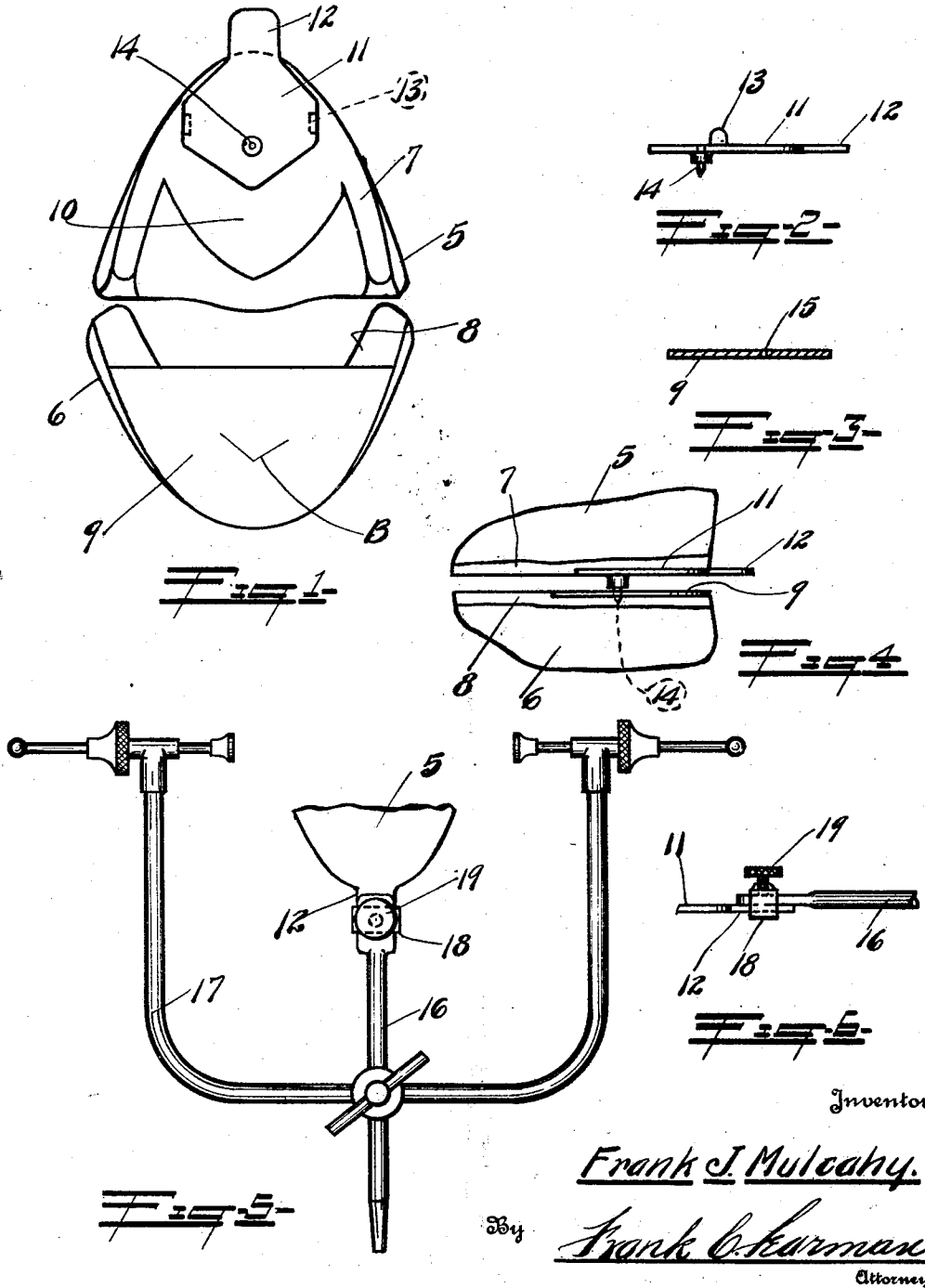


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METHOD OF OBTAINING CENTRAL OCCLUSION IN THE
CONSTRUCTION OF ARTIFICIAL DENTURES
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METHOD OF OBTAINING CENTRAL OCCLUSION IN THE CONSTRUCTION OF ARTIFICIAL DENTURES

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This invention relates to an appliance for obtaining central occlusion in the construction of artificial dentures such as constructed by prosthetists, and other skilled in this particular art, central occlusion being the place of rest of the lower jaw and from which all movements start.

Heretofore this has been a somewhat difficult operation due to the inability of the patient (for whom the dentures are being constructed) to close his mouth, so that the jaws register exactly the same each time. In the various steps of the fitting and construction of these dentures the base plates are inserted and removed a large number of times, and it is necessary that central occlusion be registered each time the plates are inserted, consequently, the prosthetist must "sight" between the jaws (when the plates are in the mouth) to determine the correctness of the bite, this requires considerable time and is at best a somewhat difficult and haphazard method, as the slit between the jaws is narrow, and it is almost impossible for the patient to close the mouth (a number of times) in a natural, habitual and normal manner.

