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DENTURE

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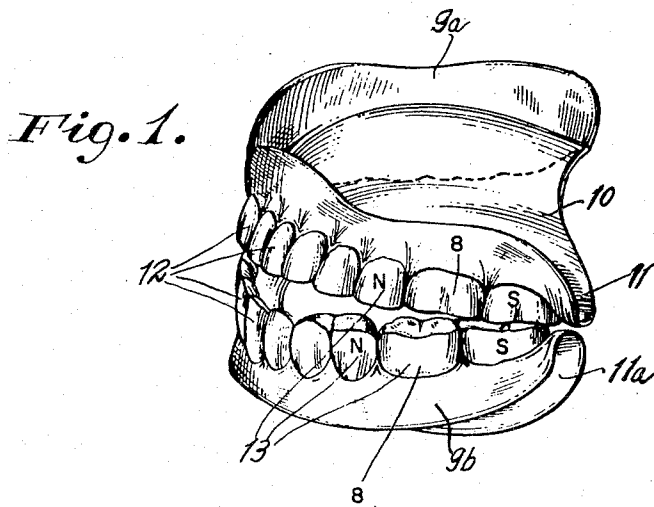


FIG. 2

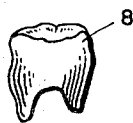


FIG. 3

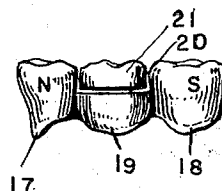


FIG. 4

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DENTURE

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5 Claims. (Cl. 32—2)

This invention relates to improvements in artificial dentures and has particular reference to the type of dentures having permanent magnets.

In said patents, a magnetic material is used in dentures in such a manner that the opposed portions of the denture tend to repel one another and thus assist in maintaining the dentures in the optimum operative position in the wearer's mouth. The said patents disclose horseshoe shaped magnets attached to or embedded in teeth. The manufacture of such dentures involves considerable expense and the magnets so disposed are not as efficient as when in closer proximity to each other. Herein are disclosed dentures wherein the teeth themselves are made of magnetic material, thereby simplifying manufacturing process, increasing the magnetic strength, and thereby making the dentures more economical, efficient, and useful.

It is, accordingly, an object of this invention to provide a denture which is simple in construction, economical to manufacture, and simple and efficient to use.

Another object of the invention is to provide dentures wherein the teeth themselves used therein are made of magnetic material.

Another object of the invention is to provide dentures wherein three adjacent teeth on each plate are made of magnetic material.

A further object of this invention is to provide a denture wherein two spaced teeth are made of magnetic material and connected by a magnetic bar to be disposed adjacent similarly disposed teeth on another plate.

With the above and other objects in view, the present invention consists of the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportions, and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

Fig. 1 is a perspective view of a pair of dentures showing the invention applied thereto;

Fig. 2 is a view of a bar magnet used as three molar teeth on each side of a denture;

Fig. 3 is an end view of the magnet shown in Fig. 2; and

Fig. 4 is a side view of a horseshoe magnet comprising another embodiment of the invention.

In carrying out the invention, it is proposed to employ, in the making of the magnetic molar teeth 8, a non-corrosive magnetic material which is particularly suited to this invention because of its ability to retain a high degree of magnetism over a long period of time. The entire teeth or the body of the molar teeth are made of magnetic material. For this purpose, the material sold under the trade name "Alnico V" has been found suitable with a plating or coating thereon to prevent corrosion.

The form of the upper and lower dentures, as shown in the drawing, may be accomplished by following any of

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the preferred techniques established in the art. Thus, the plate of the upper denture 9a comprises the usual palatal portion 10 merging at its margin into the base or cavostucture 11 which receives the ridge of the upper bone structure of the mouth when the denture 9a is in its operative position. The same is true of the lower denture 9b, the corresponding cavostucture being designated at 11a. The artificial teeth or facings of the dentures 9a and 9b comprise the usual types which may be described for purposes of this invention as anterior facings 12 and posterior facings 13, both sets being attached to a plastic or vulcanized rubber base in the customary manner.

