Feb. 13, 1934. P. L. BRAUNWORTH 1,946,567

PORTABLE SOLARIUM

Filed Oct. 31, 1931 3 Sheets-Sheet 1

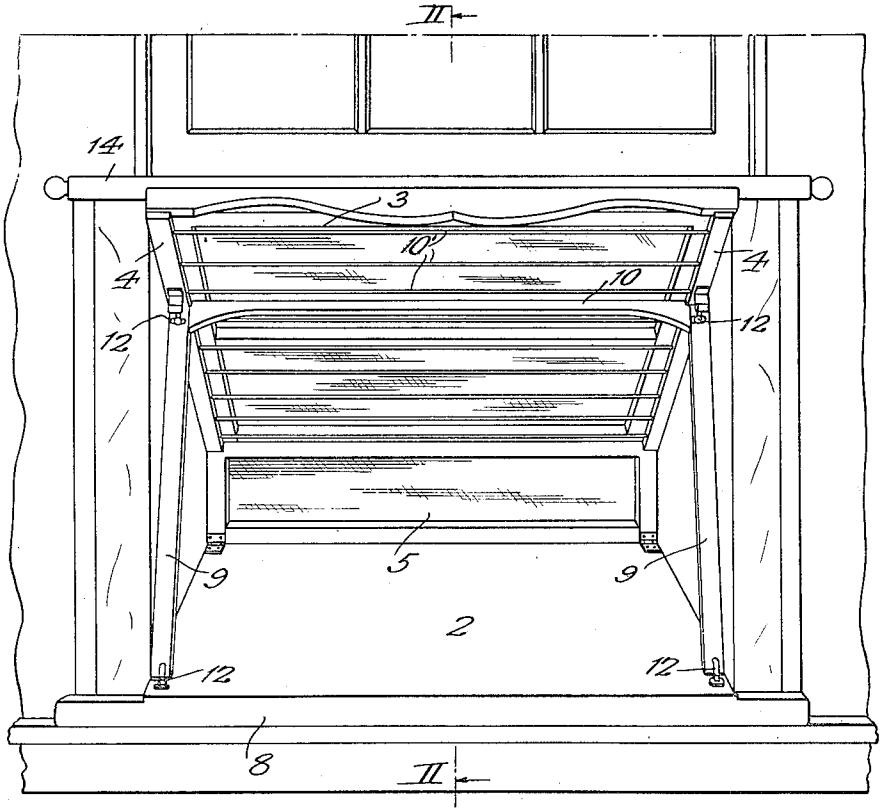


FIG. 1.

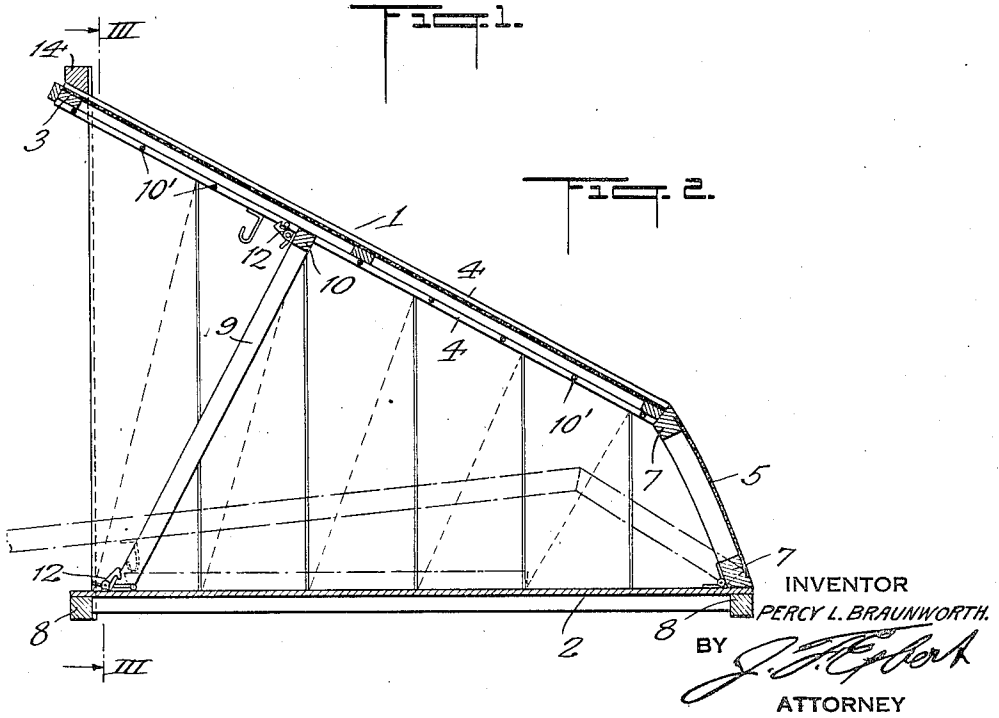


FIG. 2.

