

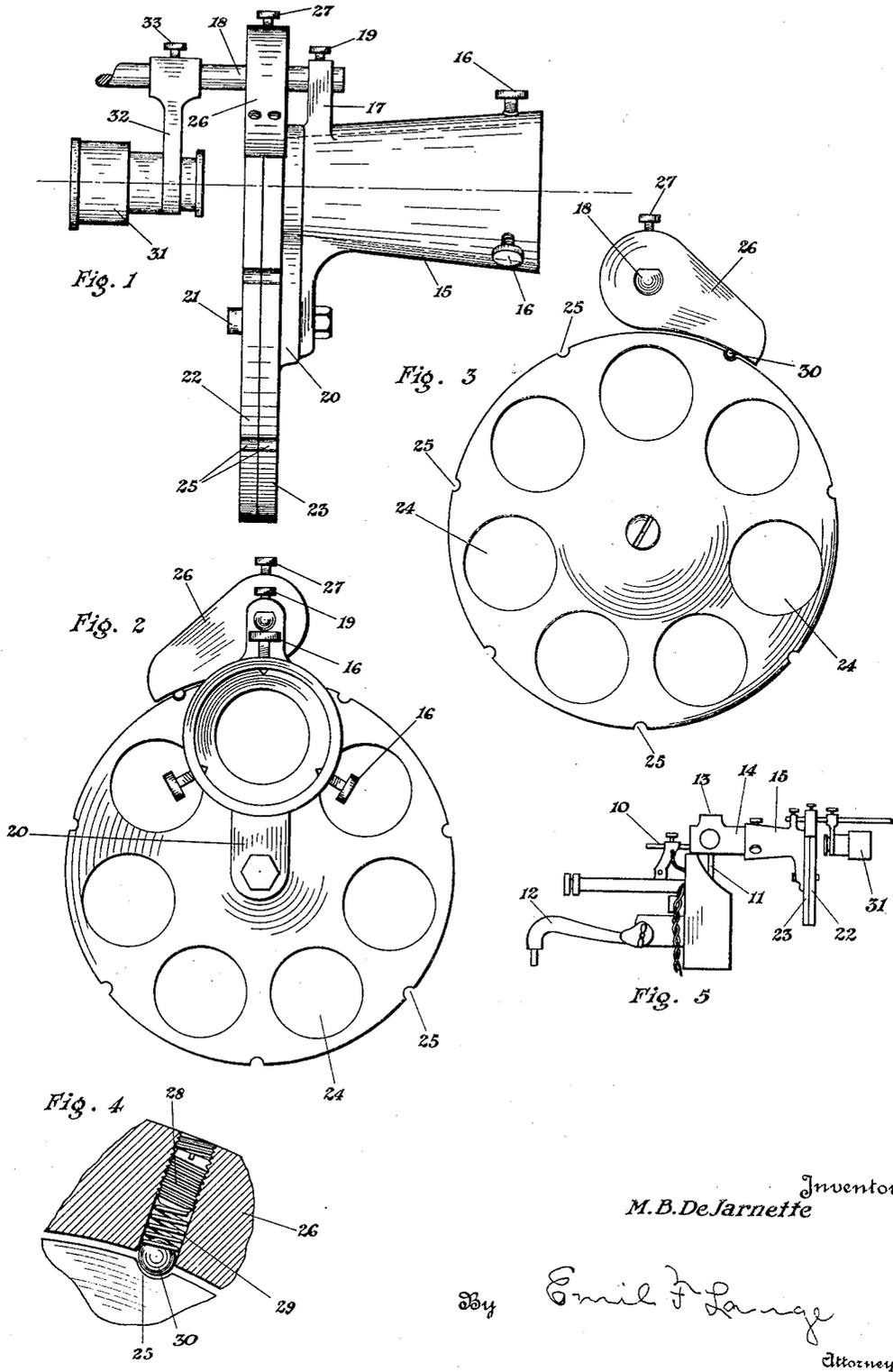
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COAXIAL DISK SPECTRUM SELECTOR

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COAXIAL DISK SPECTRUM SELECTOR

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My invention relates to devices of the kind used in color therapy in the treatment of disorders and diseases by the use of light rays of various wave lengths.

one of the disks and showing also the automatic latching mechanism.

