

UNITED STATES PATENT OFFICE.

MARGARET HELEN WEAGANT, OF OWEN SOUND, ONTARIO, CANADA, EXECUTRIX OF HENRY BLAKEY WEAGANT, DECEASED.

DENTAL CLAMP.

No. 865,733.

Specification of Letters Patent.

Patented Sept. 10, 1907.

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To all whom it may concern:

Be it known that HENRY BLAKEY WEAGANT, deceased, late of the city of Owen Sound, in the county of Grey, in the Province of Ontario, Canada, dentist, did invent certain new and useful Improvements in Dental Clamps, of which the following is the specification.

The invention relates to improvements in dental clamps, and the object of the invention is to devise a clamp of this class by which a dental flask or flasks may be securely and rigidly clamped and held during use.

Further objects are to make a device of this class, which is simple, clean, in which there will be no rivets to break, no threads or nuts to wear out or slip, which will not rust or corrode, durable, accommodate different sizes of flasks, be readily handled and manipulated quickly. To this end the clamps are constructed with a base plate of non-corrosive metal having lugs at the bottom thereof, metal loops held in the lugs and extending upwardly from the base plate, a bridge of loop spring metal pivotally held on the top of one of the and having a hook-shape free end, a lever pivotally held on the opposite loop and having a lip designed to be engaged with the hook-shape end of the bridge, the parts being arranged and constructed in detail as hereinafter more particularly explained.

Figure 1, is a perspective view showing the improved clamp with two flasks held therein. Fig. 2, is a vertical section showing the clamp in the same position as in Fig. 1, and in dotted lines in the released position. Fig. 3, is a perspective view of the clamp in the released position.

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

A is the base of the improved dental clamp having the lug A' and a pair of lugs A² located diametrically opposite the same and at right angles thereto. The base A is preferably made of brass or other suitable non-corrosive metal.

B is a stationary loop of heavy wire preferably brass, the closed end of the loop being uppermost and the bottom ends B' being bent at right angles to the main body of the loop and extending through holes in the lugs A'.

C is the swinging loop preferably of brass, which has the bottom C' bent at right angles to the same and extending outwardly through the lugs A² as indicated in Fig. 1 forming a hinge. The upper end of the loop C flares outwardly and is closed forming a cross bar for

the reception of one end of the lever D, which is provided with a depending lip D'.

E is a substantially semi-elliptical form of bridge having an eye E' at one end through which the top end of the loop B extends. The opposite end of the bridge E is bent downwardly and provided with a hook E².

F are the flasks which it is designed to hold within the clamp.

The bridge E and lever D are thrown back, so as to allow the flask to be inserted and then the bridge E is thrown forward again and then the lever D is moved, so that the depending lip D' is brought into engagement with the hook E² and as it is being brought into engagement the depressed portion of the bridge D contacts with the top of the flask. By exerting sufficient pressure on the end of the lever the bridge is tightened and drawn outwardly longitudinally, so that sufficient pressure is exerted upon the top of the flasks to hold them in position, which is the end designed.

By such a device one is enabled to not only readily but quickly secure the flasks in position and without any liability of deterioration of the dental clamp itself.

What is claimed as the invention is:

1. In a dental clamp, the combination with the base, of loops suitably connected thereto diametrically opposite to each other and extending upwardly, a spring bridge pivotally held on the end of one loop and provided with a hook at the opposite end, a lever pivotally mounted on the top of the opposite loop and provided with a depending lip designed to be brought in engagement with the hook as and for the purpose specified.

2. In a dental clamp, the combination with the base plate having lugs formed at the bottom thereof diametrically opposite each other, one lug being at one side and the two lugs at the opposite side opposite each other and diametrically opposite and at right angles to the aforesaid lug, of a stationary upwardly extending loop having right angular bent ends extending through the single lug and a swinging loop having right angular bent ends extending through and hinged in the pair of lugs, and means for connecting the tops of the loops together, whereby a spring pressure is exerted on the uppermost flask as and for the purpose specified.

3. In a dental clamp, the combination with the base plate having lugs formed at the bottom thereof diametrically opposite each other, one lug being at one side and the two lugs at the opposite side opposite each other and diametrically opposite and at right angles to the aforesaid lug, of a stationary upwardly extending loop having right angular bent ends extending through the single lug and a swinging loop having right angular bent ends extending through and hinged in the pair of lugs, and two members pivotally connected to the upper ends of the loops and having a detachable connection between them, whereby when connected a pressure is exerted on the uppermost flask as and for the purpose specified.

4. In a dental clamp, the combination with the base plate having lugs formed at the bottom thereof diametrically opposite each other, one lug being at one side and the two lugs at the opposite side opposite each other
5 and diametrically opposite and at right angles to the aforesaid lug, of a stationary upwardly extending loop having right angular bent ends extending through the single lug and a swinging loop having right angular bent ends extending through and hinged in the pair of lugs, and
10 a substantially semi-elliptical spring bridge pivotally con-

nected to the upper end of the stationary loop and provided with a hook at the free end and a lever pivotally mounted on the upper end of the opposite loop and having a lip designed to engage with the hook of the bridge as and for the purpose specified.

MARGARET HELEN WEAGANT,

Executrix of Henry Blakey Weagant, deceased.

Witnesses:

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IDA M. BECKETT.