

No. 724,889.

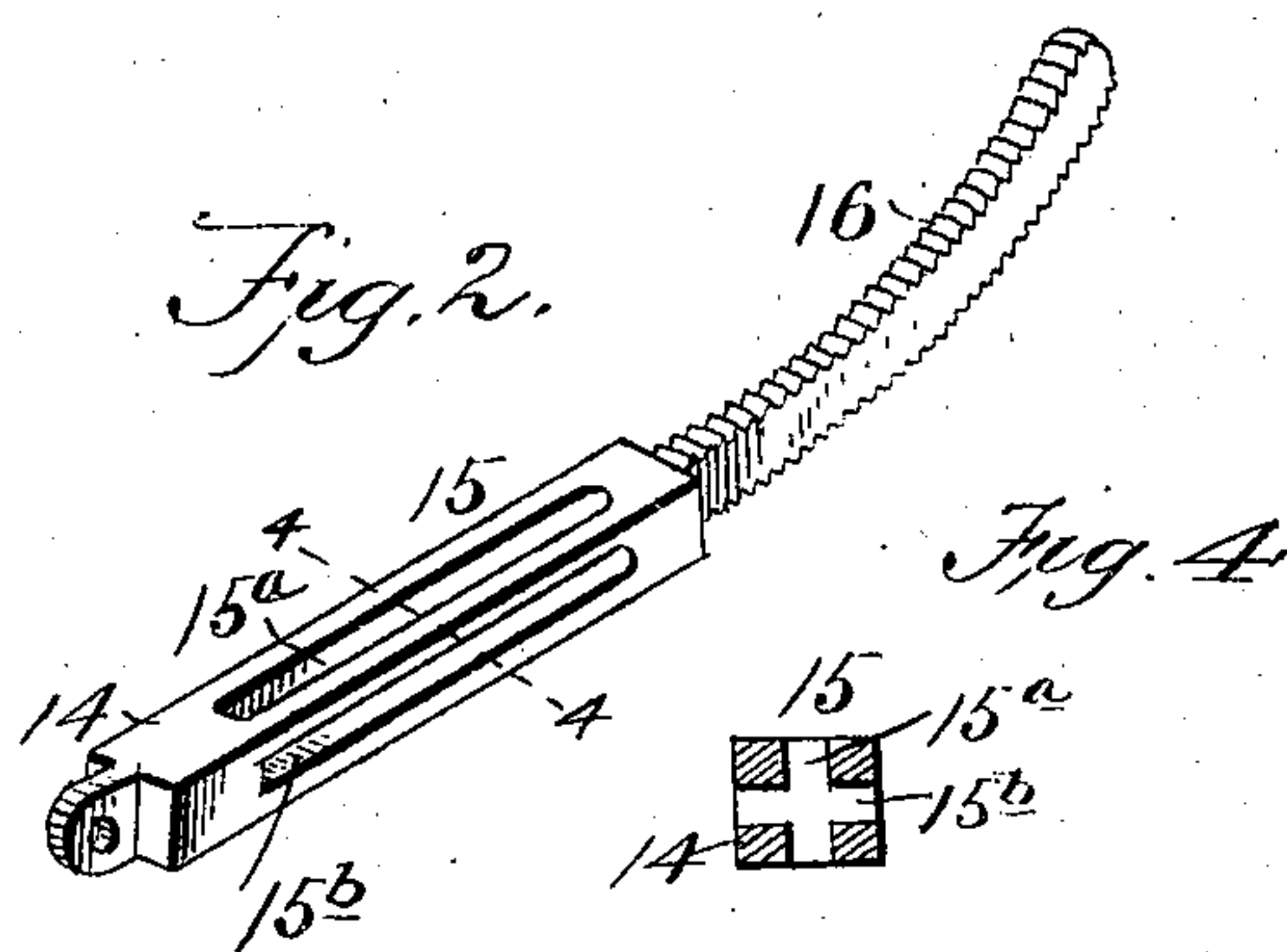
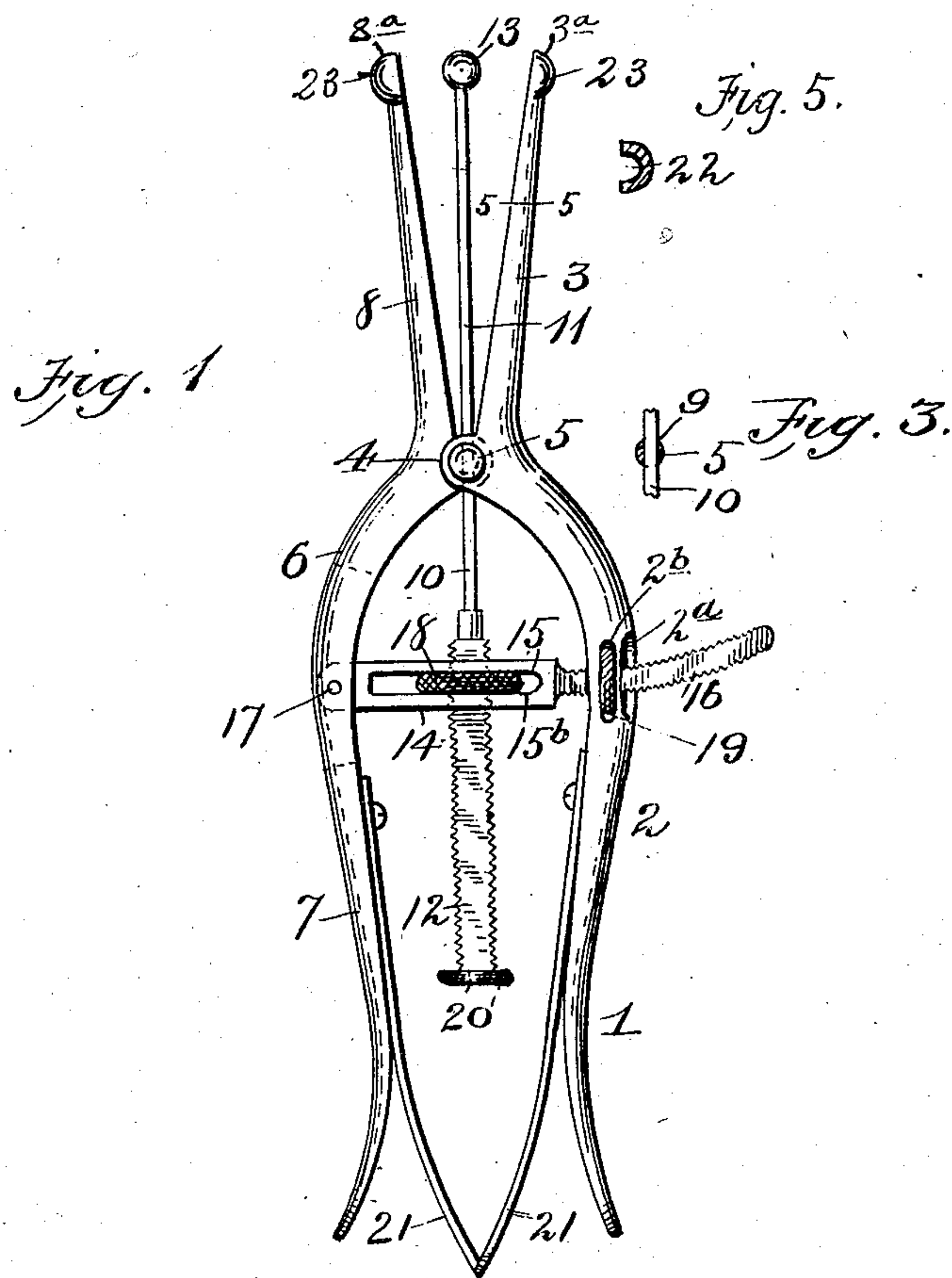
PATENTED APR. 7, 1903.