Figure 4 is a detail view showing a fragment of one of the disks and showing also a sectioned fragment of the latching bar, the figure showing particularly the structure of the latch within the latching bar.

Figure 5 is a diagrammatic view in side elevation of the co-axial disk spectrum selector and showing also the assembly with the lamp.

The lamp is of the arc type in which two carbons 10 and 11 are employed. The lamp is provided with a goose neck 12 whereby the entire assembly may be adjustably secured to a stand or to an article of furniture. The lamp is also provided with a casing having a flue 13 and having also a sleeve portion 14 for conducting the beam of light.

My device includes a funnel 15 having set screws 16, the funnel being so dimensioned that it will slip easily over the sleeve 14 to which it may be firmly secured by means of the set screws 16. The funnel 15 provides a passage way for the beam of light from the source of light at the junction of the carbons 10 and 11. Projecting upwardly from the funnel 15 and integral therewith is a support 17 having an aperture for receiving the rod 18. The upper surface of the rod 18 is flattened as best shown in Figure 3 and the rod is firmly secured to the funnel by means of the set screw 19 passing through the upper surface of the support 17. The rod 18 constitutes a support for other parts of the spectrum selector as will be explained subsequently.

Projecting downwardly from the funnel 15 is an ear 20 which is also integral with the funnel 15. The ear 20 is provided in its lower end portion with an aperture for receiving a pivot 21 which is preferably in the form of a bolt. Two disks 22 and 23 are carried on the pivot 21. The two disks are exactly alike in their form and both are centrally apertured as shown in Figure 3 for receiving the pivot pin 21. Both disks are provided with a plurality of apertures 24, the number, size, and position of the

5 One of the objects of the invention is the provision of a co-axial disk spectrum selector embodying in two disks, the complete solar spectrum including primary and secondary colors.

10 Another of my objects is the provision of a device including two rotatably adjustable disks so arranged that either or both of the disks may be quickly adjusted into alignment with the source of light.

15 Another object which I have in view is the provision of a disk arrangement which completely eliminates all handling of color slides.

20 I also contemplate the provision of a suitable lens whereby the light may be diffused or concentrated at will without increasing or decreasing the distance of the source of light from the body member being treated.

25 Another of my objects is the provision of a rotatably adjustable disk with a spring latching device for maintaining the disk in perfect alignment with the source of light, this positively eliminating the possibility of having objectionable colors coming through the device.

30 It is also my object to provide an instrument which is light in weight and which is easily portable and in which all the colors are represented so that there is no possibility of leaving some of the colors behind when answering a call.

35 It is also my object to provide two disks each of which has a plurality of colored windows with one space left open so that the complete spectrum is available without the filtering effect of color disks.

40 Having in view these objects and others which will be pointed out in the following description, I will now refer to the drawing, in which

45 Figure 1 is a view in side elevation of the co-axial disk spectrum selector.

Figure 2 is a view in rear elevation of the co-axial disk spectrum selector.

50 Figure 3 is a view in front elevation of

apertures 24 being alike in both disks and being also symmetrical with respect to the disk in which they are formed. These apertures are also so positioned that they may be brought successively into alignment with the smaller end of the funnel 15.

For adjustably latching the disks 22 and 23 with apertures in registration with each other and with the smaller end of the funnel 15, each disk is provided with a plurality of notches 25, these notches being in the peripheries of the disks and at points midway between successive apertures 24. The latching bar 26 is secured by means of a set screw 27 to the supporting rod 18. The lower surface of the latching bar 26 is arcuate in form and substantially in contact with the disks 22 and 23, there being just enough clearance to prevent interference of the latching bar with the disks during the rotation thereof. Near the outer extremity of the latching bar 26 is an aperture which is best shown in Figure 4. The upper portion of this aperture is screw threaded for the reception of a screw plug 28. The screw plug is designed to hold and to tension a coil spring 29 seated against a ball bearing 30. The tension of the spring 29 may be increased or decreased by tightening or loosening the screw plug 28. The ball bearing 30 seats readily into any one of the sockets or notches 25 so that the disks will automatically latch when the ball 30 drops into a notch 25.

