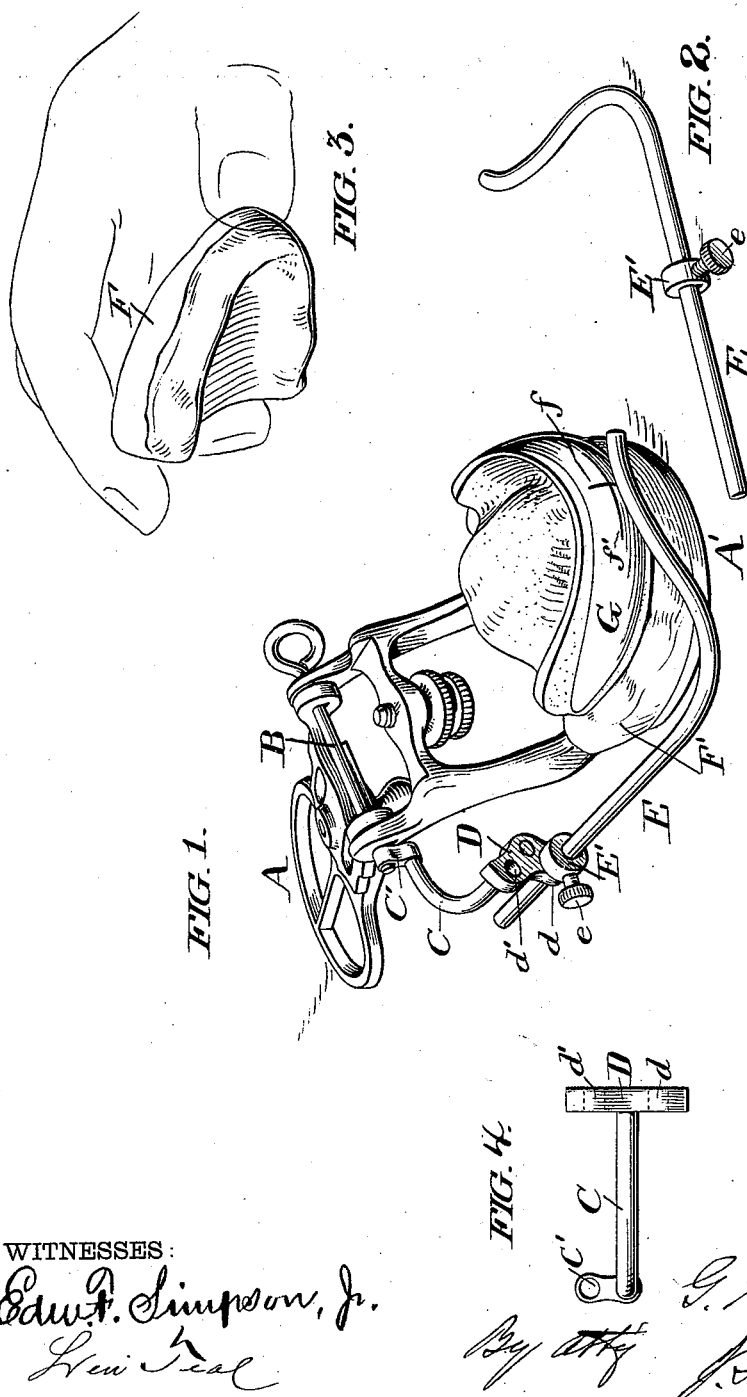


(No Model.)

G. K. BAGBY.
DENTAL ARTICULATOR.

No. 522,188.

Patented July 3, 1894.



WITNESSES:

Edw. F. Simpson, Jr.
New York

INVENTOR

G. K. Bagby
J. Peyton

UNITED STATES PATENT OFFICE.

GEORGE K. BAGBY, OF NEW BERNE, NORTH CAROLINA.

DENTAL ARTICULATOR.

SPECIFICATION forming part of Letters Patent No. 522,188, dated July 3, 1894.

Application filed April 23, 1894. Serial No. 508,598. (No model.)

To all whom it may concern:

Be it known that I, GEORGE K. BAGBY, a citizen of the United States, residing at New Berne, in the county of Craven and State of North Carolina, have invented certain new and useful Improvements in Dental Articulators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements, as hereinafter claimed, by which to accurately determine the articulation or bite in the preparation of artificial dentures.

