(No Model.)

G. L. BRUCE.

DENTAL MATRIX.

No. 531,833. Patented Jan. 1, 1895.

619 214

Fig. 1

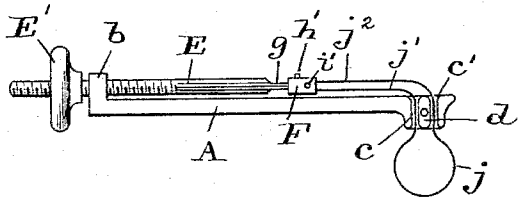
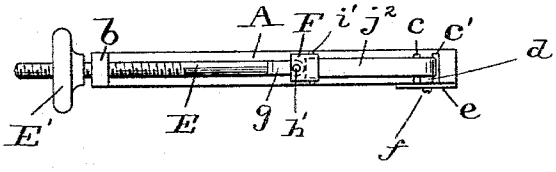


Fig. 2.



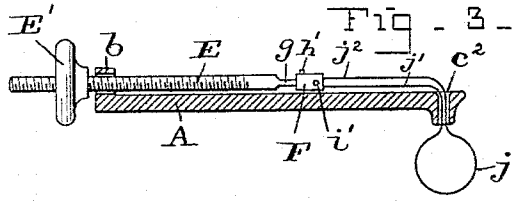
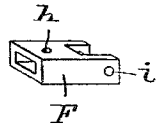


Fig. 3.

Fig. 4.



WITNESSES :-

L. I. Van Horn.

Charles B. Mann Jr.

INVENTOR :-

Geo L. Bruce

By Chas B. Mann

ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE L. BRUCE, OF BALTIMORE, MARYLAND.

DENTAL MATRIX.

SPECIFICATION forming part of Letters Patent No. 531,833, dated January 1, 1895.

Application filed June 12, 1894. Serial No. 514,267. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. BRUCE, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Dental Matrices, of which the following is a specification.

This invention relates to an improvement in matrices and clamps therefor for the use of dentists in filling teeth.

The object of the invention is to provide a matrix and clamp of simple and improved construction.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side view showing the preferred form of dental matrix and clamp with the side plate removed. Fig. 2 is a top or plan view of the same with plate on. Fig. 3 is a longitudinal section showing a slight modification. Fig. 4 is a view of the pivoted head.

The letter, A, in the drawings designates a horizontal base-bar having a bearing, *b*, at one end and two lateral or cross slots, *c c'*, through it at the other end. A block, *d*, separates the two slots and a metal plate, *e*, at the side covers the said slots, and a screw, *f*, passed through the plate and into the block serves to secure the plate. A screw-threaded stem, E, is loose through the bearing, *b*, and is provided at its outer end with a thumb nut, E', whereby it is actuated, and at the other end the stem has a neck, *g*, to which a head, F, is pivoted, as will be hereinafter described. The clamp which is to engage the tooth to be filled, comprises a thin flat band of resilient metal which forms a loop, *j*. The two ends, *j'*, j^2, of the clamp pass through the slots, *c*, *c'*, in the base-bar, one through each slot, and then extend along the bar. The head, F, is a hollow rectangular shell open at two opposite ends and having a pivot hole, *h*, through it at one end and a hole, *i*, through its sides at the other end. One open end of this head fits loosely over the neck, *g*, of the threaded stem, E, and is pivoted to the neck by a pin, *h'*, passed through the hole, *h*. The two ends, *j'*, j^2, of the clamping band connect with the head at the other end and are secured by a pin or rivet, *i'*, passed through the hole, *i*.

In Fig. 3 a slight modification is shown. In this instance the end of the base-bar, A, has one slot, c^2, instead of two slots as in the other case, and both ends, *j'*, j^2, of the clamping band pass through this single slot. The clamping band may be endless or have two ends.

The operation of the device is as follows: The loop, *j*, of the clamp is engaged to or encircles a tooth to be filled, the nut, E', being turned to move the stem, E, to contract or enlarge the loop to the size required. To tighten the loop on the tooth the nut is turned to draw the stem. This action draws on the band and causes the loop to contract and firmly grip the tooth.

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

A dental matrix comprising in combination, a base-bar, A, having a bearing at one end and one or more lateral slots at the other end; a screw-threaded stem loose through the bearing and carrying at one end a threaded nut and at the other end a pivoted head; and a clamping band secured to the head and passed through the said lateral slot or slots in the base-bar to form a loop, *j*, which is to engage a tooth, substantially as described.

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

GEORGE L. BRUCE.

Witnesses:
CHARLES B. MANN, Jr.,
C. CALVERT HINES.