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DENTAL JACK

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Fig. 1.

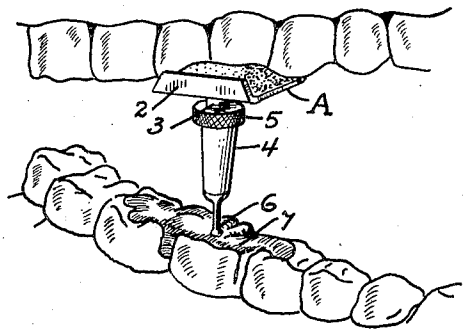
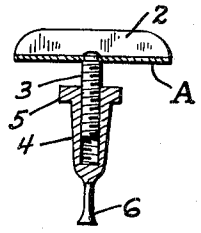


Fig. 2.



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DENTAL JACK

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1 Claim. (Cl. 32—1)

This invention relates to a dental jack which is intended for holding dental bridges, gold inlays, and the like, in proper position while they are being fitted, and particularly when forcing or burnishing the marginal edges of gold inlays into place.

In order to properly seat a dental bridge or gold inlay, the cement already being inserted in cavities immediately after mixing, it is necessary for the dentist to continually exert a pressure on the bridge or inlay with his fingers to counteract pressure of gum in opposite direction. This pressure exerted in seating the inlays or castings, forces out the excess cement, which lifts the frail margins of gold away from abutments and the margin of the cavity. It is necessary to burnish these gold margins back into place before cement sets. In cases where patients have small mouths, or fleshy cheeks, or where it is difficult for patients to open adequately wide, this burnishing is exceedingly difficult to do, the failure of which produces cement lines and its subsequent unnecessary work to correct. The area taken up by the fingers of the dentist in holding his castings in position, limits his scope of operation.

The object of the present invention is generally to improve and simplify the construction and operation of jacks of the character described; to provide a jack whereby a bridge or inlay is correctly seated in the bicuspid or molar regions of the mouth and the burnishing of the frail gold margins of the abutments while the dental cement is setting may be properly accomplished; and, further, to provide a jack which counteracts the pressure exerted by the gum when facings of the bridge are impinging against it and, therefore, obviates a slight unseating of the bridge with its resulting cement rim exposed, which washes out during the process of mastication and brushing, affording a recessed area or leak in the margin where the decay will occur.

The jack is shown by way of illustration in the accompanying drawing, in which—

Fig. 1 is a perspective view of the jack in position between the teeth of the upper and lower jaws;

Fig. 2 is a central, vertical, longitudinal section of the jack.

Referring to the drawing in detail, and particularly Fig. 2, A indicates a flat elongated base or supporting plate, which is provided with side flanges 2, said flanges being employed for the purpose of holding or retaining dental molding compound, as will hereinafter be described.

Secured to the face of the plate A is a threaded jack screw 3, and carried thereby is an internally threaded tapering sleeve 4, which terminates at one end in a knurled nut 5 and at the opposite end in a pin 6. The manner in which the jack is used will be as follows:

First, insert the jack between the jaws and shorten or lengthen the shaft by screwing up or unscrewing to the proper distance desired.

Second, heat up some dental compound and put on occlusal side of the base, and while soft place in mouth, first placing the pin in a sulci or pit where desired and holding there, telling the patient to close until an adequate impression of the occlusal surfaces of the opposing teeth is secured; then chill. The jack is now ready for use.

Insert a bridge or inlay in the tooth, as indicated at 7 in Fig. 1. Set the jack in position and tell the patient to close until she feels she can close no longer and then tell her to exert slight pressure so that the bridge or inlay is held snugly in its seat. Then the dentist grinds off excess gold and burnishes his margins. He then removes the jack, sterilizes the cavities, places his cotton rolls to keep cavities dry, mixes his cement which he immediately places in the cavities, places his bridge or inlay fairly well in position, then he inserts jack in same position as he had when he was grinding off excess gold. In short, he repeats the process just mentioned above, burnishing margins while cement is setting, the bridge or inlay being immovable.

When not using a jack, there is a tendency to displacement because of the vibration created by revolving stones and disks used by the dentist in burnishing. In cases where there is an edentulous ridge on opposing jaw, mold compound to fit ridge.

The dental molding compound applied to the bottom of the base plate and retained by the side flanges 2 permits an impression to be taken of the upper surfaces of the teeth upon which the jack is to be placed, and once this impression has been made and the molding compound chilled it is always possible to replace it in exactly the same position. Furthermore, the flanges on the base, together with the dental compound retained thereby, hold the jack in place and prevent slippage and displacement.

The pressure exerted by the jack when the patient clamps down thereon counteracts gum pressure when cementing bridges and forces all inlays or castings into their proper place.

The jack allows the dentist free use of both

hands while cementing the inlays or bridges in place in the teeth.

The jack affords a larger area of vision, as it will be unnecessary to hold the bridges or inlays in place with his fingers or by the use of cotton rolls. The jack will also afford a larger area in which the dentist can work freely as the pin end 6 of the jack contacts only a small portion of the inlay or bridge casting which it holds in place.

The jack will keep the jaws spread apart the desired distance and this without any discomfort to the patient. That is, the tendency is for the patient to gradually close the jaws as they become tired from maintaining them widely separated. The jack, as here desired, affords a rest for the jaws of the patient and thereby prevents tiring.

By merely grasping the nut 5 of the jack and turning it in one direction or another the jack can be quickly adjusted for any opening or spacing between the jaws desired, and while this and other features have more or less been specifically described, we wish it understood that various changes may be resorted to within the scope of the appended claim. Similarly, that the materials and finish of the several parts employed may be such as the manufacturer may decide, or varying conditions or uses may demand.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:—

A dental jack comprising a base member which is U-shaped in cross section to receive and retain a molding compound whereby the base may be seated and retained with relation to selected teeth of one jaw, a threaded pin secured to the base, a threaded sleeve adjustable thereon, and a pin on the end of the sleeve, said pin terminating in an abrupt end relatively small in cross-section, said pin end being adapted to engage a small area on the occlusal surface of a casting which is being filled or cemented into a cavity of a tooth of the other jaw.

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