

No. 774,816.

PATENTED NOV. 15, 1904.

L. H. BABCOCK.
MATRIX BAND RETAINER.
APPLICATION FILED MAR. 11, 1904.

NO MODEL.

Fig. 1.

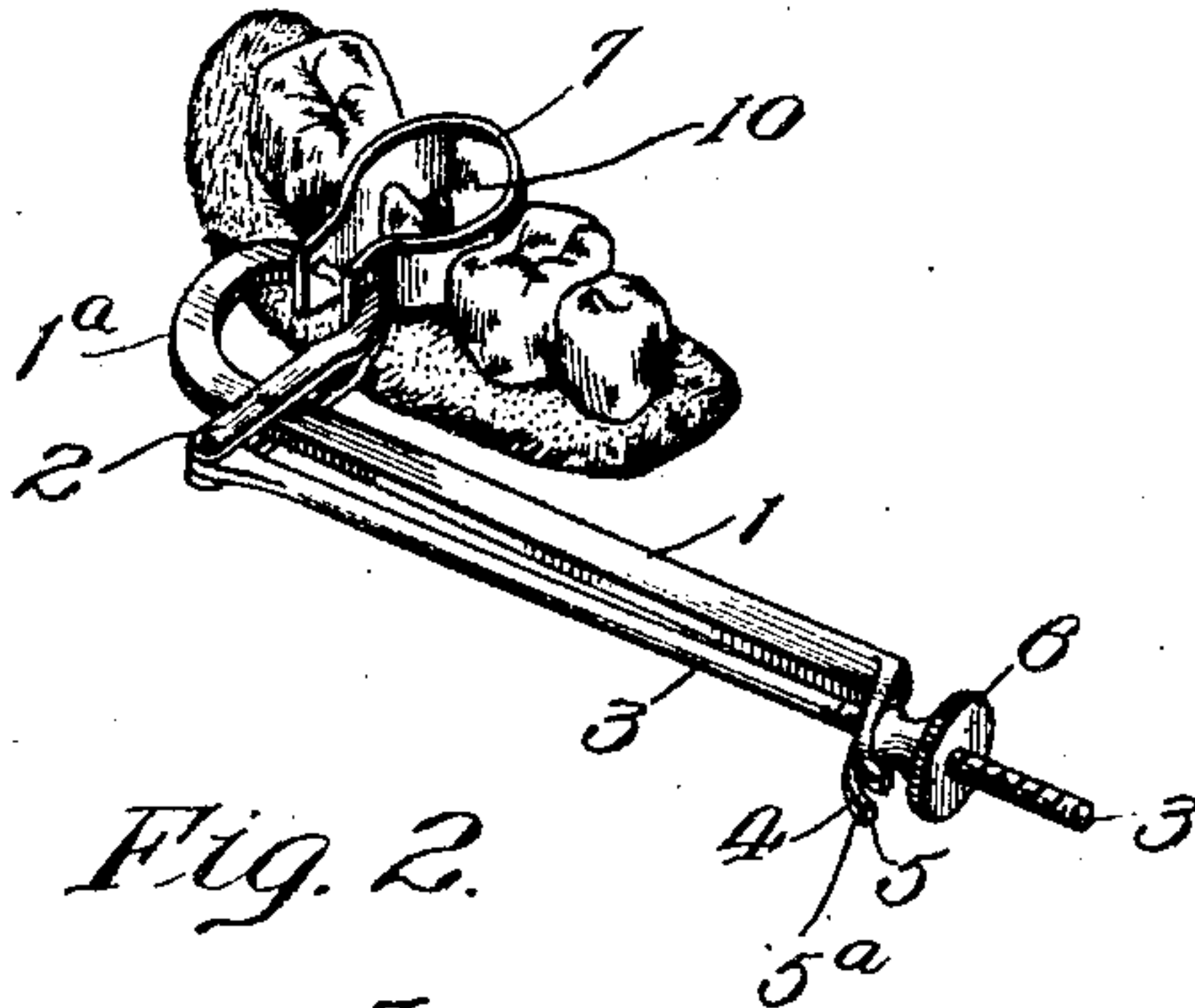


Fig. 2.

