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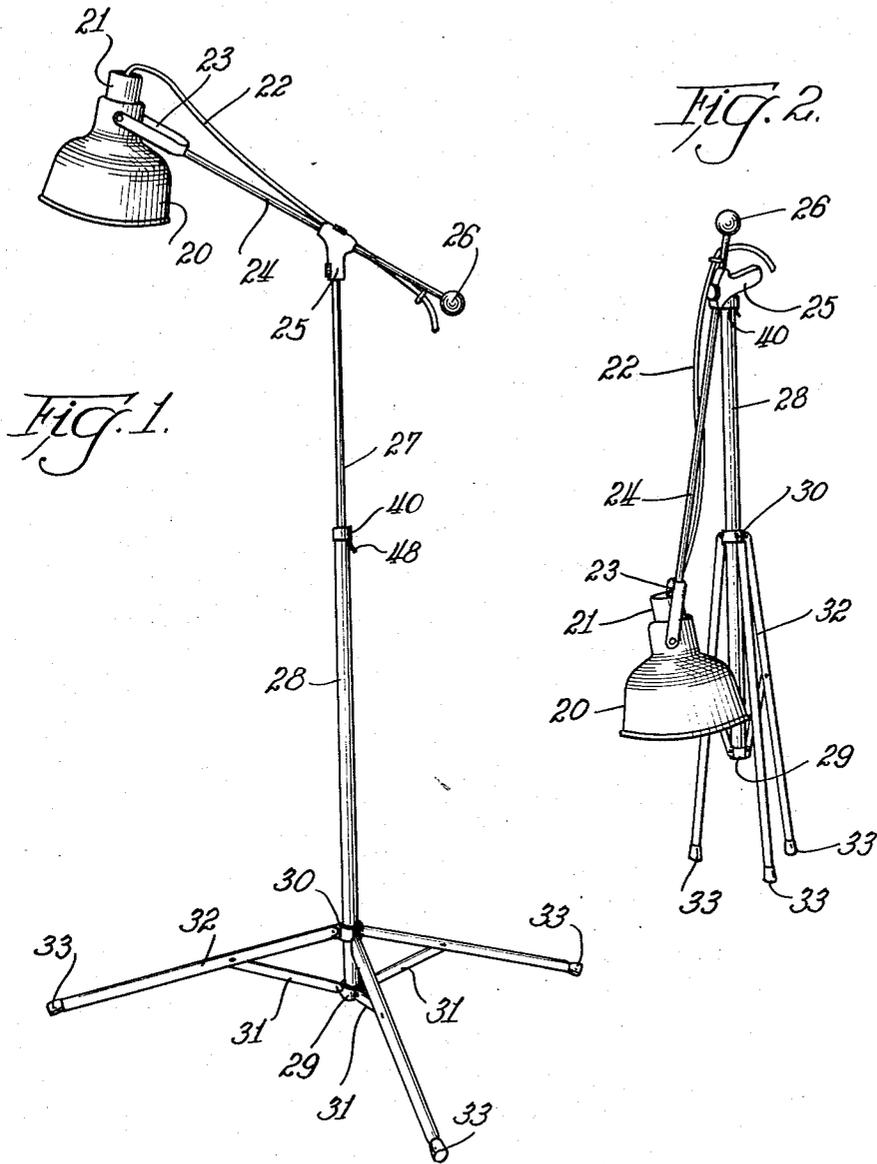
E. J. PETRICK ET AL

