

(No Model.)

C. CLUTHE.
TRUSS.

No. 563,449.

Patented July 7, 1896.

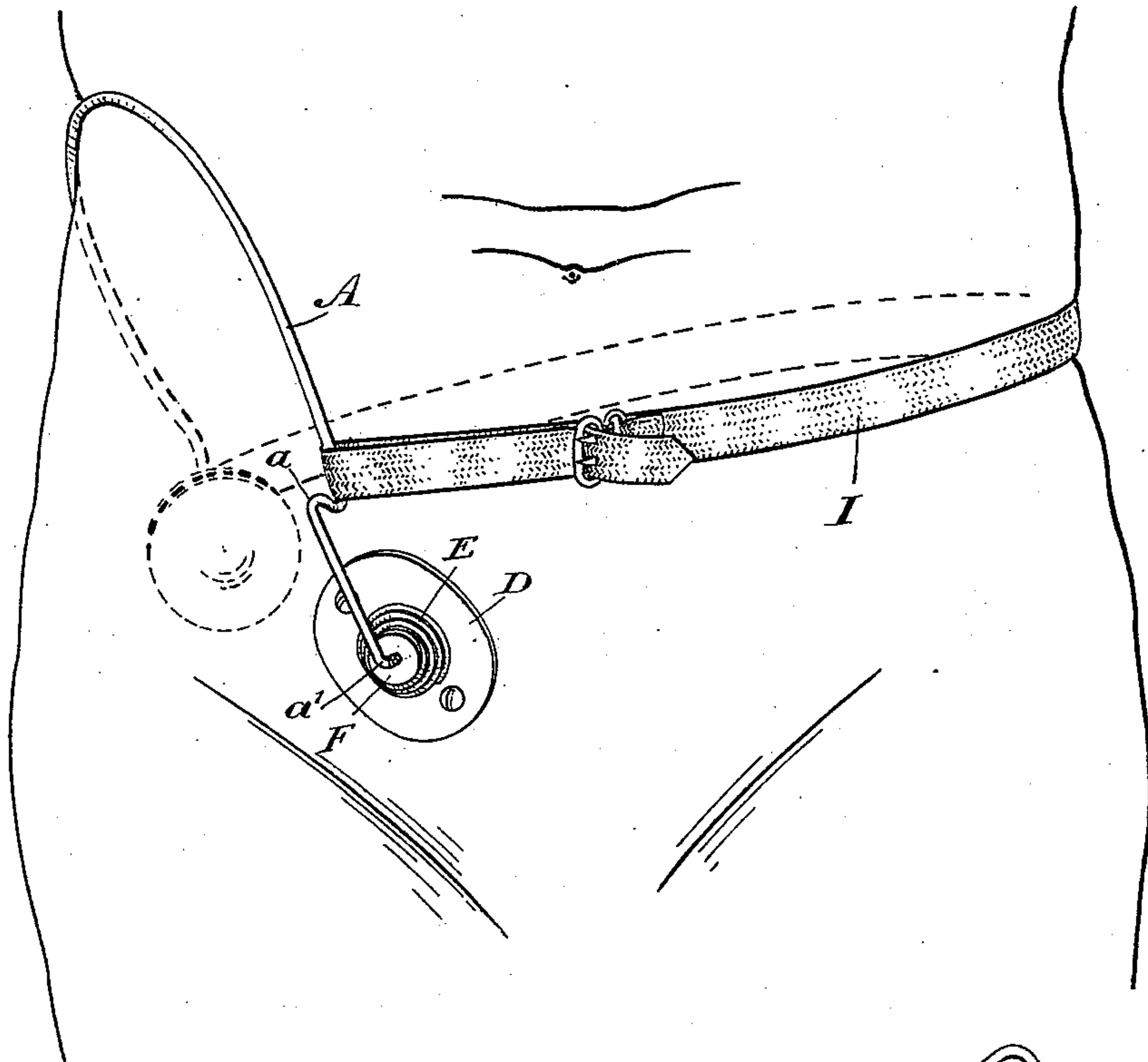


Fig. 1.