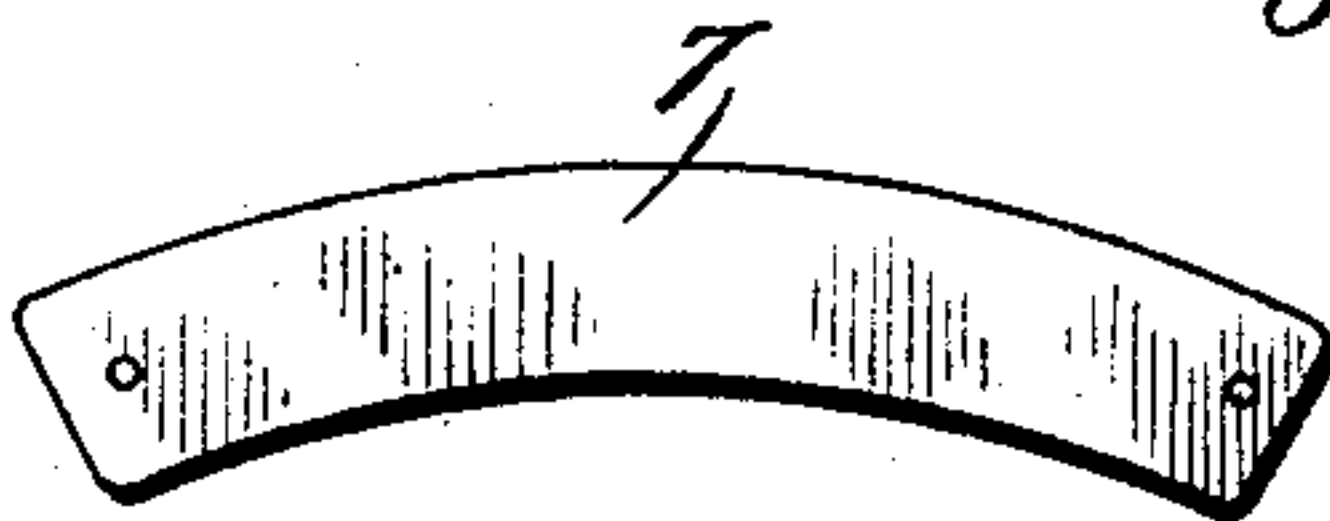


Fig. 3.