The light passing through the funnel 15 and through a pair of apertures 24 reaches the projecting lens 31. This lens is supported on a member 32 which in turn is supported on the rod 18, the securing means being in the form of a set screw 33 which bears against the flattened surface of the rod 18. The set screw 33 makes it possible to shift the member 32 along the rod 18 so as to vary the distance of the projecting lens 31 from the apertures of the disk 22. This adjustment, together with the adjustments in the lens combination itself, makes it possible to secure any desired degree of concentration or diffusion of the light.

The apertures 24 are provided with light filters of various colors, one of the apertures 24 in each disk being either left open or provided with a window of clear glass or other suitable transparent material. Since both disks 22 and 23 are rotatable, it is possible thus to bring any two light combinations into registration with each other and with the light source.

The carbons employed in color therapy are now obtainable in a considerable variety for emitting light rays confined within a limited portion of either the visible or invisible spectrum. The proper selection of carbon must, of course, be made in the use of my device. Any of these carbons will,

however, emit both desired and undesired light rays but my device will enable the operator to filter out the undesired rays. This may be done quickly and easily by turning one or both of the disks until the proper color filter combination is obtained for filtering out the undesired rays. With my spectrum selector, it is possible for the operator to employ either visible or invisible light rays within a very limited portion of spectrum and to thus eliminate the error which follows from the use of an instrument in which undesired light rays are permitted to pass through.

From the foregoing description it will be apparent that I have provided a spectrum selector for primary and secondary colors and for light rays in the ultra-violet and infra-red portions of the invisible spectrum. It will also be apparent that the device is of great simplicity in use since the adjustment may be quickly and easily made and in which the disks are yieldably latched by means of a simple automatic latch. The color disks are part of the instrument and they require no handling in use as is the case with detachable color slides which are also apt to be mislaid and forgotten when the device is taken along in answering a call. It is evident also that the instrument as a whole is very light in weight and that for this reason it is easily portable.

In my drawing I have shown the disks each provided with seven apertures for receiving various color filters. I do not wish, however, to be restricted to this precise number of color filters as the number may be increased or decreased in accordance with certain demands by merely altering the diameters of the disks.

As shown, the device has a wide range over the entire spectrum from the erythema producing ultra-violet portion to the hyperæmia producing infra-red rays at the other end of the spectrum. It not only has a great range over practically the entire spectrum but it also has great selectivity, giving the operator full control over the sedative blues and violets, the stabilizing greens, the intestinal and renal energizing yellows and the stimulating reds. With my device tense tissues may be relaxed and inflammations may be quickly relieved so that it enables the operator to manipulate sore muscles or to adjust painful joints with little or no pain to the patient.

Having thus described my invention in such full, clear, and exact terms that its construction and operation will be readily understood by others skilled in the art to which it pertains, what I claim as new and desire to secure by Letters Patent of the United States is:

In a color therapy device, a casing with a lamp housing thereon and a forward pro-

jection from the housing through which rays
from a lamp may be projected, a bracket arm
for supporting the casing, a funnel sleeve
adjustably fitted over said projection and
5 having on its outer end upwardly and down-
wardly extending arms, a pair of light filter
disks coaxially pivoted on the downwardly
extending arm and having symmetrically
arranged color filters therein for adjustment
10 relative to each other and to the axis of pro-
jection through the projection and the sleeve,
a rod secured to the upwardly extending arm
and disposed above and beyond the disks, a
latching bar mounted on the rod and en-
15 gaging the disks to hold the same in adjust-
ed position, and a projecting lens adjustably
mounted on the rod in line with the said axis
of projection.

20 In testimony whereof I affix my signature.
MAJOR BERTRAND DE JARNETTE.

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