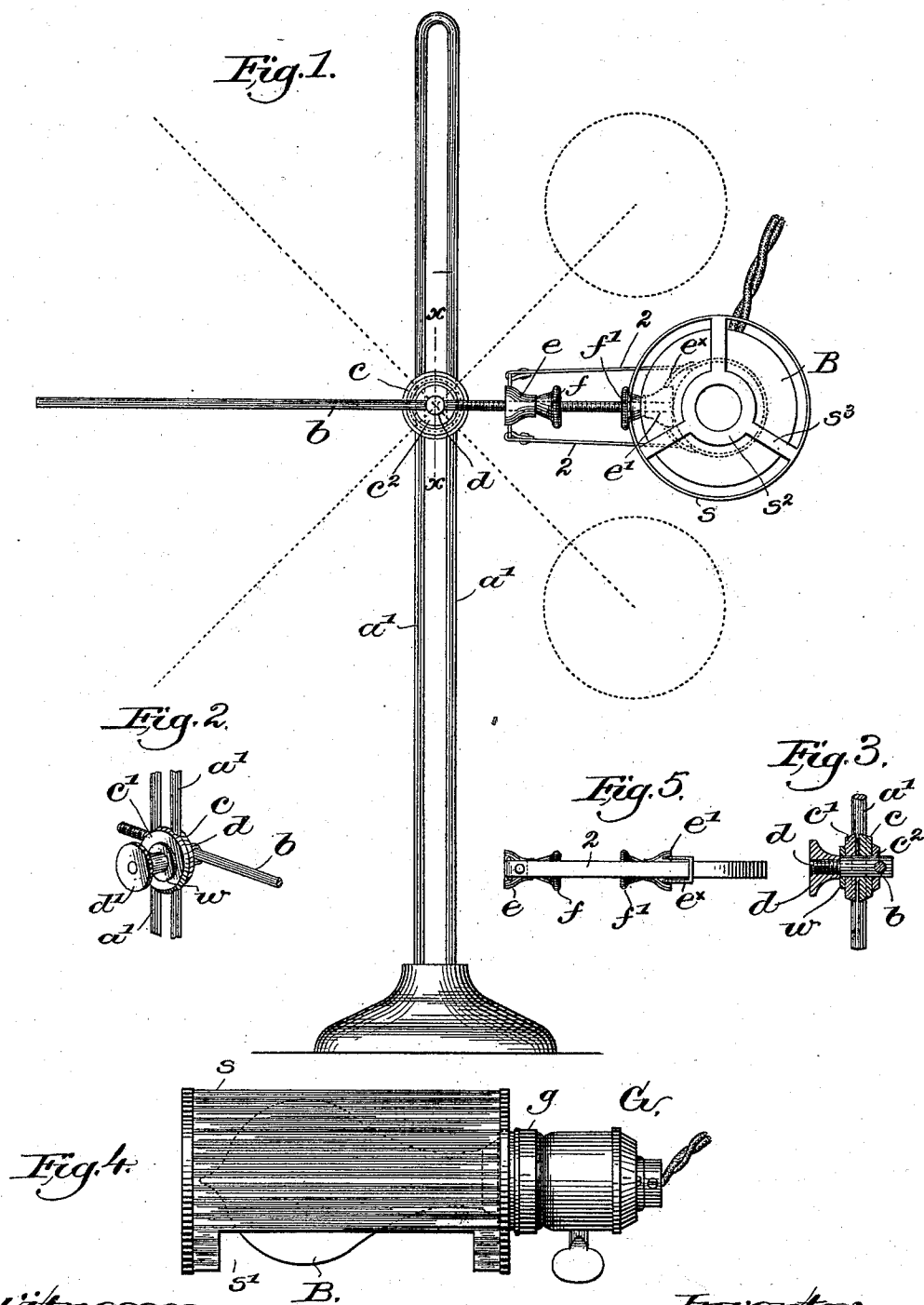


(No Model.)

N. T. MILLS.
PORTABLE ELECTRIC LAMP SUPPORT.

No. 505,060.

Patented Sept. 12, 1893.



Witnesses.
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UNITED STATES PATENT OFFICE.

NORMAN T. MILLS, OF BOSTON, MASSACHUSETTS.

PORTABLE ELECTRIC-LAMP SUPPORT.

SPECIFICATION forming part of Letters Patent No. 505,060, dated September 12, 1893.

