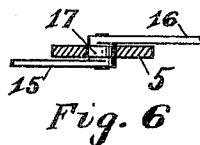
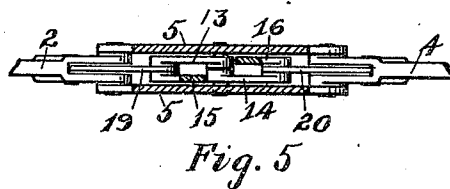
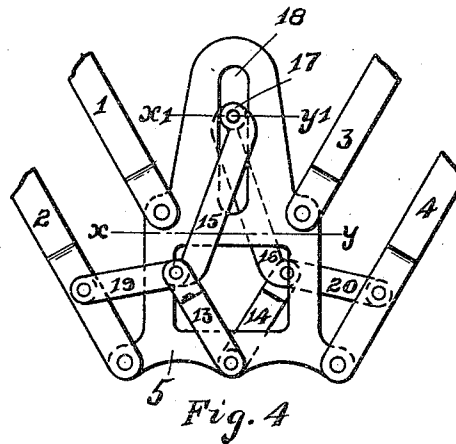
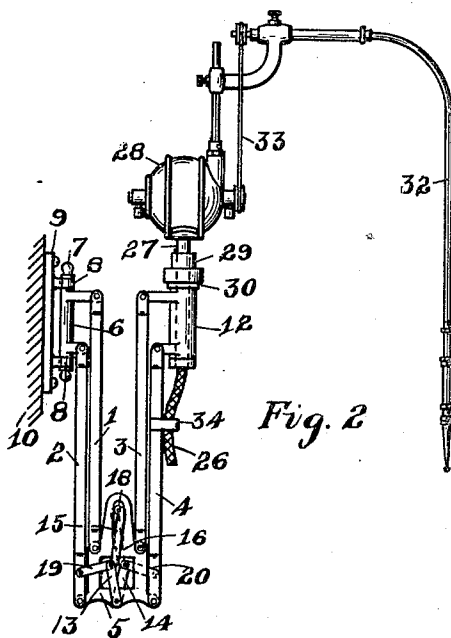
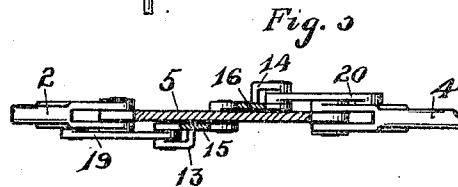
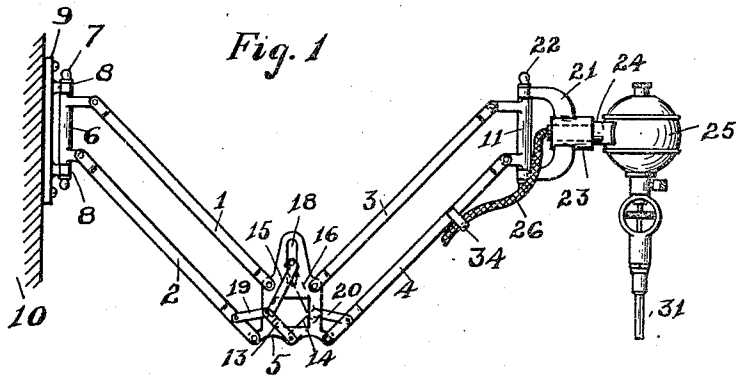


J. V. TRENAMAN.
EXTENSIBLE BRACKET.
APPLICATION FILED AUG. 19, 1915.

1,189,754.

Patented July 4, 1916.



WITNESSES:

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JOHN V. TRENAMAN, OF NEW YORK, N. Y.

EXTENSIBLE BRACKET.

1,189,754.

Specification of Letters Patent.

Patented July 4, 1916.

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To all whom it may concern:

Be it known that I, JOHN V. TRENAMAN, a citizen of the United States, residing at New York, in the county and State of New York, have invented a new and Improved Extensible Bracket, of which the following is a specification.