J. H. KOCHENDERFER.

HERNIAL FORCEPS.

APPLICATION FILED SEPT. 22, 1902.

NO MODEL.



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HERNIAL FORCEPS.

SPECIFICATION forming part of Letters Patent No. 724,889, dated April 7, 1903.

Application filed September 22, 1902. Serial No. 124,443. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. KOCHENDERFER, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented new and useful Improvements in Hernial Forceps, of which the following is a specification.

My invention relates to forceps for treating hernia, and the object of the same is to construct an instrument of this character by means of which the fallen parts may be returned to their normal positions and the rupture irritated to start healing.

The simple and novel construction employed by me in carrying out my invention is fully described in this specification and claimed, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a side elevation of my forceps. Fig. 2 is a detail of the cross-bar. Fig. 3 is a detail section of the cross-pin and stem or plunger. Fig. 4 is a section on the line, Fig. 2. Fig. 5 is a detail section on the line 5 5, Fig. 1.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates a member comprising a curved handle 2 and a straight rounded jaw 3. Apertured ears 4 are formed on the member 1 and are pivoted on a cross-pin 5 to a member 6, which comprises a handle 7, similar to the handle 2, and a jaw 8, like the jaw 3, and arranged to cooperate therewith.

Slidingly mounted in a transverse aperture 9 in the cross-pin 5 is a stem or plunger 10, having a body comprising a round uniform portion 11 and a larger slab-sided threaded portion 12. A ball or knob 13 is formed on the end of the plunger 10 to adapt it for use against thin membranes without injuring or lacerating them. A cross-bar 14, having a rectangular body 15, bearing a slab-sided threaded shank 16, is mounted between the two handles 2 and 7, with the threaded shank 16 engaging an aperture 2^a in the handle 2 and with the other end thereof pivoted to the handle 7 on a cross-pin 17.