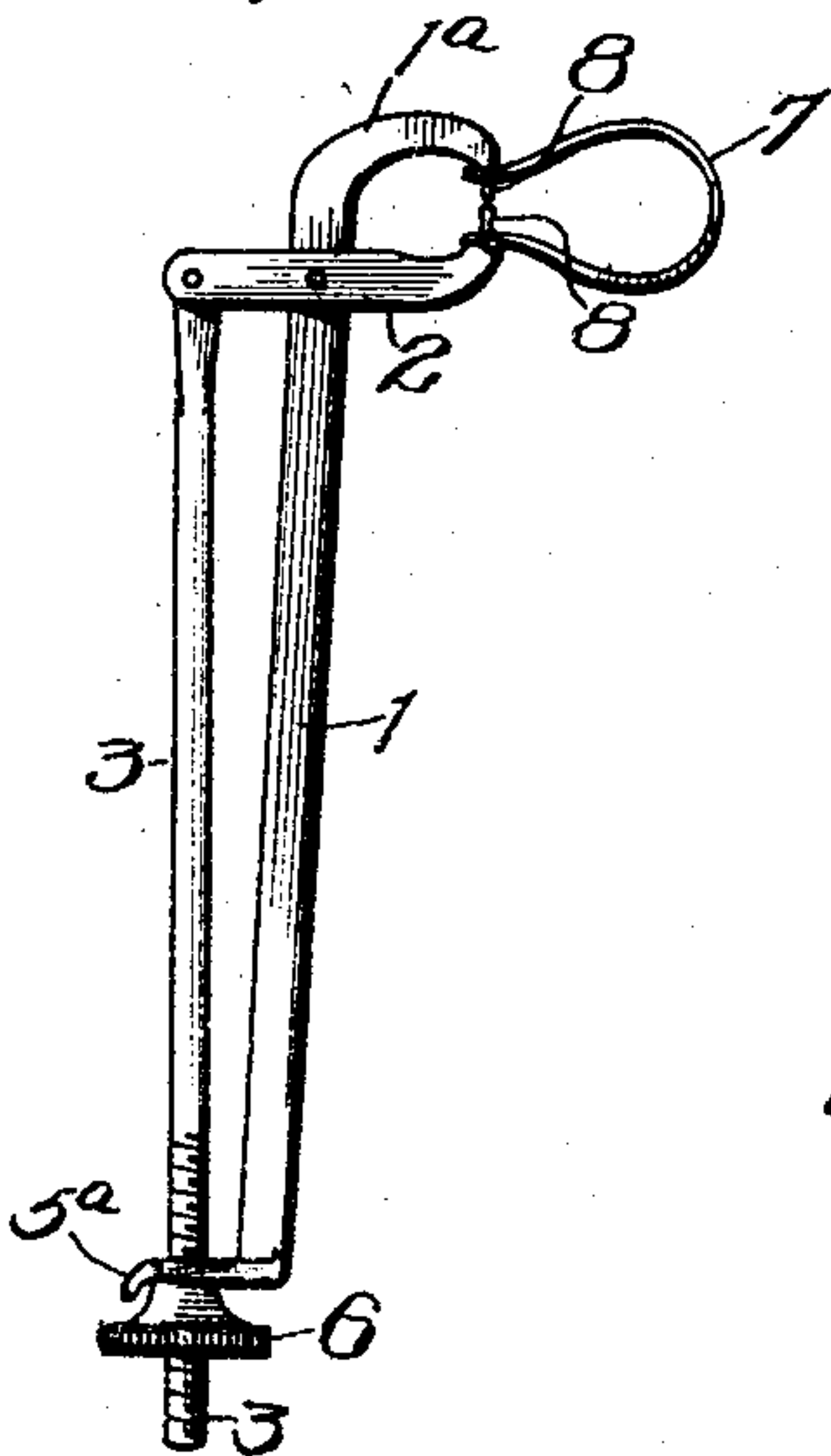


Fig. 4.

