Jan. 5, 1932.  W. P. MYRON  1,839,580
INFANT'S BED
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This invention resides in the provision of a simply constructed and inexpensive incubator for infants, which incubator is particularly designed for use in hospitals and may be easily and cheaply operated to provide a safe and properly ventilated housing for a number of infants, for example four or more, which housing may be accurately maintained at the desired heat to properly care for and promote the normal growth and development of the infants placed in the incubator.

One of the objects of the invention is to provide an incubator of the character described which is comparatively small, compact, portable and yet capable of properly caring for a number of infants at the same time, the construction of the incubator being such as to provide for individual housing of the infants in compartments so arranged as to provide adequate circulation and heat and permit of an easy placing and removal of the cribs or baskets containing the infants.

Another object of the invention is to provide an incubator of the character described in which all danger of setting fire to the coverings and clothing for the infants, and of overheating of the incubator are eliminated and in which the parts of the apparatus are arranged so that they may be easily maintained in a clean and sanitary condition.

A further object of the invention is to provide an incubator of the character described which provides for the entire upper side thereof being open to the light and atmosphere whereby the proper circulation of air is insured and the proper application of sunlight and light may be had.

With the above mentioned and other objects in view, the invention consists in the novel construction and combination of parts hereinafter described, illustrated in the accompanying drawings, and set forth in the claims hereto appended, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Referring to the drawings:

Fig. 1 represents a side elevation of an incubator constructed in accordance with my invention.

Fig. 2 is a top plan view of the incubator, the supporting tray and crib being removed from one of the compartments.

Fig. 3 represents a cross sectional view of the incubator.

The embodiment of the invention shown in the accompanying drawings includes a portable frame of rectilinear outline, made up of four uprights or legs 1 having casters 3 on their lower ends and supporting at their upper ends a rectangular frame 2. Below this frame 3 is a similar rectangular frame 4 and beneath the frame 4 are U-shaped yokes 5, the free ends of which are attached to the legs. These yokes 5 are joined by a brace bar 6. The frame may be made up of tubular members joined together by couplings, or may be otherwise constructed as desired, the main requirement being that it be light, strong and properly arranged for supporting the incubating receptacle 7. This receptacle is in rectangular form, closed on all but its upper side and may be attached to the frame 3 in any suitable manner, one way of attaching being to bend the edges of the side and end walls of the receptacle over the side and end members of the upper frame 3, thus providing overhanging or hook portions 8 (see Fig. 3). This is a cheap and simple way of attaching the receptacle and provides for a ready removal thereof from the frame for the purpose of cleaning the various parts of the apparatus.

The receptacle 7 is divided into compartments 9 by transverse partitions 10 there being in the present instance four compartments of equal size. Extending longitudinally of the receptacle in spaced parallel relation to one another and several inches above the bottom of the receptacle are a plurality of supporting rods 11. These rods extend through the partitions from one end of the receptacle to the other and support wire mesh trays 12 in the several compartments, each tray being of slightly less width and slightly less length than the compartment so that they may be readily placed into and re-
moved from the compartment. Beneath the rods 11 in each compartment are a plurality of electric heating elements 13. These elements may be of any suitable kind but are preferably in the form of an incandescent electric light, frosted so as to give a subdued light. In the present instance I have found that six of such lights, three on each side of the compartment, will provide an even and proper temperature within each compartment. The infants are placed in reticulated cribs or baskets 14 made of large mesh metal fabric and these baskets are then placed on top of the trays 12. The size of the compartments of the incubator are such that the baskets lie well below the tops of the compartments, thus properly housing the infants contained in the baskets and yet providing for admission of atmosphere into the compartments. The electric heating elements may be controlled by circuit closers or switches as shown at 15 mounted on one side of the wall of the receptacle 7.

If desired to provide for circulation of air through the incubator, the bottom wall of each compartment may be provided with a plurality of air intake openings 16 controlled by a slide plate 17 having openings 18 therein adapted to be moved into and out of registration with the openings 16. By adjusting these slide plates, the proper amount of air may be admitted to regulate the circulation of air as desired and to maintain the desired temperature. I have found that incubators constructed in accordance with this invention excepting the use of air circulating means have worked satisfactorily, sufficient air being admitted through the open side of the incubator, but if desired, the air circulation means may be used as shown.

The trays 12 prevent the coverings and clothing for the infant from dropping down upon or close to the heating element and thereby prevent fires. These trays are also so spaced from the heating as to maintain an even temperature in the region of the basket in which the infant is contained. By having the baskets containing the infants disposed approximately centrally of the compartments, the entire zone surrounding the infant is maintained at an even temperature. For the purpose of cleaning the apparatus the trays 12 and baskets may be readily removed.

The incubator of this invention will provide for simultaneous treatment of several infants in such manner as to provide for the normal growth and development of said infants at a minimum of cost and with the maximum of safety. The simplicity of the structure and its compact, portable form are features of importance in adapting the apparatus for hospital usage and the fact that the upper side of the incubator is maintained fully open at all times facilitates the use of the apparatus particularly in that it provides for the ready and easy placing of the infants in and removing them from the apparatus and maintains the infants in full view so that they may be inspected from time to time without in any way adjusting the apparatus or disturbing the infants.

I claim:

1. In an infant’s bed of the character described, a portable frame; a receptacle on said frame; a plurality of spaced supporting elements extending in the same plane from end to end in said receptacle, and spaced above the bottom of the receptacle; a plurality of transverse partitions dividing the entire receptacle into a plurality of separate non-communicating compartments; electric heating elements disposed in each compartment between the said supporting elements and the bottom of the receptacle; a perforated tray removable mounted on the supporting elements in each compartment; and a crib placed on each tray, spaced from the walls of the respective compartment, the upper side of said receptacle being open to allow the removal of the crib and of the tray therein.

2. In an infant’s bed of the character described, a portable frame; a receptacle on said frame; a plurality of spaced supporting elements extending in the same plane from end to end in said receptacle, and spaced above the bottom of the receptacle; a plurality of transverse partitions dividing the entire receptacle into a plurality of separate non-communicating compartments; electric heating elements disposed in each compartment between the said supporting elements and the bottom of the receptacle; a perforated tray removable mounted on the supporting elements in each compartment; a crib placed on each tray, spaced from the walls of the respective compartment, the upper side of said receptacle being open; to allow the removal of the crib and of the tray therein; and means operatively related to each compartment to separately regulate the circulation of air in the individual compartments, independently of each other.

WILLIAM P. MYRON.