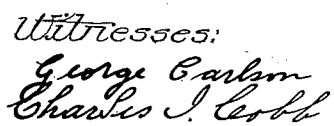


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3 SHEETS—SHEET 1.

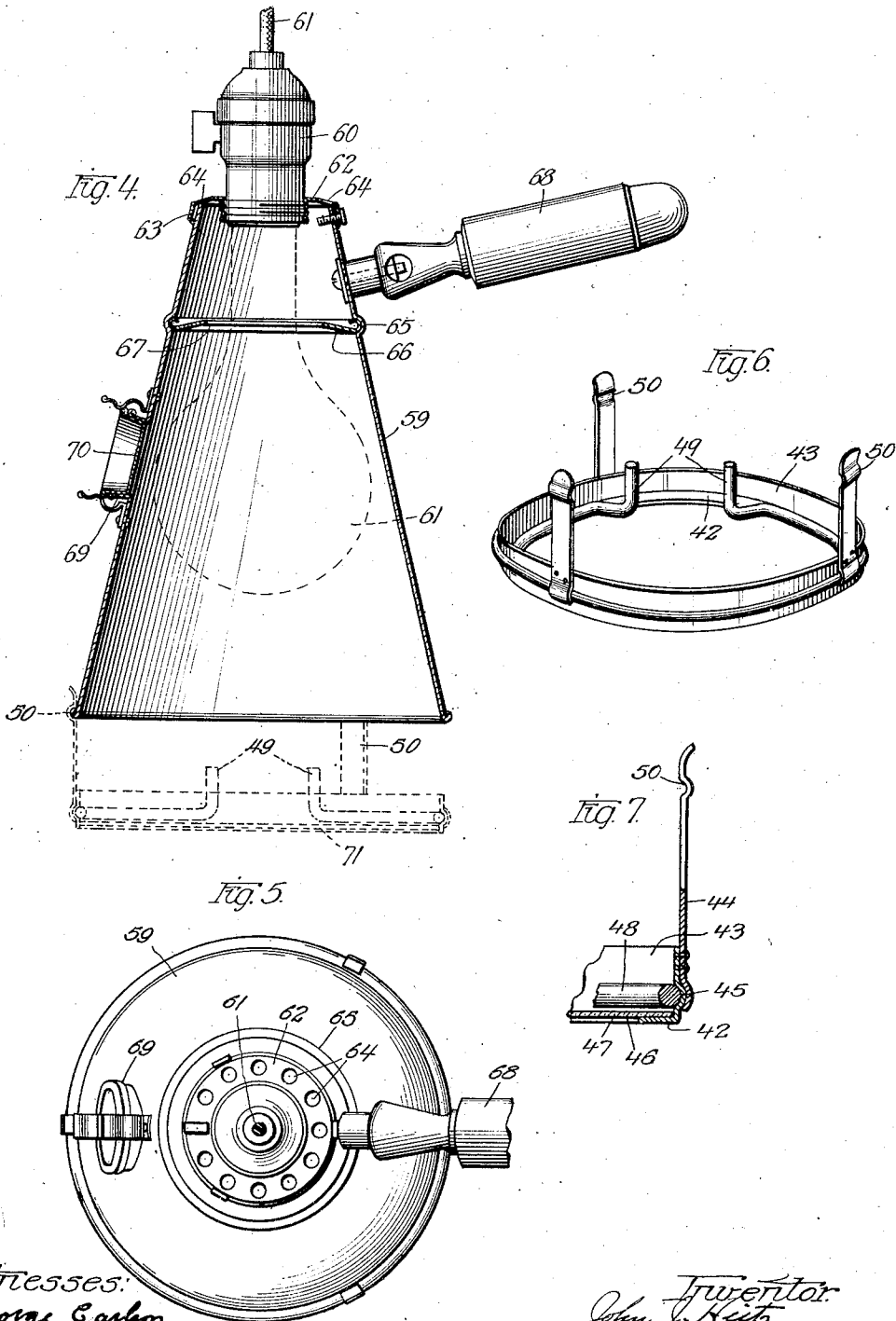


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J. J. HEITZ.
THERAPEUTIC LAMP.
APPLICATION FILED SEPT. 17, 1917.

