Sept. 8, 1931. B. W. AVERY ET AL 1,822,837

ARTIFICIAL TOOTH

Filed Feb. 15, 1929 2 Sheets-Sheet 1

Fig. 2.

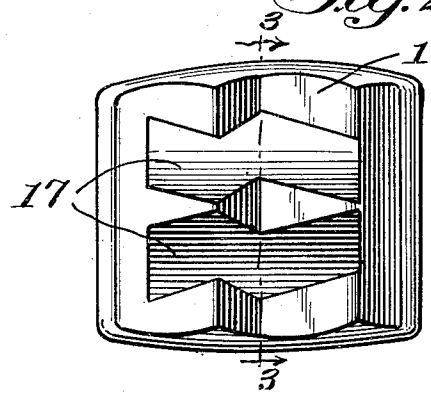


Fig. 3.

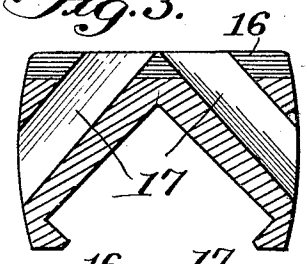


Fig. 4.

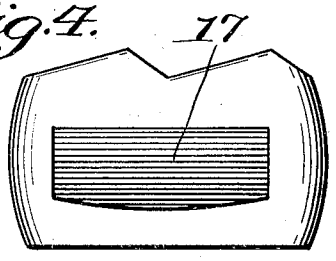
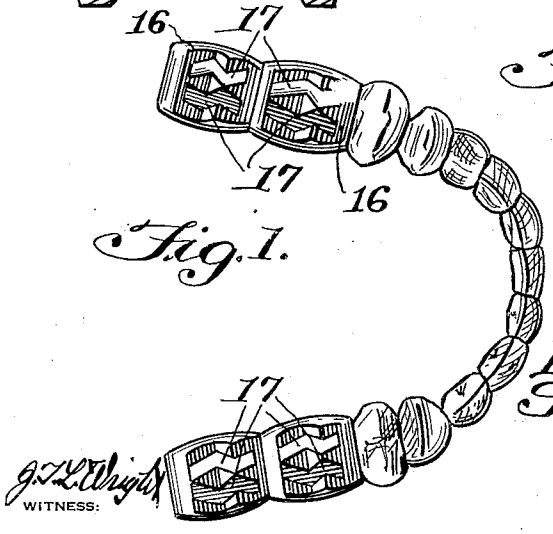


Fig. 1.



Bruce W. Avery
Samuel H. Avery INVENTOR

BY Victor J. Evans
ATTORNEY

WITNESS:

Sept. 8, 1931. B. W. AVERY ET AL 1,822,837

ARTIFICIAL TOOTH

Filed Feb. 15, 1929 2 Sheets-Sheet 2

Fig. 5.

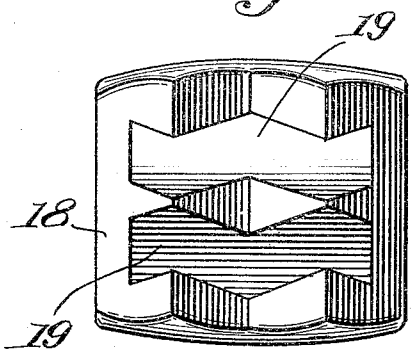


Fig. 6.

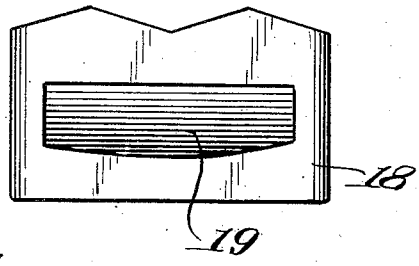


Fig. 7.

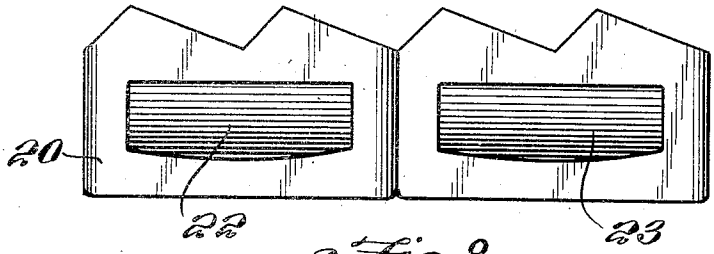
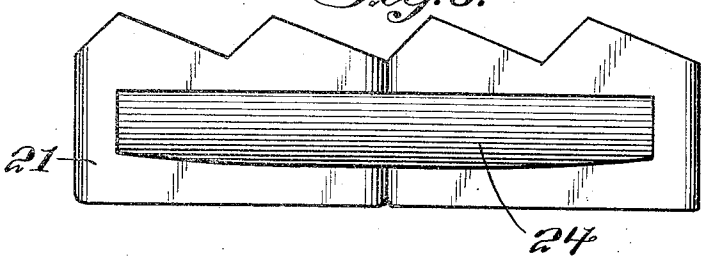


Fig. 8.