2,703,690

LAMPSTAND

Filed July 21, 1950

3 Sheets-Sheet 1



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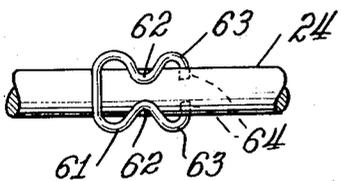
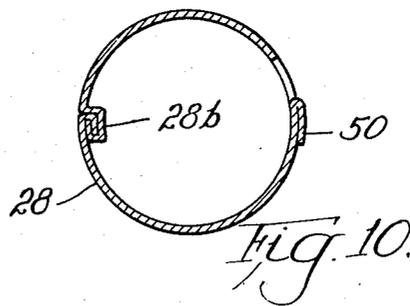
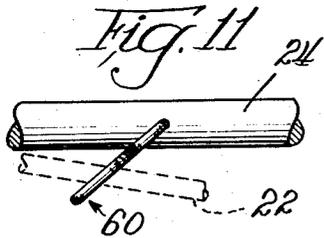
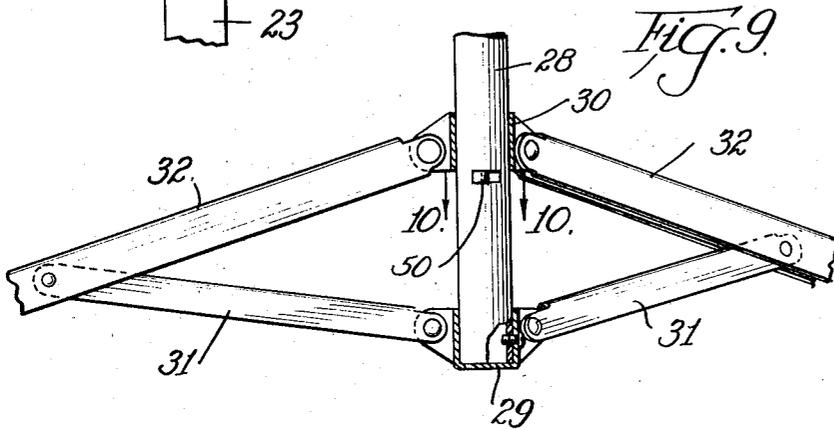
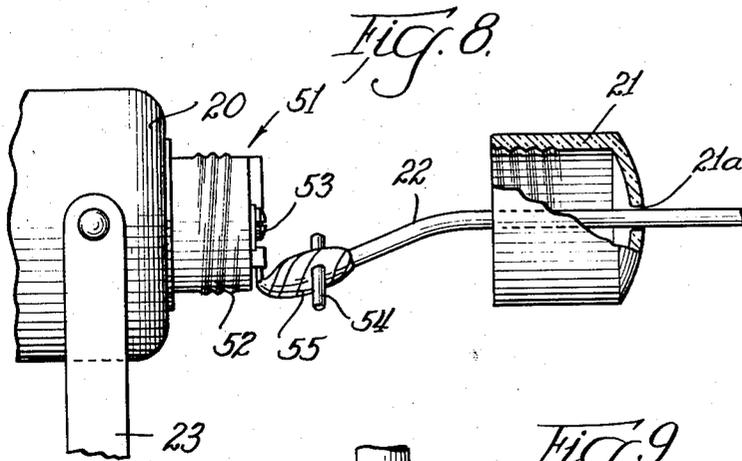
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LAMPSTAND

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1 Claim. (Cl. 248—124)

This invention pertains to new and useful improvements in lamp stands, particularly of the type for using therapeutic bulbs.

One object of the invention is to provide a stand which may be adjusted to an almost infinite number of positions for use, in particular when the stand is fitted with a therapeutic bulb and the patient is reclining as upon a couch or bed.

Another object of the invention is to provide an article of the above described class which may be folded into relatively compact form for storage without being dismantled.

Yet another object of the invention is to provide a connector between the vertically extensible portion of the stand and the relatively horizontally extensible portion or boom thereof which carries the reflector, which connector may be put into several positions with respect to the vertical portion of the stand, thereby making for compactness of the overall structure in its not-in-use or stored condition.

Another object is to provide a tripod structure, the legs of which may extend in well supported manner in a variety of positions from near-horizontal to closely spaced position.

Another object of the invention is to provide a lamp stand having a vertically extensible portion which has combined with it means for locking the same in any elevated position and also has at its end support means giving additional rigidity to the structure.

Still another object of the invention is to provide in a lamp stand a means whereby the conventional electric cord may be so placed in the usual socket and accompanying parts that the cord may be subjected to a considerable pull in a direction away from the reflector without putting strain upon the connection between the electric wires contained within the cord and the lamp socket.

Another object of the invention is to provide a supporting means for the lamp cord, remote from the lamp socket, which will prevent the cord from being entangled about the extensible neck or boom which carries the reflector.

How these and still other and further objects of the invention are achieved is set forth in the description which follows and shown on the accompanying drawings in which:

Fig. 1 is a view of the lamp in a typical position for use;

Fig. 2 is a showing of the entire stand as adjusted for a typical condition for compact storage;

Fig. 3 is a cross-sectional view of a typical connector between the vertically and horizontally adjustable portions of the stand;

Fig. 4 is a view of the structure otherwise shown in Fig. 3 viewed from the left side;

Fig. 5 is a fragmentary cross-sectional view of the vertically extensible member and the tube within which it telescopes, particularly illustrating the lock means for holding the vertically extensible member in desired position;

Fig. 6 is a side view of the cap otherwise shown in Fig. 5;

Fig. 7 is a cross-sectional view taken substantially along the line 7—7 of Fig. 5;

Fig. 8 is an exploded view showing the electric cord, its contained wires and the rearwardmost end of the usual lamp-receiving socket, particularly illustrating the

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novel means employed to prevent a pull given the cord from causing strain on the connection between cord and wire-receiving portions of the lamp socket;

Fig. 9 is a fragmentary view of the leg portion of the stand adjacent its connection with the vertically extending tube hereinafter more fully described;

Fig. 10 is a cross-sectional view taken substantially along the line 10—10 of Fig. 9;

Fig. 11 is a fragmentary side elevational view of the yoke which supports the electric cord slightly remote from the connection of the cord with the lamp socket; and

Fig. 12 is a bottom view of the cord-supporting yoke shown in Fig. 11.

