O. C. WHITE.
ADJUSTABLE BRACKET.
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ADJUSTABLE BRACKET.


To all whom it may concern:

Be it known that I, OTIS C. WHITE, a citizen of the United States, residing at Worcester, in the county of Worcester and 5 State of Massachusetts, have invented a new and useful Adjustable Bracket, of which the following is a specification.

This invention relates to a bracket or holder, and is particularly adapted for resonator boxes.

The principal objects of the invention are to provide a simple and convenient bracket of this kind which can be secured to a table, desk, or the like, and which will support the resonator box or other instrument in such a way that the same can be moved about through a wide range and yet the bracket can be folded up so as to occupy comparatively little space; to provide a construction securing these results in which the instrument can be clamped in any desired position and in which the conductor for the instrument will be supported by the bracket and will be prevented from being twisted up in spite of the wide range of adjustability of the bracket; also to provide a construction in which the resonator box or instrument is normally held in any adjusted position about its own axis, but can be turned therefrom easily and simply without disconnecting any parts.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a side view of a preferred embodiment of the invention; Fig. 2 is a plan of the same showing certain adjustments of the parts in dotted lines; and Fig. 3 is a plan showing other adjustments.

The invention is shown as comprising a base or standard 10 adapted to be screwed or bolted to a desk, table, or the like. This is provided with a central vertical passage therethrough for the conductor 11 and the latter is shown as surrounded by an insulating bushing 12 in the supporting table or desk.

The standard is provided with an integral stop 13 on one side extending above a horizontal circular face 14 near the top thereof. Extending above this face is a concentric vertical pivot 15 which enters a correspondingly shaped socket in the hub 21 of a swinging arm 20 so that the arm is adapted to swing about a vertical axis. The bottom of the hub 21 rests on the face 14. A pivoted jaw 22 is provided having a clamping screw 23 by which the arm may be clamped to the pivot 15 and held in any desired position thereon. This clamp not only holds the arm in adjusted position but also takes up the back lash and prevents play of the parts even after they are worn.

The hub 21 has a central vertical passage registering with the passage in the base and at the top is provided with a smooth burnished insulating bushing 24. The conductor 11 passes up through this and extends along the arm, being supported thereon by eyes 25. The bushing fully insulates the conductor and also reduces wear to a minimum on account of its smooth inner surface. On a level with the bottom of the hub is an integral stop 26 projecting inwardly with respect to the arm into engagement with the stop 13, so that the extent of swinging of the arm is limited.

At the free end the arm is provided with a horizontal circular face 27 at the top of a hub 28 which is provided with a vertical passage for the conductor 11. Just at the inner edge of this face 27 is an integral stop 29 projecting above the face. Extending above this face 27 and concentric therewith is a pivot which enters a socket in the hub of a second arm 30. This second arm is constructed substantially like the first and is supported in the same way, and it also carries the conductor in the same way with the exception that at its free end the horizontal circular face 31 is not entirely plain, but is provided with an integral rib 32 preferably radial and V-shaped. The hub 33 below this face is provided with an enlarged passage 34.

On the top of the face 31 rests the hub 40 of a support 41. This hub is provided with a downwardly projecting brass tube 42 which fits in the passage 34, and at the bottom it has a burnished bushing 43 for the conductor. The bottom of the hub 40
is provided with a series of radial notches 44 in which engages the rib 23. On account of this the chattering of the instrument will not, of itself, throw it out of adjustment. The resonator box 45 or other instrument is secured to the upper surface of the support 41. This hub also has an integral stop 46 thereon adapted to move in a path to engage the stop on the outer end of the arm 30.

From what has been said and from the illustration the way in which the device is set up will be obvious.

The continuous conductor or conductors 11 extend from the bushing 12 along the two arms into the resonator box in an obvious manner. An important feature of the invention is the provision of the several stops located as specified, so that the conductors cannot be twisted. From a consideration of Figs. 2 and 3 the reason for this will be apparent. In Fig. 3 the arm 20 is swung around to its limit to the left and the only way in which it can move is around to the right in the direction of the arrow. In this direction it can go nearly all the way around. The arm 30 also is located in its limiting position in one direction in Fig. 3 and it must be swung around in the direction of the arrow thereon if it is to be adjusted at all. This arm can swing around from the position shown in full lines nearly 360 degrees and it can be swung into any intermediate position as the arm 20 is swung through this arc. An intermediate position is shown in dotted lines.

Fig. 2 shows the arm 20 in a position from which it can swing equally in both directions. Also the arm 30 is shown in full lines in a similar position, that is, in the position shown in Fig. 1. In dotted lines two other positions of the arm 30 are indicated. It is to be observed also that the resonator box itself can be swung through an arc of nearly 360 degrees, but on account of the location of the stops it cannot swing beyond a certain limit, and it cannot be swung around twice in the same direction without first reversing it. On this account, the resonator box can be brought to any desired position and placed at any desired angle, and yet the conductor cannot be twisted. All this is accomplished practically without any attention on the part of the operator, his only care being to get the resonator box into a convenient position and to swing the arms back out of the way when he is through with it.

While I have illustrated and described a preferred embodiment of the invention, I am aware that many modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to all the details of construction herein shown and described, but

What I do claim is:—

1. In a bracket, the combination of a base having a vertical pivot at the top, an arm mounted to swing on said pivot, said arm having a circular upper face at the free end thereof and provided with a vertical pivot at the top of said face, a second arm mounted to swing about the last named pivot and provided with a socket in the end, and a resonator support fitting in said socket and adapted to turn therein, the second arm having a circular face surrounding the socket provided with an upwardly extending rib thereon, and the resonator support having a notched face resting on said face, the notches thereof fitting said rib, whereby the support can be turned to any desired position and will remain therein.

2. In a bracket, the combination of a base having a vertical pivot at the top, an arm mounted to swing on said pivot, said arm having a circular upper face at the free end thereof and provided with a vertical pivot at the top of said face, a second arm mounted to swing about said pivot, and a support supported by said second arm and adapted to turn on a vertical axis, said base and each arm near the free end thereof being provided with an upwardly extending stop, the stops on the arms being on the top thereof and located just inside the circular faces thereof, each arm also being provided with a second stop on the bottom near the point at which it is pivoted.

3. In a bracket, the combination of a base having a vertical pivot at the top, an arm mounted to swing on said pivot and having a horizontal circular face at the free end thereof and provided with a circular pivot at the top of said face, a second arm mounted to swing about said pivot and provided with a socket in the end, and a resonator support fitting in said socket and adapted to turn therein, said base being provided with a stop on one side thereof projecting up above the bottom of the arm which is mounted thereon, and each arm being provided with two stops, one at the bottom of the end at which the arm is supported and the other extending above the top of the opposite end, both of said stops being located between the axis on which the arm swings and its free end.

4. In a bracket, the combination of an arm mounted to swing about a vertical pivot and provided with a socket in the end, a circular face surrounding the socket provided with an upwardly extending rib thereof, and with an upwardly extending stop, and a resonator support fitting in said socket and adapted to turn therein, and
having a notched face resting on said face, the notches thereof fitting said rib, whereby the support can be turned to any desired position and will remain therein and having a stop adapted to engage the stop on the arm.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

OTIS C. WHITE.

Witnesses:

ALBERT E. FAY,

C. FORREST WESSON.

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