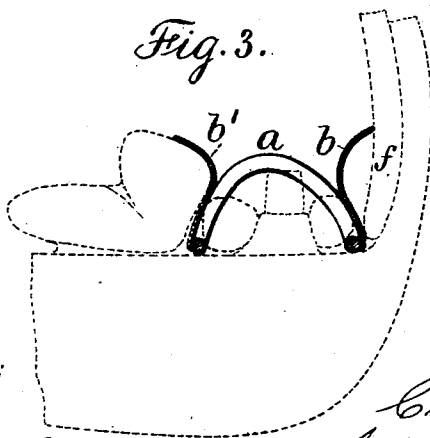
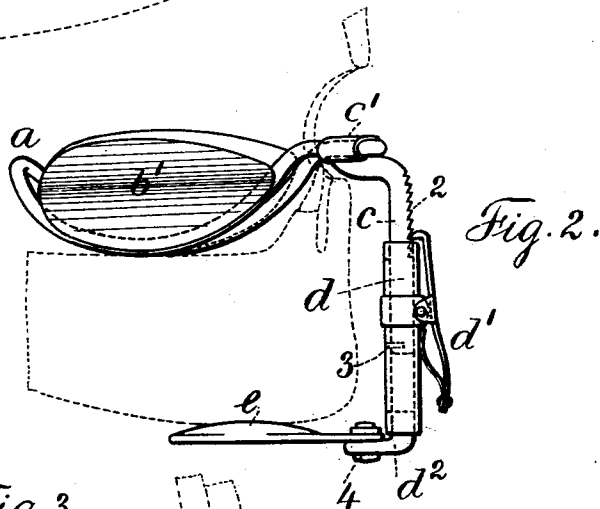
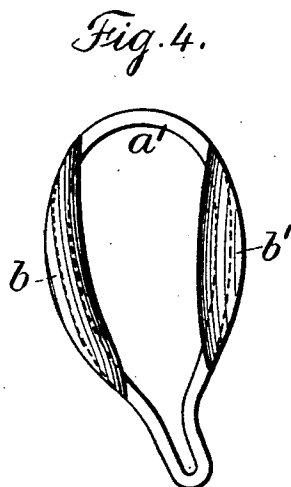
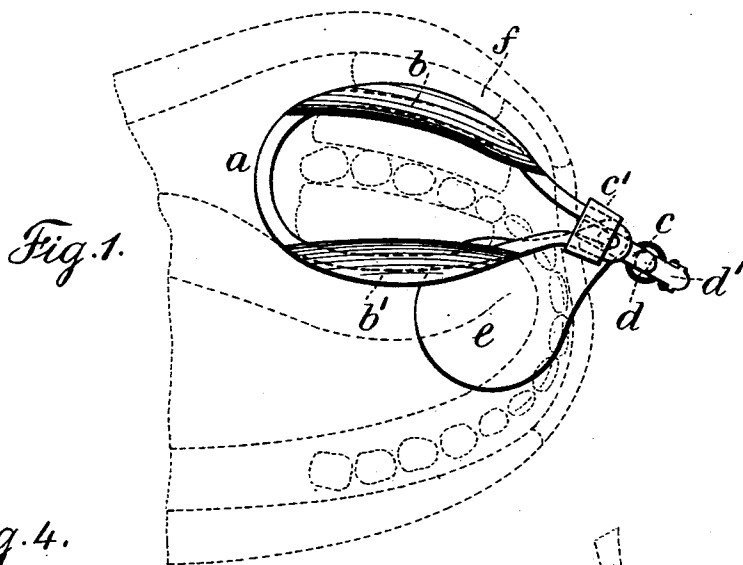


(No Model.)

C. F. C. MEHLIG.
DENTAL APPLIANCE.

No. 590,460.

Patented Sept. 21, 1897.



Witnesses:
J. Stair
Charles Smith

Inventor:
Charles F. C. Mehlig
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UNITED STATES PATENT OFFICE.

CHARLES F. C. MEHLIG, OF NEW YORK, N. Y.

DENTAL APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 590,460, dated September 21, 1897.

Application filed June 11, 1897. Serial No. 640,285. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. C. MEHLIG, a citizen of the United States, residing at New York, in the county and State of New York, have invented a new and useful Improvement in Dental Appliances, of which the following is a specification.

My invention relates particularly to dental appliances for facilitating operations upon the teeth of the lower jaw; and the object of the invention is to provide a device adapted to keep the cheek and tongue from contact with and immediate proximity to the teeth being operated upon, and which device can be readily and quickly applied and which will leave the operator free to effectually pursue his work, and the patient can close the mouth to relieve the strain and rest without risk of wetting the teeth.

In carrying out my invention I provide a double bow-frame with opposite outward-curved plates to straddle and extend along each side of the teeth of the lower jaw at either side of the mouth, together with a vertically-adjustable standard and a plate bearing outside and beneath the chin.

This device is adjustable and interchangeably applicable for the teeth at either side of the mouth and is adapted for use with wads of dental paper or similar material for absorbing and arresting the flow of saliva.

In the drawings, Figure 1 is a plan view representing my improved device and in dotted lines an outline of the lower jaw and the teeth. Fig. 2 is a side elevation and dotted outline of a section of the jaw. Fig. 3 is a cross-section and in dotted lines an outline of the jaw in section, and Fig. 4 is a plan of the left-hand-side bow-frame and plates.

