

UNITED STATES PATENT OFFICE.

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DROP-LIGHT ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 786,543, dated April 4, 1905.

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To all whom it may concern:

Be it known that I, GEORGE F. BRYAN, a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Drop-Light Attachments, of which the following is a full, clear, and exact description.

The present invention relates to adjustable drop-light attachments.

In Letters Patent of the United States, No. 699,650, dated May 13, 1902, there is shown a gas-fixture comprising a bracket which is formed with a screw-thread, whereby the bracket can be attached to the screw-threaded terminal of a fixed pipe, and a vertically-adjustable burner-carrying standard guided in and sustained by said bracket. The present invention designs to improve the construction and arrangement set forth in said patent and to provide an adjustable support which can be conveniently and easily attached to and detached from the usual fixed pipe terminal or fixture and without displacing the usual shade and burner.

The invention further designs to provide an improved portable and vertically-adjustable burner-support which is simple in construction.

The invention also designs to provide an improved coupling whereby a flexible tube can be attached to a fixture.

The invention consists in the several novel features hereinafter set forth, and more particularly pointed out by claims at the conclusion hereof.

In the drawings, Figure 1 is a side elevation of a fixture or support embodying the invention. Fig. 2 is a vertical section of the coupling on a larger scale. Fig. 3 is a section on line 3 3 of Fig. 2. Fig. 4 is a section on line 4 4 of Fig. 2.

A denotes a stationary fixture or chandelier of usual construction and comprises an arm a , provided with a cock a' , and a burner-tube a'' , secured to the screw-threaded terminal a^3 of arm a in usual manner and adapted to receive a burner-tip of usual construction in its upper end. A shade a^4 of usual design is sus-

tained by a ring a^5 , which is sustained as usual.

The adjustable fixture is detachably secured to arm a by a coupling B, which comprises a tube b , having a downwardly-extending nipple b' , which is slightly tapered and adapted to enter the open upper end of burner-tube a'' to provide a non-leaking and detachable connection between the stationary fixture and the adjustable lamp or burner support. A bracket B' has a sleeve portion b^2 , which is rigidly secured to tube b , and an extension or ring b^3 , which is adapted to fit around burner-tube a'' . A clamp-screw b^4 passes through a screw-threaded opening in ring b^3 , so it can impinge against the burner-tube and firmly secure the coupling to the burner-tube. The clamp also secures the coupling so nipple b' will be firmly held to its seat in the burner-tube, so leakage will be prevented and against accidental displacement and also so the weight of a lamp suspended at the end of the adjustable support will not tend to strain the nipple or loosen the nipple in its seat. Tube b is bent at its upper end, where it is joined to downwardly-extending nipple b' and so the tube will extend downwardly from its connection with the nipple, and its lower end is connected to a flexible tube or section C by a suitable coupling c of usual construction. The lower end of the flexible tube is connected by a suitable coupling c' to the lower end of standard D, which is provided with an arm d , at the outer end of which a lamp or burner E of any construction is sustained. Standard D is guided and vertically sustained in a guide b^5 , formed in an extension of bracket B, and in a bracket B^4 , which is rigidly secured near the lower end of tube b and has an opening b^6 where through standard D passes. A screw b^7 passes through a screw-threaded opening in bracket B^4 and is adapted to clamp the standard in assigned position, and thus the burner-carrying standard can be secured in any desired elevation. Standard D is preferably formed of a hollow tube, through which gas is conducted from the flexible tube to the burner at the end of arm d . Tube or hose C being

flexible permits vertical adjustment of the standard and the lamp carried thereby without disturbing the flow of gas from coupling B to burner E. The upper end of tubular standard D is closed by a plug d' and is also provided with a removable stop d'' , which is screw-threaded to the standard and restricts the downward travel of the standard in its guides, so the standard cannot pass out of the guides. Being movable, the stop can be secured to, the standard after the standard has been placed in guides b^5 b^6 . A hook F may be used to sustain the flexible tube in close proximity to fixture A when the standard is in elevated position.