Referring now to the drawings, and in particular to Fig. 1, reference numeral 20 indicates a reflector, which may be of any conventional form, into which the bulb portion of a therapeutic lamp or the like may be received. 21 indicates a cover for the rear end of the socket and for the ends of the electric cord, best shown in Fig. 8, and reference numeral 22 indicates the usual electric cord which may at its end have another connection (not shown) for insertion into a convenient electrical outlet.

The reflector 20 is swingably mounted between the arms of a generally U-shaped bracket 23, and rigidly connected to the bracket 23 is a rod 24 which passes, as best shown in Fig. 3, through the bored out portion 25a of a connector 25. A ball or handle 26 is positioned on the end of rod 24 to be used in adjusting the lamp inwardly or outwardly with respect to the connector. The upper end of a vertically extensible rod 27 is receivable in the bored out portion 25b of connector 25, as shown in Fig. 3. Rod 27 is telescopably positioned within a vertically extending hollow cylindrical tube 28, as best shown in Fig. 5.

At the lower end of tube 28 is a tripod which comprises outwardly extending legs 32, each having at its outer end a rubber friction tip 33. Each leg is hingedly mounted at its inner end for vertical swing on an annular yoke 30 which, in the various positions of extension of legs 32 slides upwardly and downwardly on the external surfaces of tube 28.

As shown in Figs. 9 and 10, an outwardly extending lug 50, or similar means, is provided on tube 28 and below yoke 30 to inhibit the latter from assuming a position such as to cause legs 32 to assume other than an upwardly and inwardly angular position, thereby assuring that the yoke will never pass therebelow and thereby become locked on tube 28. Rigidly mounted on the lower end of tube 28 is a fixed bracket 29 on which the inner ends of struts 31 are hingedly mounted for vertical swing, the outer ends of the struts being hingedly connected to the lower portions of legs 32 at about medially of their length.

Referring now particularly to Fig. 3, the connector 25 will be seen to have a bore 25a passing angularly therethrough and extending in an upwardly angularly extending direction to receive the extensible rod or boom 24, and a thumb nut 35 is threaded into the upper portion of the connector so that the end thereof, in its in-turned condition, contacts the outer periphery of rod 24 to hold the rod in any desired position of extension. At its lower end, connector 25 has a cylindrical bore 25b formed therein to receive the end of vertically extending rod 27. Still another thumb nut 36 is so positioned and threaded that, in its inwardly in-turned position, its end contacts the end of rod 27 to firmly hold the connector on the latter. Connector 25 is provided with still another cylindrical bore 37, in an angularly disposed position, to receive the end of rod 27 in the compacted or folded up condition of the lamp stand, such as that shown in Fig. 2.

Referring now to Figs. 5 and 6, it will be seen that rod 27 is internally receivable within cylindrical member 28, there being mounted adjacent the end thereof a piston-like washer 38, which is preferably made of some resilient, friction-producing material such as rubber or plastic, this washer engaging the inner surfaces of tube 28 and forming an effective support for the end of rod 27. Positioned slightly above washer 38, rod 27 is swedged out to form thereon outwardly extending ears 39 which inhibit rod 27 from normally being pulled out of cylin-

drical member 28 a distance sufficient to disconnect the engaged parts. Cylindrical member 28 has positioned upon its upper end a cap 40 which has a medially disposed opening 40a through its top and through which rod 27 extends. As best shown in Fig. 6, cap 40 is provided with a lug 42 adapted to fit into a bayonet slot 41 provided in the end of tube 28 so that when the cap is in proper position and turned, the cap is firmly held in attached position on the end of the tube.

