

A. F. PIEPER.
COUNTERPOISED BRACKET.
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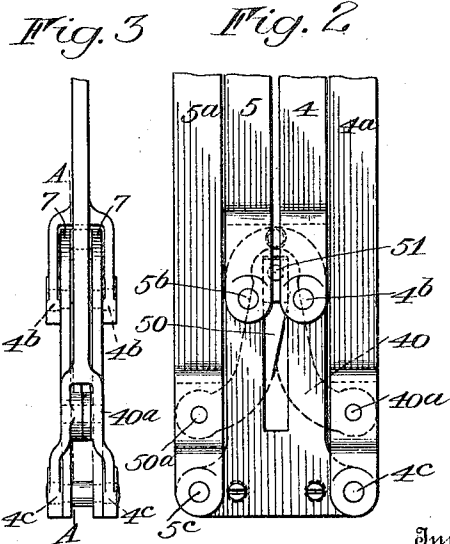
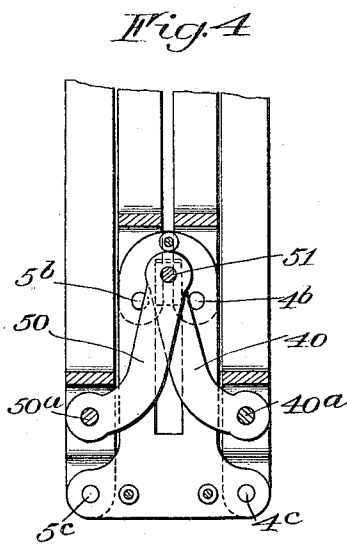
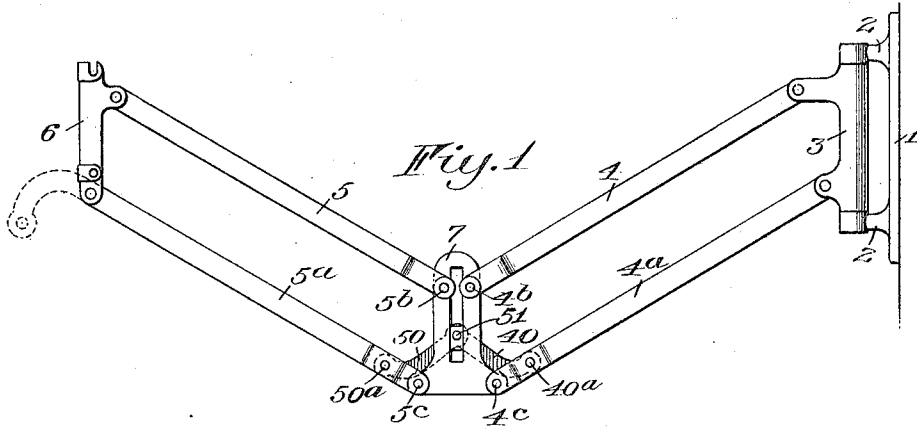


Fig. 2

Fig. 3

Fig. 4

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COUNTERPOISED BRACKET.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALPHONSE F. PIEPER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Counterpoised Brackets; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide an adjustable bracket adapted to be extended, or retracted, by moving outwardly or inwardly relatively to its support, and which will in all positions of adjustment be perfectly counterpoised.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a side elevation of a bracket constructed in accordance with my invention; Fig. 2 is a detail enlarged view showing the connection between the inner and outer sections; Fig. 3 is a side elevation thereof; and Fig. 4 is a cross sectional view taken on the line A—A of Fig. 3.

Similar reference numerals throughout the several figures indicate the same parts.

A bracket constructed in accordance with my invention is adapted particularly for use in supporting the trays for holding the instruments used by dentists, or for supporting the tool cabinets in which such instruments are usually contained, and the general arrangement of the parts is such that the sections of the bracket may be drawn forwardly or moved outwardly away from their support and held counterpoised in any position of adjustment.