To overcome the obstacles above described, I have perfected a method for obtaining this central occlusion, by providing simple and inexpensive upper and lower individual bite plates, which I secure to the base plates, having the patient trace the movements of the lower jaw on the lower bite plate, and provide means for locking the plates in central occlusion.

The above and other objects will appear as the specification progresses references being had to the attached sheet of drawing in which I have shown the means for locking the jaws in proper relation, and in which like reference numerals indicate like parts throughout the several views thereof.

In the drawing:

Fig. 1 is a view showing the base plates with wax-bite rims with the bite plates in place thereon.

Fig. 2 is an edge view of the upper bite plate.

Fig. 3 is a sectional edge view of the lower bite plate.

Fig. 4 is a side view showing the base plates locked in central occlusion.

Fig. 5 is a plan showing a face bow attached to the upper bite plate so that the casts may be assembled in an articulator in definite and accurate relation.

Fig. 6 is a fragmentary edge view showing the face bow pin attached to the upper bite plate.

Referring now in detail to the drawing, base plates 5 and 6 are fitted to the upper and lower jaws of the patient, wax-bite rims 7 and 8 respectively being provided on the base plates in a manner well known to the profession, these base plates with the wax bite rims are then placed in the patient's mouth, and the wax is trimmed and cut to proper lip line.

The base plates are then removed and a stainless metal bite plate 9 is sealed on the lower bite rim, the face of said plate being smoked with an essential oil, or any other suitable covering film may be applied. The vault in the upper base plate is then filled with a wax or other plastic compound 10, and an upper metal bite plate 11 is secured thereto, said upper plate being formed with a forwardly projecting leg 12, and a pair of unwardly bent prongs 13 are also formed integral with the plate and penetrate the wax or compound to hold it in position, a pin 14 being mounted in said plate in the medium line and posterior to anterior palatine foramen. The base plates are then placed in the patient's mouth, and the patient, (with the mouth closed), traces the "Gysi" arch, by moving the jaw in all possible positions, with only the pin on the upper metal plate in contact with the metal plate on the lower jaw, the arch being indicated at "B" and is always triangular in shape.

The base plates are then removed from the mouth and a hole 15, (shown in Fig. 3) is drilled in lower plate at the apex of the triangle. The base plates are now returned to the patient's mouth and locked in central occlusion by the closing of the jaws, the

pin 14 registering and being seated in the opening 15 in the lower plate. With the base plates locked, small compound impressions, (not shown) are taken on each side of the base plates and are then removed from the mouth.

With the jaws in the same locked position, I next take a face bow pin 16 shown in Fig. 5 mounted in position in the face bow 17, this is provided with a metal keeper 18 which in practice slips over the leg 11 of the upper bite plate, I then tighten the set screw 19 to clamp the bow pin to the leg the contacting surfaces being slightly scored to prevent displacement, I next tighten the bow pin in the face bow, then release the set screw 19 and remove the face bow, assemble the casts in a conventional articulator by means of the face bow and side impressions, and central occlusion will be registered definitely and accurately.

It will of course be obvious that the pin may be adjustably mounted in the upper bite plate and that other interlocking means may be used if desired without departing from the spirit of the invention.

From the foregoing description it will be obvious that I have perfected a very simple, inexpensive, and accurate method for registering central occlusion on artificial dentures.

What I claim is:

1. The method of obtaining central occlusion in the construction of artificial dentures which comprises securing upper and lower members to a pair of base plates, providing a pin in the median line on the upper member for tracing the movements of the lower jaw on the lower member, and drilling a hole at the apex of said tracing for engagement by the pin to hold said plates in central occlusion.

2. The method of obtaining central occlusion in the construction of artificial dentures, which comprises securing upper and lower members to a pair of base plates, smoothing the face of the lower plate with an essential oil, providing a pin in the median line of the upper plate for tracing the movements of the lower jaw, and drilling a hole at the apex of said tracing to receive said pin to register central occlusion.

3. The method of obtaining central occlusion in the construction of artificial dentures which comprises securing an upper and lower member to an upper and lower base plate, providing means in the median line of the upper member for tracing the movements of the lower jaw, and providing interlocking means at the point of central occlusion for detachably holding said jaws in such relation.

4. The method of obtaining central occlusion in the construction of artificial dentures which comprises securing an upper

and lower member to an upper and lower base plate, providing a pin in the median line of the upper plate for tracing the movements of the lower jaw, and then drilling a hole at the apex of the tracing for detachable engagement by the pin and for securing said members in central occlusion.

In testimony whereof I hereunto affix my signature.

FRANK J. MULCAHY.