1,318,751.

Patented Oct. 14, 1919.
3 SHEETS—SHEET 2.

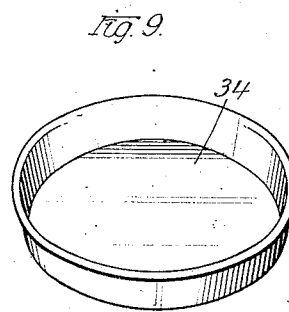
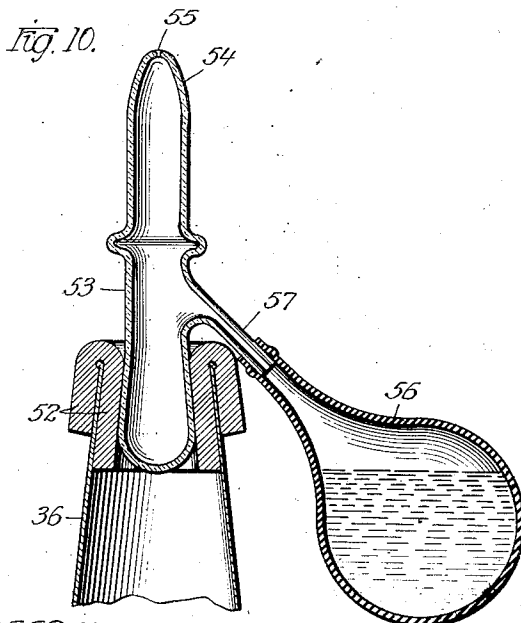
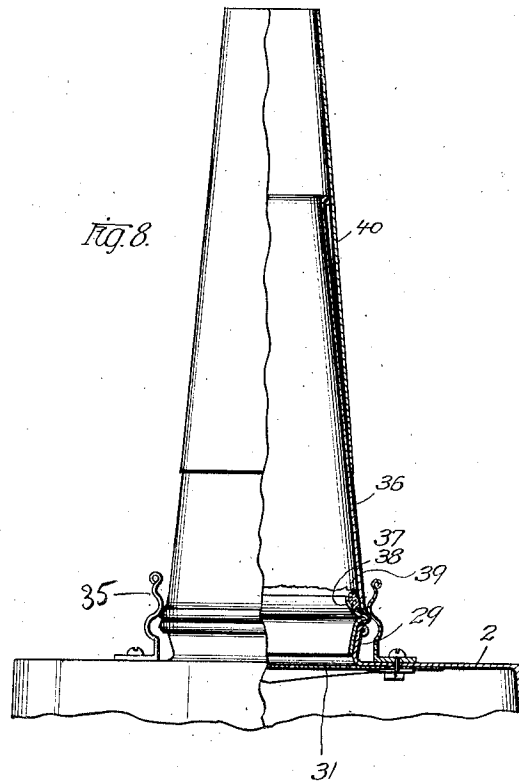


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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

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THERAPEUTIC LAMP.

1,318,751.

Specification of Letters Patent.

Patented Oct. 14, 1919.

Application filed September 17, 1917. Serial No. 191,789.

To all whom it may concern:

Be it known that I, JOHN J. HEITZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Therapeutic Lamps, of which the following is a description.

My invention belongs to that general class of devices known as medical implements and more particularly therapeutic lamps for medical, surgical and like purposes, or for use wherever found applicable. The invention has among its objects the production of a device of the kind described that is simple, convenient, durable, efficient, attractive and satisfactory, which may be employed in various ways to produce the desired results. Many other objects and advantages of the constructions herein shown and described will be obvious to those skilled in the art from the disclosure herein made.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts:

Figure 1 is a view partly in elevation and partly in section of one form of my device, a portion of the attachments removed,

Fig. 2 is another view in elevation of the same,

Fig. 3 is a view in elevation of a portion of the interior of the device,

Fig. 4 is a sectional view of a simplified construction,

Fig. 5 is a top elevation of the same,

Fig. 6 is a perspective view of the screen holder and one of the screens,

Fig. 7 is a sectional view of a portion of the same,

Fig. 8 is a view partly in elevation and partly in section of the concentrating tube,

Fig. 9 is a perspective view of the cap or pan,

Fig. 10 is a sectional view of a portion of the concentrating tube and the rectal and vaginal illuminator, irrigator and dilator.

