

No. 790,377.

PATENTED MAY 23, 1905.

C. R. MESTON.
FAN BASE ADJUSTMENT.
APPLICATION FILED DEC. 31, 1904.

Fig. 1.

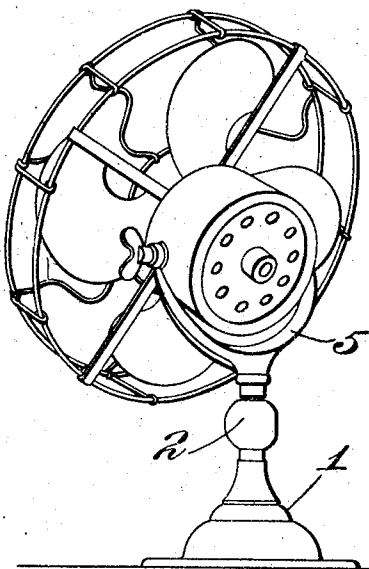


Fig. 2.

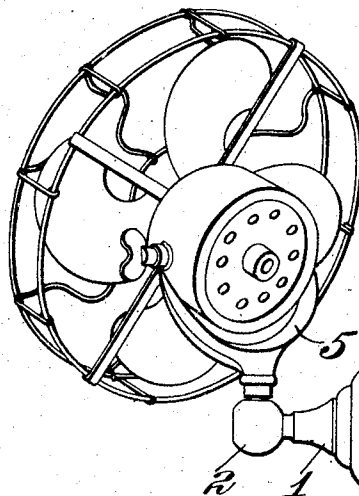


Fig. 3.

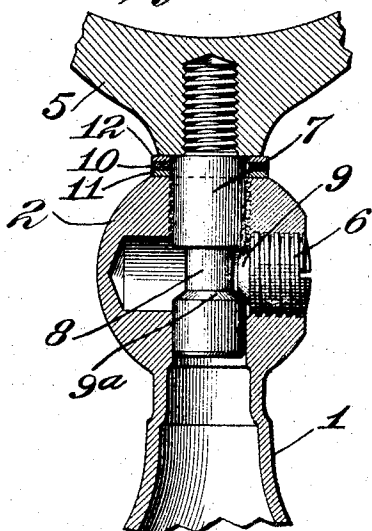
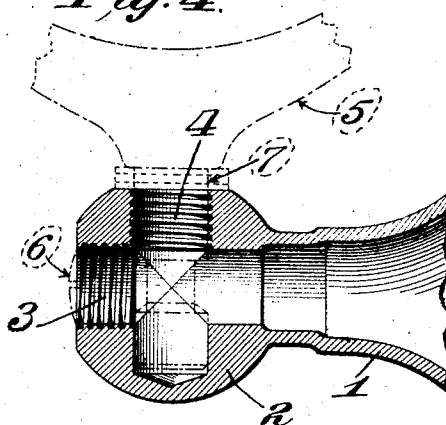


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES R. MESTON, OF ST. LOUIS, MISSOURI, ASSIGNOR TO EMERSON ELECTRIC MANUFACTURING COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

FAN-BASE ADJUSTMENT.

SPECIFICATION forming part of Letters Patent No. 790,377, dated May 23, 1905.

Application filed December 31, 1904. Serial No. 239,265.

To all whom it may concern:

Be it known that I, CHARLES R. MESTON, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Fan-Base Adjustments, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a fan the base of which is vertically attached thereto. Fig. 2 is a perspective view of a fan illustrating the base as being horizontally attached thereto. Fig. 3 is a vertical longitudinal sectional view through a portion of the base and the shank for the motor-bracket, and Fig. 4 is a vertical longitudinal sectional view through a portion of the base in its horizontal position.

This invention relates to motor-base adjustments, and particularly to a means for permitting adjustments to be made whereby a fan-motor base may be changed to adapt the fan for a bracket-fan or to be used on a horizontal support, such as a table, desk, &c.

One of the objects of the invention is to provide a base which may be suitably attached to a supported part, such as a bracket or yoke for a fan-motor, so that the base may be attached to a vertical support, such as a partition or wall, or adjusted so as to rest upon a horizontal support. In the position indicated in Fig. 1 the base is arranged with respect to the motor and fan for what is known to the trade as a "desk-fan," while in Fig. 2 the base is arranged for a "bracket-fan."

It is the purpose of this invention to so arrange the adjustable connection that the parts will be interchangeable, so that in order to adjust the base from a vertical to a horizontal position it will not be necessary to utilize any part or parts not employed in either of the adjustments.

