

No. 641,372.

Patented Jan. 16, 1900.

W. R. CLOSE-ERSON.
TRUSS.

(Application filed Dec. 22, 1898.)

(No Model.)

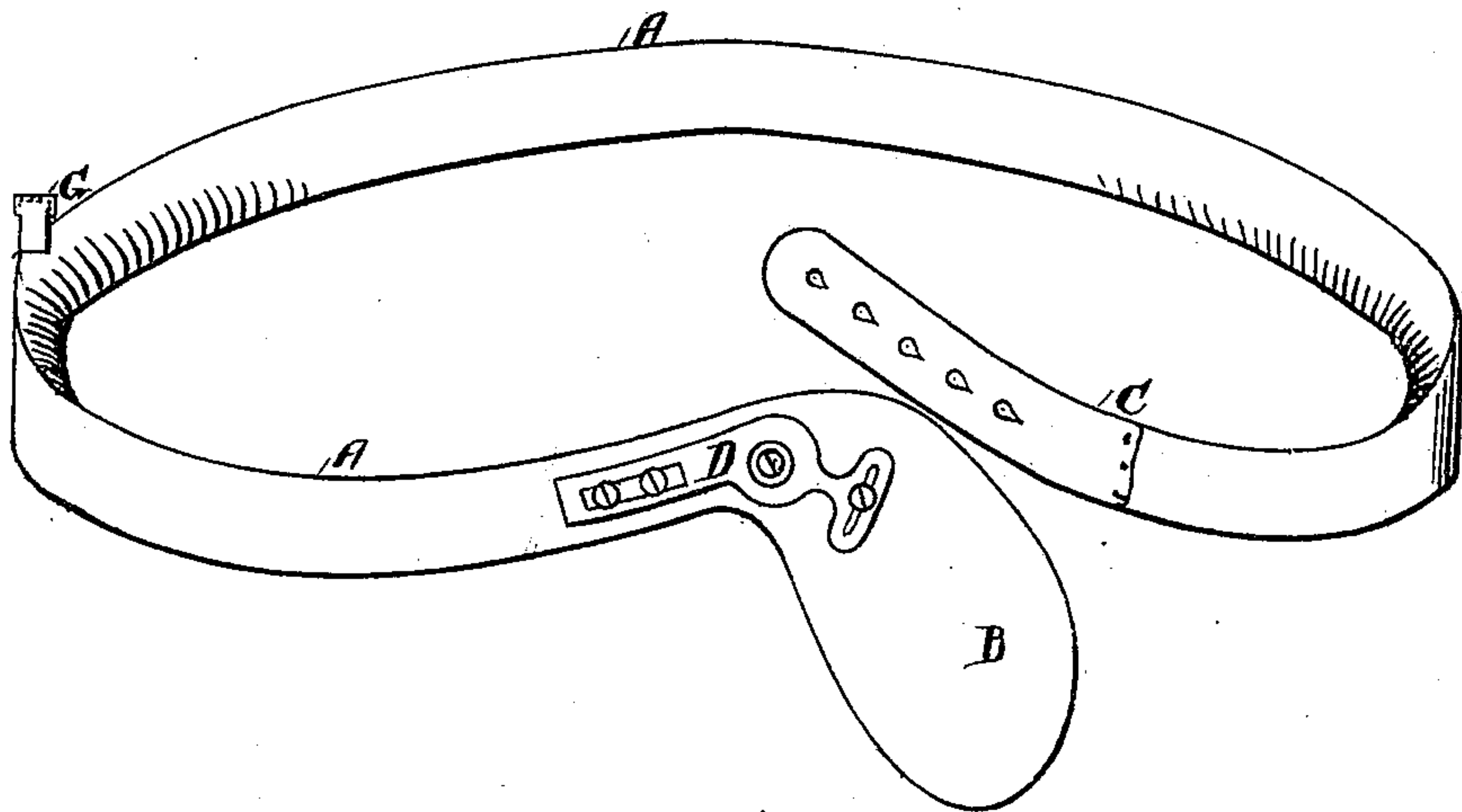


FIG. 1.