Referring to the drawings, my lamp consists of a hood consisting of the side wall 1 and closed end 2, the opposite end being open, with the edge rounded as at 3. The

same is arranged at one side to carry a lamp socket, as shown a threaded shell 4 or the like, which carries the lamp 5 of the desired size and type. The shell 4 is carried by the socket part 6, having suitable electrical connections with the conducting cord 7. As shown, part 6 is mounted on the tubular shell 8 which extends into a tubular shell 9, flanged as at 10 and spaced from the wall of the hood. Referring particularly to Fig. 1, the flange 9 is secured to the hood by the screws or bolts 11, 12 being spacers arranged between the flange and the hood. The opening 14 through which the lamp extends is preferably large enough to provide the spaces about the socket as shown in Fig. 1. It will be noted by referring to this figure that the shell part 8 is formed as at 15 so as to engage with the flange 10 to prevent its being accidentally drawn out. I also preferably provide insulation 16 between the lamp and shell 4 and the shell 8. In this case I provide a handle 17 arranged to be secured to the socket part 6, the cable or conducting cord 7 passing through the handle. The part 6 is also provided with openings 18 so as to afford ventilation and prevent the socket parts from becoming too hot.

For suspending the lamp when in use I provide a member 21, as well as an eye 22. The member 21 permits the lamp to be held at the desired angle and be supported from a cable, or as shown from the conducting cord itself. By making the member 21 with a series of notches, any desired angle of the lamp may be obtained when the same is suspended. In the case shown, conductors 7 extend through a ball or the like 23, upon which is arranged a plate 24 at each side, and a shackle 25 having a hook, snap or the like 26 arranged to engage the eye 22 or member 21.

The end 2 of the hood is preferably outwardly flanged as at 29 with an opening formed within its confines. Ordinarily I provide a piece of composition, mica or isinglass 31 covering the opening, which may be secured in place by the screws 32 or equivalent means. I have also shown adjusting screws 33 by means of which a portion of the screen 31 may be retained in such a position as to permit the escape of heat through the opening.

A pan shaped cap 34 is shown positioned

on the flange 29 and covering the opening and cap, and this not only serves as a cover to prevent the escape of light rays, but being pan-shaped also serves as a medicament container so that medicaments may be placed therein and be vaporized by the concentrated heat. The spring catches 35 may be employed to securely retain the cap 34 in place if desired.

In Fig. 8 I show a concentrating tube 36 mounted on the flange 29. A portion of the concentrating tube is shown in Fig. 2 in combination with the cap 34. In Fig. 8, however, the cap is omitted. The tube 36 is formed at the end with part 37, arranged to fit in the flange 29, and the same may be so arranged as to be engaged by the clips 35. I have also shown an internal flange or ring 38 which may be constructed to carry the ring 34 of suitable material, which may be impregnated with a desired medicament. I have also shown the tube 36 provided with an auxiliary tube 40 which I ordinarily prefer to make of paper. The purpose of the concentrating tube and paper tube will be hereafter described in detail.

In Figs. 2, 6 and 7 I show a screen arranged to be positioned over the open end of the hood. As shown, this consists of a screen holder comprising a flanged ring 42-43 which is provided with the resilient members 44, which may be formed at 50 to engage with the rolled edge 3 of the hood. A screen holder carries the screen 47 preferably of composition or of mica, isinglass or the like of the desired size, thickness, color and composition. This is detachably maintained in place by the spring ring 48, formed with the projecting ends 49, by means of which the spring may be contracted. The object of the screen will be hereafter set forth.

