

No. 742,698.

PATENTED OCT. 27, 1903.

E. L. MASON, DEC'D.
F. L. MASON, ADMINISTRATOR.

DENTAL JAW PROP.

APPLICATION FILED OCT. 31, 1902.

NO MODEL.

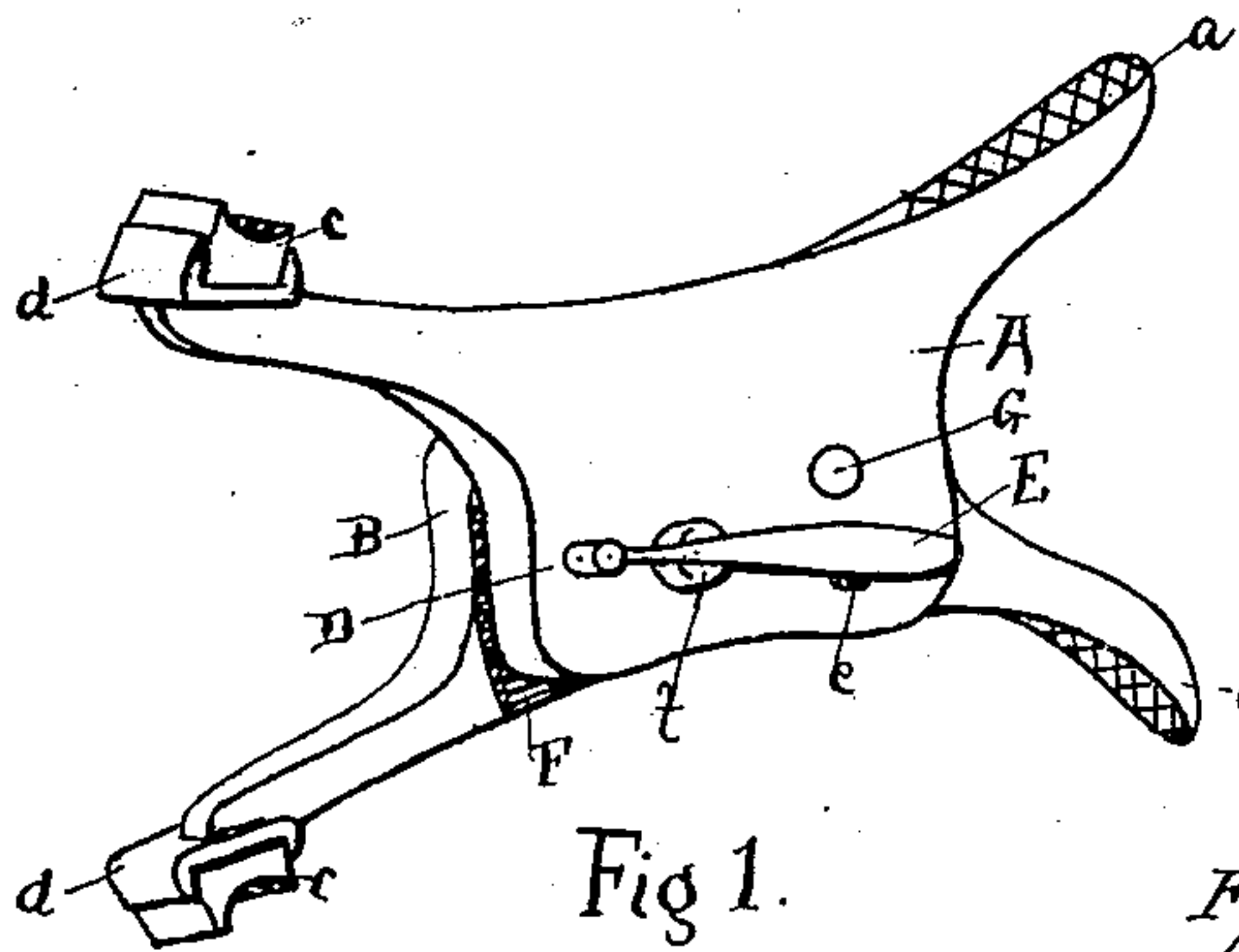


Fig 1.

