(No Model.)

T. G. LEWIS.

DENTAL BRACKET.

No. 551,190. Patented Dec. 10, 1895.

Fig.1

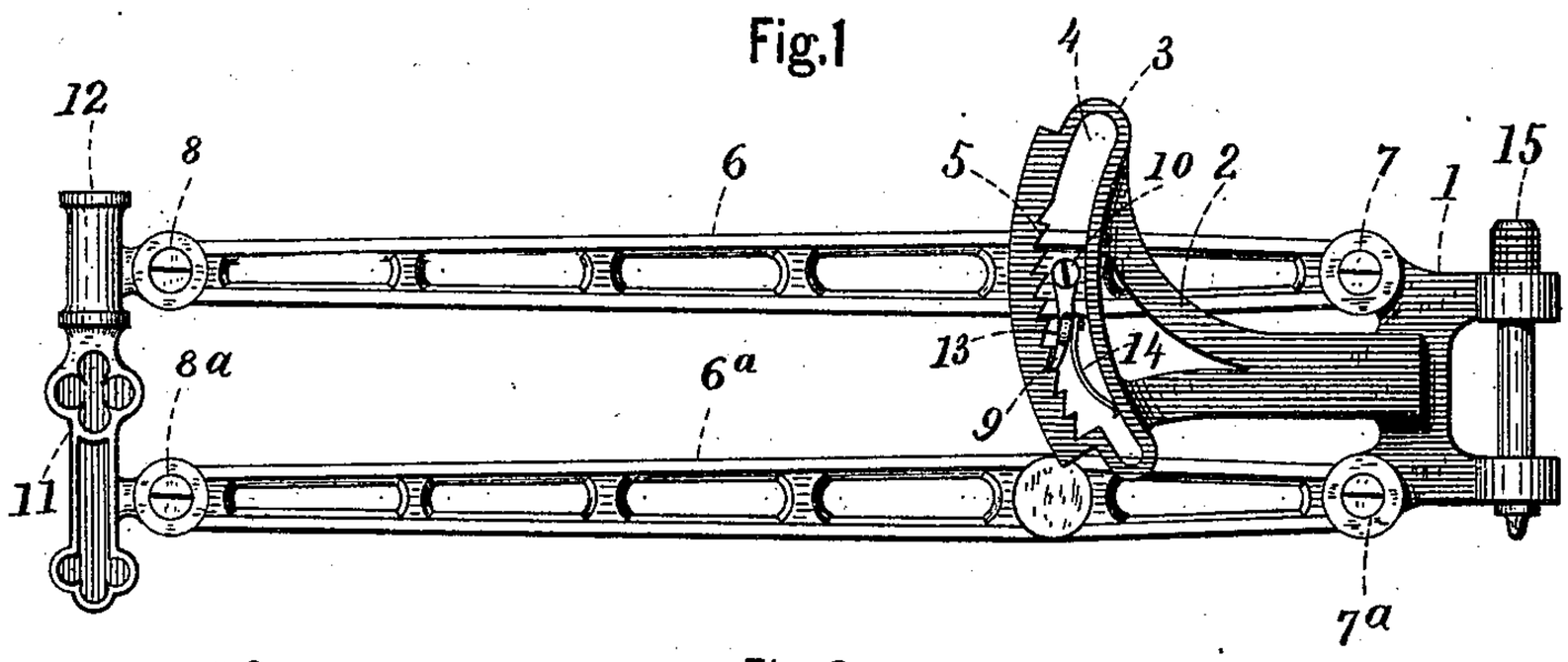