In carrying out my invention I provide a bracket composed of two sections, one a wall section the other, the outer or extensible section. The wall section is connected to the holder 1 attached to a wall or other support, and having the outwardly extending arms 2 forming journals carrying the horizontally revoluble head 3 to which is pivotally connected the vertically adjustable arms or rods 4 and 4^a. The outer or extensible section of the bracket comprises the arms 5 and 5^a also connected for pivotal movement and joined

at their outer ends by the member 6 which may carry the tray, cabinet or other object which it is desired to support on the bracket.

Connection between the two members of the bracket is effected by the member 7, and to stiffen the structure against twisting or torsional strains I make said member with separate side plates, as shown in Fig. 3, and I further provide each arm of both pairs of arms with bifurcated ends which overlie the side plates of the member and are connected thereto by the pivot pins 4^b—4^c and 5^b—5^c, thus affording great stability at the joints. The arms are all preferably straight and the pivots 4^c and 5^c are arranged out of vertical alinement with the pivots 4^b and 5^b, and also separated a greater distance to permit the several arms to lie in parallel lines and edge to edge when folded together, as shown in Figs. 2 and 4.

Equilateral movement of the two pairs of arms relatively to the connecting plate 7 is obtained by means of a controlling connection in the form of a pair of links 40 and 50, pivoted together at 51, and guided for vertical movement on the member 7. In the illustrations, the member 7 is shown as provided with guide slots in which are mounted small blocks carrying the ends of the pin 51. The outer ends of the links are connected, one to each pair of arms 4—4^a and 5—5^a, the pivotal points being preferably made with the lower arms, the link 40 being journaled on the arm 4^a by the pin 40^a, and the link 50 similarly attached to the arm 5^a by the pin 50^a. These pins 40^a and 50^a are also positioned between the bifurcations of said arms and between the side pieces of the member 7 so that they are completely housed when the bracket is in closed or folded position.

When the bracket is in extended position a severe strain or twisting action would be imparted to the pin 51 if it should be supported only at one end, or if the links should be held in but one guide, and this strain is relieved by carrying the two ends of the pins in the guides in the side plates of the member 7. The arrangement of the parts in the manner shown completely conceals the links when the bracket is collapsed, and when it is extended they are partly hidden, and by reason of the position they occupy they are practically unnoticeable.

Where the nature of the object to be supported will permit its being suspended or held in other than one position in all posi-

tions of adjustment of the bracket, the outer or extensible section may only comprise the lower member 5^a the extremity of which may be extended as shown in dotted lines as a means of suspending objects.

I claim as my invention:

1. In an adjustable bracket, the combination with two pairs of arms both pivotally connected at their outer ends, of a common connecting member to which the adjacent ends of said pairs of arms are pivoted, links pivoted to one of the arms of each pair, said links being united and guided on the connecting member and so disposed that they move in an upward direction when said pairs of arms are moved toward each other.

2. In an adjustable bracket, the combination with two pairs of arms each connected at their outer ends and each arm having bifurcated extremities at its inner end, of a connecting member formed of two spaced plates disposed between and pivoted to said bifurcated ends of the arms and connecting the pairs of arms, two connected links guided between said plates and pivoted between the bifurcated portions of one arm of each pair of arms.

3. In a counterpoised bracket, the combination with a wall section comprising two

arms pivotally connected to a supporting member and an extensible section member, of a plate having a guide thereon pivoted to the two arms of the wall member and to the extensible member and forming a connection between them, two pivotally united links carried by the guide on the plate and pivotally attached, one to the extension member and the other to one of the arms of the wall section.

4. In an extensible bracket, the combination with a center member having a guide thereon, two arms attached at different points to the upper end of said member, and two other arms pivoted at the lower end of said member at points separated a greater distance than the points of attachment of said first mentioned arms, of links pivoted to the last mentioned arms and traveling on the guide to limit the opening movement of said arms and separate members connecting in pairs the outer ends of the pairs of arms extending at opposite sides of the center member.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."