

(No Model.)

J. A. DONALDSON.

DENTAL JAW BRACE.

No. 264,260.

Patented Sept. 12, 1882.

Fig. 1.

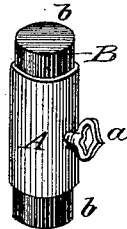


Fig. 2.

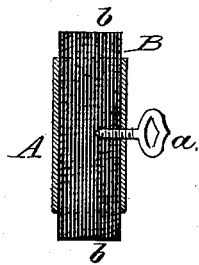


Fig. 3.

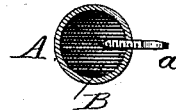
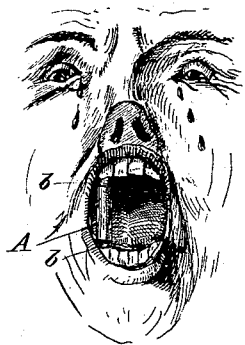


Fig. 4.



WITNESSES:

Fred. L. Dietrich,
Jno. W. Stockett.

James A. Donaldson.
INVENTOR,
by *Louis Bagger & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES A. DONALDSON, OF GREENVILLE, PENNSYLVANIA.

DENTAL JAW-BRACE.

SPECIFICATION forming part of Letters Patent No. 264,260, dated September 12, 1882.

Application filed June 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. DONALDSON, of Greenville, in the county of Mercer and State of Pennsylvania, have invented certain
5 new and useful Improvements in Dental Jaw-Braces; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and
10 use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved dental jaw-brace. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is
15 a cross-section through the outer tube with its adjustable binding-screw, and Fig. 4 illustrates the manner of applying my improved dental brace to the mouth of the patient.

20 Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to the art of dentistry; and it consists in the construction and combination of parts of a brace for retaining
25 the mouth of a patient in an open position while the dentist is engaged in operating upon the teeth, as hereinafter more fully described and claimed.

My improved dental jaw-brace consists of a
30 tube, A, of suitable length, made of silver, hard rubber, celluloid, or any other suitable material. Into this tube is inserted a cylindrical plug, B, of india-rubber or gutta-percha, of greater length than the tube, so that its
35 ends will project on both sides thereof, as shown at *b b*. About midway on tube A is inserted a thumb-screw, *a*, for holding the rubber plug or cylinder in place within its tube. The projecting ends *b b* may be flat or con-
40 caved, as desired.

The device is used by placing one of the projecting ends or cushions *b* upon a tooth in the lower jaw of the person operated upon, and the other end against a tooth in the upper

45 jaw, thus holding the mouth wide open by bracing the jaws against each other, as clearly illustrated in Fig. 4 of the drawings.

When the plug B becomes worn or hardened by usage it can readily be removed from the
50 tube by loosening screw *a* and another substituted. The tube prevents the soft and flexible plug from bending or collapsing in the mouth of the patient, the tubes with their plugs being made of varying length, so as to permit of the use of the device both in the front and
55 back part of the mouth.

I do not claim broadly a jaw-brace consisting of a rigid middle part or standard having cushioned or flexible extremities, as shown in the patents granted to G. H. Hurd, No. 86,922, 60 of February 16, 1869, and No. 225,525, of March 16, 1880; but my jaw-brace constitutes an improvement upon those devices. Experience has demonstrated that the rubber cushions or flexible tips inserted into cavities in the ex-
65 tremities of a rigid standard are apt to become dislodged; but this is impossible in my device, in which the tips *b b* constitute opposite ends of a solid core, B, the middle part of which is stiffened by the encircling tube A and fixed
70 therein, so that displacement or dislodgment is impossible by the screw *a*. Hence

What I claim as my improvement, and desire to secure by Letters Patent of the United States, is—

75 In a dental jaw-brace, a flexible plug or cylinder, B, of rubber or similar material, inserted into a rigid tube, A, shorter than the plug, and held in place therein removably by a screw, *a*, as shown and described, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES ALLISON DONALDSON.

Witnesses:

C. R. BEATTY,
JAMES A. HOGE.