

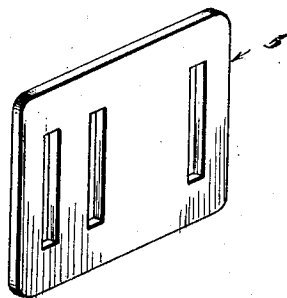
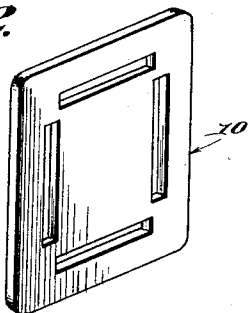
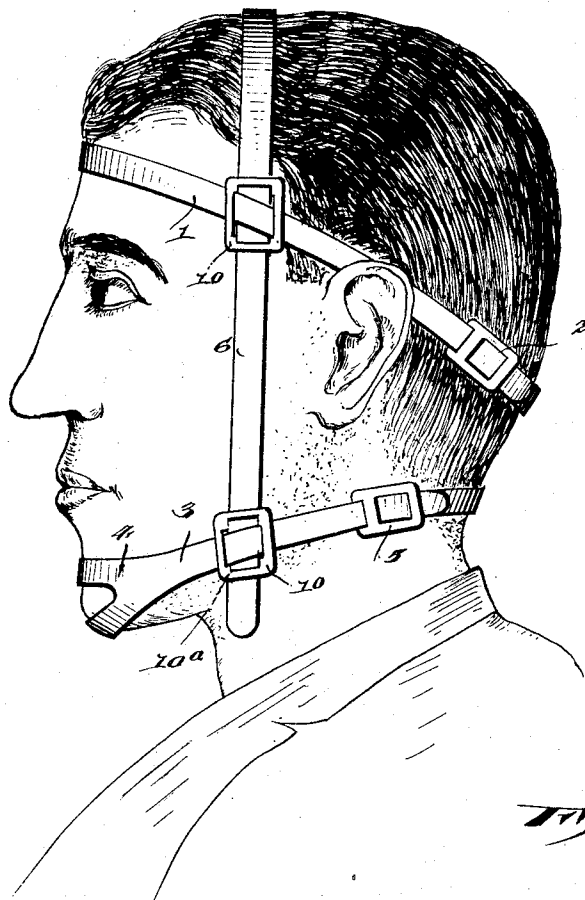
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DENTAL BITE APPARATUS

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DENTAL BITE APPARATUS

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This invention relates to dental apparatus and more particularly to devices for insuring a proper bite or occlusion of the human jaws which is necessary preparatory to the construction of an artificial denture.

It is well known to dentists that in taking impressions of the teeth and jaws with a wax compound such as is used by dentists that the tendency of the patient is to throw the lower jaw outwardly to an extended and unnatural position resulting in a faulty impression which is not only misleading to the dentist but results, if the impression is followed, in causing a mal-occlusion of the finished denture necessitating its reconstruction. The tendency is also to throw the lower jaw forward or to one side or the other, or both forward and sidewise which of course causes a mal-occlusion of the finished denture or other restoration.

A primary object of this invention is to overcome these objections and provide a device which will insure the effective and proper closing of the jaws in normal relationship and prevent all possibility of an erroneous impression being made.

Another object of the invention is to so construct an apparatus for application to the head of the patient which when secured in operative position will cause the mandible to be brought and held in normal relation with the maxilla while the jaws are occluded, insuring the normal and regular functioning of the mandible and thereby prevent mal-occlusion and failure of the bite.

Another object of the invention is to construct an apparatus of this kind of a series of suitably connected straps so arranged as to permit of their easy adjustment to conform to various facial measurements and angles and which when applied will prevent the patient from protruding or throwing the mandible laterally or forwardly.

In carrying out these objects, the invention is susceptible of a wide range of modification

without departing from the spirit or sacrificing any of the advantages of the claimed invention; there being shown in the drawings for illustrative purposes a preferred and practical form, in which:

Figure 1 represents a side elevation of this improved apparatus shown applied;

Fig. 2 is a perspective view of one of the buckles used in the construction of the apparatus; and

Fig. 3 is a similar view of another of such buckles.

In the embodiment illustrated the apparatus constituting this invention comprises a head encircling strap 1 adapted to pass horizontally around the head engaging the forehead and extending down over the temples to the back of the head where it is secured by a suitable buckle 2 which adapts the strap to fit heads of different sizes and to insure its proper fitting around the head of the patient. Another strap 3 is designed to pass around the lower portion of the head having a chin engaging portion 4 which is shaped to fit over and under and around the point of the chin to form a pocket for the chin as is shown clearly in Fig. 1. The ends of this strap 3 pass backward on both sides of the mandible of the patient and to the back of the neck where they are secured together by a suitable buckle 5.