In order that the manner of accomplishing the desired result may be apparent, I have illustrated the base in section in both of its

adjusted positions. The part 1 may be alternately employed as a base or a bracket; but for the sake of uniformity it will hereinafter be referred to as the "base." One end of the base is provided with a head portion 2, having a longitudinal bore 3 and an intersecting transverse bore 4, which bores are adapted to alternately receive the shank of the motor-holder 5. The entrance-openings to the bores 3 and 4 are threaded to alternately receive a threaded plug 6, which constitutes a fastening device for the shank. The shank 7 is of approximately the same diameter as the diameters of the respective bores, and intermediate the respective ends of the shank 7 is a constricted portion 8 of a length equal to the diameter of the projection 9 on the plug 6, which projection is of less diameter than the diameter of the threaded plug 6. The shank 7 may serve as a spindle whereby the fan may be swung on the axis of its holder 5 to the desired horizontal angle and then tilted vertically in the forked ends of the holder 5. The rotary movement of the shank will not be prevented by the locking device 6, and inasmuch as the diameter of the shank 7 is approximately the same as the diameters of the respective bores or sockets 3 and 4 a rigid connection will be made in either of the adjusted positions.

In operation suppose it is desired to provide a desk-fan. The shank will be attached to the base in the position indicated in Fig. 3, and the locking device consisting of the plug 6 will be inserted and screwed into the bore 4 until the engaging projection 9 enters between the shoulders formed at the ends of the constricted portion 8 of the shank 7. If at any time it is desired to change the fan to a bracket-fan, so as to secure it to a vertical partition, wall, or other support, the plug 6 will be removed and the shank 7 will be inserted in the bore 4, while the plug will be inserted in the bore 3, so as to lock the shank against displacement, but permit it to rotate. In both of these adjusted positions the shank will be vertical, while in one case the base will be vertical and in the other horizontal. Attention

is directed to the ease of manipulation whereby these adjustments may be made, and particularly to the fact that the same parts are employed in making either adjustment, the interchangeability of these parts materially contributing to the efficiency of the device.

In order to provide means for deadening the sound due to the vibration of the fan, I provide a resilient packing 10, which is interposed between two washers 11 and 12, located between the fan-holder 5 and the base 1. The packing 10 is resilient to the extent of being compressible and if made of felt or rubber or some similar material will effectually reduce the tendency of the parts to rattle. Another advantage of utilizing a resilient washer is that the frictional contact between the spindle and plug 6 may be relieved, so that the spindle may be turned in its socket whereby the direction of the fan-blast may be controlled; but the packing and the plug 6 co-act, so as to hold the spindle in any position which it is capable of assuming. By providing the projection 9 in the form of a taper, so as to engage the tapered shoulder 9^a on the spindle 7, the introduction of the fastening device 6 will cause the sound-deadening device, including the two washers, to be held between the head 2 and the lower portion of the fan-holder 5, so as to hold the shank 7 rigid and prevent all vibration.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An adjustable connection between a base and a part held thereby, which connection consists of a head having intersecting bores, a shank in one of the bores, a shank-fastening device in the other bore, said shank and fastening device being interchangeable one with the other; substantially as described.

2. The combination of a base and a fan-holder, a spindle-shank carried by the holder and having a reduced portion intermediate its ends, the base having at one end bores at right angles to each other, both of said bores being of equal diameters, a plug fitting in one of the bores and having a projection adjacent to the reduced portion of the shank, said shank and plug being of approximately the same diameter whereby the plug may be interchanged for the shank in either of the bores; substantially as described.

3. The combination of a base having intersecting right-angularly disposed bores, the entrance portion of each bore being threaded, and interlocking interchangeable devices in the respective openings, one of which is a

locking device and the other a spindle; substantially as described.

4. The combination of a base having intersecting right-angularly disposed bores, and interlocking interchangeable devices in the respective openings, one of which is a locking device and the other a spindle; substantially as described.

5. The combination of a base having a bore, a fan-holder, a shank on the fan-holder and resting in the bore, said shank having a beveled shoulder, a sound-deadening packing between the fan-holder and the base, and a plug having a tapered projection for engagement with the beveled shoulder on the shank; substantially as described.

6. The combination of a base having a bore, a fan-holder, a shank on the fan-holder and resting in the bore, said shank having a beveled shoulder, a sound-deadening packing between the fan-holder and the base, and a plug having a projection for engagement with the beveled shoulder on the shank; substantially as described.

7. The combination of a base having intersecting right-angularly disposed bores, a fan-holder having a shank in one of the bores, a sound-deadening washer between the fan-holder and the base, said shank having a beveled shoulder, a locking device in the other bore and having a tapered end for engagement with the beveled shoulder on the shank, said shank and fastening device being interchangeable; substantially as described.

8. The combination of a base having a bore, a fan-holder, a shank on the fan-holder and rotatably secured in the bore, a plug carried by the base and frictionally engaging the shank, and a yielding packing between the fan-holder and the base; substantially as described.

9. The combination of a base having a bore, a fan-holder, a shank carried by the fan-holder and rotatably secured in the bore, a plug in the base frictionally engaging the shank, and a sound-deadening yieldable packing interposed between the fan-holder and the base and adapted to be compressed to temporarily relieve the frictional contact between the plug and the shank; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 29th day of December, 1904.

CHARLES R. MESTON.

Witnesses:

B. F. FUNK,
GEORGE BAKEWELL.