

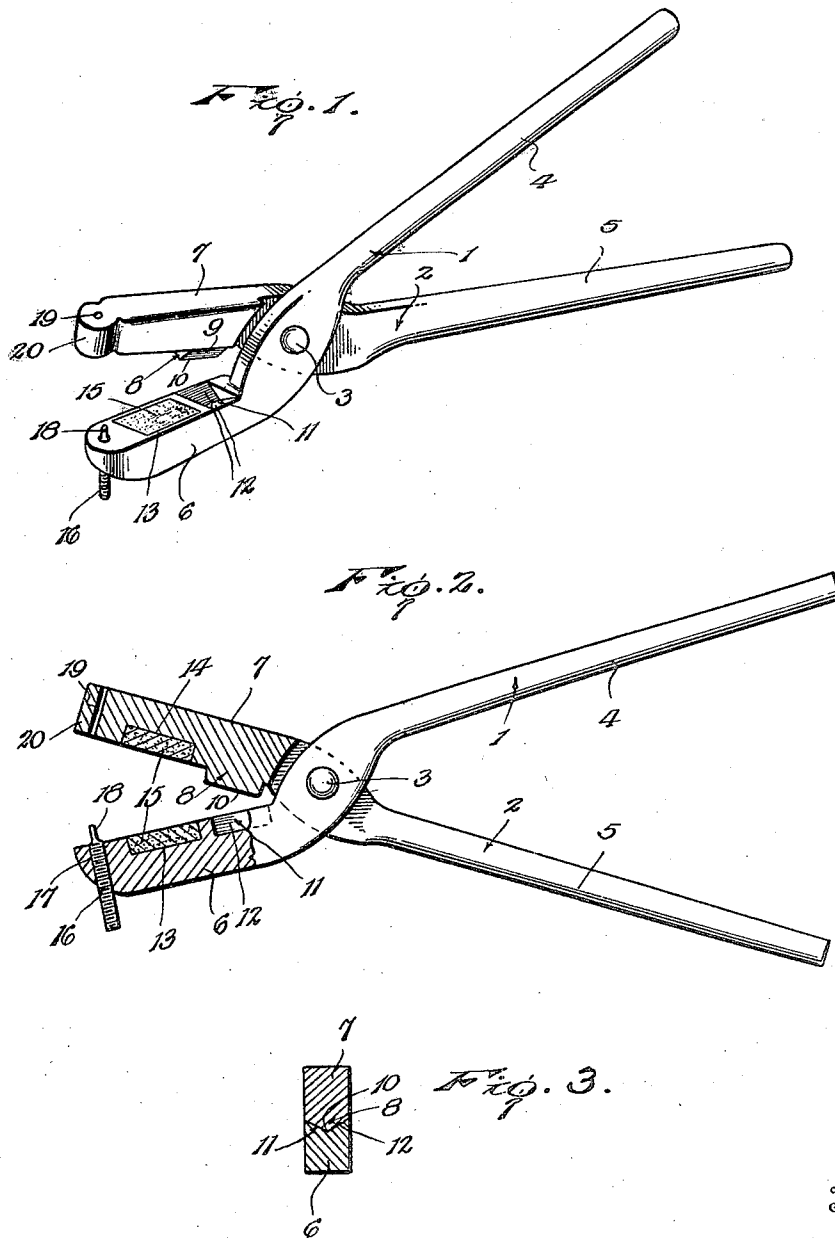
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M. J. CLARK

DENTAL INSTRUMENT

Filed March 28, 1922



Inventor

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By

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UNITED STATES PATENT OFFICE.

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DENTAL INSTRUMENT.

Application filed March 28, 1922. Serial No. 547,430.

To all whom it may concern:

Be it known that I, MICHAEL J. CLARK, a citizen of the United States, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Dental Instruments, of which the following is a specification.

This invention relates to an improved instrument for use in prosthetic dentistry and has as its general object to provide an instrument which may be conveniently employed in bending lingual bars, punching holes in the gold backing of artificial teeth to receive the studs upon the said teeth, and for pressing and smoothly shaping such a backing to the artificial tooth.