My invention relates to extensible and adjustable wall brackets of the type especially adapted for use in supporting dental engines or trays, a bracket being required for such purpose that will fold up against the wall so as to occupy the least possible space, and which may be extended outwardly to positions various distances from the wall.

The objects of the invention are, first, to provide a bracket of the class described formed in two sections pivotally connected to move angularly from or toward each other in a vertical plane to occupy an outwardly extended position or a vertical position with the sections folded substantially against each other and adjacent the wall on which the bracket is supported; second, to so pivotally connect the sections, through the medium of an equalizing device, that any such angular movement of one section will cause a like angular movement of the other whereby the object, as a dental engine or tray, supported on the outer section will be in the same horizontal plane for all positions of the bracket, such equalizing connection permitting a free relative movement of the section; and, third, to mount such a bracket so as to swing horizontally and also to provide means on the outer section for revolvably supporting the object carried thereby. I attain these objects in a bracket such as illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of the bracket in extended position with an electric dental engine supported thereby to rotate on a horizontal axis; Fig. 2, a side elevation of the bracket in closed or inoperative position with an electric dental engine of a different type supported thereby to rotate on a vertical axis; Fig. 3, a horizontal sectional view taken along the line $x-y$ of Fig. 4; Fig. 4, an enlarged face view of the connecting plate and equalizing levers; Fig. 5, a sectional view similar to Fig. 3 but showing two connecting plates instead of one and with the equalizing levers disposed between them; and Fig. 6, a sectional detail along the line x^1-y^1 of Fig. 4.

Similar reference characters refer to similar parts throughout the several views.

The bracket comprises an inner and an outer section each formed by two parallel arms 1, 2 and 3, 4, respectively, the corresponding ones having, as in Figs. 1 to 4, inclusive, their adjacent ends bifurcated and pivotally connected to a central plate 5 at points oppositely disposed on its side edges. The other ends of the inner section arms 1 and 2 are bifurcated and pivotally connected to projections extending outwardly from a vertically disposed tubular end member 6 hinged on a pintle 7 to and between ears 8 formed on a plate 9 secured to a wall or other suitable support 10; while the outer ends of the arms 3 and 4 are bifurcated and pivotally connected to projections extending inwardly from a vertically disposed tubular member as 11, in Fig. 1, or 12, in Fig. 2. The arms of each section are so spaced apart and connected to the plate 5 and their respective end members as to have a parallel movement and to fold up against but one in advance of the other, as in Fig. 2.

On opposite sides of the plate 5 and pivoted thereto at a point near the lower edge and in a vertical line midway between the pivotal connections of the arms 1, 3 and 2, 4, respectively, with the plate are two similar levers or links 13 and 14 which extend at like angles but in opposite directions from such vertical center. These links 13 and 14 have pivotally connected thereto at their outer ends the inner ends of somewhat longer links 15 and 16, respectively, the outer ends of which are pivoted on a stud carrying a roller 17 engaging in a centrally disposed vertically extending slot 18 therefor in the plate 5. Also pivoted on the studs connecting the links 13 and 15, and 14 and 16 are the inner ends of comparatively short levers 19 and 20, respectively, the outer ends of which are pivoted, respectively, to the arms 2 and 4 at points equidistant from their pivotal connection to the plate 5.

The links 14 and 16 are caused by the lever 20 to move relatively toward or from a vertical position accordingly as the arm 4 is moved to close or open the bracket, and such angular movement of the links 14 and 16 causes a similar movement of the corresponding links 13 and 15 which in turn actuates the lever 19 to cause a corresponding

movement of the arm 2 to that of the arm 4. The bracket sections, it will thus be seen, are equipoised and, although a comparatively heavy object may be supported, the sections
 5 can be moved toward or from each other by exerting but a slight pressure against one or the other thereof. The end member 11 or 12 remains under all conditions in a vertical position and, as before stated, the section
 10 arms have a parallel movement.