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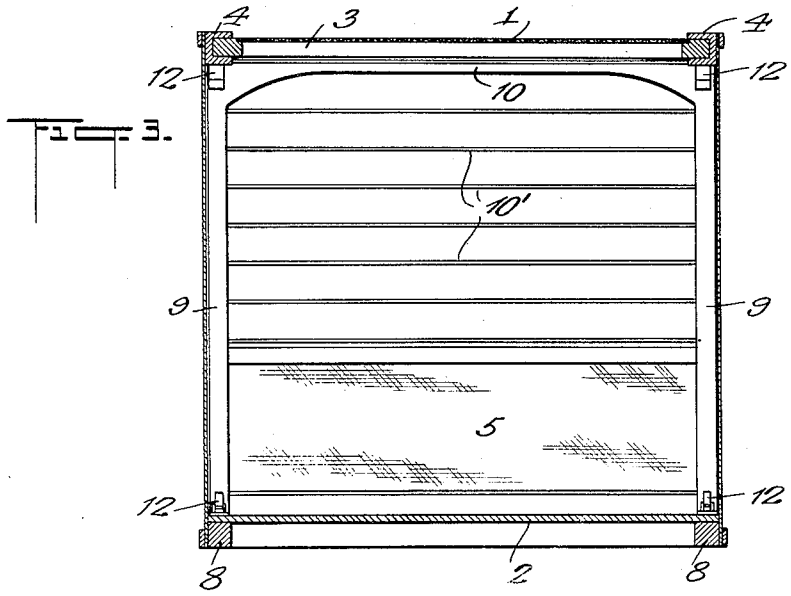


Fig. 3.

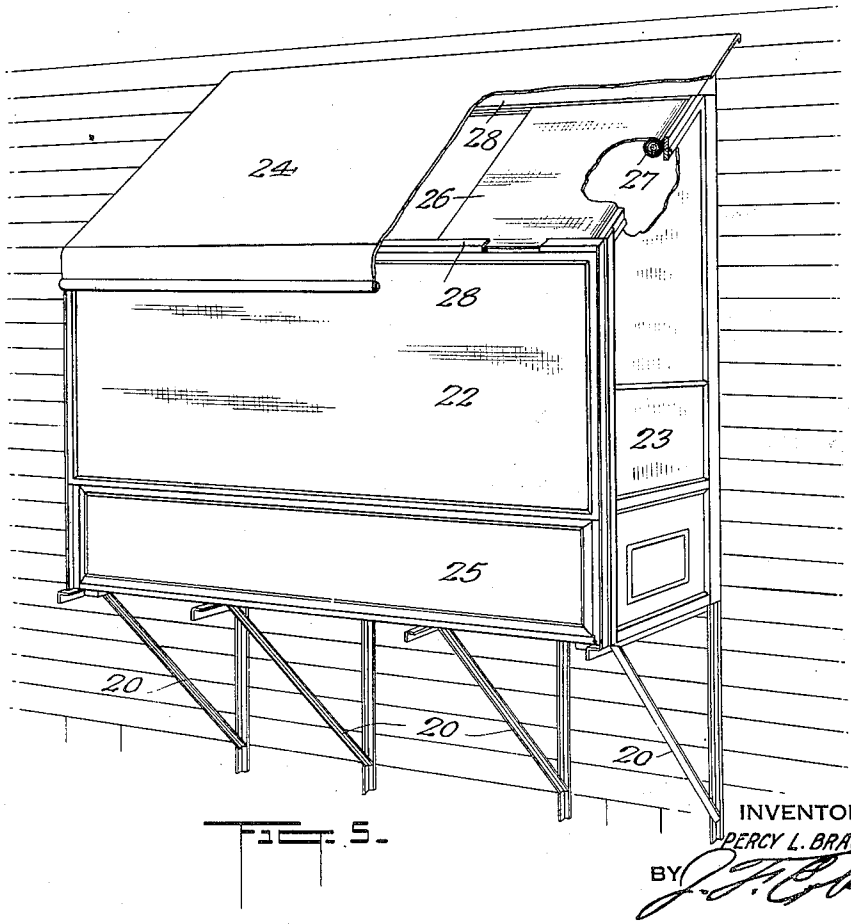


Fig. 5.