As best seen in Fig. 5, positioned below cap 40 and within cylindrical member 28, is a helical spring 43 through the coils of which rod 27 passes. A friction pad 27a comprising a piece of felt is wrapped around rod 27 in such a manner as to repose under the coils of spring 43 to form a friction pad tending to inhibit rod 27 from dropping when the hereinafter described locking means is released. The upper end of spring 43 abuts the lower surfaces of cap 40, and the lower end of the spring abuts the generally annular portion 44 of a locking means 45 for rod 27 which locking means has a centrally disposed opening 46 therein through which rod 27 extends. Opening 46 is sufficiently larger than rod 27 to relatively freely receive the latter. Annular portion 44 has at its one side a notch 47 to accommodate the in-turned crimp 28b of tube 28 (Fig. 7) and at its side opposite notch 47 has integral with it the down-turned lever portion 48. Locking means 45 is receivable in the end of tube 28 by insertion into a vertically extending slot 28a and in the assembled condition of the parts the locking means abuts and fulcrums upon the lower end 28c of slot 28a. Spring 43 normally braces the annular portion 44 of the locking means into a slightly out-of-horizontal position, thus causing the inner surfaces of opening 46 to impinge the outer surfaces of rod 27. Downward pressure on lever 48 releases this impingement permitting rod 27 to be telescoped within tube 28 to any desired position within the mechanical limits otherwise imposed upon it.

Referring now to Fig. 8, the bulb-receiving socket, which is generally formed of ceramic material, will be seen to be provided with external threads 52 to receive the correspondingly internally threaded cover 21, which is likewise formed of ceramic material. Cover 21 has an opening 21a at its rear through which the electric cord 22 extends. Cord 22, as is conventional, contains two wires, the insulation of which is removed for connection with the usual wire-holding socket portions 53. To take away any strain which might be imposed on the interconnections between the electric wires and their corresponding connectors, a transversely extending member 54 of greater length than the diameter of opening 21a is positioned between the electric wires at a point more remote from connectors 53 than the distance between the latter and the internal surfaces of cover 21. The transverse member is preferably taped in place by means of several wraps of fusible tape indicated by reference numeral 55. Thus, when cap 21 is screwed onto socket 51 into fully attached condition, any pull exerted on cord 22 will be carried by transverse member 54 rather than being borne by the raw wires attached to connectors 53, the fusible tape securely holding the transverse member in place and also thoroughly insulating the raw wires from one another.

Referring now to Figs. 11 and 12, there is therein shown the wire-supporting yoke which is swingably mounted on rod 24, preferably near the handle-bearing end of the latter. This yoke is generally designated by reference numeral 60 and comprises a single piece of wire bent backwardly to form a wire holding loop defined by inbent portions 62-62 and beyond these portions being bent outwardly again a distance greater than the diameter of rod 24 as at 63-63 and the ends thereof being bent inwardly toward one another for reception in appropriate opposed holes provided in rod 24. Yoke 61 effectively

holds wire 22 spaced from rod 24 and prevents the wire from twisting or becoming otherwise entangled.

As heretofore mentioned, Fig. 2 shows the highly compacted form the stand may assume for storage. In this shape the end of rod 27 is inserted into connector opening 37, rod 24 then assuming an extremely downwardly directed angle. Legs 32, in this form, assume a nearly vertical position, yoke 30 being slid a considerable distance up tube 28 and the leg tips 33 frictionally engaging the floor sufficiently to insure retention of the leg position shown.

To put the stand into use, rod 27 is placed in connector opening 25b and thumb nut 36 is tightened down. Yoke 30 may then be slid down tube 28, thus giving legs 32 such spread as may be desired. It is to be noted that the legs may lowered to a point sufficiently near the horizontal as to be readily shoved under a bed, permitting tube 28 and rod 27 to be brought to the side of a bed. Depression of lever 48 to substantially the dotted line position shown therefor in Fig. 5 will release the impingement of annular lock member 44 from rod 27 and the latter may then be placed in any desired position. By loosening thumb nut 35 angularly extending rod 24 may be slid in opening 25a to the desired amount of extension and held in such position by tightening down its controlling thumb nut. Reflector 20, being hingedly carried between the legs of U-shaped bracket 23, may be swung to any desired angle, cord 22 being effectively guided by yoke 60.

From all the foregoing, it will be apparent that the stand of our invention provides great compactness, extreme rigidity, extreme adjustability and great versatility, attaining all those objects hereinbefore set forth with respect to it.

Having described our invention in considerable detail, we do not wish this exactness of disclosure to be taken in a limiting but only in an illustrative sense, desiring to be limited only as we may be by the scope of the appended claim.

We claim:

A lamp stand adapted for movement between a compact storage position and an adjustable operative position, comprising: an upright standard having a cylindrical upper end portion; an elongated rod adapted to receive a lamp fixture at one end; a unitary connector having a transverse bore in which said rod is slidably mounted, and a pair of sockets each adapted to slidably receive the upper end portion of the standard to permit the connector and rod to be selectively swingably supported in either of two positions on the upper end of said standard, one of said sockets being angularly disposed in relation to said transverse bore to support the rod in outwardly extending operative position in relation to said standard, the other of said sockets being arranged at an acute angle to the transverse bore to support the rod in a downwardly extending storage position close adjacent the standard; and means for securing said elongated rod in varying positions of slidable adjustment in said transverse bore.

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