PATENT SPECIFICATION

418,519

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PROVISIONAL SPECIFICATION.

Improvements in and relating to Adjustable Supports, such as Stands or Brackets for Toilet Mirrors, Reading Lamps, and like Small Articles.

We, BROOKES & ADAMS, LIMITED, a Company organised under the Laws of Great Britain, of 250—252, Barr Street, Hockley, Birmingham, 19, in the County of Warwick, and ARNOLD EDWIN BROOKES, a Subject of the King of Great Britain, of the Company's address, do hereby declare the nature of this invention to be as follows:—

This invention relates to adjustable supports, and is particularly applicable to stands or brackets for toilet mirrors, reading lamps, and the like.

It has for its chief object to provide a neat and simple construction of support, which will enable the mirror, lamp or the like carried thereon to be easily and quickly adjusted to any desired position and retained in such position with the requisite degree of firmness.

A further object is to provide adjusting means of such a type as to allow of the support and the article carried thereon being formed mainly of non-metallic material.

According to this invention, the support comprises a body or base, a rod axially slidable therein, a member (formed integrally with, or attached to, the article to be supported) which is pivoted on the rod about an axis transverse to that of the rod, and resilient non-metallic packing adapted to be engaged between the relatively movable parts so as to hold them in their adjusted positions. Preferably, at one or more of the adjustment points, this packing takes the form of a ring of rubber or like material, arranged to be compressed against a member slidably or rotatably mounted therein so as to hold the member in place.

In one construction according to this invention as applied to a stand for a mirror used for toilet purposes, the body or base of the support takes the form of a hollow cone which preferably has its larger end outwardly flared or bell-mouthed to enable it to carry an eccentrically disposed and relatively heavy article (such as a mirror or lamp) without risk of overbalancing.

A metal or other rod of circular cross section is mounted in the smaller end of the conical support, being adjustably slidable therein on an axis coincident with that of the cone, and to its projecting end is pivotally secured a member which is formed integrally with, or attached to, the back of a glass mirror. The axis of the pivot is perpendicular to that of the rod.

With such an arrangement, the mirror has, within limits, three degrees of freedom, that is, it is movable both longitudinally and angularly in relation to the axis of the conical base, and is also movable angularly about an axis perpendicular to that of the base. Such adjustability is convenient where the mirror is intended for use during the operation of shaving.

A special feature of the invention concerns the provision, at the points of adjustment, of resilient non-metallic packing adapted on compression between the relatively movable parts to hold them frictionally in their adjusted positions.

One of these adjustment points is at the smaller end of the conical base, through which the rod is coaxially slidable. The frictional holding means here provided, for preventing further axial or angular movement of the rod once it has been adjusted as desired in relation to the base, comprise a ring of substantially circular cross section, made of soft rubber or like material and adapted normally to grip the rod fairly tightly, which is secured between the end of the base and an annular cap screwed thereon. This end of the base is closed except for the aperture through which the rod passes, and it may be formed, as also may the cap, with an annular conical or curved recess providing a seat for the rubber ring. The friction exerted by the ring is normally light enough to enable the rod easily to be moved in relation to the base, but on

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screwing up the cap, the ring is compressed against the rod and holds it firmly in its adjusted position.

The projecting end of the rod is forked to receive a lug integral with or attached to the back of the mirror, and a pivot screw or bolt passes through the parts from side to side. The frictional holding means provided at this point comprise non-metallic washers (which may be of fibre or like material) threaded on the pivot screw and engaged between the lug on the mirror back and the jaws of the rod. Preferably a recess is provided in the lug to accommodate each washer, but is not sufficiently deep to receive the full thickness of the latter. Normally this knuckle joint is kept tight enough to maintain the mirror at any desired angle to the rod, but, should it work loose in practice, tightening of the pivot screw at once ensures a firm grip.

It will be realized that the use of such non-metallic holding means renders the support particularly suitable for manufacture in some inexpensive non-metallic material, such as synthetic resin or the like. The base, the annular cap therefor, the lug on the supported member, and even the rod may be moulded from this material in known manner.

A support so constructed may be arranged for use as a bracket by the provision of a keyhole slot in the flared portion of the body, whereby it may be hung on a screw and secured to a wall with its axis perpendicular thereto.