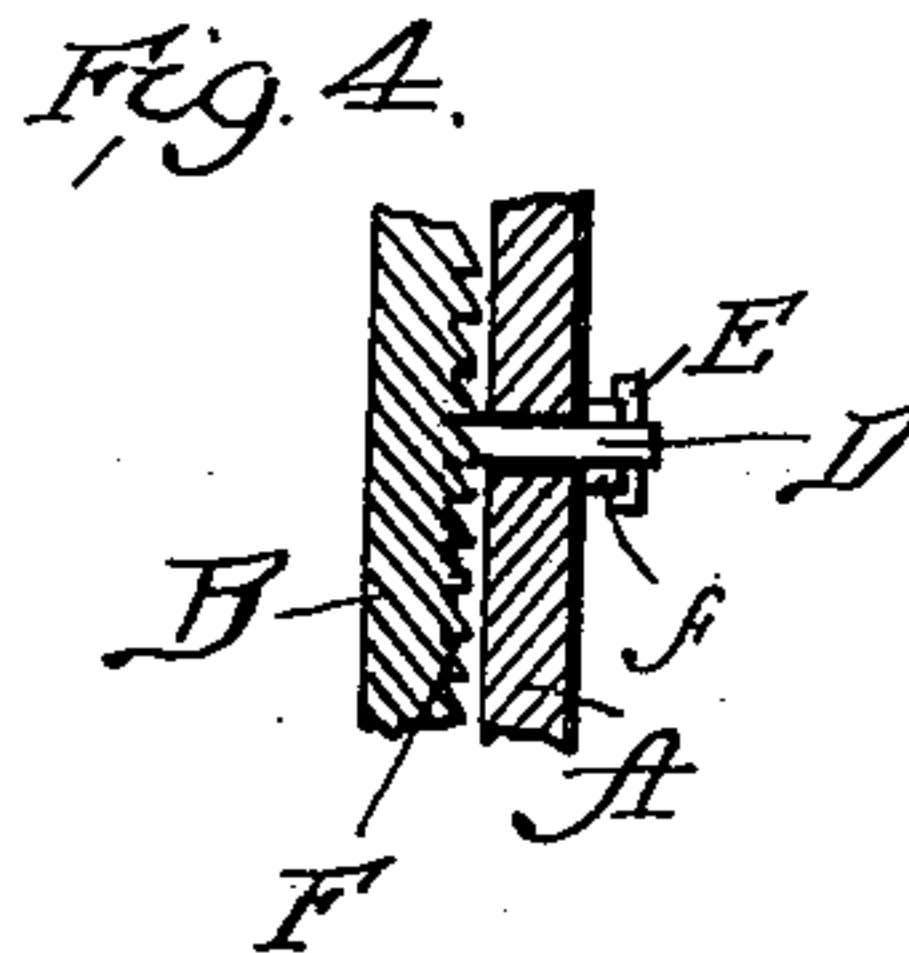


Fig. 4.