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PORTABLE SOLARIUM

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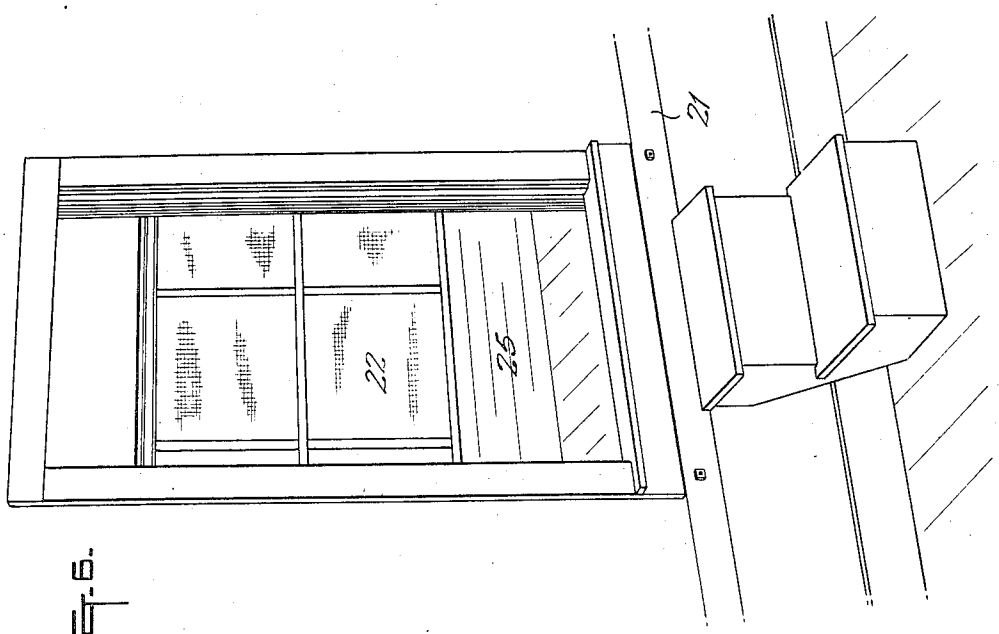


FIG. 6.

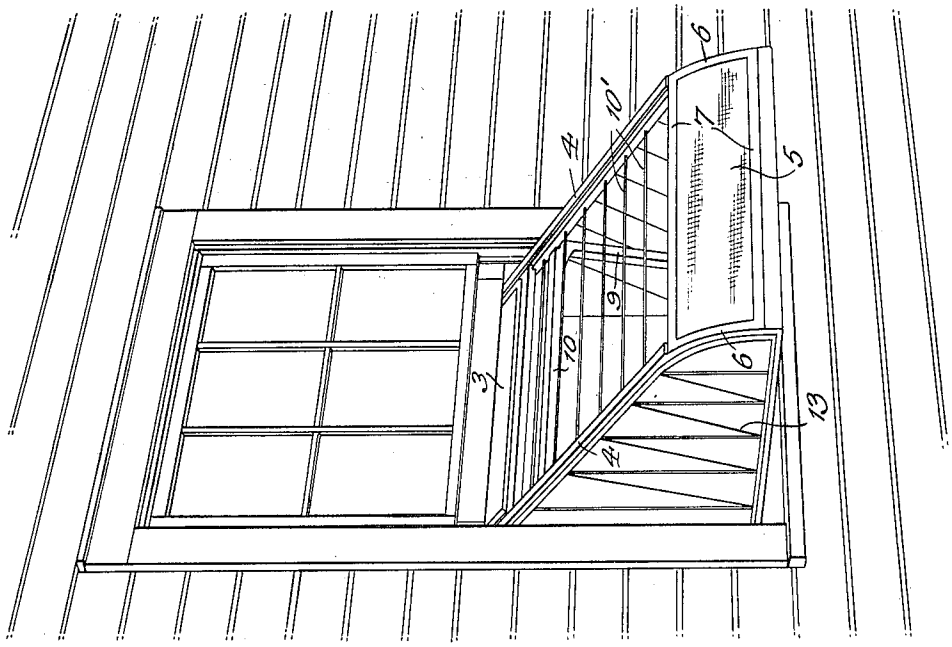


FIG. 4.

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Patented Feb. 13, 1934 1,946,567

UNITED STATES PATENT OFFICE

1,946,567

PORTABLE SOLARIUM

Percy L. Braunworth, East Orange, N. J.

Application October 31, 1931. Serial No. 572,299

4 Claims. (Cl. 20—1)

This invention relates to portable structures of the character of solariums, and more particularly to such structures designed to afford an individual the opportunity of exposing the body, either directly or indirectly, to the ultraviolet rays of the sun.

