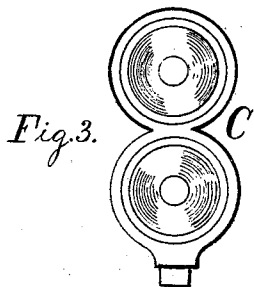
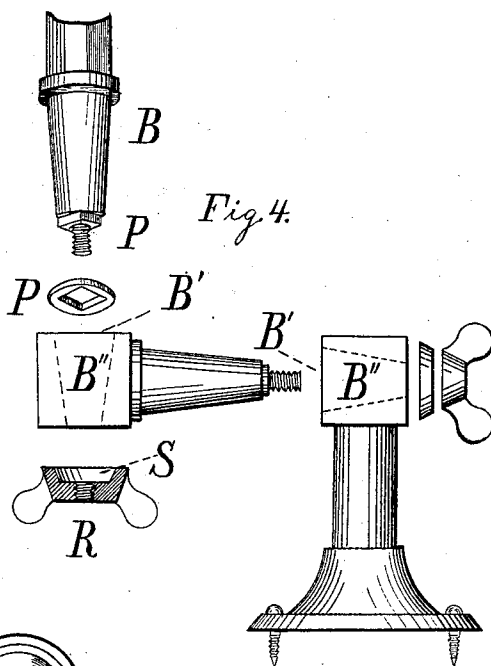
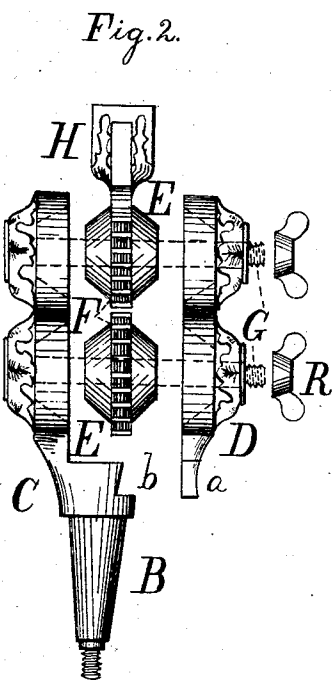
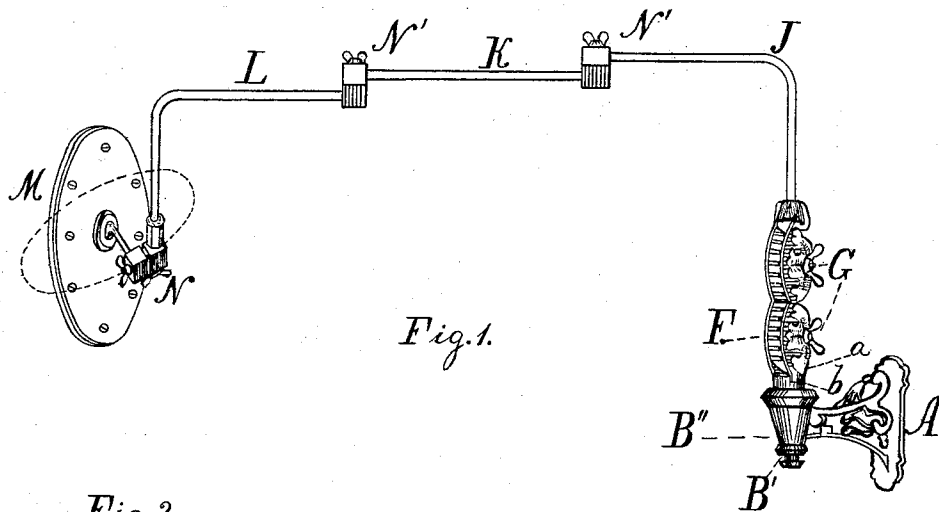


H. S. WOOD.
Mirror-Brackets.

No. 151,737.

Patented June 9, 1874.



Witnesses
A. P. Grant.
E. S. Hetherington.

Inventor
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by
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Attys.