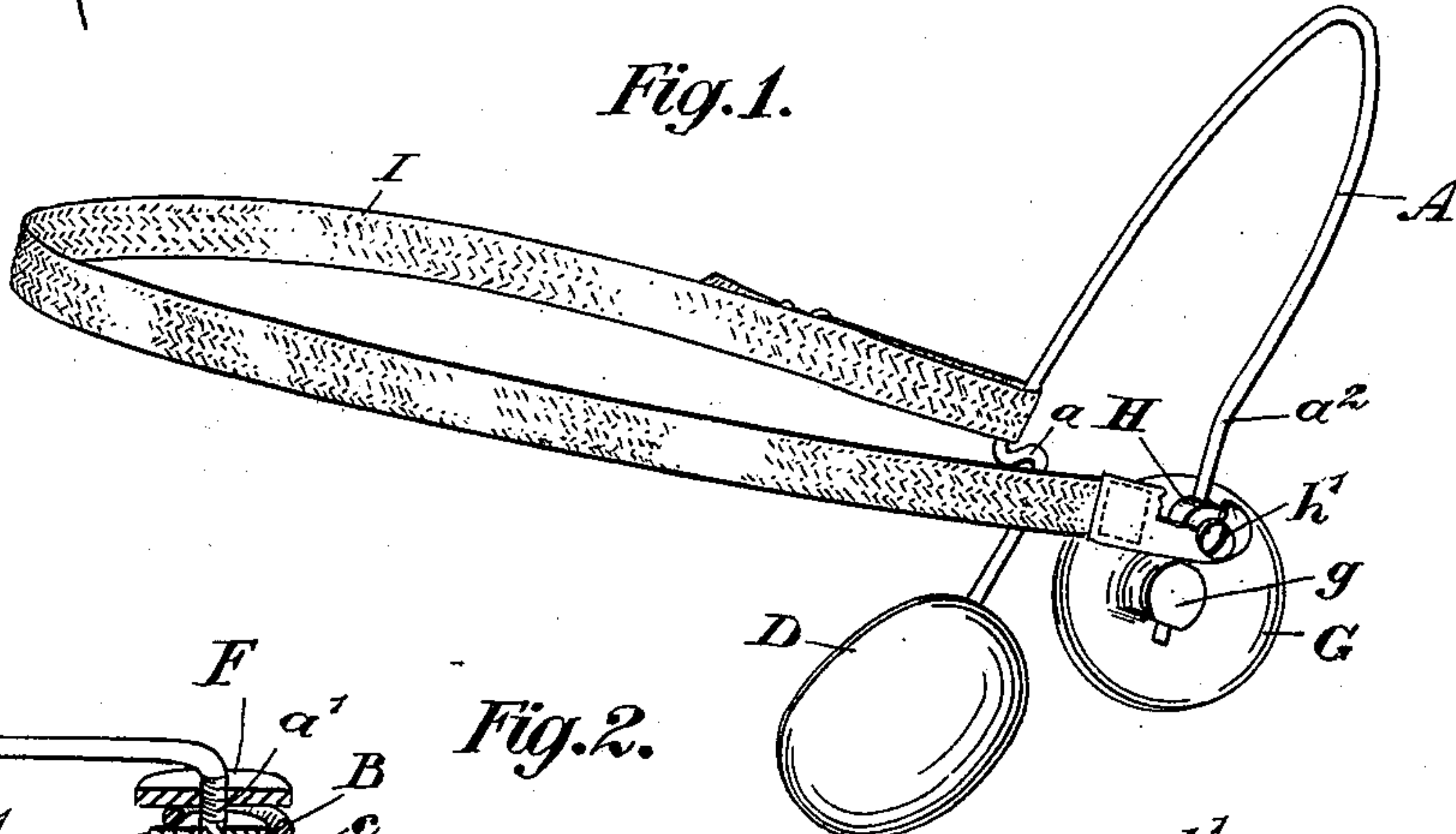


Fig. 2.