Dated the 24th day of April, 1933.

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COMPLETE SPECIFICATION.

Improvements in and relating to Adjustable Supports, such as Stands or Brackets for Toilet Mirrors, Reading Lamps, and like Small Articles.

We, BROOKES & ADAMS, LIMITED, a Company organised under the Laws of Great Britain, of 250—252, Barr Street, Hockley, Birmingham, 19, in the County of Warwick, and ARNOLD EDWIN BROOKES, a Subject of the King of Great Britain, of the Company's address, do hereby declare the nature of this invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to adjustable supports, such as stands or brackets for toilet mirrors, reading lamps, and like small articles, and it refers particularly to supports of the kind comprising a hollow body or base, a cylindrical stem axially adjustable therein, and a member (formed integrally with or attached to the article to be supported) which is angularly adjustable upon a pivot disposed transversely of said stem.

The chief object of the invention is to provide a neat and simple construction of the above type having adjusting means of such a type as will allow of the relatively movable parts being formed in non-metallic or other soft material without risk of their becoming worn or damaged by constant adjustment.

In this connection, it has previously been proposed to mount an electric lamp or lamps upon a portable stand having a heavy base with an upright tube fixed thereto, a second tube telescopically adjustable in the latter and a lamp-carrying part adjustably pivoted to this second tube. The prior construction referred to involved the provision of securing means at the two points of adjustment one of these comprising a collar fixed to the upper end of the outer tube, a cap screwing thereon, and a leather washer adapted, on being clamped between these parts, to be forced into engagement with the slidable inner tube, whilst the other consisted of a bracket rotatably mounted on the upper end of the inner tube and connected by a pivot bolt with a winged nut to a friction jaw on the lamp-holder.

According to the present invention, non-metallic packing rings are arranged at both points of adjustment, one ring being adjustably engaged between the body or base and a cap screwing directly thereon, whilst a pair of rings are engaged directly between the angularly-adjustable member and a forked end of the stem, the pivot comprising a screw which engages in said forked end and is rotatable to clamp the angularly-adjustable member in the desired position. The packing ring at the first mentioned adjustment point may be

formed of rubber and of substantially circular cross-section, being arranged to be forced radially against the cylindrical stem so as to resist axial movement thereof in relation to the body or base.

In order that our invention may be clearly understood and more readily carried into practice, we have appended hereunto one sheet of drawings illustrating the same, wherein:—

Figure 1 is a part-sectional side elevation of a stand constructed in accordance with the invention, and of a toilet mirror adjustably supported thereon.

Figure 2 is an enlarged view, partly in section, of adjusting means provided at the knuckle joint shown in Figure 1, and

Figure 3 is a fragmentary perspective view of another detail of the stand.

In the construction illustrated as applied to a stand for a mirror used for toilet purposes, the body or base 5 of the support takes the form of a hollow cone which preferably has its larger end outwardly flared or bell-mouthed as at 6 to enable it to carry the eccentrically disposed and relatively heavy glass mirror 7 without risk of overbalancing.

A metal or other solid rod 8 of circular cross section is mounted in the smaller end 9 of the conical base 5, being adjustably slidable therein on an axis coincident with that of the cone, and to its projecting end is pivotally secured a lug 10 or other member which is formed integrally with, or attached to, the back 11 of the mirror 7. The axis of the pivot is perpendicular to that of the rod 8.

With such an arrangement, the mirror 7 is movable both longitudinally and angularly in relation to the axis of the conical base 5, and is also movable angularly about an axis perpendicular to that of the base. Such adjustability is convenient where the mirror is intended for use during the operation of shaving.

The invention concerns the provision, at both points of adjustment, of resilient non-metallic packing rings adapted, on compression between the relatively movable parts, to hold the latter frictionally in their adjusted positions.

