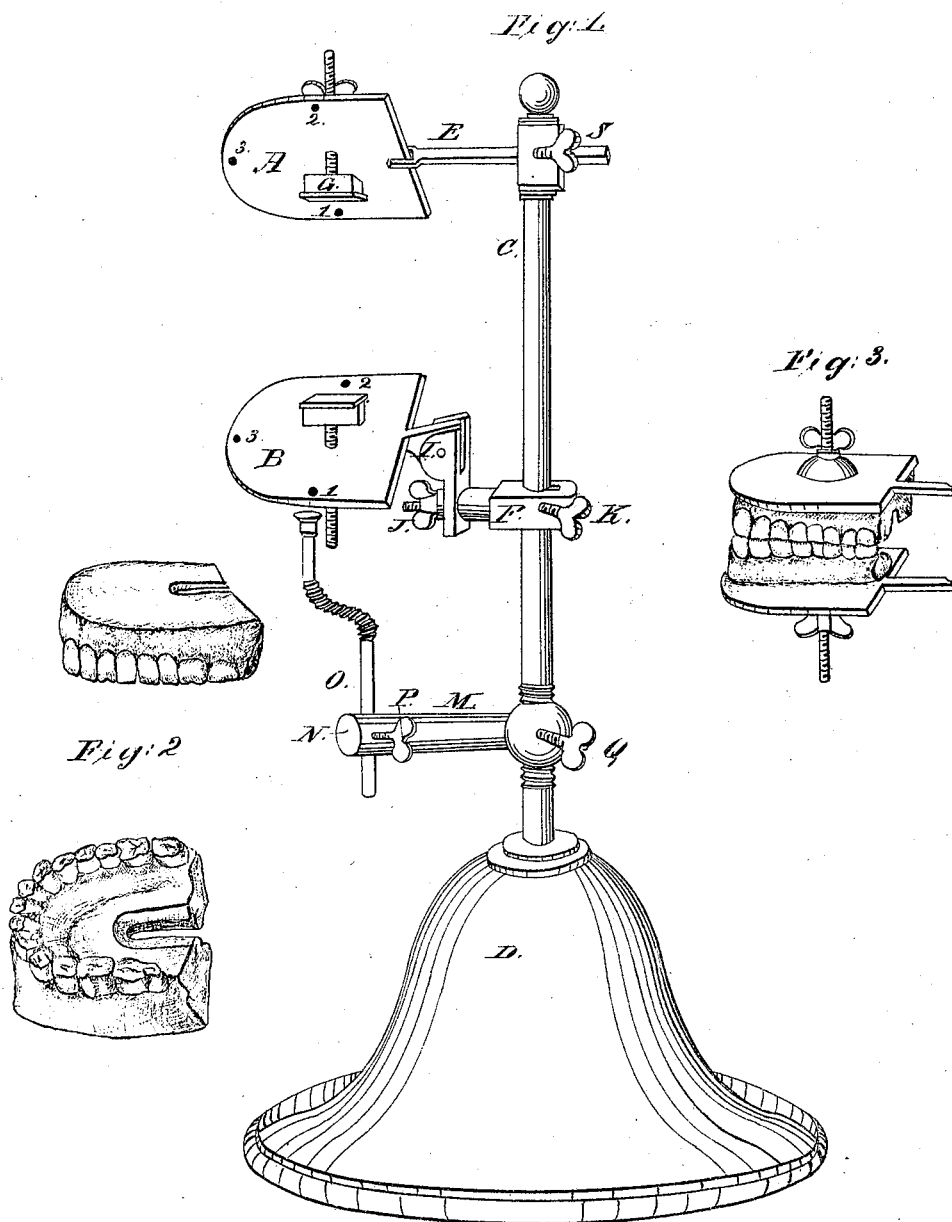


*J. Cameron,*  
*Dental Articulator.*  
*N<sup>o</sup> 1574.      Patented Apr. 30, 1840.*



# UNITED STATES PATENT OFFICE.

JAMES CAMERON, OF PHILADELPHIA, PENNSYLVANIA.