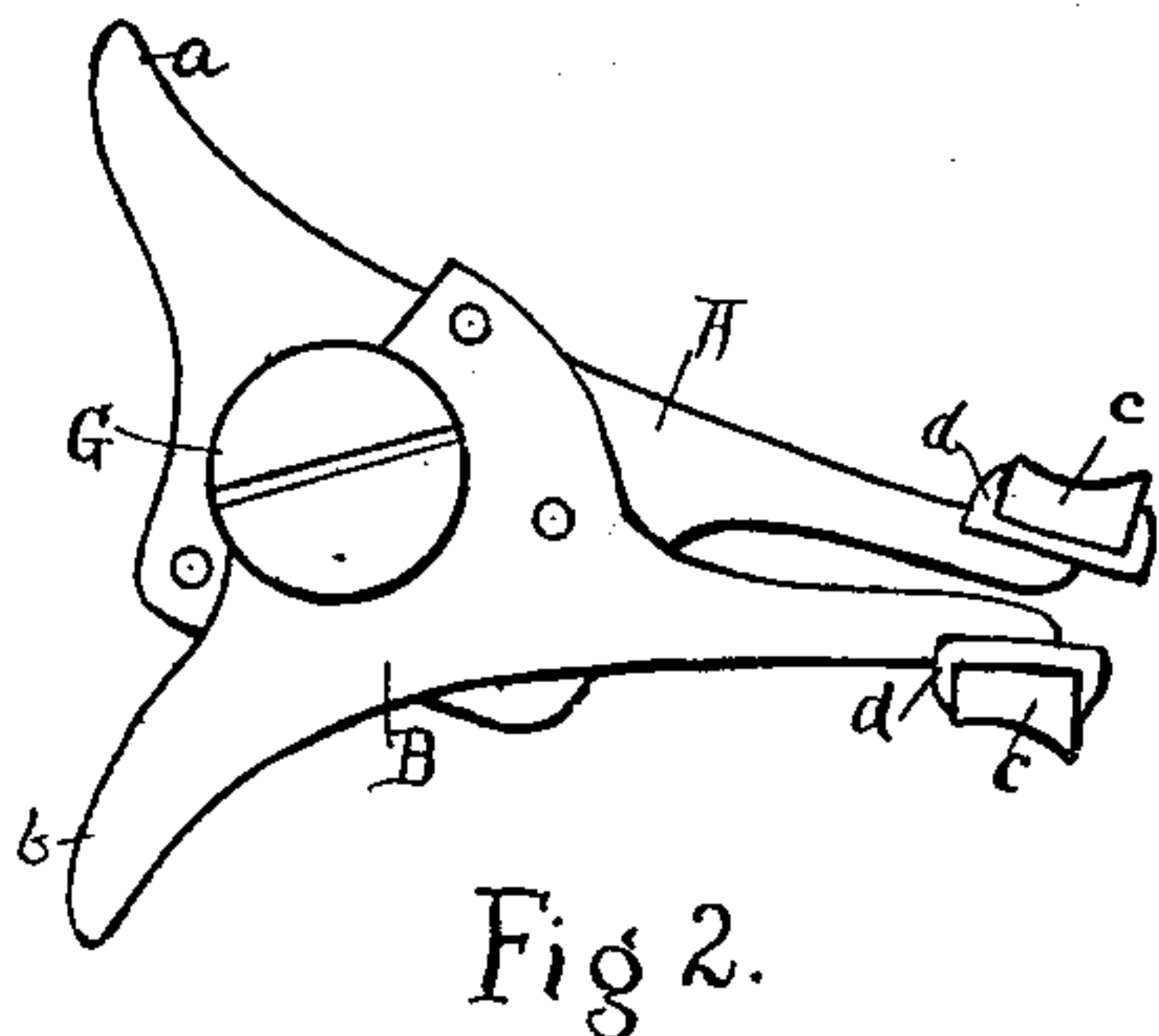


Fig 2.