Application filed October 15, 1892. Serial No. 448,942. (No model.)

To all whom it may concern:

Be it known that I, NORMAN T. MILLS, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Portable Electric-Lamp Supports, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

This invention has for its object the production of a portable stand for incandescent lamps, whereby the said lamp may be adjusted in various directions, and which shall be easily and quickly regulated.

The stand, as will be hereinafter described, is of simple construction and consists of few parts, and is adapted to any form or make of incandescent lamps now in use.

A clamping or adjusting device is employed for retaining the parts in adjusted position, which is effective and rapid in operation, and the lamp holding device or connection permits rapid insertion or removal of a lamp of any size.

My invention accordingly consists of a portable incandescent lamp stand comprising a standard, a lamp supporting rod pivotally mounted and vertically movable thereon, and adjustable radially and concentrically about its pivotal point, and a single clamp to confine said rod in adjusted position and also to secure it to the standard, combined with a lamp, and connections between said lamp and supporting rod, substantially as will be described. Also in a portable incandescent lamp stand comprising a standard, and a lamp supporting rod mounted thereon, combined with a lamp, flexible connection between it and said supporting rod, and independent separable bearings for said connection rotatable upon the rod, substantially as will be described.

Other features of my invention will be hereinafter described and particularly pointed out in the claims.

Figure 1, in side elevation, shows a standard embodying my invention, with the lamp and its shade turned into a horizontal position. Fig. 2 is a detail view of the clamping mechanism. Fig. 3 is a vertical section thereof on the line *x-x*, Fig. 1. Fig. 4 shows in side elevation a lamp socket and bulb of usual

construction having a shade applied thereto.

Fig. 5 is a detail to be described.

As herein shown, I have provided a weighted base *a* with an upright or standard *a'*, *a'*, herein shown as two rods or pieces of stiff wire, connected at their tops for convenience in handling.

A clamping device is adapted to slide upon said standard consisting of two vertically grooved clamping plates *c*, *c'* having a central opening or aperture through which is extended a stud *d* having one end threaded. Through the other end is extended a cross-piece or rod *b* to support the lamp.

Between the said lamp supporting rod or cross-piece and the clamping plate *c*, I have herein shown a washer *c²* having a groove across its outer face to receive a portion of the rod *b*, and adjacent to the clamping plate *c'* is placed a washer *w*, and a thumb nut *d'* is placed upon the threaded end of the stud *d*, best shown in Figs. 2 and 3. By reference to these figures it will be seen that when the said nut is tightly screwed down upon the washer *w*, the clamping plates *c*, *c'*, will bind the standard *a'*, *a'*, between them and prevent vertical movement of the rod *b*, and the washer *c²* will also be drawn tightly against the adjacent clamping plate, preventing rotation of the said rod *b* on the stud *d* as an axis. A slight loosening of the nut *d'* enables the angle of the rod *b* to be changed, or it may, with the clamping device, be moved bodily up and down upon the standard.

As shown in Fig. 1, one end of the cross-piece or supporting rod *b* is threaded, and receives upon it loosely two bearing blocks *e* and *e'*, the block *e'* having attached thereto guides *e^x*, through which a flexible and preferably metallic band or strap 2 is passed, the ends of the said strap being secured to the block *e* in any suitable manner. Between the said bearing blocks and in contact therewith are adjusting nuts *f*, *f'*, rotatable upon and engaging the threaded portion of the rod *b*. The strap or band 2 is extended beyond the guides *e^x* and bearing block *e'* to form a loop adapted to surround any suitable part, as *g*, of the usual lamp socket *G*, see Fig. 4, the strap or band connecting the lamp and its supporting rod. Rotation of one or the other of said adjusting nuts on the rod *b* will

force the blocks e, e' , apart, and thereby draw the band 2 taut around the cylindrical portion g of the lamp socket and hold it firmly against the block e' .

5 In Fig. 4, I have shown the lamp socket and its usual bulb B as provided with a shade s , substantially cylindrical in form and cut away at one side, as s' , to permit passage of light therethrough. The end of said shade, 10 best shown in Fig. 1, is stiffened by a spider s^2, s^3 .