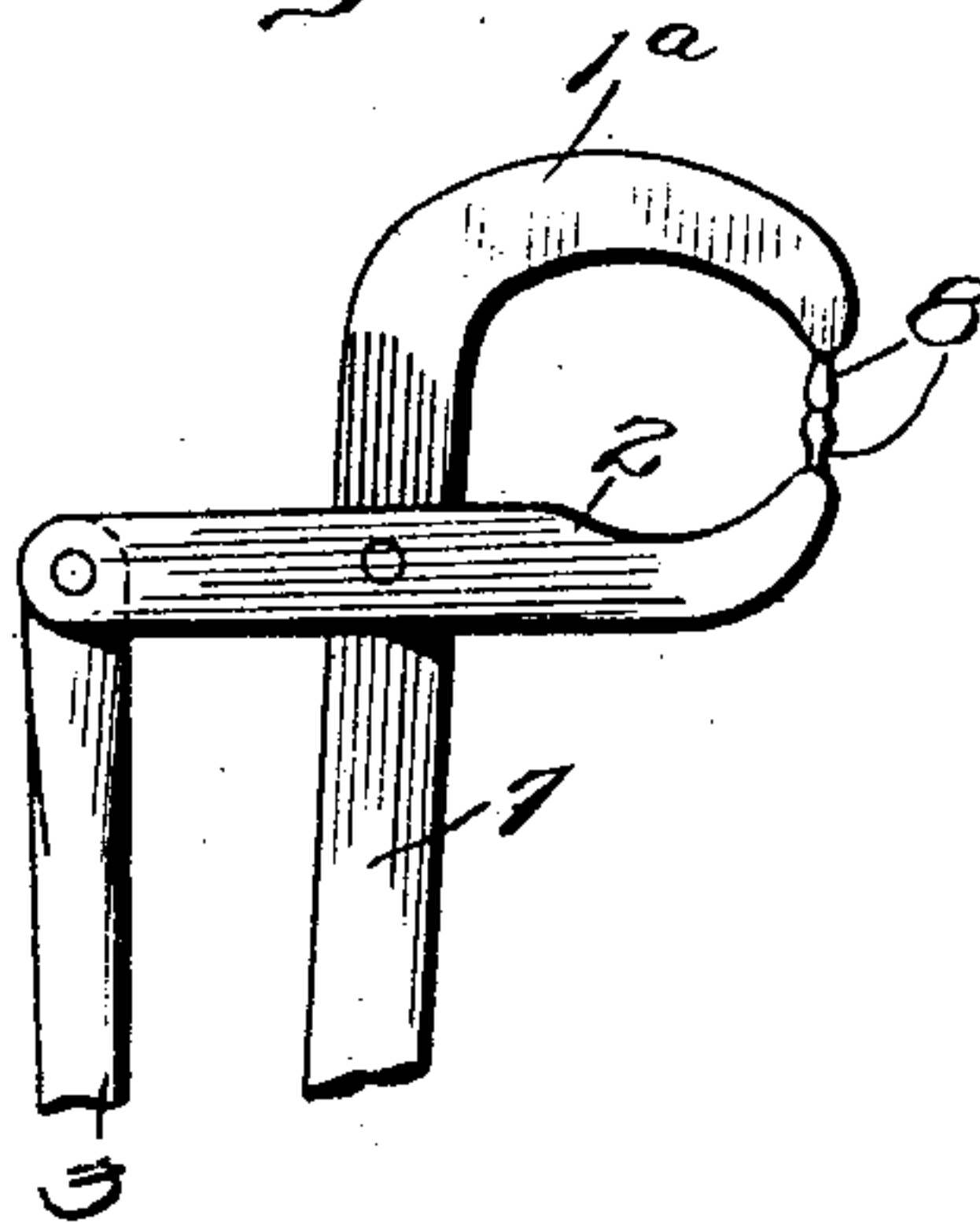


Fig. 5.