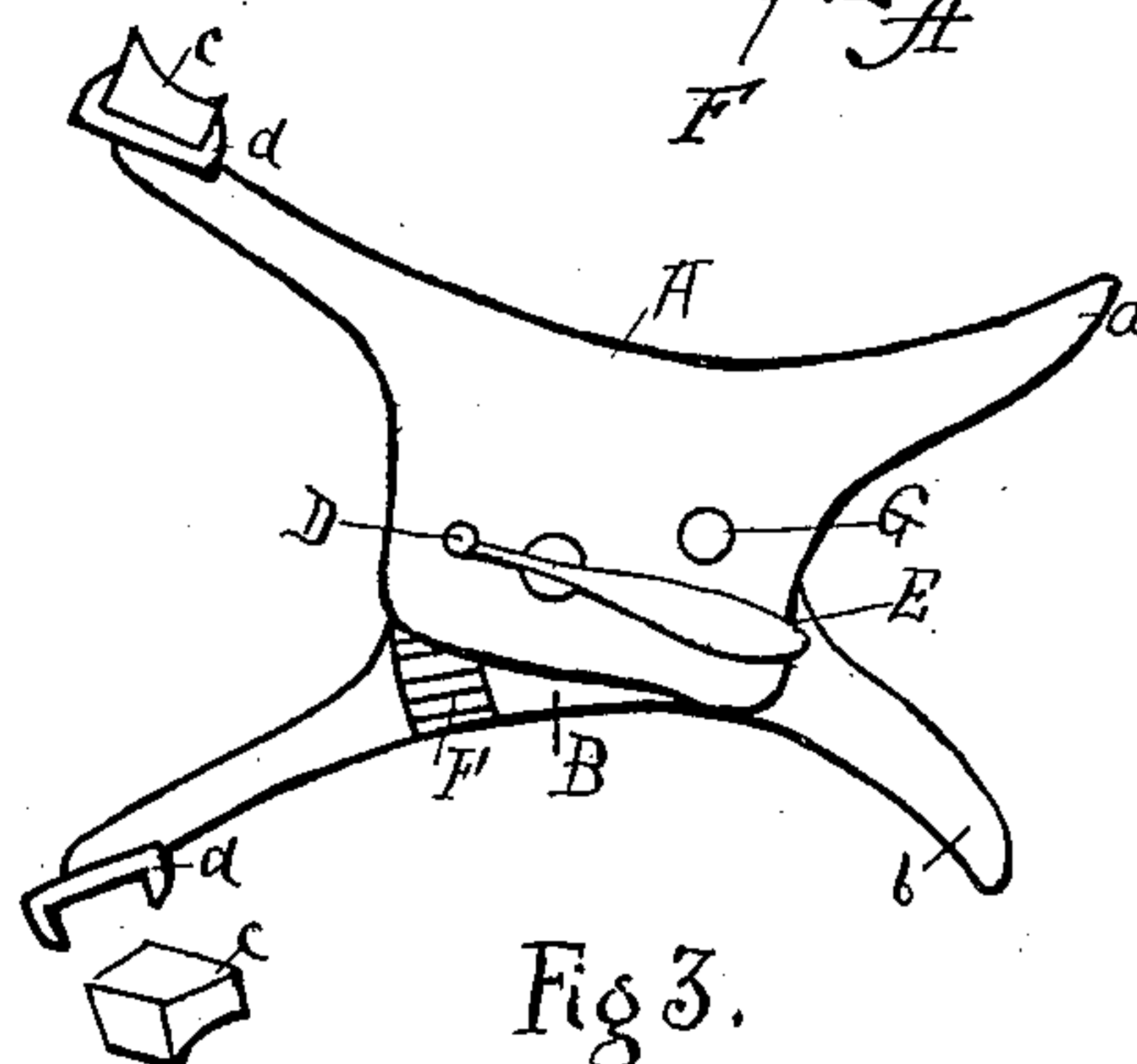


Fig 3.

WITNESSES:

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DENTAL JAW-PROP.

SPECIFICATION forming part of Letters Patent No. 742,698, dated October 27, 1903.

Application filed October 31, 1902. Serial No. 129,559. (No model.)

To all whom it may concern:

Be it known that I, EDGAR L. MASON, a citizen of the United States, residing at Rockland, Maine, have invented certain new and useful Improvements in Dental Jaw-Props, of which the following is a specification.

This invention relates to dental jaw-braces, and more particularly to those adapted to be used where nitrous gas, ether, or other anesthetic is to be administered for an operation.

