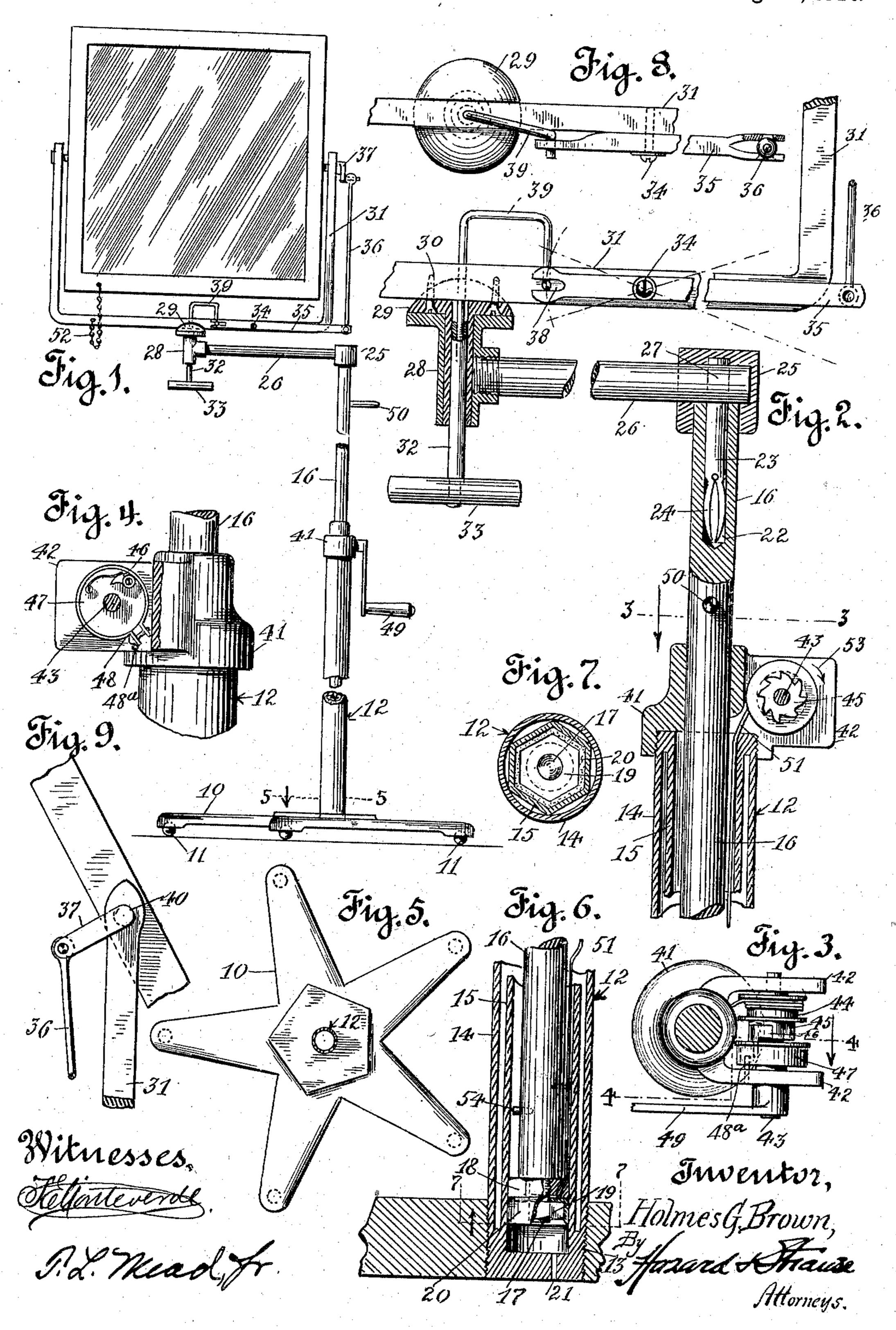
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ADJUSTABLE STAND.

APPLICATION FILED MAY 13, 1909.

967,493.

Patented Aug. 16, 1910.



UNITED STATES PATENT OFFICE.

HOLMES G. BROWN, OF LOS ANGELES, CALIFORNIA.

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Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed May 13, 1909. Serial No. 495,793.

To all whom it may concern:

Be it known that I, Holmes G. Brown, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Adjustable Stands, of which the following is a specification.

My invention relates to stands wherein is provided means for adjusting the same, and more particularly has reference to stands especially adapted to carry a mirror.

The prime object of my invention is to provide a stand for mirrors, such as a shaving or a dressing mirror, which will permit of vertical adjustment of the same, and also permit the mirror to be swung in both a vertical and horizontal plane.

It is also of the objects of my invention to provide a simple means for effecting said adjustments, whereby a maximum number of such adjustments can be effected by means of a minimum number of parts.

