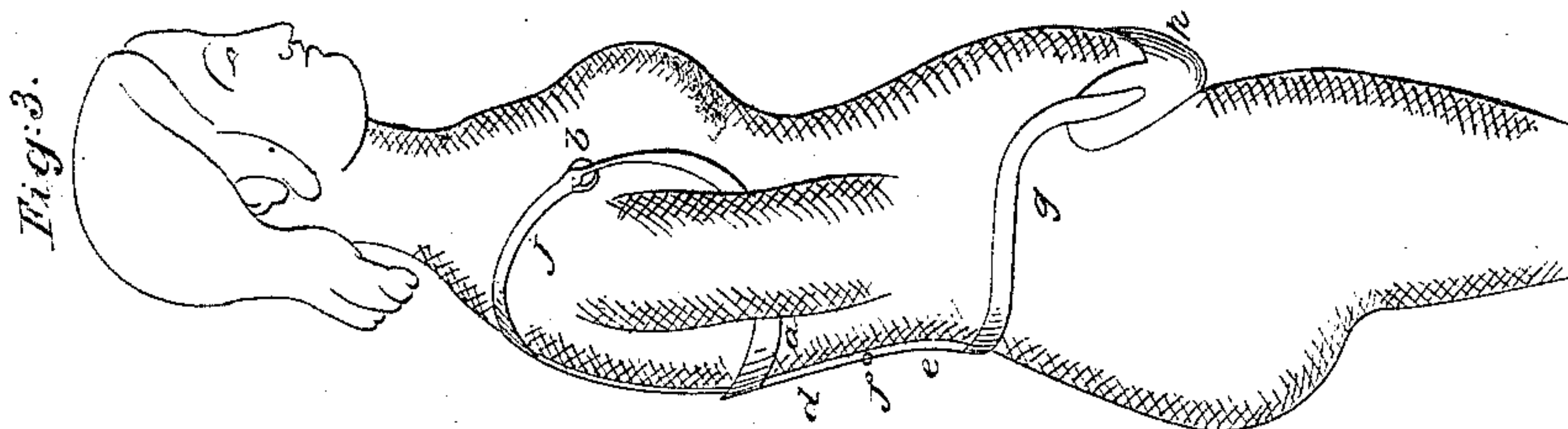


*J. S. Dare,*

*Truss,*

*No. 8,297,*

*Patented Aug. 12, 1851.*





# UNITED STATES PATENT OFFICE.

JOHN S. DARE, OF KNIGHTSTOWN, INDIANA.

## SHOULDER-BRACE COMBINED WITH ABDOMINAL SUPPORTER.

Specification of Letters Patent No. 8,297, dated August 12, 1851.

*To all whom it may concern:*

Be it known that I, JOHN S. DARE, of Knightstown, Henry county, Indiana, have made new and useful Improvements in  
5 Shoulder-Braces and Uterine Supporters; and I do hereby declare the following to be a full, true, and exact description thereof, reference being had to the annexed drawings, making part of this specification.

10 The principal object of my invention is so to arrange a brace for the shoulders or other parts of the human frame as to afford a firm yet elastic support without obstructing the circulation, or interfering with any  
15 of the vital functions or movements of the limbs and it is in the herein described peculiar arrangements of construction, for the attainment of these objects, that the feature of useful novelty exists.

20 In the annexed drawings in which the same letters refer to like parts Figure 1 shows a front Fig. 2 a back and Fig. 3 a side view of the brace as applied to a patient and Fig. 4 is a perspective view of a brace apart  
25 from the person.

In place of the loops or bands usually employed to brace the shoulders, and which obstruct the circulation and confine the muscles I introduce two metallic bands or bars  
30 (a) combining with the requisite firmness an amount of elasticity sufficient to yield to the motions of the body. These bars having a common point of attachment behind the body pass forward under the arm pits and  
35 terminate in pads (b) which resting upon the patient's person in front of the clavicle, and two pads (c) bearing against the back on each side of the spine, and the said bars (a) being so bent as just to avoid touching  
40 the person at any other part, attains the desired object, without interfering with the operations of the body. Projecting downward rectangularly from the junction of these shoulder bars is a bar (d) which is  
45 united to another bar (e) by a pivot (f). This lower bar (f) is firmly united to two bars (g) which passing around the body immediately above the hips terminate about opposite the center of the illiac region either  
50 by two pads or are united to a plate (h) as represented.

A pair of pads (i) similar to those (c) above described are placed on the inner side of the bars one on each side of the spine.  
55 Bands (j) passing over the shoulder may be

applied in particular cases to give additional support to the brace but will seldom be needed. The bar, while permitting of no extension longitudinally, allows by its elasticity, of a slight fore and aft play, and by  
60 its joint, of easy flexure sideways, but has withal sufficient fore and aft rigidity to hold the body upright when at rest, and being pierced with a number of pivot holes can be adjusted to its proper length. The bars  
65 only touching by the pads at a few points permit of the freest possible circulation and ventilation and involve the least possible amount of confinement.

In order to enable those interested to construct and apply my invention I here append a particular description of its manufacture. Firstly, in order to have the instrument fit easily, the measure of the patient must be taken with copper wire thus:  
70 place one end of the wire immediately over the ninth dorsal vertebra, then carry it transversely around the body just so low as to be clear of the scapula, until at a point immediately beneath the axilla it must be  
80 curved upward and finally somewhat backward and outward so as to press upon the person opposite to the carrocoid process of the scapula, and beneath and in front of the clavicle, care being taken to have the patient's shoulders in their natural position  
85 and also caution being had that the wire shall be shaped so as to fit smoothly through its whole course, but tightly nowhere except at the points before spoken of. This done  
90 the opposite side of the patient is to be measured in the same way, and the two pieces of wire thus shaped, are to be carefully removed and used as patterns by which to  
95 forge the bars. The two back bars must be forged so as collectively to extend from the ninth dorsal vertebra to the third lumbar vertebra and must be formed to the shape of the back. For the lower bars, place one end of the wire upon the third lumbar vertebra  
100 and carry it transversely around the body above the hip bone to the crest of the os illium then descending and converging bring it to the center of the illiac region where it must be made to press upward and back-  
105 ward. The lower bars may be attached to the pelvic plate by pins passing through slotted holes so as to admit of adjustment. These bars are all (for an adult) about an inch wide of spring steel and having suffi-  
110



cient thickness to give stiffness and yet a slight elasticity. The other parts of the construction need no particular explanation.

Having thus fully described the nature of my improvements, what I claim therein as new and desire to secure by Letters Patent are—

1. The bars (*a*) having a common point of junction to a center bar at the back, passing thence under the armpits, and thence, forward upward and backward until their padded extremities bear upon the clavicle; the bar being so formed as to fit snugly without direct pressure upon the body except at the points at front and back as herein explained, giving the desired support to the shoulders without unnecessary confinement of the person or obstruction of its various functions and at the same time affording through the medium of the bar (*d, e,*) a firm

point of attachment and support for a uterine or abdominal supporter.

2. The jointed bar (*d, e,*) having pads (*c c*) (*i i*) located on each side of the spine, at the junction of the said bar with the braces (*a*) (*g*) the said bar being jointed midways, so as to admit of easy flexion sideways, without compromising the rigidity which is necessary in other directions and affording, by the limited extent of its pressing surfaces free scope to the circulation perspiration, muscular action and other bodily functions.

In testimony whereof, I have hereunto set my hand before two subscribing witnesses.

JNO. S. DARE.

Witnesses:

GEO. H. KNIGHT,  
EDWARD H. KNIGHT.