In Fig. 10 I have illustrated a portion of the concentrating tube 36 which is provided with a heat insulator 52 at the end. In this figure 53 represents a rectal and vaginal illuminator, as well as an irrigator and dilator, the end 54 of the same in the construction illustrated being provided with an opening 55, the opposite end being closed. The illuminator 53 is preferably of glass of the desired shape and color, and it may be used merely as an illuminator, by means of which the light may be directed into the rectum or vagina. The same is also provided with the tubular extending part 57 upon which may be arranged the medicament container 56. The bulb 56 is of rubber or the like and represents any style of syringe or source of supply for the medicament. With this apparatus the patient may be treated with the medicament at the same time as treated with the light rays and heat.

The simplified construction shown in Fig. 4 varies merely in the different style of hood

and socket and minor details, and is particularly intended for home use, while the hood previously described is especially designed for physicians' use. Either, however, is designed for use by patient or physician. Referring to Figs. 4 and 5, 59 represents the hood, at one end, as shown, the reduced end of which is provided with a lamp socket 60 connected with the conducting cord 61. As shown the same is secured to an end part 62 flanged over the hood at 63 and secured thereto in any desired manner. The end 62 is preferably provided with openings or holes 64 for the purpose of ventilation and preventing excessive heat. A cross partition 66 having an opening 67 therethrough is also preferably provided for shielding the socket from some of the heat, the same being seated in a groove formed by the bead 65. The partition also acts as a reflector. The lamp 61 (shown in dotted lines) extends through the opening 67 and is carried by the socket 60, making the usual electrical contact therewith. I have shown a handle 68, in this case arranged at one side, and an opening in one side (any side) about which the flange 69 is formed. A cap 70, similar to the cap 34, is also provided. Obviously the concentrating tube previously described may be used with this construction and in dotted lines I have shown a screen 71, similar to the screen illustrated in Fig. 6.

It is considered unnecessary to set forth the various diseases and conditions, the symptoms of which may be greatly relieved or pains stopped by the use of the lamp. The purpose and value of therapeutic lamps is recognized by the medical profession generally. Some advantages of the completed device herein illustrated, however, might be mentioned. The cap 34 serves to cause the heat to be retained within the hood and prevents the rays of light from passing through the opening. The same also serves as a receptacle for vaporizing medicaments or for sterilizing small instruments. The concentrating tube or reducer is desirable for local application and for local examination, vaporizing and sterilizing. When it is inserted at the opening with the cap 34 removed, the light may be directed into the throat, nose, ear or where desired, or it may be placed over the cap so as to retain the vaporized medicament in a case of local treatment. By means of the concentrating tube and the illuminator shown in Fig. 10, light and heat from the lamp may be directed internally and internal treatments given in the rectum or vagina or other places. With the particular type illustrated a medicament can be applied at the same time. The pad or heat insulator 52 prevents the glass illuminator 53 from becoming hot and the same may also be used when

the illuminator is omitted for protecting the tissue of the body from coming in contact with the metal. The auxiliary or paper concentrator 40 is particularly adapted for use on the concentrator 36 as the same is easily changed and each patient given a new one. In this manner the same is sanitary and safe. This is particularly desirable in the case of treatments on the throat or the like where the paper tube might be inserted in the mouth or as desired. The screen 31 as well as the screen 47 protects the patient and is considered desirable when the lamp is used over an open cavity, or over the face, or into the ear, nose, mouth or other cavity. The fact that this screen is made preferably of composition or of mica or isinglass, the same does not crack or become chipped as might be the case with glass in a cold atmosphere, for example in the winter months, the same does not chip, and should the lamp break the hot glass would not fall upon the body, burning the patient. As mentioned, the screens may be of varied colors, thereby producing different therapeutic values or effects. Owing to the simple construction one holder serves for any of the colored screens and one or more screens of different colors may be used at the same time. It is also of light weight.