Another object of my invention is to provide means whereby, should the apparatus by which the standard is secured when raised vertically fail to hold, the mirror will be saved from being broken.

These features are all clearly illustrated in the accompanying drawings, in which:—

Figure 1— is an elevation of my improved stand with a mirror mounted thereon. Fig. 2— is an enlarged detail view, partly in section, of the principal actuating parts of my 35 device. Fig. 3— is a section taken on line 3-3 of Fig. 2, showing the raising mechanism. Fig. 4— is a section taken on line 4—4 of Fig. 3. Fig. 5— is a plan view of the foot of the stand. Fig. 6— is an enlarged central vertical section of the lower portion of the stand body showing the means for securing the lifting wires, and also the air cushioning means. Fig. 7— is a section taken on line 7-7 of Fig. 6 showing the means by which the mirror support is guided and kept from rotation. Figs. 8 and 9 are enlarged detail views of parts of the mirror actuating mechanism.

Referring now more specifically to the drawings, reference numeral 10 indicates a spreading base supported upon suitable rollers, or casters 11, and carrying the upright standard 12 which has screw-threaded engagement with the base as indicated at 13.

Standard 12 consists of a tubular outer member 14 and an inner hexagonal member 15.

The outer tubular member 14 serves to give a neat appearance to the stand, while the inner hexagonal member 15 serves as a guiding means in the vertical adjustment of the 60 mirror support or stem 16. Mirror support 16 is provided at its lower end with an elongated screw-threaded portion 17, which bears the hexagonal nut 18 snugly fitting the hexagonal member 15, and smaller nut 65 19 which serves as retaining member for the packing 20. It will be seen by reference to Fig. 6 that the lower end of standard 12 is closed and provided with a restricted passage 21, the object of which will appear 70 later.

The mirror support 16 is chambered at its upper end, as indicated at 22, in which is fitted a stud member 23 provided with frictional engaging means 24 at its end, which 75 engage the walls of the chamber. The support 16 also pivotally bears an elbow 25 at its upper portion within which is supported a rod or arm 26 extending at right angles to the support 16. Said rod 26 is provided 80 with an opening 27 within which the stud member 23 is fitted. At its outer end the rod 26 bears a vertical head or journal member 28 having a vertical bore within which is fitted a bearing or pintle 29. The bearing 85 29 has an enlarged upper portion which is secured by means of suitable fastening means 30 to the bracket or main mirror frame 31. Bearing 29 is provided with an angular vertical passageway therethrough, within which 90 is slidingly mounted the angular shaft or shank 32 of the adjusting handle 33. Upon the main mirror frame is provided a bearing stud 34 on which is pivotally supported a lever 35 which extends to one side of the 95 mirror frame, and has pivotal engagement with the rod 36 connecting the same with the crank 37. At its other end the lever 35 is provided with a longitudinal slot 38 within which is fitted the end of rod 39 con- 100 nected with adjusting handle 33. Rod 39 is guided through the frame 31, as shown in Fig. 2. The mirror is accurately balanced in the mirror frame, and is directly connected with crank 37, as indicated at 40. 105 At the upper end of standard 12 I provide a lifting mechanism, which comprises a cap 41 provided with a vertical opening through which the mirror support 16 is adapted to slide. Said cap is also provided with arms 110 42 bearing a shaft 43. Shaft 43 in turn bears a small drum 44 secured thereto. One

side of the drum 44 is provided with a ratchet wheel 45 which is engaged by a spring pressed dog 46 carried on drum 47 loosely mounted on the shaft 43. I provide 5 the drum 47 with a suitable band brake 48, the object of which is to limit rotation thereof. I also provide shaft 43 with a crank 49 secured thereto. I provide support 16 with a stop 50 which will engage crank 49 when 10 the standard 16 nears its lowermost position. Suitably secured upon drum 44 and to the hexagonal nut 18 is a lifting member, preferably formed of piano wire, which is adapted to raise the mirror support, as will 15 be hereinafter described. If desired I may provide a suitable connection, such as a light chain 52, between the mirror and the frame to prevent its swinging too far. In order to keep the band brake 48 from rotating, I provide a pin 48a in one of the arms of the cap which projects into the path of one end of the band brake as indicated in Fig. 4.