Fig.2

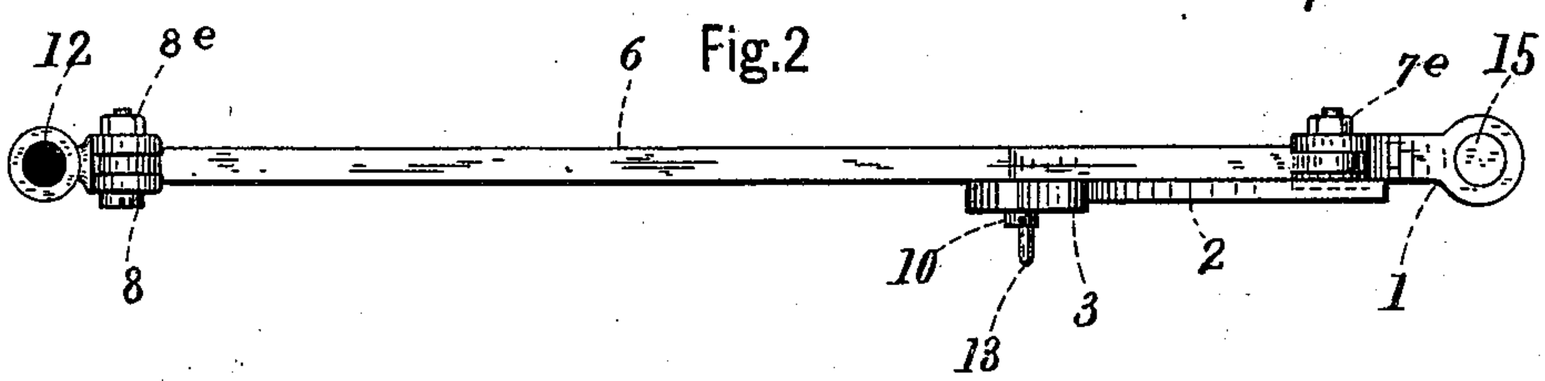
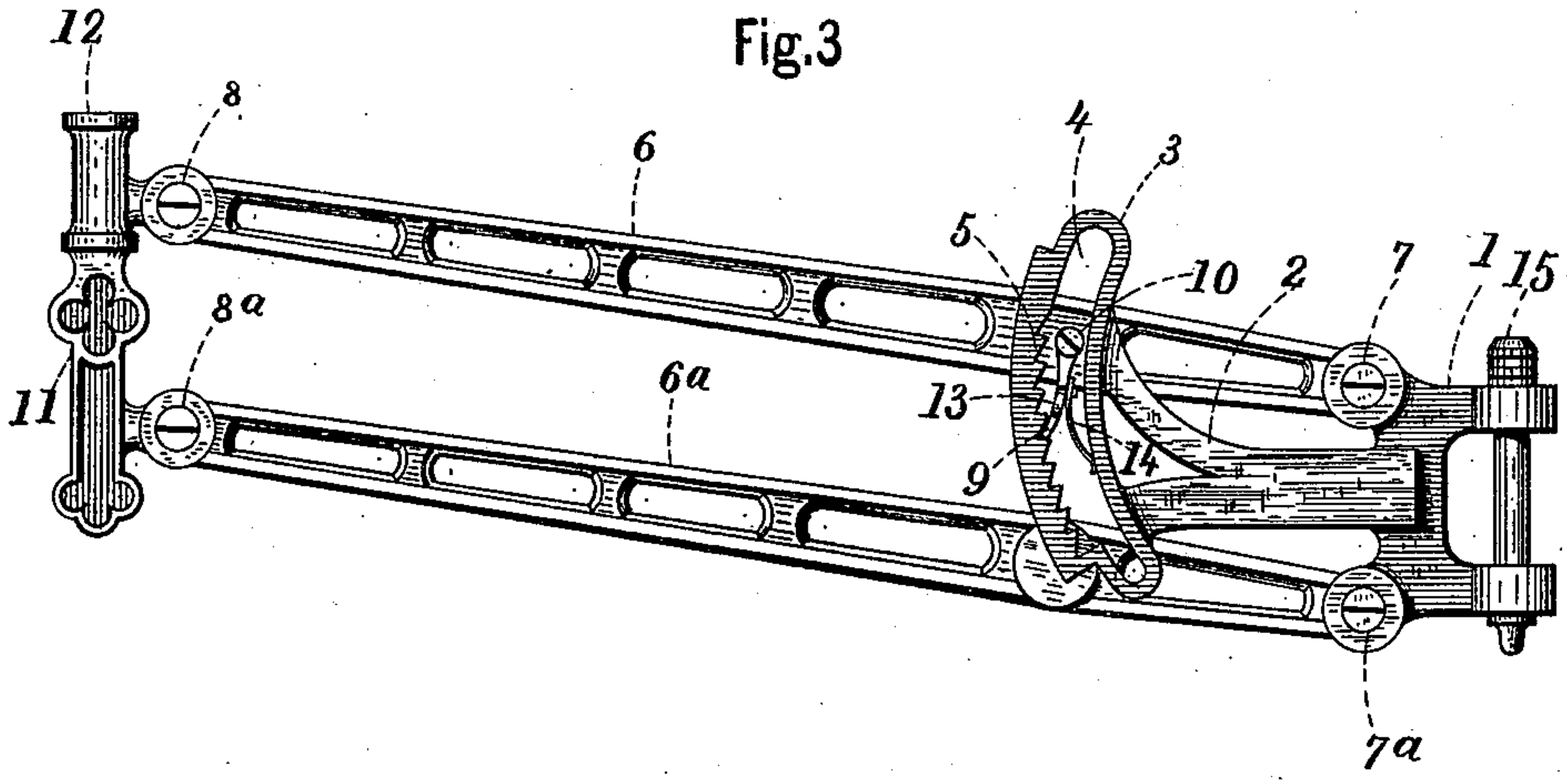


Fig.3



Witnesses.