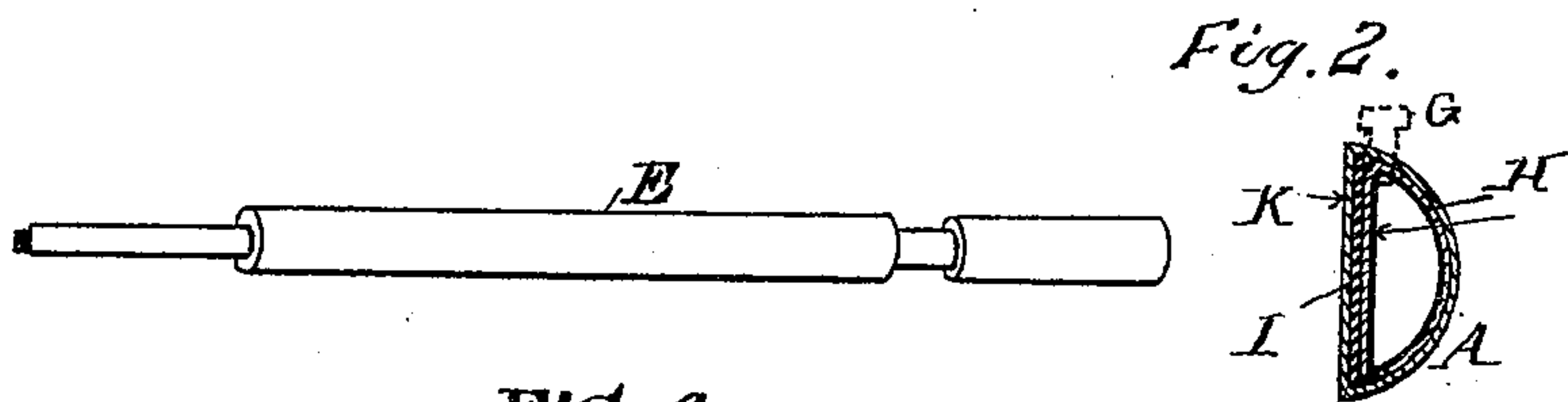


FIG. 4.