In so far as the construction of the lamp itself is concerned, the same, owing to the method of ventilation provided, does not become overheated. The same may be hung in any desired position or at any angle, so that the treatments extending over a considerable length of time may be given without discomfort to the patient or to the physician treating the patient. By replacing the large lamp ordinarily used for treatments with a smaller lamp, a warming device is provided which may take the place of the usual hot water bottle or electric pad. The hood shown in Fig. 1 is preferably constructed so that the rays are not concentrated into a small area, so that with my lamp there is generally no danger of burning, as would be the case with the rays concentrated.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention, hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. In a device of the kind described and in combination, a hood provided with means for securing heating and illuminating means therein and with a handle, said hood provided with a flanged opening through one of the walls thereof, a detachable pan

shaped cap for covering said opening, a concentrating tube arranged at one end to fit said cap, and means for detachably securing said cap and tube in place.

2. In a device of the kind described and in combination, a hood provided with means for securing heating and illuminating means therein, said hood provided with an opening through one of the side walls thereof, a concentrating tube arranged at one end to fit the opening in said wall, and an auxiliary concentrating tube detachably mounted on said first tube and projecting beyond the end thereof.

3. In a device of the kind described and in combination, a cup shaped hood member provided with means for electrically connecting and securing heating and illuminating means therein, said hood provided with a flanged opening in one of the walls thereof, an adjustable guard of transparent material arranged over said opening, and a concentrating tube arranged at one end to fit the flange at said opening and provided at its opposite end with a detachable part of heat insulating material.

4. In a therapeutic device of the kind described and in combination, a hood member provided with an opening in one of the walls thereof, a lamp socket mounted on the exterior of the hood at said opening but spaced from the edge of the opening, a handle secured to said socket, a contacting cord connected with said socket, said hood provided with an opening through one of the side walls thereof, and a tube arranged at said opening and extending from the hood, and means for detachably securing said tube in place.

5. In a therapeutic device of the kind described and in combination, a cup shaped hood member provided with an opening in one of the walls thereof, a lamp socket mounted on the exterior of the hood at said opening but spaced from the edge of the opening, a handle secured to said socket, a contacting cord connected with said socket, said hood provided with an opening through one of the side walls thereof, and a tube arranged at said opening and extending from the hood, means for detachably securing said tube in place, and an auxiliary tube detachably mounted on the exterior of said first tube.

6. In a therapeutic device of the kind described and in combination, a hood member provided with an opening in one of the walls thereof, a lamp socket mounted on the exterior of the hood at said opening but spaced from the edge of the opening, a handle secured to said socket, a conducting cord connected with said socket, a screen member comprising a plate of transparent material, a flanged ring shaped holder for said plate, means for detachably securing said plate

in the holder, and means for detachably securing said holder to the hood at the open side thereof but spaced from the edge of the hood.

5 7. In a therapeutic device of the kind described and in combination, a hood consisting of a shell having one side open and provided with an opening in one wall relatively smaller than the open side of the shell, illuminating and heating means arranged within the shell including a socket, a tube detachably mounted on the hood at said small opening, a tubular dilator of transparent material arranged at the outer end of said tube, and heat insulating means arranged between the tube and dilator.

8. In a therapeutic device of the kind described and in combination, a hood consisting of a shell having one side open and provided with an opening in one wall relatively smaller than the open side of the shell, illuminating and heating means arranged within the shell including a socket, and means for controlling the escape of heat through said small opening, a tube detachably mounted on the hood at said small opening, a tubular dilator of transparent material arranged at the outer end of said tube, heat insulating means arranged between the tube and dilator, said dilator provided with a discharge outlet at the extreme

end and with an inlet intermediate the ends, and means for passing fluid through the dilator.

9. In a device of the kind described, a cup shaped hood provided with means for securing heating and illuminating means therein, said hood provided with an opening through one of the walls thereof, in combination with a detachable pan shaped cap for covering said opening, means for securing said cap in place, a detachable screen holder for the open end of the hood and means for detachably maintaining screens within said holder.

10. In a device of the kind described a cup shaped hood provided with heating and illuminating means therein, said hood provided with an opening through one of the walls thereof and a concentrating tube constructed at one end to fit the opening in the wall in combination with a screen holder maintained in spaced relation from the open end of the hood and means for detachably maintaining a screen therein.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN J. HEITZ.

Witnesses:

JOHN W. HILL,
CHARLES I. COBB.