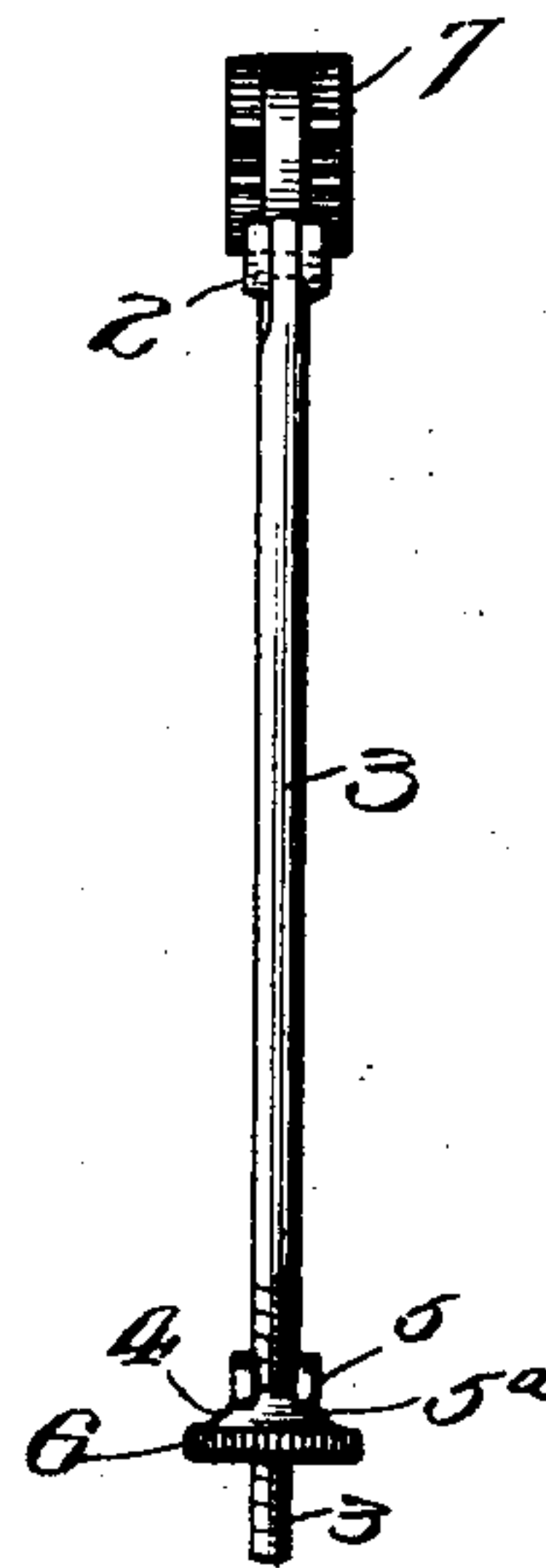
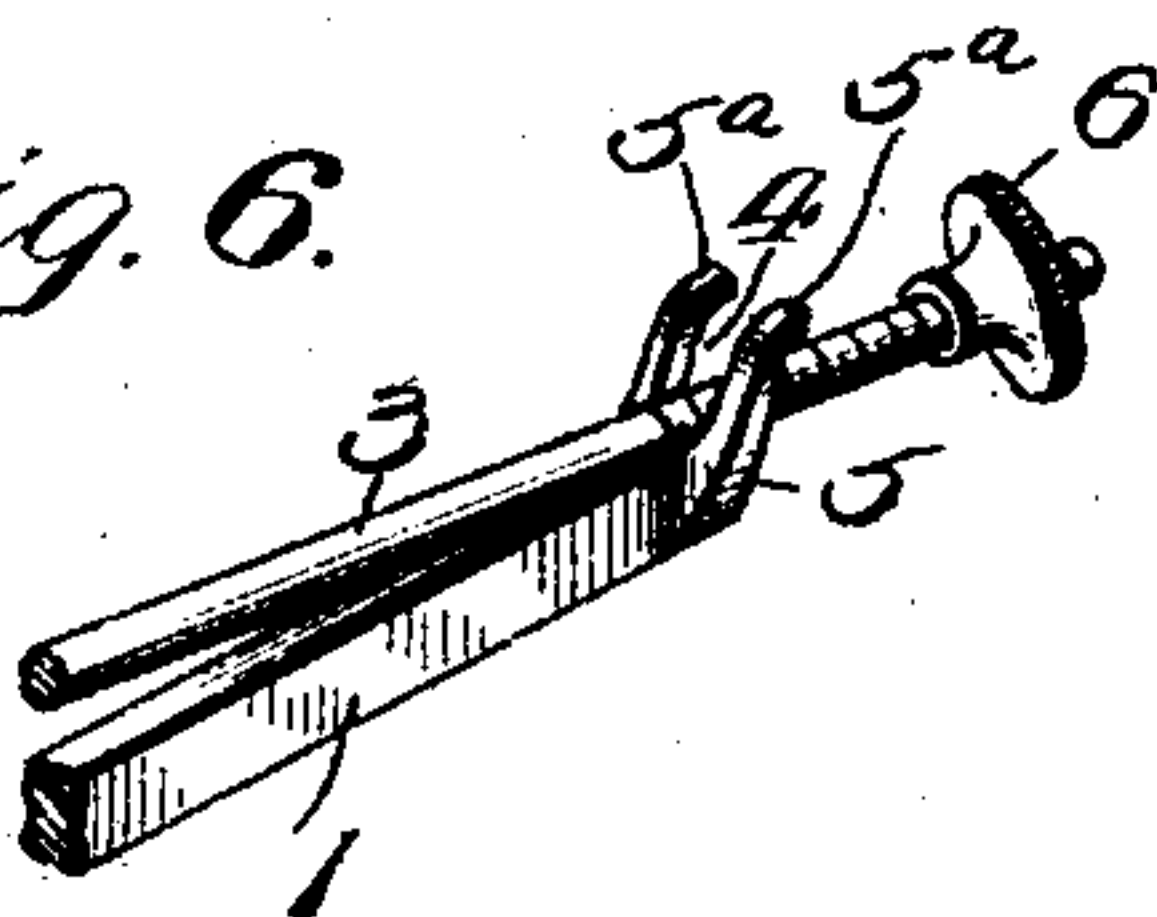


Fig. 6.