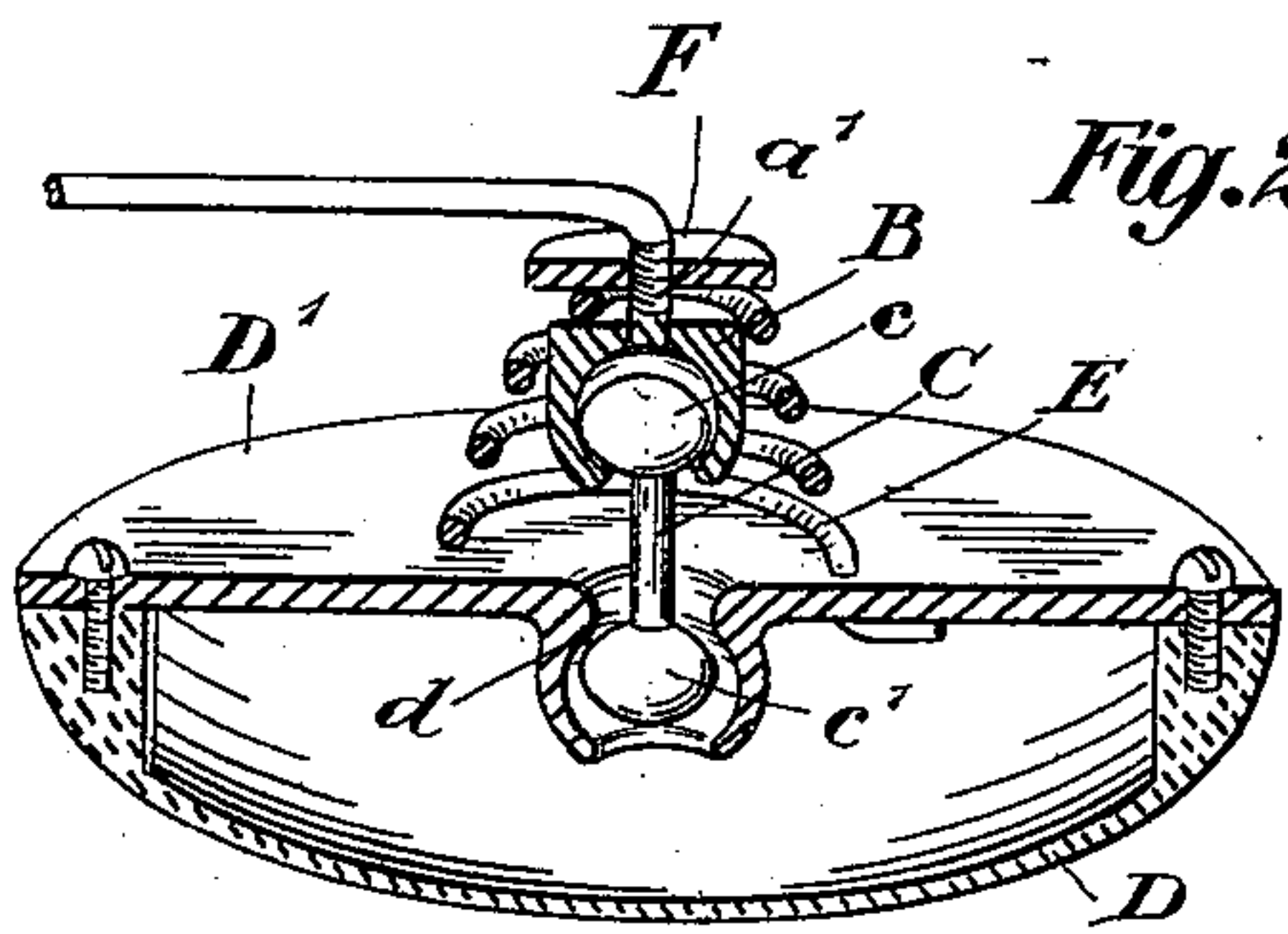


Fig. 3.