The double bow-frame and opposite outwardly-curved plates are made rights and lefts for the respective sides of the lower jaw, *a* representing the right side and *a'* the left side. These double bow-frames have outwardly-curved portions that extend between the gums and cheek on one side and the gums and tongue on the opposite side. The frames curve upwardly at the back to extend over the gums and upwardly and with two parts slightly tapering in relation to one another at the front.

b b' represent the outwardly-curved plates,

the plates being secured at their lower curved edges to the lower curved portions of the bow-frames, and their upper free edges are curved outwardly, the plate *b* coming next to the cheek, so as to press the cheek outward and away from contact with or proximity to the teeth, and the plate *b'* coming next to the tongue and having a tendency to keep the same down and also away from contact with or proximity to the teeth, and this plate *b'* is of such shape and action in use that the tongue cannot ride over the plate.

The parts *a* and *a'*—that is, the right and left frames and plates—are exactly alike in construction, except that they are curved in the opposite direction to fit opposite sides of the mouth.

The standard comprises the rod *c*, the upper part of which is bent at nearly right angles to the vertical portion and on which bent portion the sleeve *c'* is affixed. This rod *c* is provided with ratchet-teeth 2 and with a pin 3. The rod is received in a tube *d*, having a long slot in which the screw or pin 3 moves. This screw prevents the rod being withdrawn from the tube or turning therein.

d' represents a spring-pawl pivoted to a strap-piece passing around the tube *d*, the point of the pawl engaging the teeth 2 of the rod *c*, and a foot-piece *d'* is secured in the lower end of the tube *d*. To this foot-piece a plate *e* is pivoted at 4, the same being adapted to swing in its relation to the rod and tube. The sleeve *c'* receives the front portion of the double bow-frame, the parts of which are slightly tapering to one another. If the right-hand bow-frame is to be employed, it is inserted in the sleeve *c'* and the rod *c* is moved outward in its relation to the tube *d* and the plate *e* is swung in the opposite direction to that occupied by the bow-frame. The bow-frame and its plates are then inserted in the mouth of the patient and are brought in their proper relation to the teeth of the lower jaw. Pressure is then applied to the parts of the standard to push the rod into the sleeve to bring the plate *e* up snugly to the under side of the chin and adjust the apparatus in the mouth of the patient in the proper position and to such an extent that it practically becomes fixed, in which position the spring-pawl engaging the ratchet-teeth holds the dental

appliance in place. The double bow-frame and the outwardly-curved plates are of such shape in relation to the curve of the teeth of the jaw that sufficient room is left at each side of the teeth and between them and the plates for the insertion of rolls or wads of dental paper or other suitable absorbent materials applied and pressed into position for the purpose of absorbing and arresting the flow of saliva. The curved plate *b*, which comes next to the cheek, occupies such a position that it is possible to employ a flat wad of dental paper or other suitable absorbent materials back of the plate and against the inner side of the cheek, as seen at *f*, to cover the saliva-duct in the cheek and prevent or retard the flow of saliva.

The left-hand double bow-frame replaces the right hand one in the sleeve *c* with facility, and when said left-hand frame is employed the pivoted plate *e* is turned to a position at an angle thereto, so that in either position in use it is preferable and advantageous that the plate *e* occupy a position centrally between the chin.

I claim as my invention—

1. The combination with an adjustable standard and a plate to take a bearing beneath the chin, of a double bow-frame and curved plates connected therewith, said frame being adapted to engage the adjustable standard and with its plates to occupy a position in the mouth at each side of the teeth to hold away from the teeth the cheek and tongue, substantially as set forth.

2. The combination with an adjustable standard and a plate pivotally connected therewith and adapted to come beneath the chin, of a double bow-frame having downwardly-curved portions, an upwardly-curved portion at the back and an upwardly-curved

portion at the front having adjacent and slightly-diverging portions adapted to engage the adjustable standard and opposite plates secured to the double bow-frame and conforming thereto at their lower edges and curved outwardly at their upper free edges, the one to come against and press outward the cheek and the other to extend over the edge of the tongue to keep the cheek and the tongue from contact with or proximity to the teeth operated upon, substantially as set forth.

3. The combination with the double bow-frame and the opposite outwardly-curved plates connected therewith, of a sleeve to receive and engage the end of the frame, a rod to which the sleeve is connected, a tube receiving the rod and in which the same is vertically movable, a plate pivoted to the base of the rod and adapted to swing, and a means for connecting the rod and the sleeve in the desired position of adjustment, substantially as set forth.

4. The combination with the double bow-frame and the opposite outwardly-curved plates connected therewith, of a sleeve to receive and engage the end of the frame, a rod to which the sleeve is connected, a tube receiving the rod and in which the same is vertically movable, a plate pivoted to the base of the rod and adapted to swing, and a spring-actuated pawl pivoted to the tube and adapted to engage teeth made in the vertically-movable rod, and a means for connecting the rod and the sleeve in the desired position of adjustment, substantially as set forth.

Signed by me this 7th day of June, 1897.

CHAS. F. C. MEHLIG.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.