One of these adjustment points is at the smaller end 9 of the conical base 5, through which the rod 8 is coaxially slidable. The frictional holding means here provided, for preventing further axial or angular movement of the rod 8 once it has been adjusted as desired in relation to the base, comprise a ring 12 of substantially circular cross section, made of soft rubber or like material and adapted normally to grip the rod 8 fairly tightly. This ring being secured between the end 9 of the base except for the aperture 14 through which the rod 8 passes, and a cap 13 screwed thereon. The cap 13 is formed with an annular recess 15 which provides a seat for the rubber ring 12 or a similar recess may be provided in the end 9 of the base, and in either case the recess may be made of conical or curved form if desired. The friction exerted by the ring is normally light enough to enable the rod 8 easily to be moved in relation to the base 5, but on screwing up the cap 13, the ring 12 is forced radially against the rod 8 and holds it firmly in its adjusted position. Means, such as the screw 16, may be provided to prevent complete separation of the rod from the base.

The projecting end of the rod 8 is forked at 17 to receive the lug 10 on the back 11 of the mirror 7, and a pivot screw 18 or bolt passes through the parts from side to side as shown in Figure 2. The frictional holding means provided at this point comprise a pair of non-metallic washers 19 (which may be of fibre or like material) threaded on the pivot screw 18 and engaged between the lug 10 on the mirror back 11 and the jaws 17 of the rod. Preferably a recess 20 is provided in the lug to accommodate each washer 19, but is not sufficiently deep to receive the full thickness of the latter. Normally this knuckle joint is kept tight enough to maintain the mirror 7 at any desired angle to the rod 8, but, should it work loose in practice, tightening of the pivot screw 18 at once ensures a firm grip. The rod 8 may be split longitudinally as at 21 to facilitate the clamping of the lug 10.

It will be realized that the use of such non-metallic holding means renders the support particularly suitable for manufacture in some inexpensive non-metallic material, such as synthetic resin or the like. The base 5 the annular cap 13 therefor, the lug 10 on the supported member, and even the rod 8 may be moulded from this material in known manner. In Figure 1, the mirror back 11 is formed of such non-metallic material with the lug 10 moulded integrally therewith.

A support so constructed may be arranged for use as a bracket by the provision of a keyhole slot in the flared portion 6 of the base 5, whereby it may be hung on a nail, screw, or other projection and suspended upon a vertical wall with the axis of the rod 8 extending perpendicularly of the latter. Alternatively, a keyhole slot 23 may be formed in a metal or other plate 24, which is slidably or otherwise mounted on a screw 25 engaging in the under side of the flared portion 6 in such a manner that the attachment plate 24 may be accommo-

dated wholly beneath the conical base 5 when not required, as shown in Figure 1, or may be moved so as to project externally thereof, as shown in Figure 3, when the support is to be hung on a wall in the manner aforesaid.

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

1. An adjustable support of the kind referred to, wherein non-metallic packing rings are arranged at both points of adjustment, one ring being adjustably engaged between the body or base and a cap screwing directly thereon, whilst a pair of rings are engaged directly between the angularly adjustable member and a forked end of the stem, the pivot comprising a screw which engages in said forked end and is rotatable to clamp the angularly-adjustable member in the desired position.

2. An adjustable support according to Claim 1, wherein the packing ring at the first mentioned adjustment point is formed of rubber and of substantially circular cross-section, being arranged to be forced radially against the cylindrical stem so as to resist axial movement thereof in relation to the body or base.

3. An adjustable support according to claim 2, wherein one of the relatively-movable members is formed with an annular conical or curved seating for the ring.

4. An adjustable support according to any of the preceding claims, wherein the stem is split longitudinally to facilitate the clamping of the angularly-adjustable member in the forked end of said stem.

5. An adjustable support according to any of the preceding claims, wherein the body is formed or provided with means for engaging a nail or other projection whereby it may be hung upon a vertical wall with the stem extending perpendicularly thereof.

6. An adjustable support constructed substantially as described with reference to the accompanying drawings.

Dated the 13th day of April, 1934.

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[This Drawing is a reproduction of the Original on a reduced scale.]

FIG. 1.