It is well-known that the ultraviolet rays of the sun are beneficial biologically, but to enable one to derive this benefit it is necessary to expose the body to the ultraviolet rays as practically all substances do not transmit these rays. Since clothing does not pass the ultraviolet rays, the body must be nude, and in order to permit nudity, some form of an enclosure is necessary that will screen one from view while at the same time not exclude the ultraviolet rays that are in the sun.

To afford a practical construction having these advantages, it is necessary that the same be of a portable nature, and further, be functionally related with an exit, preferably a window, so that one may at will enter the structure without fear of exposure of person.

It is, therefore, an object of the invention to provide a portable structure in the nature of a solarium which may be used in combination with a window and adapted to permit exposure of one's person to the sun without being seen.

Another object is the provision of a portable solarium in various forms or types which makes possible sun bathing of the exposed body of either infants or adults.

Another object is the provision of a portable solarium which embodies in its construction an arrangement of parts which permit direct passage of the sunlight or its passage through a material capable of transmitting the ultraviolet rays, it being optional which form of exposure is preferred by the person using the solarium.

A special object of the invention is the provision of a portable structure in the form of a child's crib which is of the collapsible type and adapted to be easily inserted into a window and supported thereby without special mountings.

Further objects of the invention having to do with constructional features will be manifest upon a reading of the following description.

In the accompanying drawings:

Fig. 1 is a perspective view of a child's crib embodying the invention;

Fig. 2 is a sectional view taken along the line II—II of Fig. 1;

Fig. 3 is a cross-section taken along the line III—III of Fig. 1;

Fig. 4 is an outside perspective view of the crib, showing it protruding through a window and supported by the frame thereof;

Fig. 5 is a perspective view showing the outside of a portable solarium which embodies the invention and is a modification to which it lends itself; and

Fig. 6 is an interior perspective view of the solarium shown in Fig. 5.

Referring generally to Figs. 1 to 4 of the drawings it will be seen that the crib is composed generally of an enclosure comprising a frame having collapsible sides, the top being inclined towards the closed end while the opposite end is adapted to engage with a window frame which serves as supporting means for the crib. More particularly the crib is composed of a top 1 and a base 2. The top may comprise a screen 3, slidably mounted in side rails 4, each of which terminate at their lower extremity in mortised joints adapted to engage an end section 5. The end section 5 is preferably curved which is accomplished by having the sides 6 thereof formed of arcuated end pieces connected by cross pieces 7. The lower cross piece 7 is hinged to the base 2 which may be of plywood secured to frame members 8.

The top is supported in an inclined position by means of hinged supporting arms 9 connected at their upper ends by a cross piece 10, while the lower ends thereof are hinged to the base 2. The supporting arms 9 are hinged to swing inwardly and when the crib is folded they lie flat upon the base 2. Suitable latches 12 hold the supporting arms in position whenever the crib is opened.

By having the sides of the crib made collapsible it is possible to drop the top whenever desired. Any construction which affords this feature may be employed but I have found cloth fabric, preferably moisture proofed, quite satisfactory for this purpose. As reenforcing means for the fabric, and as limiting the upward swing of the top 1, a cord 13 is laced between suitable eyelets (not shown) so that when the top 1 is raised and held in an open position by the supporting arms 9, the cord is taut. In a similar fashion a cord 10 is laced back and forth between the rails 4, which not only add reenforcement to the top 1, but also serve as the means for preventing a child from getting out of the enclosure whenever the screen 3 is raised, as shown for instance in Fig. 4.

The inner frame member 8 of the base extends beyond the sides of the crib, and this member, together with member 14 carried by the top 1, functions to support the crib from the window frame, on the principle of a cantilever. By covering the end section 5 and the screen 3 with some translucent or transparent material capable of transmitting the ultraviolet rays of the sun, a child placed within the crib may be exposed in the nude without fear of undue exposure to such rays or fear of being seen by outsiders. Such a material may be in the nature of a glass substitute and one well-known product of this kind is exploited under the trade name of "Cel-O-Glass".

By having the screen slidably mounted in the rails 4, the screen, whenever desired, may be pulled

up or raised so that the child may be exposed to direct sunlight. This may be desirable on cloudy days or such times as when the sun is not sufficiently bright to obtain satisfactory exposure under the material from which the screen 3 is made.