In general the invention contemplates the provision of an instrument which may be employed in all of the several operations enumerated above and by which said operations may be carried out more expeditiously and in a more satisfactory manner than by the methods heretofore practiced.

Another object of the invention is to provide an instrument for use for the purposes stated in which the several instrumentalities will be arranged in a compact form and in a manner to provide for the most convenient use of the instrument.

In the accompanying drawings:

Figure 1 is a perspective view of the instrument embodying the invention;

Figure 2 is a view partly in side elevation and partly in longitudinal section illustrating the instrument;

Figure 3 is a vertical transverse sectional view through that portion of the instrument which is to effect bending of a lingual bar, the jaws of the instrument being closed.

The instrument embodying the invention comprises a pair of handle members one indicated in general by the numeral 1 and the other by the numeral 2. These handle members are arranged in crossed relation and pivotally connected intermediate their ends as indicated by the numeral 3. The portions of the members rearwardly of their pivot constitute handles 4 and 5 respectively, and the portions forwardly of the pivot constitute jaws indicated respectively by the numerals 6 and 7.

In order to adapt the instrument for use in bending lingual bars and performing other similar work, the jaw 7 is provided with an anvil portion 8 which confronts the

jaw 6 and has oppositely inclined or beveled faces 9 providing between them a ridge 10 over which the lingual bar is to be found. The corresponding portion of the face of the jaw 6 is provided with a recess 11 the side walls 12 of which are arranged in relatively inclined planes having substantially the same angular disposition as the sides or faces 9 of the anvil portion 8 so that when the handles 4 and 5 are grasped and manipulated to close the jaws, the anvil portion 8 will enter the recess 11, and the wall surfaces of the recess and the surfaces 9 of the said anvil portion will be caused to coact to suitably bend and form a lingual bar disposed between these portions of the jaws.

In order that a metallic backing or shell which is to be applied to an artificial tooth, may be formed to snugly embrace the tooth, the faces of the jaws 6 and 7 forwardly of the anvil 8 and recess 11 are recessed as indicated by the numerals 13 and 14, and presser blocks 15 of rubber or other suitable yieldable material are molded or otherwise provided within said recess. In using the instrument for this stated purpose, the backing is applied to the tooth and the assemblage is then laid upon one of the presser blocks 15 with the backing confronting the said block 15. The instrument is then manipulated to close the jaws, and pressure is thus brought to bear against the backing. Due to the yieldable nature of the blocks 15, the thin metallic backing will be formed about the surface of the tooth so as to snugly fit and embrace the same.

As previously stated the instrument is also to be employed in punching holes in the backing to receive the stud or studs upon the artificial tooth to which the backing is applied, and in order that the instrument may serve this purpose, a stem 16 is threaded into a bore or opening 17 formed in the jaw 6 near the outer end thereof and is provided with a punch point 18 adapted to enter a socket or opening 19 formed in a narrowed and rounded nose 20 at the forward end of the jaw 7, it being understood that the backing is to be disposed between the ends of the jaws with the punch point engaging the backing at the point at which the opening is to be located, and the jaws then closed to punch out the material of the backing and form the opening.

Having thus described the invention what is claimed as new is:

In a dental instrument, coacting jaw members having opposing working faces, the working face of one of the jaw members being provided with an anvil portion having relatively oppositely inclined faces, the said face of the said jaw member being likewise provided in proximity to the anvil portion with a yieldable insert, and beyond the insert and adjacent the end of the jaw being provided with an opening, the working face of the other jaw being provided in confronting relation to the anvil portion of the first-mentioned jaw with in-

clined surfaces arranged to straddle the said anvil portion when the jaws are closed, the said working face of the last-mentioned jaw having a yieldable insert opposing the insert of the first-mentioned jaw, and a punch point projecting from the said working face of the last-mentioned jaw and located beyond the insert in said face and in position to enter the opening in the first-mentioned jaw when the jaws are closed.

In testimony whereof I affix my signature.

MICHAEL J. CLARK. [L. s.]