These straps 1 and 3 are held in proper relation to each other and secured in operative position on the head by means of a strap 6 which passes vertically over the top of the head around the sides thereof crossing strap 1 at the temples and there secured to said strap 1 by four-way buckles as 10. The strap 6 then extends down over the condyles of the wearer and crosses strap 3 at the angle of the mandible as shown clearly in Fig. 1. This strap 6 where it crosses strap 3 is adjustably connected with strap 3 by means of four-way buckles 10a similar to the buckles 10 and

which provide for the easy adjustment of the straps 6 and 3 relatively to each other.

The straps from which this apparatus is constructed are preferably made of leather, although, obviously they may be made of other material, and the apparatus is placed in position on the head of the patient while the jaws are apart with strap 6 firmly held in position and passing through buckles 10 which connect it with strap 1 at the temples. The strap 6 then passes down over and against the condyles, then down through the buckles 10a where it is connected with the strap 3 at the angles of the mandible. The straps 1 and 3 are then securely fastened in position by means of the buckles 2 and 5. When the apparatus is so placed on the head of the patient the mandible is held simultaneously at the heads thereof, at the angles, and at the chin, and the heads of the mandible are thereby forced and held in their normal position in the glenoid fossæ of the temporal bones so that the mandible and maxilla are brought and retained in normal relation to each other causing the mandible to function normally and regularly and prevents the patient from unconsciously protruding the mandible or throwing it laterally when the jaws are occluded for taking the impression for a bite in the construction of dentures and other dental restorations.

It is of course understood that two of the buckles 10 and 10a are employed one of each on each side of the wearer's head as shown in Fig. 1 and two buckles only for securing the straps 1 and 3 in position are required being those shown at 2 and 5 in Fig. 1.

Without further description it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art, and it will, of course, be understood that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention or its scope as claimed.

We claim:

1. A dental bite apparatus comprising a series of connected straps, one to fit horizontally around the forehead and back of the head of the patient, another horizontally around the chin and back of the neck, and another to extend across the head and intersect the two horizontal straps and be adjustably connected with them at the points of intersection.

2. A dental bite apparatus comprising a series of connected straps, one to fit horizontally around the forehead and back of the head of the patient, another around the chin and back of the neck and having a longitudinally slit portion to form a chin receiving pocket, and another strap to extend across the head and to intersect the two first men-

tioned straps and adjustably connected with them at their points of intersection.

3. A dental bite apparatus comprising a series of connected straps to fit over and around the head of a patient, one of said straps being adapted to pass around the forehead and the back of the head having means for adjustably securing it in operative position, another strap adapted to pass around the chin and the back of the neck of the wearer and provided with means for securing it in position, and a strap to pass over the head of the wearer and to intersect the first mentioned straps in planes substantially at right angles and to be connected therewith.

4. A dental bite apparatus comprising a series of connected straps to fit over and around the head of a patient, one of said straps being adapted to pass around the forehead and the back of the head having means for adjustably securing it in operative position, another strap adapted to pass around the chin and the back of the neck of the wearer and provided with means for securing it in position, and a strap to pass over the head of the wearer and to intersect the first mentioned straps in planes substantially at right angles and to be connected therewith, and buckles adjustably connecting the overhead strap with the straps which are arranged in planes at right angles thereto.

5. A dental bite apparatus comprising a series of adjustably connected straps to fit over and around the head of a patient, one of said straps being designed to pass around the forehead and back of the head and having means for securing it in adjusted position, another strap adapted to pass around the chin and the back of the neck of the wearer, the chin portion being slit longitudinally to form a chin receiving pocket, means for securing said chin strap in adjusted position, and a strap adapted to pass over the head of the wearer and down crossing the first and second mentioned straps, buckles adjustably connecting said overhead strap with said first and second mentioned straps whereby the apparatus may be securely fitted to the head of the patient to prevent malocclusion of the jaws.

6. A dental bite apparatus comprising a series of adjustably connected straps, one to pass horizontally around the forehead to the lower portion of the back of the head with its ends adjustably connected to fit heads of different sizes, another horizontal strap to pass over and under and around the point of the chin and backward on both sides of the manible around to the back of the neck with its ends adjustably connected, and another strap to pass vertically from over the top of the head down the sides crossing the forehead-encircling strap at the temples and the chin-engaging strap at the angle of the

mandible, and fourway buckles adjustably connecting said horizontal and vertical straps at their points of intersection whereby the mandible is held simultaneously at the heads and the angles of the mandible and at the chin, the heads of the mandible being thereby forced and held in their normal position in the glenoid fossæ of the temporal bones so that the mandible and maxilla are brought and kept in normal relation to each other while the jaws are occluded in taking the impression.

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