Viewing Fig. 1, it will be seen that the rod b supporting the lamp and its shade may be turned upon the stud d as a pivot into a variety of positions in a vertical plane, two of 15 which are shown in dotted lines, by slightly loosening the thumb-nut d' . These various positions may be assumed at different heights by simply moving the clamping device up or 20 down upon the lamp standard, and the lamp may be moved nearer to or farther from the standard by drawing the rod b from one to the other side as desired when the nut d' is loosened. As the blocks e, e' , are loose upon 25 the threaded portion of the cross rod, they may be turned upon the same as an axis, though held in proper adjusted position by the adjusting nuts f, f' , and the lamp and its shade made to assume any desired position 30 in a plane at right angles to said cross-rod, the blocks thus acting as bearings for the lamp connection. Furthermore, the lamp and its shade may be turned upon its own longitudinal axis within the strap or band 2, to 35 thereby bring the opening s' of the shade to any desired point. The base a of the standard is suitably weighted to counter-balance the weight of the lamp, its shade and the devices shown, upon the cross-rod, no matter 40 how far from the standard the said lamp may be drawn.

By an inspection of Figs. 2 and 3, it will be seen that the entire clamping device, whether 45 for height, angular or lateral adjustment, is under the control of the thumb nut d' , making a very simple and compact arrangement of parts, and yet very effective.

As best shown in Figs. 1 and 5, the guides e^x are curved open pieces of metal through 50 which the strap or band 2 is extended, the said guides serving to contract the band upon opposite sides of and to grasp a greater portion of the surface g of the lamp socket.

I have herein shown the standard as composed of two parallel rods a' , that being a convenient form, but I wish it to be understood 55 that my invention is not restricted to this particular form of standard, as any standard adapted to be embraced by the clamping plates, is deemed to come within the scope of 60 my invention; nor do I wish to restrict myself to the specific construction and arrangement of parts herein shown.

I do not desire to restrict myself to the use 65 of the part g of the lamp socket as the part to be embraced by the connection between

the lamp and supporting rod, as any other suitable portion of the lamp or socket may be used.

I claim—

1. A portable incandescent lamp stand comprising a standard, a lamp supporting rod pivotally mounted and vertically movable thereon, and adjustable radially and concentrically about its pivotal point, and a single 75 clamp to confine said rod in adjustable position and also to secure it to the standard, combined with a lamp, and connections between said lamp and the supporting rod, substantially as described. 80

2. A portable incandescent lamp stand comprising a standard, and a lamp supporting rod mounted thereon, combined with a lamp, a flexible connection between it and said supporting rod, and independent separable bearings for said connection rotatable upon the rod, substantially as described. 85

3. A portable incandescent lamp stand comprising a standard, an adjustable longitudinally movable lamp supporting rod mounted 90 thereon, and a single clamp to confine said rod in adjusted position longitudinally or in a vertical plane, combined with a lamp, and adjustable connections therefor mounted axially upon said rod, the lamp being frictionally held by and rotatable in said connections, 95 substantially as described.

4. An incandescent lamp stand comprising a standard, a lamp, a substantially cylindrical inclosing shade therefor provided with an 100 opening in the side, and a support for the lamp, combined with adjustable connections between said lamp and standard including a single clamp and rotatable bearing blocks whereby the opening in the shade may be 105 turned in any direction, substantially as described.

5. An electric lamp stand comprising a standard, an adjustable longitudinally movable lamp supporting rod thereon, and a 110 clamp through which said rod is extended to confine said rod in any adjusted position, combined with a lamp, adjustable connections between the lamp and its supporting rod, and bearings for said connections rotatable on 115 said rod, whereby the lamp may be rotated about the supporting rod at an axis, substantially as described.

6. A standard, a lamp supporting rod, and a clamping device connecting said standard 120 and rod, comprising clamping plates to embrace the standard, a stud therethrough carrying the supporting rod, and a grooved washer between said rod and one of the clamping plates, combined with an adjusting nut 125 upon the stud, rotation of the nut clamping or releasing all the parts, substantially as described.

7. A standard, and a lamp supporting rod thereon, combined with bearing blocks adjustable upon said rod, guides upon one of 130 said blocks, and a flexible lampreceiving loop—

like bands extended through the guides and secured to the other block, substantially as described.

5 8. A standard, and a lamp supporting rod thereon, combined with bearing blocks rotatable upon said rod, and a loop-like connection supported by said blocks between said rod and the lamp to embrace a portion of the lamp frictionally and permit rotation

thereof upon its own axis, substantially as is described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NORMAN T. MILLS.

Witnesses:

GEO. W. GREGORY,
EMMA J. BENNETT.