Attached to the dentures 9a and 9b at the rear portions thereof are the magnetic teeth 8. The magnetic molar teeth 8 are made of solid magnetic material such as Alnico V and comprise a bar magnet. Since the teeth 8 are disposed at the rear portion of the mouth and not generally in view, any variation in color of the metal teeth from the color of natural teeth is not objectionable.

Fig. 2 shows a detail of the three rear teeth 8 shown in Fig. 1 removed from the denture. The teeth 8 are polarized as shown with the front tooth being the north pole and the rear tooth the south pole in each case or vice versa so that similar magnetic poles are disposed adjacent each other and, therefore, the teeth repel each other, tending to force the dentures 9a and 9b into place and holding the dentures 9a and 9b in their proper position.

Fig. 4 shows another embodiment of the invention wherein two molar teeth 17 and 18 are shown connected by a partial tooth 19 having a flat top surface 20. The teeth 17, 18, and 19 are made of magnetic material polarized to form a body generally in the shape of a horseshoe magnet with a porcelain tooth 21 set in place and cemented thereto between the two magnetized teeth 17 and 18. Therefore, when teeth such as those shown in Fig. 4 are arranged as the rear teeth of a denture plate with a corresponding set of magnetic teeth having like poles arranged adjacent like poles of the teeth shown, the repulsion of the like poles of the magnets will urge the dentures 9a and 9b against the wearer's gums to hold the dentures in place.

The foregoing specification sets forth the invention in its preferred practical forms but the structure shown is capable of modification within a range of equivalents without departing from the invention which is to be understood is broadly novel as is commensurate with the appended claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A set of dentures comprising upper and lower dentures, each said denture comprising a plurality of artificial teeth, a plurality of adjacent teeth on each said denture comprising a first magnet made of magnetic material with the ends of said magnet shaped in the form of a tooth, and a second magnet similar to said first magnet supported on an adjacent denture, said magnets being adapted to engage similar teeth on adjacent dentures, said magnets being disposed at the rear of said dentures and adapted to be disposed with their like poles adjacent the poles of the similar magnet in said other denture.

2. A set of dentures comprising upper and lower dentures, each said denture comprising a plurality of artificial teeth, a plurality of adjacent teeth on each said denture, a magnet having ends made in the shape of a tooth mounted on said upper denture, and another magnet having ends made in the shape of a tooth supported in said lower denture, each said end of said magnets replacing a tooth of said denture.

3. A set of dentures comprising upper and lower dentures, each said denture comprising a plurality of artificial teeth, a plurality of adjacent teeth on each said denture being made in the form of a horseshoe magnet, said

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horseshoe magnet having each end thereof made in the form of a tooth and connected by a partial tooth comprising an intermediate part of said magnet, and a non-magnetic partial tooth disposed on said intermediate part of said partial tooth between said two ends of said magnet, said non-magnetic partial tooth and said intermediate part forming a complete tooth disposed between said two teeth comprising the ends of said magnet.

4. A set of dentures comprising upper and lower dentures, the two spaced molar teeth on each said denture being integral and comprising a horseshoe magnet, the ends of said horseshoe magnet being made of magnetic material formed in the shape of teeth, the opposing magnetic teeth on said upper and lower dentures being magnetized with a magnetic pole on said upper denture adjacent a like polarized pole on said lower denture.

5. A set of dentures comprising upper and lower dentures, the body of two spaced molar teeth on each side of each said denture being made of magnetic material and

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connected by a connecting member, said magnetic material comprising a magnet, said teeth comprising the ends of said magnet, said magnetic material being formed in the shape of teeth, and an artificial tooth disposed on said connecting member, said dentures adapted to be used with like poles of said connecting members adjacent each other.

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