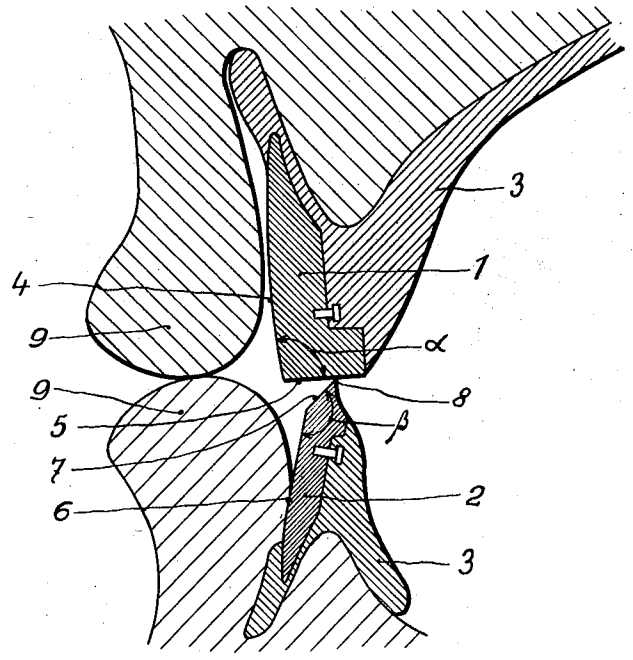
July 4, 1933. L. KÖHLER 1,917,131

ARTIFICIAL INCISOR

Filed Oct. 29, 1932



Inventor:
Ludwig Köhler
Attorney:

Patented July 4, 1933 1,917,131

UNITED STATES PATENT OFFICE

LUDWIG KÖHLER, OF COLOGNE, GERMANY

ARTIFICIAL INCISOR

Application filed October 29, 1932, Serial No. 640,305, and in Germany October 26, 1931.

This invention relates to artificial incisors.

Heretofore the incisors for artificial dentures have had a more or less long biting portion and have imitated the shape of the corresponding natural incisors. As in natural teeth, the rear surface of the biting portion of all these artificial incisors forms with their labial surface an angle of from 45 to 60 degrees, the height of the biting portion being different and varying between 3 and 5 mm.

These artificial incisors heretofore used suffer from two drawbacks. The biting edge has to be ground off on the visible portion, in order to adapt the shape of the biting edge of such artificial incisors to the motion of the jaws. Longer teeth than were actually necessary therefore had to be selected. Furthermore, this grinding-off requires special skill and a great consumption of time and if wrongly done another tooth has to be used.

The customary artificial incisiors have to be mounted immediately on the crest line of the jaw, that is on the crest line of the toothless alveolar ridge and close to the latter, in order to prevent tilting of the denture during the biting and masticating motions of the jaw. This mode of mounting artificial incisors entails the disadvantage that the lips have a very sunken apperance, since a toothless jaw has a much greater inward inclination than the former natural teeth and the angular space thus formed between the lip and the jaw is not filled up by artifiical incisors of the shape heretofore employed.

The invention has for its object to overcome these drawbacks which object is achieved by giving a novel shape to artificial incisors that differs widely from the shape of the natural incisors.

According to the invention artificial upper incisors are provided with a masticating surface which projects toward the lip and is at least approximately plane and extends at least approximately horizontally, while artificial lower incisors are provided with an inclined upper front surface which extends from the biting edge downward at such a slope as to form an obtuse angle with the front surface proper of the incisor.

The described configuration of the upper incisors makes it possible to grind only the rear part of the said horizontal plane masticating surface to fit, so that the ground-off part is not visible on the face and cannot impair the good appearance of the front of the denture. The front of both the upper and lower incisors according to the invention is thus moved farther forward, when compared with the customary artificial incisors, so that the new incisors better meet the conditions of natural appearance. They fulfill, nevertheless, also the required mechanical conditions, since in the lower incisor the biting edge is situated above and in the same vertical plane as the upper edge of the alveolar ridge, in spite of the fact that the front of the tooth is situated farther forward than heretofore.

A further advantage of the new configuration of incisors consists in the fact that the new upper and lower incisors can be applied in combination both with natural incisors and artificial incisors of the customary old shape.

In order that the invention may be clearly understood and readily carried into effect, an upper and a lower artificial incisor designed according to the invention are illustrated in sectional view and on enlarged scale in the accompanying drawing by way of example, as mounted on a palatal and a lower dental plate.

In this drawing 1 denotes the upper incisor which is fixed to the palatal plate 3 and has an approximately plane masticating surface 5 forming with the front surface 4 of the incisor an angle α of about 90 degrees, so that the masticating surface 5 extends approximately or exactly horizontally.

The new lower incisor, denoted by 2, has an upper front surface 7 downwardly inclined from the biting edge 8 toward the front surface proper 6, the inclination of the surface 7 being such as to form an angle β of about 120 to 135 degrees with the front surface proper 6. The rear side may be formed in any desired manner, to meet the special conditions of the jaw.

The described new shape of the front part of artificial incisors results in the possibility of having their labial surface projecting by 1 to 2 mm. beyond their biting surface and biting edge, respectively, so that the lips 9 show no sunken appearance, in spite of the fact that the teeth are mounted correctly also in mechanical respects, since the lips are better held forward by the new shape and position of the new incisors.

Furthermore, the technical work of mounting the incisors is facilitated by the described new shape which, in addition, results in a better appearance of dentures. More particularly the new shape facilitates the arrangement of the teeth in the mouth in a more or less downwardly curved arch. In addition, much fewer shapes of teeth need be held in stock than heretofore. It will be seen further from the drawing that both the new upper and lower incisors can be applied not only in combination with one another but also with opposing teeth of other shapes.

What I claim as my invention is:—

In artificial dentures, an upper incisor having a substantially horizontal plane masticating surface and an opposed lower incisor having on its labial side a front surface proper, a biting edge adapted to engage the masticating surface of the upper incisor, and an inclined surface extending from said biting edge downward to the front surface proper and forming with the latter an obtuse angle.

In testimony whereof, I affix my signature.

LUDWIG KÖHLER.