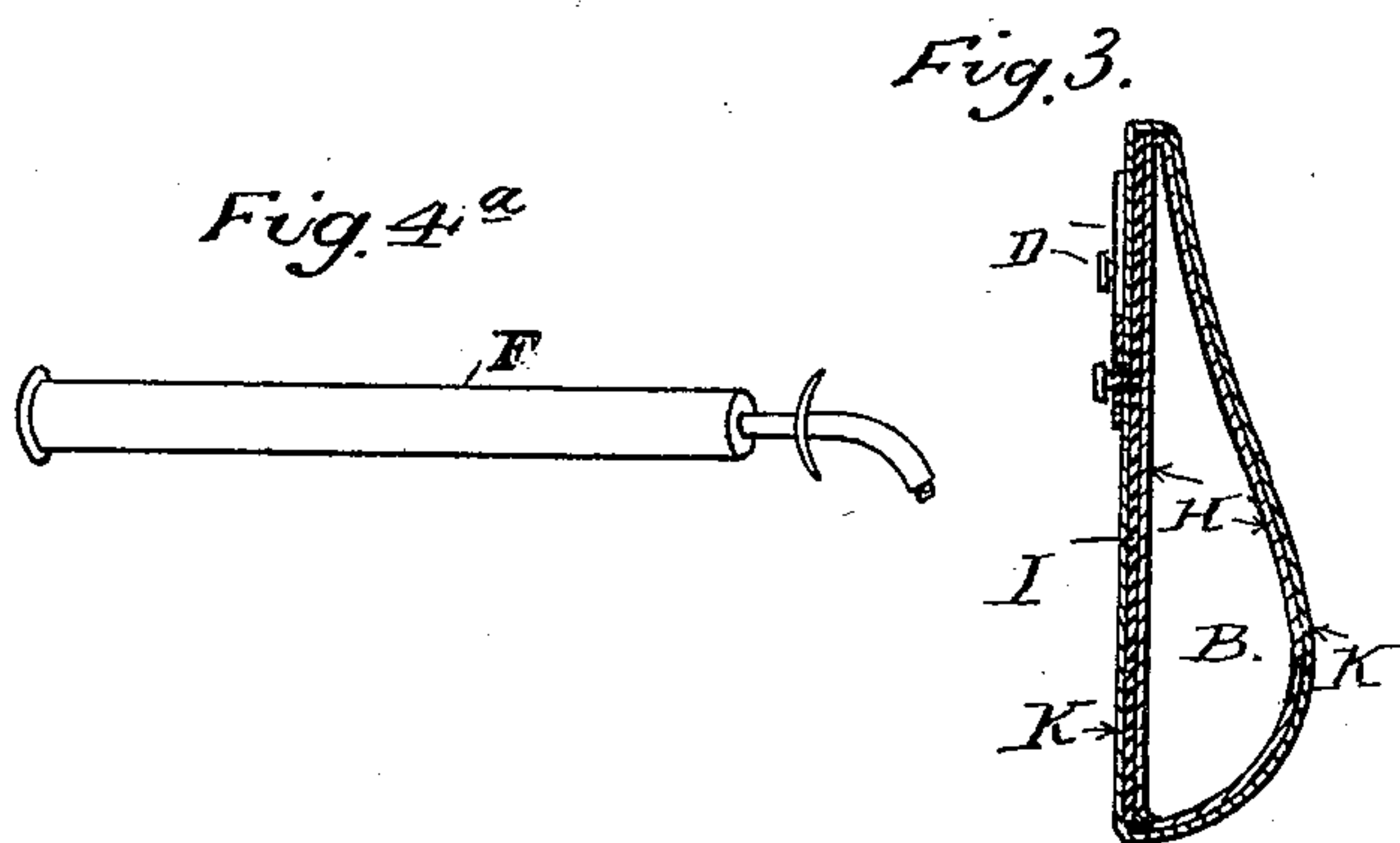


Fig. 4^a

Fig. 3.

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WILLIAM ROBERT CLOSE-ERSON, OF ONEHUNGA, NEW ZEALAND.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 641,372, dated January 16, 1900.

Application filed December 22, 1898. Serial No. 699,985. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROBERT CLOSE-ERSON, physician and surgeon, a subject of Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and a resident of Onehunga, in the provincial district of Auckland and Colony of New Zealand, have invented a certain new and useful Improved Truss for Treating Various Forms of Hernia, of which the following is a specification.

This truss is designed in the treatment of various forms of hernia to minimize discomfort and to facilitate easy application and uniform pressure on the part or parts of the patient being treated, which pressure can be increased or decreased as desired and as circumstances require. It may be shaped the same as other trusses now in use or in any way that will admit of its successful application. Ordinarily it is made to fit around the human body and has one or more pads connected to it. It has a stiffening-piece of steel, vulcanite, or other similar substance, with more or less spring in the stiffening-piece to keep the truss in place. On the inner side and to this stiffening-piece vulcanized india-rubber or caoutchouc or any substance having the same pliable character and quality of holding compressed air tight is attached, which is made in either one continuous piece or in parts joined together, so that they have a continuous or pneumatic or hollow center, which permits of their being inflated with compressed air by any of the methods now in use, and this inflation can be either partial or complete, according to the pressure required.

In the accompanying drawings, Figure 1 is a representation of the truss, showing one pad attached thereto; Fig. 2, a cross-section of the pneumatic tube; Fig. 3, a cross-section of the pad, while Figs. 4 and 4^a disclose two inflaters with either of which the truss and pad or pads can be filled or partly filled with compressed air.

The parts shown on the drawings are: A, truss; B, pad connected to one end of truss A; C, strap attached to other end of truss A; D, buttons secured to an inside stiffening-piece I for strap to fasten to; E, telescopic tubular inflater; F, finger-grip inflater; G, valve fixed into truss A, through which the com-

pressed air is pumped into the pneumatic tube and from which it is allowed to escape.

The truss A, as shown in Figs. 2 and 3, incloses a stiffening-piece I, before referred to, and the pneumatic tube H, which is attached to the inner side of the stiffened piece. As both the stiffening-piece and the pneumatic tube H are covered over by any form of suitable material K, they do not show in Fig. 1, which represents a truss A and pad B ready for use.

Only one pad B is shown on the drawings, as one is sufficient to illustrate its use; but two or more can be connected to any part of the truss, so that the pneumatic tube H has a continuous connection with them, whereby they can be inflated with the truss A and other pad B.

The purpose of the strap C and buttons D (shown on Fig. 1) is self-evident; but while this form of fastening is shown any other kind can be used that will suit.

Two forms of inflaters E and F are shown in Fig. 4; but any other way of impelling air into the pneumatic tube can be used that will produce the required result.

G, the valve, may be the ordinary form used with bicycle-tires or any other kind that will answer.

H, the pneumatic tube, can be made of vulcanized india-rubber or other substance, as before stated, that will keep it air-tight.

The materials and manner of construction before mentioned, as well as the size of the truss and pad or pads, may be varied according to circumstances; but the pneumatic tube must be made continuous, so that every part of the truss and pad or pads can be simultaneously inflated. The pad can be made circular, oval, or of any other shape found to be suitable.

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

1. A combined truss and pad consisting of a continuous flexible exterior covering, a continuous, hollow, flexible interior tube, adapted to be inflated, and a stiffening and shaping plate at one side of the truss and pad and interposed between the inside tube and the exterior covering.

2. A truss including a pad and a body portion consisting of inner and outer tubes, a plate interposed between said tubes at the side opposite to the body, for retaining the shape of the tubes, and means for connecting the inner tube to an inflater.
3. A truss comprising a tubular body portion and a pad of pliable material, an interior inflatable tube and a stiffening and shaping plate attached to one side of the inner inflatable tube and lying between said inner tube and the adjacent inner wall of the outer tube.

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Witnesses:

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