Because of the light construction of the crib it is easily inserted in a window and is held in place by the members 8 and 14 as illustrated in Fig. 1. In order to eliminate drafts the fabric covering the sides may be extended at right angles and parallel with the window casing, and have its ends (top and bottom) attached to the ends of the members 8 and 14. When the crib is not in use it may be folded by merely unlatching the supporting arms 9. Turning these arms down upon the base 2 permits the collapse of the side walls with the result that the crib occupies comparatively small space.

A modification of the invention in the form of a solarium is shown in Figs. 5 and 6. The solarium is adapted for the treatment of adults and is designed to be attached to the side of a building in such a manner that a window serves as an entrance to the solarium. According to the construction shown in the drawings the solarium is supported by angle irons 20 which are secured to the side of the building by means of bolts extending from a board 21 mounted on the inside, and just below the window, of the room with which the solarium is associated. The spacing of the angle irons 20, with respect to each other and the studding of the building, is such that the board 21 functions as a templet for the ready location and fastening of the angle irons 20 to the side of the building.

The form of the enclosure comprising the solarium may be of any general construction provided it is sufficiently commodious to accommodate the convenience of an adult person for sun bathing. The side 22 and ends 23 are composed of "Cel-O-Glass" or other suitable ultraviolet transmitting material. The top may comprise a roll-screen 26 made of "Cel-O-Glass" and mounted on a roller 27 so as to operate longitudinally of the solarium. Any convenient form of mounting of the roll-screen 26 will suffice as long as the edges are made to run in rails 28 which will afford means for supporting the screen when unrolled and at the same time effectively seal the top when the screen is extended the full length of the solarium, thereby affording a closure for the solarium. This construction is weather-proof and is best adapted to climates subject to a fairly wide range of temperature changes. As additional covering for the top an awning 24 may be provided and so arranged to be pulled up against the outside of the house by the usual pulleys and ropes (not shown). By making the top composed of a roll-screen 26 and an awning 24, direct exposure to the sun may be had whenever desired by pulling up the awning and rolling back the screen.

By removing the sash from the window and placing steps in the room immediately in front of the window, access to the solarium is easily secured. Inasmuch as the solarium is a complete enclosure when the top is closed there is afforded a draft-proof communication between the solarium and the room into which the window leads. As this is also a feature of the crib, it is possible to utilize the room to the fullest advantage with respect to being free from drafts, and at the same time have ready egress and ingress thereto.

By having the solarium functionally related to the window in the manner contemplated by the invention, there is offered the convenience of being able to step directly from the room into the solarium. It is obvious that the solarium can be furnished with any suitable furnishings such as a couch, draperies and the like and the person undergoing treatment is afforded not only a convenient but practical and ready form of treatment. As in the case of the crib, whenever it is desired to have direct exposure to the sun the same can be easily secured by rolling up the awning 24. In a commercial form of these solariums the side 22 is hinged to the baseboard 25 in such a way that it may be swung outwardly to any desired position, which feature, combined with having the top made adjustable, makes it possible to obtain direct sunlight practically all hours of the day, if desired.

While modifications will suggest themselves to those skilled in the art, it is my intention to cover all such modifications as come within the terms of the appended claims.

What is claimed is:

1. The combination with a window frame of, a portable crib provided with a slidable top portion covered with a translucent capable of transmitting ultraviolet light, said top portion being secured to an end portion hinged to a bottom portion, side portions composed of cloth fabric and reenforced by a cord laced between the top and bottom portions, supporting means for holding the top portion in an inclined position, and means for suspending the crib from the window frame in cantilever fashion.

2. The combination with a window frame of, a portable structure comprising a top portion and a bottom portion, said top portion being secured to an end section hinged to said bottom portion, collapsible side portions of opaque material secured to said top and bottom portions, means for supporting the top portion in an inclined position, and means for supporting the structure from the window in cantilever fashion.

3. The combination with a window frame of, a portable crib comprising a top portion, a bottom portion, and an end section, said top portion consisting of a screen adapted to pass ultraviolet light and slidably mounted in side rails terminating at one end in mortised joints, said end section being formed of arcuated end pieces connected by cross pieces, one of said cross pieces being hinged to said bottom portion and the other cross piece being engaged by the mortised joints of the side rails, side portions composed of cloth fabric reenforced by a cord laced between the top and bottom portions, hinged supporting means for holding the top portion in an inclined position, and frame members secured to the opened ends of said top and bottom portions and adapted to function on the principle of a cantilever for supporting the crib from the window frame.

4. The combination with a window frame of, a crib adapted to be supported from the window frame in cantilever fashion and comprising a top section arranged to permit the passage of sunlight either directly or through a translucent capable of transmitting ultraviolet light, said top section being secured to an end section hinged to a bottom section, and side portions of a collapsible nature secured to the top and bottom sections.

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