In the accompanying drawings which show a suitable application of my improvements to an articulator of usual construction, Figure 1 is a view in perspective showing the upper section of the articulator as swung back and the measuring or gaging attachment in place to determine the location of the impression models upon the articulator. Fig. 2 is a view in perspective of the sliding or endwise adjustable arm of the jaw-gage or measuring attachment. Fig. 3 is a view in perspective showing the model obtained from the impression of the superior jaw held in hand preparatory to adjusting it in position upon the articulator; and Fig. 4 is a view of the inner section of the jaw-gage.

The upper section A and lower section A' of the articulator, of ordinary construction, are jointed together by a pivot B as usual. A measuring attachment or jaw-gage is detachably connected with the articulator pivot and is so constructed in sections jointed together as to adapt it to be lengthened or shortened as desired. As shown this jaw-gage is composed of two sections C and E. The bent inner section C has at its inner end a socket or bearing C' for detachably pivoting it upon the articulator pivot B, and is provided with an arm D at its outer end which has a socket or bearing d to receive the outer detachable and endwise sliding section E formed by a bent rod as shown. This section E has a sliding collar E' which is provided with a set screw e so that the collar may be adjusted and fixed in position as desired.

In the preparation of an artificial denture the usual plaster models F F' of the superior

and inferior jaws are first secured. Next a cup or tray G, such as set forth in Letters Patent of the United States, No. 502,164, granted to me July 25, 1893, with warm wax placed in both its top and bottom portions is adjusted in position in the mouth of the patient and a simultaneous impression of the upper and lower teeth (or jaws) is taken. After thus taking the bite and trimming away the excess of wax displaced by the closing of the patient's jaws, the tray or cup with the impression therein, is carefully replaced in the mouth and the tray is marked to indicate the median line, as at f, and is also marked horizontally, as at f', to indicate its lip length as a guide to the teeth length in upper and full dentures. The cup, with its attached impressions, is now taken from the mouth and preserved until wanted for transference to the articulator. It will be seen that as in accordance with my before mentioned patented improvement, the dentist is enabled to take the bite at the first sitting of the patient for taking the impressions. At the same sitting, also, the length of jaw is accurately ascertained in the following way: The set screw e of the collar E' being loosened the socket C' of the gage C E is placed against one of the cheeks of the patient at the condyle (joint of the jaw) and held there while the section E of the gage is adjusted to bring its bent outer end to bear against the labial necks of the lower central incisor teeth, and next the collar E' is slid against the arm D of the inner section of the gage and fixed by the set screw, to limit the sliding movement of the outer section. The gage thus gives the exact measurement desired of the lower jaw, when the central incisors are present. In event of their absence the outer end of the sectional gage is adjusted to bear against the alveolar border at the symphysis. Now, with the plaster models from the first obtained impressions at hand, the gage is connected with the articulator pivot, and with plaster in plastic condition suitably applied to the lower section of the articulator the lower model is placed in position thereon so that the outer end of the gage section E will rest against the necks of the lower incisors (or the alveolar border) represented by the model. When the lower model has been fixed by the setting of the plaster the

tray G with its impression is placed thereon, and next the upper plaster model is placed on the upper impression of the tray, and the upper section of the articulator is closed down upon the model which is then secured to the articulator by plaster. It is obvious that if, in arranging the artificial teeth, in constructing the denture in manner well understood, the length of the bite needs be changed, the articulating relations of the teeth will remain exact, because the natural jaw length is correctly duplicated by the articulator.

A second socket *d'* is provided in the arm D of the section C of the gage, to receive the outer section of the gage so as to ascertain the length of the upper jaw measured from the condyle if desired.

My improvements may be modified in various ways without departing from the spirit of my invention. For instance, the sliding collar might be dispensed with and the set screw be carried by the arm D of the inner section of the gage so as to be capable of clamping

the outer section in position of adjustment and instead of the arm D being upon the inner section it might be upon the outer section of the gage and the inner section thereof suitably lengthened to adapt it to such alteration.

I claim as my invention—

The sectional jaw-gage for a dental articulator, consisting of the inner section adapted to be pivotally connected with the articulator pivot, the outer section adapted to extend laterally to the front ends of the articulator sections and having jointed connection with the inner section of the gage and adapted to have an endwise sliding movement relatively thereto, and means by which to limit said sliding movement, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE K. BAGBY.

Witnesses:

H. R. BRYAN, Jr.,
M. W. CANNON.