The operation of my improved mirror and stand is as follows: When it is desired to ²⁵ adjust the mirror and its frame vertically, shaft 43 is rotated in the direction indicated by the arrow 53 in Fig. 2, whereupon the wire 51 will be wound upon the drum 44, and through its connection with nut 18 will 30 cause the standard 16 to be raised vertically. During such movement the standard 16 is guided through cap 41, and is prevented from rotating by means of hexagonal member 15. Standard 16 is prevented from be-35 ing forced out of guide-way 15 by means of stud 54. If for any reason the dog 46 should fail to engage ratchet wheel 45 when the mirror support 16 is in the raised position, thus allowing the same to fall, the 40 packing 20 will act as a piston, and the mirror support will be air cushioned and so prevent breaking the mirror. The restricted passage 21, however, will allow the air to gradually escape therethrough when it is desired to lower the device normally. When it is desired to so lower the standard, the crank 49 is turned backward, the dog 46 keeping in engagement with the ratchet wheel, while band brake 48 yields sufficiently to allow the backward movement of crank 49, thus allowing the support 16 to descend. The lifting wire 51 would tend to buckle and become stripped from its drum should the crank 49 be rotated backward too far. To prevent this I have provided the stop 50 to engage said crank when the low position of the standard 16 is reached, thereby effectually preventing further backward rotation of said crank. The mirror frame is adapted 60 to be swung bodily in a horizontal plane through the pivotal elbow 25 provided at |

the top of support 16, and is retained in any

desired position by means of the frictional

engaging means 24, as will be readily un-

65 derstood. When it is desired to rotate the

frame 31 on its vertical axis, the handle 33 is rotated, and since its angular section 32 engages bearing 29, which is securely fastened to mirror frame 31, it is seen that the mirror will be rotated. When it is de- 70 sired to swing the mirror about a horizontal axis, handle 33 is pulled downward or raised upward according to the direction in which it is desired to swing the mirror, whereupon rod 39, through its engagement with slot 38, 75 will cause the lever 35 to be swung on its pivot 34, thereby rotating the mirror by means of crank 37 and connecting rod 36. Since the mirror is in perfect balance, it will remain in any position to which it is swung. 80

Having described my invention what I claim as new and desire to secure by Let-

ters Patent is:—

1. In an adjustable stand, in combination, a head, means for supporting the same, a 85 bracket adjustably supported in said head, a member adjustably supported in said bracket, an adjusting handle mounted in said head adapted to adjust said bracket, and means connecting said handle with said 90 member for adjusting said member with respect to said bracket.

2. In an adjustable stand, in combination, a head, a bracket mounted to rotate in said head on a substantially vertical axis, a mem- 95 ber mounted to rotate in said bracket on a substantially horizontal axis, a handle mounted in said head adapted to rotate said bracket, said handle being adapted to slide in said head, and means connecting said 100 handle with said member to adjust said

member by a sliding movement of said handle. 3. In an adjustable stand, in combination, a head having a vertical bore therein, a pin- 105 tle rotatably mounted in said bore, a handle

having a shank sliding in said pintle and affording means for rotating said pintle, a bracket attached to said pintle and adapted to be rotated by said handle when said 110 handle is rotated, a member rotatably mounted in said bracket, and means connecting said handle with said member to rotate said member by a sliding movement of said handle.

4. In an adjustable stand, in combination, a standard, an arm supported thereby and extending laterally therefrom, a head carried by said arm, a bracket mounted in said head to rotate on a substantially vertical 120 axis, a mirror mounted in said bracket to rotate on, a substantially horizontal axis, and means at said head for adjusting said bracket and said mirror on said axis of rotation respectively.

5. In an adjustable stand, in combination, a standard, a stem adjustably mounted in said standard, an arm carried by said stem and extending laterally therefrom, a head carried by said arm and having a vertical 130

bore, a pintle rotatably mounted in said bore, a handle having an angular shank sliding in said pintle and adapted to rotate said pintle, a bracket attached to said pintle, a 5 mirror rotatably mounted in said bracket, and means connecting said handle with said mirror for adjusting said mirror with respect to said bracket, said handle affording means for rotating said bracket on the axis 10 of said bore.

6. In an adjustable stand, in combination, a standard, a stem adjustably mounted in said standard, an arm carried by said stem and extending laterally therefrom, a head 15 carried by said arm and having a vertical bore, a pintle rotatably mounted in said bore, a handle having an angular shank sliding in said pintle and adapted to rotate said pintle, a bracket attached to said pintle, a 20 mirror rotatably mounted in said bracket

and means connecting said handle with said mirror for adjusting said mirror with respect to said bracket, said handle affording means for rotating said bracket on the axis of said bore, said standard having a bore 25 therein, and a head carried by the lower end of said stem sliding in said last named bore and adapted to compress air in the lower end of said bore to cushion the downward movement of said stem, said standard having a 30 vent permitting the slow escape of compressed air.

In witness that I claim the foregoing I have hereunto subscribed my name this 4th day of May, 1909.

HOLMES G. BROWN.

Witnesses:

T. L. MEAD, Jr., E. A. STRAUSE.