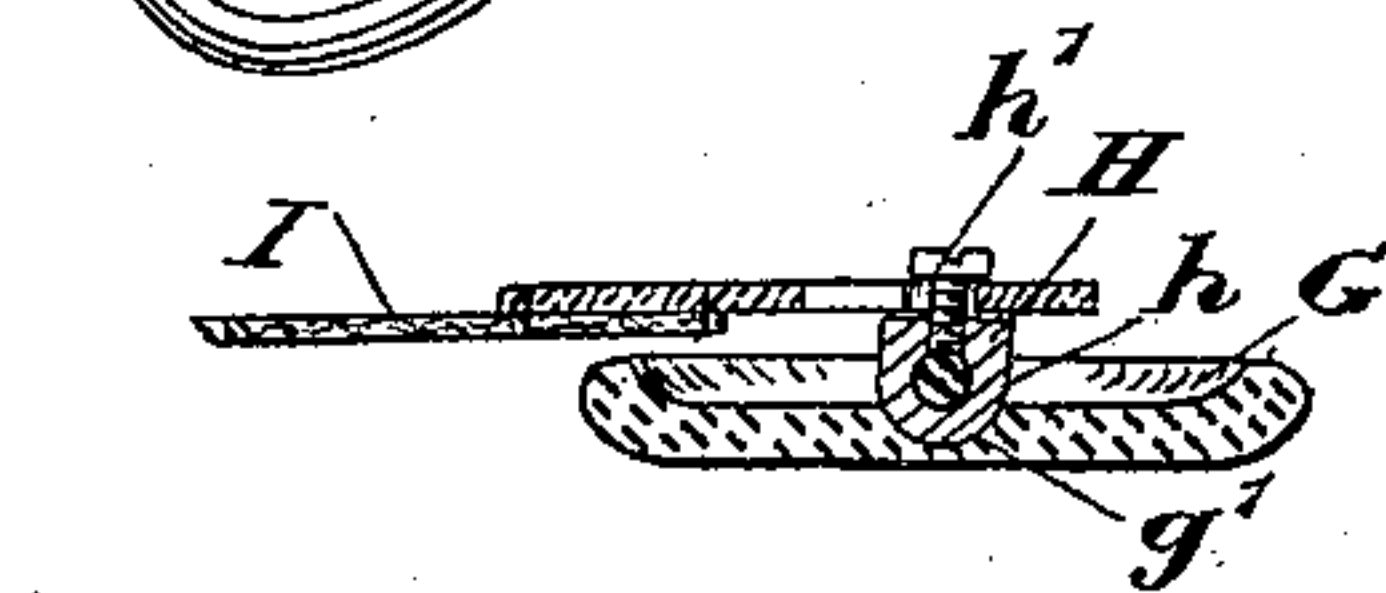


Fig. 4.

Witnesses.

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Inventor

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UNITED STATES PATENT OFFICE.

CHARLES CLUTHE, OF TORONTO, CANADA, ASSIGNOR TO AMELIA CLUTHE,
OF SAME PLACE.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 563,449, dated July 7, 1896.

Application filed July 2, 1895. Serial No. 554,720. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CLUTHE, surgical machinist, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Hernia-Trusses, of which the following is a specification.

My invention relates to improvements in hernia-trusses, and the object of the invention is to provide a simple means for retaining the truss in position and yet at the same time allow for the movement of the body without affecting the comfort of the wearer and also to provide a simple means for changing the position of the hernia-pad to any position desired; and it consists, essentially, of a wire hood which is provided with an offset at its front portion above which is attached the belt, the end of the wire being bent and connected to the hernia-pad by a ball-and-socket joint or joints and helical spring and the back pad being provided with a peculiar longitudinally-adjustable connection and swing-joint, as hereinafter more particularly explained.