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UNITED STATES PATENT OFFICE.

THEODORE G. LEWIS, OF BUFFALO, NEW YORK.

DENTAL BRACKET.

SPECIFICATION forming part of Letters Patent No. 551,190, dated December 10, 1895.

Application filed June 11, 1892. Serial No. 436,325. (No model.)

To all whom it may concern:

Be it known that I, THEODORE G. LEWIS, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Dental Brackets, of which the following is a specification.

My invention relates to certain improvements in dental brackets whereby the strength and durability of the bracket is increased, and it is rendered more convenient in its operation, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the bracket. Fig. 2 is a top view. Fig. 3 represents a side elevation showing the bracket elevated above its horizontal position.

Referring to said drawings, the supporting-piece for holding the bracket is composed of the pivotal portion 1, provided with two back-projecting pieces by which it may be pivoted by the pin 15 to any suitable stationary support, so that it may have a side horizontal swinging motion on the said pin 15. Projecting forward from the portion 1 is a forwardly-projecting portion 2, having a curved bar 3, provided with a curved opening or slot 4, one side of which slot is provided with ratchet-teeth 5 and the opposite side or wall is smooth, the whole formed of one piece of metal, so that every portion of it is rigid and stationary. To this portion 1 is pivoted by pins 7 7^a, secured by nuts 7^e, (see Fig. 2,) two parallel bars 6 6^a, having their opposite ends pivoted by pins 8 8^a, secured by nuts 8^e to a vertical socketed bar 11.

The slotted portion 2 of the bracket is secured to and projects from one side of the pivotal portion 1, so as to permit the arms or bars being supported in a line with the pivotal portion without interfering therewith. The socketed portion 12 is provided with a socket adapted to receive the shank of a dental or other tray.

From the above construction it will be seen that the parallel bars 6 and 6^a will keep the socketed bar 11 in a vertical position at any point of the adjustment of the bracket either up or down.

To hold the bracket at any point to which it may be adjusted a pawl 9 is pivoted by a pin 10 to the bar 6, and is located within the slot 4 of the curved stationary bar 3, so that its free end will catch in the teeth 5. A spring 14 is rigidly secured to the back of the pawl, so that its lower end presses against the back of the slot 4, and thereby keeps the point of the pawl in engagement with the teeth 5. This pawl 9 is easily released from the teeth 5 by pressing back on the thumb-piece 13 whenever it is desired to lower the bracket, as the spring will readily slide along the smooth side of the slot. When the thumb-piece is released so that the spring 14 is free to act the pawl immediately assumes its normal position and engages with the teeth 5, so as to securely hold the bracket at any position to which it may be adjusted. By this construction a simple, strong, and durable device is produced which is easy of adjustment by means of the thumb-piece 13.

The parallel bars are preferably made of brass, but any other suitable material may be used, and the supporting-piece 1 may be made of either brass, iron or other equivalent material.

It will be noticed that, in the use of this device in adjusting the socketed portion 12 upward, all that is necessary to do is to lift it upward to the desired point and the pawl 9 will engage with the teeth 5 of the curved bar and hold it at that point, so that all that is required to do in this instance is to lift the socketed portion to the desired position.

The bracket is easily lowered by pressing the thumb-piece 13, so as to disengage the pawl, as hereinbefore mentioned. This quickness of adjustment is an important feature in this kind of bracket.

I am aware that a holding or supporting bracket having a curved slotted bar and adapted to swing horizontally has heretofore been used in combination with two parallel bars pivoted thereto so as to adapt them to swing vertically thereon and having means connected with the curved slotted portion for securing their vertical adjustment. I therefore do not claim such construction, broadly; but

What I do claim is—

In a dental bracket, the combination, with a pivotal portion, one side of which is provided

with a forwardly projecting portion, the front end of which is provided with a slot, one side or wall of said slot being provided with teeth, and the opposite wall being smooth, two parallel bars pivotally secured to said pivotal portion, at one end, a socket pivotally secured to the opposite ends of said bars, a pawl pivotally secured to the upper bar, the free end of which is adapted to engage with the teeth of the slotted portion, and is provided with a laterally projecting front piece, and a spring secured to the rear side of the pawl and adapted to rest against the smooth wall of the slot, substantially as set forth.

THEODORE G. LEWIS.

Witnesses:
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