The body 15 of the bar 14 is apertured at 15^a to accommodate the threaded portion 12 of the plunger 10 and is also slotted at 15^b to accommodate a knurled thumb-nut 18, which

is fitted on the threaded portion 12 of the plunger 10. A detachable button 18 is attached to the threaded end of the plunger 10 to serve as a stop to limit the movement thereof. A thumb-nut 19 is mounted in a slot 2^b in the handle 2 and engages the threaded shank 16 to serve to regulate the spread of the jaws 2 and 7. Springs 21 are secured to the handles and arranged to hold the jaws 3 and 8 normally closed. The jaws 3 and 8 are hollowed out at 22 and rounded out at 23 to form hollow hemispheres to accommodate the rod 11 and ball 13 of the plunger 10. The tips 3^a and 8^a are rounded off to adapt them for use without danger of injuring the patient.

In operating my forceps to cure hernia the jaws 3 and 8 are first closed by using the thumb-nut 19 to separate the handles 2 and 7, after which the plunger 10 is drawn down until the ball 13 is within or near the rounded tips of the jaws. The ball 13 is then placed against the scrotum and the plunger 10 propelled by means of the thumb-nut 18 to push up the scrotum above the hernial ring, thereby forming a fold in the scrotum. The instrument is then held with the plunger in contact with the scrotum and the nut 18 operated in a reverse direction to bring the tips of the jaws up to the ball 13, after which the thumb-nut 19 is turned to open the jaws to stretch the hernial ring and the muscular and other tissues comprising the membrane in which the hernial ring exists. The stretching of the membrane will cause irritation and a consequent contraction of the parts surrounding the opening, besides exudation and inflammation, thereby inducing healing and the closing of the hernial ring and consequent retaining and holding of the intestines in their proper place. The fold produced by the instrument prevents tearing or abrading the scrotal walls. A cure is thus effected without operating by incision.

I do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

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

1. In an instrument for the treatment of hernia, the combination of a pair of members

pivoted together, each of said members comprising a jaw and a handle for operating said jaw, a plunger slidably mounted intermediate said jaws, said plunger being rounded
5 off on its outer end to adapt it to be placed against the skin without lacerating it, and means for moving said plunger longitudinally, substantially as described.

2. In an instrument for the treatment of
10 hernia, the combination of a pair of pivoted jaws, a plunger mounted intermediate said jaws and constrained to move longitudinally, the outer end of said plunger being rounded
15 off to adapt it to be pressed against the skin without lacerating it, and means whereby said plunger is actuated, substantially as described.

3. In an instrument for the treatment of
20 hernia, the combination of a pair of pivoted jaws, handles for operating said jaws, a plunger mounted intermediate said jaws, the end of said plunger being rounded off to adapt
25 it to be pressed against the skin without breaking it, means for moving said plunger longitudinally, and means for operating said handles and holding them against accidental displacement, substantially as described.

4. In an instrument of the class described, the combination, of a pair of pivoted jaws,
30 handles constructed to operate said jaws to close them when said handles are separated, a cross-bar connected to one of said handles and passing through an aperture in the other, said cross-bar having threads thereon, a nut
35 engaging the said threads, a threaded plunger mounted intermediate of said jaws and passing through an aperture in said cross-bar, a nut located in a slot in said cross-bar and engaging the threads on said plunger, substan-
40 tially as described.

5. In an instrument for the treatment of hernia, the combination of a pair of pivoted jaws, the ends of which are rounded off to adapt them to engage the skin without cut-

ting it, handles for operating said jaws, and
45 a plunger adjustably mounted intermediate said jaws and having its upper end rounded off to adapt it to engage the skin without cutting it, and means for operating said plunger relative to the jaws, substantially as de-
50 scribed.

6. In an instrument for the treatment of hernia, the combination of a pair of jaws, handles for operating said jaws, a plunger
55 mounted intermediate said jaws, the outer end of said plunger being rounded off to adapt it to be pressed against the skin without injuring it, and means for operating said plunger longitudinally and transversely, sub-
60 stantially as described.

7. In an instrument for the treatment of hernia, the combination of a pair of pivoted jaws, concave on their opposed faces and a
65 plunger fitting said faces, substantially as described.

8. In an instrument for the treatment of hernia, the combination of a pair of pivoted jaws having hollow hemispherical points and
70 a plunger mounted intermediate said jaws and having a ball on the end, said ball being constructed to fit within said hemispheres, substantially as described.

9. In an instrument for the treatment of hernia, the combination of a pair of jaws whereby a hernia-ring is engaged, a slidably-
75 mounted plunger having a rounded end whereby the scrotum is engaged, raised and held above said hernia-ring, and means for operating said jaws, substantially as de-
80 scribed.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN H. KOCHENDERFER.

Witnesses:

C. R. MILLER,

E. KOCHENDERFER.