The bracket is adapted to support any desired object as a tray for holding dental instruments, and which necessarily should be close to the operating chair, or an electric
 15 dental engine and when for the latter use such an engine may be supported to rotate on a horizontal axis, as in Fig. 1, or a vertical axis, as in Fig. 2.

In Fig. 1 the number 21 represents a yoke engaging over the ends of the member 11 and hinged thereto on the pintle 22, such yoke having a horizontally disposed cylindrical body portion 23 in which is rotatably supported a short tubular shaft 24 having an
 25 electric dental engine 25 secured to one end thereof, the wires for such motor being inclosed in a cord 26 extending through the shaft 24 and held against the bracket by any suitable engaging means as indicated
 30 at 34.

In Fig. 2 the end member 12 is similar to but of greater diameter than the corresponding member 11 of Fig. 1, and has a tubular shaft 27, supporting at its upper end a dental engine 28, extending vertically there-
 35 through which is rotatably mounted on suitable cooperating ball bearing members 29 and 30 carried by the shaft 27 and member 12, respectively.

In the type of motor shown in Fig. 1, the flexible shaft within the cord 31 is directly connected to the motor shaft; while in the type shown in Fig. 2 the flexible shaft within the cord 32 is driven from the motor shaft
 45 through the medium of the belt 33.

Refer now to Fig. 5. In this figure there are shown two plates 5 with the section arms pivotally connected thereto, as in Figs. 3 and 4, but between the plates, and with the
 50 equalizing links also disposed therebetween thus being almost entirely concealed from view.

It is believed that, from the foregoing description, the construction, operation and
 55 purpose of the bracket are sufficiently clear to call for no further explanation herein.

What I claim is:

1. In an extensible bracket, the combination with a pivotally supported inner section, an outer section and a central plate to which adjacent ends of said sections are pivotally connected, of means for causing equal
 60

angular movement of said sections toward and from each other comprising,—two pairs of pivotally connected links pivoted at one
 65 end to said plate at a point in a line midway between the connections therewith of said sections, their opposite ends pivotally connected and slidable along said median line in
 70 guiding means on said plate, and two links each pivotally connected to one of said pairs of links and one of said sections, two corresponding ones of said links having substantially parallel movement with said sections.

2. In an extensible bracket, the combination of an inner and an outer section movable angularly toward and from each other in a vertical plane each formed by two arms spaced apart and having parallel movement, a central member comprising two plates to
 80 and between which adjacent ends of said section arms are pivotally connected, end members to which the opposite ends of said section arms are pivoted, said outer end member adapted to support an object, a wall
 85 plate on which the end member of said inner section is supported to swing on a vertical axis, and means for causing an equal angular movement of said sections comprising,—two pairs of pivotally connected links pivoted at one end to and between said central
 90 plates at a point in a line midway between the connections therewith of said section arms, their opposite ends pivotally connected and slidable along said median line in
 95 guiding means on said plates, and two links each pivotally connected to one of said pairs of links and to the lower arm of one of said sections, two corresponding ones of said links having substantially parallel movement
 100 with said sections.

3. In an extensible bracket, the combination with a pivotally supported inner section, an outer section and a central plate to which adjacent ends of said sections are pivotally
 105 connected, of means for causing equal angular movement of said sections toward and from each other comprising,—two pairs of pivotally connected links pivoted at one end to said plate at a point in a line midway between the connections therewith of said sections, a sliding member to which the opposite ends of said pairs of links are pivotally connected, centrally disposed means on said
 110 plate for guiding such sliding member, and two links each pivotally connected to one of said pairs of links and one of said sections, two corresponding ones of said links having substantially parallel movement with said sections.

JOHN V. TREMAN.

Witnesses:

MAUDE WILLMENT,
 I. H. NEWMAN.