When it is desired to attach the adjustable support to a fixture, the upper end of coupling B can be passed through the shade-supporting ring a^3 and then lowered so ring b^3 will fit around burner-tube a^2 and nipple b' will fit snugly into the burner-tube and make a non-leaking connection. Adjustment of screw b^4 will firmly secure the coupling to the fixture, and the standard will then be sustained in proper relative position with respect to the fixture. To raise or lower lamp E, it is only necessary to loosen screw b^7 , so the standard will be free to slide vertically in its guides.

It will be observed that the adjustable lamp support can be easily attached to and detached from the terminal of a fixture and without removing either the usual shade or disturbing the usual burner-tube. The construction of the coupling is such that it can be suspended entirely from the terminal of a fixture, so it can be applied to fixtures regardless of the shape or construction thereof. The coupling is so constructed that it comprises an upper and a lower guide for the lamp-carrying standard, which truly hold and guide the standard and prevent lateral play thereof.

The adjustable support is simple in construction and can be produced at a low cost.

By employing a coupling comprising a nipple, a downwardly-extending tube, and a bent connection therebetween unnecessary flexure of the flexible tube is avoided.

The improved coupling, which comprises a nipple and clamp which fits around the tubular terminal, may be used to advantage to connect a flexible tube to a fixture where the lamp is not supported by a standard—*e. g.*, when the flexible tube is used to connect a table-lamp and a gas-fixture—and because the clamp-bracket firmly and removably secures the coupling to the fixture.

The particular details of construction herebefore set forth may be modified without departing from the spirit and scope of the invention.

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

1. In a drop-light attachment, the combina-

tion of a coupling embodying a downwardly-extending tube and a terminal adapted for connection with the terminal of a gas-fixture, a burner-supporting standard, means on the coupling to sustain the burner-standard, and a flexible tube connecting said coupling-tube and said standard.

2. In a drop-light attachment, the combination of a coupling embodying a downwardly-extending tube and a terminal adapted for connection with the terminal of a gas-fixture, a burner-supporting standard adjustably sustained by said coupling, an extension or guide bracket to fit around the burner-standard, and a flexible tube connected to the lower end of said coupling-tube and to said standard.

3. In a drop-light attachment, the combination with a coupling embodying a downwardly-extending tube, a nipple adapted to engage the tubular terminal of a gas-fixture, an extension or guide bracket adapted to fit around said tubular terminal, and a clamp-screw securing said bracket to said terminal, of a burner-supporting standard extending through the bracket, and a flexible tube connected to said tube and to the standard.

4. In a drop-light attachment, the combination of a coupling embodying a downwardly-extending tube, means for securing said coupling to the terminal of a fixture, a pair of guides carried by said tube, a burner-supporting standard adjustably held in said guides, a screw for clamping said standard in one of said guides, and a flexible tube connected to said coupling-tube and to said standard.

5. In a drop-light attachment, the combination of a coupling embodying a downwardly-extending tube, means for securing said coupling to the terminal of a fixture, a pair of guides carried by said tube, a burner-supporting standard adjustably held in said guides, one of said guides being formed with an extension adapted to fit around the tubular terminal of a gas-fixture, and a flexible tube connected to said coupling-tube and to said standard.

6. In a drop-light attachment, the combination of a coupling embodying a downwardly-extending tube, means for securing said coupling to the terminal of a gas-fixture, a pair of guides carried by said tube, a burner-supporting standard adjustably held in said guides, one of said guides being formed with an extension adapted to fit around the tubular terminal of the fixture, a screw for clamping said extension around said terminal, a screw for clamping said standard in one of said guides, and a flexible tube connected to said coupling-tube and to said standard.

7. A rigid coupling for connecting a flexible tube with a fixture, comprising a downwardly-extending tube, a nipple adapted for connection with the tubular terminal of the fixture, and a bracket secured to said tube

and having an extension fitting around the tubular terminal of the fixture.

8. A rigid coupling for connecting a flexible tube with a fixture, comprising a downwardly-extending tube, a nipple adapted for connection with the tubular terminal of the fixture, a bracket secured to said tube and

having an extension fitting around the tubular terminal of the fixture, and a screw for clamping said extension around said terminal. 10
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Witnesses:

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