Figure 1 is a perspective view of portion of the body, showing the application of my truss, the back portion of the hoop, back pad, and belt being shown in dotted lines. Fig. 2 is a view from the rear, the body being left out. Fig. 3 is an enlarged perspective sectional detail of the hernia-pad and its connection to the end of the wire hoop. Fig. 4 is an enlarged sectional detail showing the connection of the opposite end of the wire hoop to the back pad.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the wire hoop, which is provided with an offset a . The lower front end of the wire A has a bent end a' , which is threaded, as shown, and secured in the outer end of the inverted ball-cup B.

C is a stem provided with a ball c at the outer end and a ball c' at the inner end. The ball c fits within the cup B, which is so formed after the ball is inserted, so as to prevent it coming out. The ball c' , at the inner end of the stem C, fits within a socket d of less diameter than the ball and forming part of the

back plate D' of the hernia-pad D, which is formed of hard rubber or other suitable material.

E is a helical spring, one end of which is inserted into a hole in the back D' of the pad D, while the other end is flattened out and extends between the flat outer end of the cup B and the nut F.

It will be seen that the peculiar connection above described between the end of the wire A and the pad D will permit of such pad when placed on the body tilting in all directions, the ball-and-socket connection to the back of the pad in particular allowing of this movement. The pad will also be capable of a vibratory movement parallel to the outside edge of the cup B, this particularly being accomplished by the double ball-and-socket connection above described. It will, however, be understood that where a greater freedom of movement is necessary the double ball-and-socket connection will be used; but where it is not necessary to have such freedom of movement I would preferably use a solid connection to the end of the wire A and have a ball-and-socket connection in the back D' of the pad D.

By loosening the nut F hereinbefore described it will be readily seen that the pad may be turned around into any desired position over the hernia in the body, and by screwing the nut F down upon the top of the helical wire spring E such pad will be maintained in the position to which it is set, although, as hereinbefore described, it will be capable of a limited movement.

For the rear end of the wire hoop A, I provide a slightly-convex rubber pad, the convex portion of which fits next the body. The wire A is offset slightly at a^2 and extends through a hole in the boss g .

The wire A is provided with a plug-sleeve H, which is provided with a hemispherical end h , which fits into a corresponding recess g' in the pad G. The set-screw h' serves to hold the plug-sleeve H securely in any desired position on the wire A. It will be seen from this construction that the pad G may tilt in any cross-direction upon its pivot, so as to accommodate itself to the body, and yet

the pad G is maintained rigidly as to longitudinal movement on the wire A. By loosening the set-screw *h'*, however, the pad G may be moved in either direction upon the
5 wire A, as desired, until the proper position for comfort on the body is reached.

In order to securely hold the truss in position, I provide a belt I, one end of which is passed around the wire A above the offset *a*
10 and is buckled, as shown, while the rear end is buttoned over the top of the set-screw *h'*. The offset *a* prevents the belt I from falling too low and thus having a tendency not only to throw the pad D, but also the wire hoop
15 out of position.

What I claim as my invention is—

1. In combination, in a hernia-truss, the belt, the pad, the hoop, the cup having a flat top carried on the threaded end of said hoop,
20 the disk also carried on said end, the spring secured at one end to said pad, the opposite

end thereof being removably clamped between said cup and disk, substantially as described.

2. In a hernia-truss, in combination, the
25 belt, the hoop, the pad having a central perforated boss to receive the end of said hoop, and the plug-sleeve adjustable on said hoop having a hemispherical head adapted to fit an eccentric recess formed in the back of said
30 pad, substantially as described.

3. The combination with the wire hoop, of the back pad G provided with a boss *g*, through which the wire extends, a plug-sleeve through which the wire also passes having a
35 hemispherical end fitting into corresponding recess in the back pad and a set-screw *h'* all arranged as and for the purpose specified.

CHARS. CLUTHE.

Witnesses:

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E. R. CASE.