UNITED STATES PATENT OFFICE.

HENRY S. WOOD, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MIRROR-BRACKETS.

Specification forming part of Letters Patent No. **151,737**, dated June 9, 1874; application filed March 25, 1874.

CASE B.

To all whom it may concern:

Be it known that I, HENRY S. WOOD, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Mirror-Reflectors; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of the device embodying my invention. Fig. 2 is an enlarged end view of the main self-sustaining joint, the parts thereof being separated. Fig. 3 is an internal view of a portion thereof.

The remaining figure illustrates detached portions of the coupling-joints.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in having a plate formed with a plug, and also with a detachable plate connected to said plug by means of the projections and notches. Between the said plates two or more frictional blocks are provided, whose sides are made conical or tapering, and entering the conical or tapering depressions in the plates, which is more fully hereinafter described.

Referring to the drawing, A represents a bracket, which is secured to the wall of a room, frame of the main mirror, or other place of application, as may be desired or necessary. B represents a tapering plug, which is fitted in a tapering socket or opening, B', at the outer end or joint B'' of the bracket A, and from this plug there rises, and is formed therewith, a plate, C, having on its inner face two or more conical depressions, and openings through the centers of the depressions. D represents a plate, which is formed similar, in depressions and openings, to the plate C, excepting that it is detachable from the plug B, and has a projection, *a*, which enters a notch, *b*, just above the plug, so that the plug and plates C D form somewhat of a fork-shaped piece. Between the plates C D, I fit, one above the other, two or more frictional blocks, E, whose sides are conical or tapering, and enter the conical or tapering depressions in

the plate. Centrally on the surface of each block there is cast or secured a toothed segment, F, the segment of one block meshing with the segment of the adjacent block, and through the blocks are openings corresponding to the openings in the plates C D. Bolts G pass through the openings, and, by means of thumb screws or nuts, the parts are held and clamped together. The upper block has secured to or formed with it a socket, H, for the reception and retention of the arm J, to which is jointed another arm, K, the latter having jointed to it an arm, L, which is connected to the mirror reflecting-glass M by a double axial coupling, N. The couplings N', between the arms J and K, and K and L, and the double axial coupling N, consist of the tapering plugs B, which enter tapering sockets B' in the joint portions B'', and have, at their extreme ends, screw-threads, on which are fitted jam-nuts or washers P and thumb-screws R, which bear against the joint portion B'', and effectively tighten the joints.

When the plugs are in use, the wear thereof is taken up by the thumb-screws, the jam-nuts or washers at all times increasing the friction between the parts, and causing them to retain their positions when adjusted.

The surfaces of the washers are angular, and the lower inner faces of the thumb-screws are countersunk at S, so that when the said screws are tightened on the plugs, the countersunk portions thereof engage with the angular washers, the said screws and washers tightening against each other, and thus firmly holding the tapering plugs in their sockets.

When the bolts G are tightened, the friction-blocks E and plates C D are brought in contact, so as to be held to each other with great friction, and while this, as a self-sustaining joint, is advantageous for properly supporting the glass M, it is objectionable for purposes of vertical adjustment of the intermediate parts, owing to the difficulty of moving the joint; but this objection is overcome by the distribution of the friction over the blocks E and plate C D, and the interposition of the toothed segments F, which, acting after the manner of gearing, ease the movements of the blocks E, and consequently decrease the power required to vertically adjust the arms J K L,

without, however, materially decreasing the friction or holding power of the joint. The adjustment of the self-sustaining joint having been accomplished, the subsequent adjustment and operation of the other parts and of the glass is sufficiently understood by those familiar with the art, that description thereof is unnecessary.

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

The plate C, formed with the plug B, and the detached plate D, connected to said plug by the projection and notch *a b*, in combination with the blocks E, substantially as and for the purpose set forth.

The above signed by me this 8th day of February, 1873.

HENRY S. WOOD.

Witnesses:

JOSHUA S. FLETCHER,
JOHN A. WIEDERSHEIM.