## INSTRUMENT FOR ADJUSTING THE GRINDING-SURFACE OF ARTIFICIAL TEETH.

Specification of Letters Patent No. 1,574, dated April 30, 1840.

*To all whom it may concern:*

Be it known that I, JAMES CAMERON, of Philadelphia, in the county of Philadelphia, in the Commonwealth of Pennsylvania, have invented a new and improved instrument for adjusting artificial teeth, so as to ascertain when their grinding-surfaces fit properly together and if they do not fit to show where the defects are; and I hereby declare that the following is a full and exact description of the same.

Two plates A, and B, are attached to a perpendicular rod C, resting upon the stand D; the upper plate A, being fixed to a rod E, at right angles to, attached to the perpendicular rod C, through a hole in said rod and commanded by the screw S; and the lower plate B, being attached to a movable shaft F, attached to and sliding upon the rod G; upon the upper plate A, is a nut and screw G, for the purpose of confining the impression and the teeth of the upper jaw to such plate, in order to make them stationary. Such impressions and teeth can also be confined to said plate by wires or screws passing through the holes 1, 2, 3, in said plate, the lower plate B, moves perpendicularly upon a hinge I, attached to the horizontal shaft F, and confined to the said shaft by the nut and screw J; the horizontal shaft E, is movable by sliding upon the perpendicular rod C, and may be confined to the same at pleasure by screw K. Upon the lower plate B, is a nut and screw L, for confining the impression and teeth of the lower jaw to clutch plate like the nut and screw G, of the upper plate A; and the said impression and teeth may be confined to the lower plate B by wires or screws passing through the holes 1, 2, 3, of said plate. Upon the perpendicular rod G, is a sliding horizontal shaft M, perforated with a hole N, at the outer extremity, through which passes a wire or rod O, sliding, and confined at pleasure by the screw P, the sliding shafts M is confined to the perpendicular rod C, by the screw 2. The upper plate A, is fixed like the upper jaw of the human head, except that it is movable at pleasure backward and forward, by means of the horizontal rod E, passing through the perpendicular rod G, and also in an oblique direction on either side by the same means. The lower plate B, is movable upon the hinge I, so as to initiate the motion of the human lower jaw. The lower plate B, is also raised or depressed at pleasure by the slid-

ing wire O; or by the horizontal shaft M, moving upon the perpendicular rod C. The two plates A, and B, are separated or approximated at pleasure by the sliding horizontal shaft F. The lower plate B, is turned obliquely upon either side by turning the hinge I, obliquely up on the horizontal shaft F, for which purpose the hinge I, is commanded by the screw J. When the sets of teeth are prepared in the usual way or manner, the set for the upper jaw is confined to the upper plate A, by the nut and screw G, or by the wires or screws passing through the holes 1, 2, 3, in said plate; and the set for the lower jaw is confined to the lower plate B; by the nut and screw L, or by the wires or screws passing through the holes 1, 2, 3, in said plate. The lower plate B, is then brought up by means of the strong horizontal shaft F, so that the upper and lower teeth meet; the shaft is then fastened by the screw K. The teeth are thus placed in the same position relative to each other, that they would occupy in the human mouth. The lower plate B, can then be moved in imitation of the human lower jaw, by the hinge I, and by thus bringing the grinding surfaces of the teeth together in the same manner as they would be if in the human mouth; and then any irregularity can be discovered and remedied. Fig. 1, in the drawings represent the whole instrument. Fig. 2, the casts of the teeth or impressions and Fig. 3 represent those impressions or teeth fastened to the upper and lower plates A, and B, and their grinding surfaces brought together.

What I claim as my invention and desire to secure by Letters Patent is—

1. The combination of the plates A, and B, with the stand C, the whole being constructed and operating substantially described or set forth.

2. I claim also in combination with the foregoing arrangement the rod O, and shaft M for supporting the lower plate when in use.

3. I claim the mode of regulating the motion of the lower plate by means of the combined operation of the hinge I, screw J, and screw K attached to the horizontal rod F, as herein set forth.

JAMES CAMERON.

Witnesses:

ISAAC BOILEAU, [L. s.]  
WM. R. CARPENY. [L. s.]