With the use of any anesthetic it is necessary to spread the jaws of the patient and generally to hold them apart during the operation, though with some, where rigidity of the muscles ensues after the jaw has become set, the prop inserted to retain it open is no longer necessary and being an obstruction to the light and a hindrance to work should, if possible, be removed.

It is therefore of the utmost importance in dental surgery to have a prop which will be adjustable to fit any mouth, free from any possible danger of infection, and at the same time capable of removal at any part of the operation without confusion or loss of time and so constructed as to be compact in form and not liable to catch the flesh of the patient between its parts.

It is the object of the present invention to overcome these difficulties and embody the features suggested in a practical dental implement adapted to meet the varied demands of the operating-room, and for this purpose the brace is made to consist of a pair of pivoted jaws adjustably held apart by a ratchet, which, having connection with a small lever on the side of the prop, is capable of instant release to allow the prop to collapse and drop out.

The construction of parts and operation of the same will be more fully described hereinafter, reference being made to the accompanying drawings, in which like letters indicate corresponding parts throughout.

Figure 1 is a general view of the prop. Fig. 2 shows the prop collapsed, and Fig. 3 a side view of the prop extended. Fig. 4 is a detail sectional view.

The jaws A B, which are removably fastened together by the pivot-screw G, carry at

their inner ends sockets *d*, into which are removably fitted the rubber tooth-pads *c* and at their outer ends roughened finger-holds *a*. One member B carries on its inner face a segmental ratchet, into which a pawl D on the jaw A takes. The pawl D is controlled by a finger-lever E and held in normal engagement with the ratchet under the pressure of the spring *e*.

The removable pads *c* are shaped to slip into and be firmly held by the sockets *d* and are slightly hollowed on their surface to receive the teeth. They are usually made of rubber or some yielding material and are preferably slightly roughened on this surface to prevent slipping as the patient bites thereon.

The segmental rack F may be cast integral with the jaw B or made separate of harder material and riveted thereto. The releasing-lever E is pivoted at *f* and engages a perforation in the pawl with its inner end.

The operation of the device is as follows: The instrument in its collapsed position is inserted between the teeth of the patient and adjusted to hold the jaws open at any distance desired by merely pressing on the finger-grasps *a b*, the pawl-and-ratchet adjustment taking up each movement and holding the members spread apart. After the anesthetic has been administered and the patient thoroughly under its influence the attendant or the operator himself may simply press the lever E, which, withdrawing the pawl D, allows the prop to drop from the mouth, which it does on account of its heavier handle end. After an operation the rubber pads *c* are removed and thrown away, the instrument thoroughly sterilized with the others, and new pads, which may be supplied at a nominal cost, inserted. Thus an instrument is furnished capable of the nicest adjustment and instantaneous release, constructed to undergo complete sterilization, and having the pads *c*, the only parts upon which a patient bites, removable, so that no one need undergo the risk attendant upon the use of a part in the mouths of several patients.

This prop is of course capable of use in other than dental operations and is capable of

various modifications without departing from the spirit of the invention.

What I claim, then, and desire to secure by Letters Patent, is—

- 5 1. A dental prop having a pair of pivoted jaws overlapping each other, a ratchet on the inner face of one jaw and a pawl on the other jaw.
2. A dental prop having a pair of jaws over-
lapping each other, a ratchet on the inner face
10 on one jaw, a pawl on the other jaw and a lever to withdraw said pawl.
3. A dental prop having a pair of jaws with

overlapping portions, and adjusting means between said overlapping portions.

4. A dental prop having a pair of jaws with overlapping portions, adjusting means between said overlapping portions and a release
mounted upon one jaw to disengage the ad-
justing means.

In testimony whereof I affix my signature
in presence of two witnesses.

EDGAR L. MASON.

Witnesses:

F. H. CROCKETT,
E. C. PAYSON.