WITNESSES:

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LISLE H. BABCOCK, OF CANISTEO, NEW YORK, ASSIGNOR TO EAGLE DENTAL MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

MATRIX-BAND RETAINER.

SPECIFICATION forming part of Letters Patent No. 774,816, dated November 15, 1904.

Application filed March 11, 1904. Serial No. 197,680. (No model.)

To all whom it may concern:

Be it known that I, LISLE H. BABCOCK, a citizen of the United States, residing at Canisteo, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Matrix-Band Retainers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 is a perspective view of the device as in use. Fig. 2 is a view of the matrix-band. Fig. 3 is a side elevation of the matrix-band retainer with a matrix-band grasped and held thereby. Fig. 4 is an enlarged elevation of the jaw end of the retainer. Fig. 5 is a front elevation of Fig. 3. Fig. 6 is a perspective of the outer end of the device broken away.

This invention has for its object to provide a matrix-band retainer and clamp which may be easily applied and which when in use in the mouth of the patient shall be out of the way of the operator and which may be readily and quickly placed and removed.

In the drawings, 1 is a bar, the forward end of which (marked 1^a) is bent at right angles or thereabout, as shown. Pivoted to this bar at a suitable distance from the said end of the latter is a lever 2, that extends to a point opposite to the free end 1^a of the bar 1, which, with said lever, may be said to constitute jaws. Pivotaly connected to lever 2 is a rod 3, that passes through an opening 4 of a projection 5 of bar 1. The outer end portion of said rod is screw-threaded and has thereon a milled nut 6, that bears against the projection 5.

7 is the usual matrix-band, which is made of a thin strip of steel or other suitable metal. It is perforated near each end, and the ends of said jaws are made with opposed studs 8, that are adapted to be entered into the perforations, respectively, of the matrix-band when the latter is bent into the form of a loop, as shown. Preferably the said studs terminate in a knob or enlargement, as seen in Fig. 4, so as to obviate liability of the band slipping off the studs.

When the device is used, the band is placed or forced between the tooth 10 and the adjacent tooth or teeth, as in Fig. 1. The lever or jaw 2 is then caused to rotate on its pivot toward the jaw 1^a of bar 1 by suitably turning the nut 6, thus constricting the band as may be required around the neck of the tooth 10. It is preferred to make the before-mentioned opening 4 an open slot in the projection 5, whereby by drawing the rod out from the slot it may be more quickly manipulated to operate the lever to open or inclose the loop of the matrix-band, the rod being returned into said slot and the required constriction of the band effected by means of the nut 6. In order to prevent the latter from accidentally slipping from the projection 5, the end of said projection is bent outwardly at 5^a, as shown.

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

1. In a matrix-band retainer, the combination of the bar having the bent end or jaw, the lever pivoted to said bar and constituting a jaw, means for retaining the ends of the usual matrix-band to said jaws, the screw-threaded rod connected to said lever and passing through a projection of said bar, and the nut on said rod for operating said lever, substantially as and for the purpose set forth.

2. In a matrix-band retainer, the combination of the bar having the bent end and the projection having the open slot, the lever pivoted to said bar and extending opposite said bent end of said bar, means for retaining the ends of the usual matrix-band to said bent end of said bar and the end of said lever, the screw-threaded rod pivoted to said lever and extending through said open slot, and the nut on said rod, substantially as set forth.

In testimony whereof I have hereunto affixed my signature this 18th day of June, A. D. 1903.

LISLE H. BABCOCK.

Witnesses:

ANDREW V. GROUPE,
WM. D. YARNALL.