Bruce W. Avery
Samuel K. Avery
INVENTOR

BY Victor J. Evans
ATTORNEY

J. L. Wright
WITNESS:

Patented Sept. 8, 1931

1,822,837

UNITED STATES PATENT OFFICE

BRUCE W. AVERY, OF WHITING, AND SAMUEL K. AVERY, OF GOODLAND, INDIANA

ARTIFICIAL TOOTH

Application filed February 15, 1929. Serial No. 340,142.

Our invention has reference to artificial teeth and is directed to the construction of the posterior teeth in which the molars and bicuspids have planes and angles as well as grooves or sluiceways on their occlusal surfaces that are set to conform to the plane of the condyle paths and whereby a shearing action is produced as the plane of one tooth passes over that of the other so that food between the teeth will be thoroughly masticated and whereby the diverging walls of the teeth and the grooves or sluiceways allow for the free lateral passage of the food after it has been ground to a suitable consistency.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawings which form part of the application, with the understanding, however, that the improvement is capable of extended application and is not confined to the exact showing of the drawings nor to the precise construction described and, therefore, such changes and modifications may be made therefrom as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claim.

In the drawings:

Figure 1 is a plan view of a complete set of artificial teeth and illustrating our invention.

Figure 2 is a plan view of a tooth in accordance with this invention.

Figure 3 is a sectional view approximately on the line 3—3 of Figure 2.

Figure 4 is a side elevation of the tooth.

Figure 5 is a plan view illustrating a slightly modified form of tooth.

Figure 6 is a side elevation thereof.

Figure 7 is a side elevation of the posterior teeth cast together.

Figure 8 is a similar view but showing the connected teeth provided with a single outlet for the groove or sluiceway thereof.

Our artificial teeth may be constructed of porcelain, metal, or of any other suitable material. Our improvement is not designed to imitate the natural teeth nor to imitate their facets or fissures. Our teeth are designed to be attached to the same plate which carries the anterior teeth and relate only to the molar and bicuspid teeth and to a construction of these teeth which will effect an easier and more thorough mastication of food and the direction of the fluids and thoroughly chewed matters produced by such mastication to or through the sides of the teeth. The artificial teeth have their occlusal surfaces of such planes and angles that little if any grinding will be required when they are set in the plate under construction. Also the planes and angles on the occlusal surfaces of the improved teeth on one plate allow for the free movement of the occlusal surface of the teeth of the cooperating plate so that all surfaces remain in contact with all movements and positions of the jaws when masticating food.

Our teeth may be readily applied on any articulator now in use in the dental profession.

The occlusal planes of the rear posterior teeth of our invention are cut at determined pitches to provide substantially V-shaped or angle grinding surfaces. The V-shaped angle planes of the respective upper and lower teeth are designed to have the respective grinding surfaces thereof cut at cooperating angles, and as disclosed by the drawings the said teeth on their said surfaces have longitudinal oppositely arranged angle openings leading from points adjacent the center and through the sides thereof to provide sluiceways. In Figures 1 to 4 the angle planes of the occlusal surfaces of the teeth are indicated by the numerals 16 and the openings or sluiceways by the numeral 17. The sluiceways 17 are designed to admit ground food to the sides of the tooth near the gum margin of the plate and the angle surfaces 16 are, of course, designed for grinding the food.

In Figures 5 and 6 the tooth is substantially simlar to that just described, except that the pitch or inclination of the occlusal surface is slightly different. This tooth 18 is provided from its center with angle sluiceways 19.

Figures 7 and 8 illustrate double teeth

which are indicated by the characters 20 and 21. These teeth have their occlusal surfaces provided with planes which are arranged at different angles. Two teeth are cast in each block. The tooth 20 is provided with two angular sluiceways 22 and 23, while the tooth 21, illustrated by Figure 8, is provided on its sides with elongated sluiceways 24.

The construction and advantages of our improvement will, it is thought, be understood and appreciated so that further detailed description will not be required.

Having described the invention, we claim:

Rear artificial teeth adapted to be arranged upon the plate carrying the anterior teeth, having their respective confronting and grinding surfaces cut at co-engaging angles, said teeth, from their said surfaces having longitudinally arranged oppositely directed angle openings leading from points adjacent the center through the sides thereof and providing sluiceways.

In testimony whereof we affix our signatures.

BRUCE W. AVERY.
SAMUEL K. AVERY.