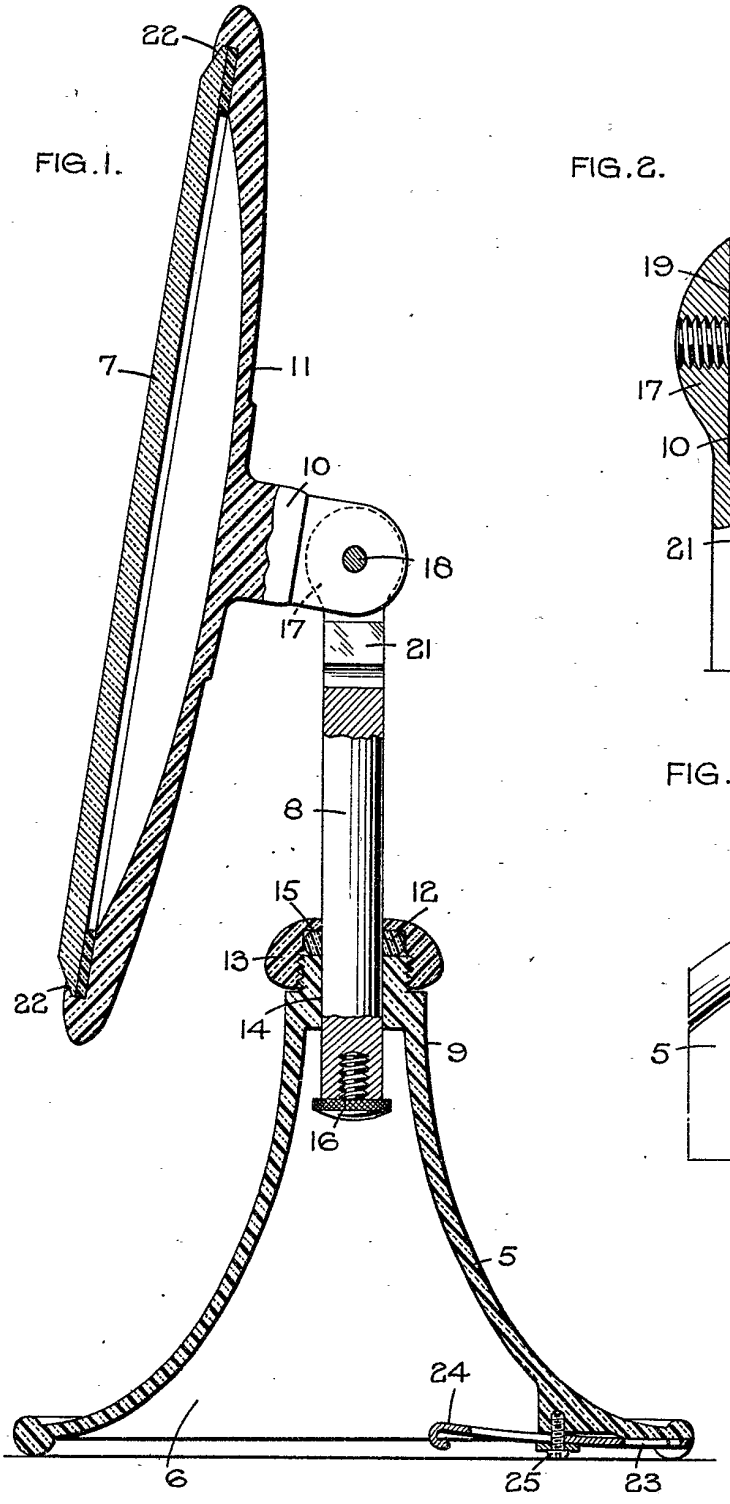


FIG. 2.

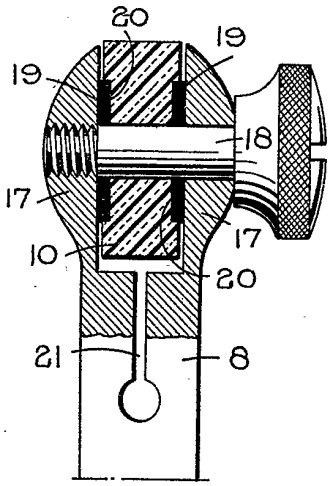
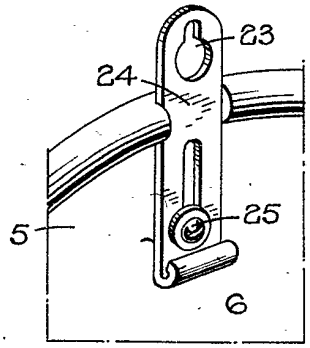


FIG. 3.



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