

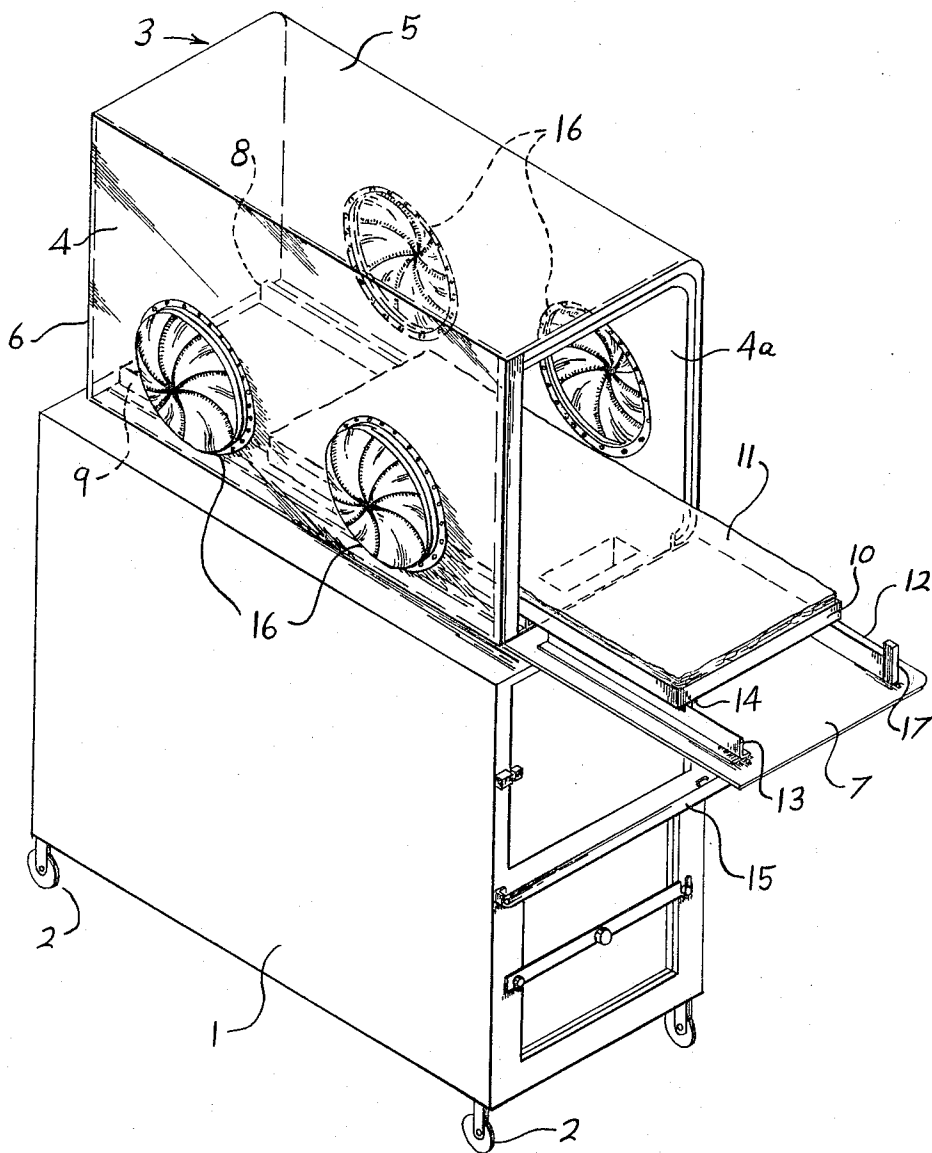
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INFANT INCUBATORS

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INFANT INCUBATORS

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1 Claim. (Cl. 128—1)

This invention relates to incubators and is especially concerned with infant incubators, particularly for premature infants.

In many infant incubators it is customary to provide armholes or access ports in one or more side walls of the hood of the incubator to enable the giving of attention to the infant while the infant remains within the incubator. For certain purposes it is desirable to provide for more complete access to the infant than is practical by the use of the armhole type of access port, and in most of the prior incubators, such additional or more complete access was obtainable only by removing or lifting the hood of the incubator so as to substantially completely uncover or expose the infant support or mattress.

The present invention contemplates an incubator in which, in addition to the commonly provided armholes or access ports, there is also provided an access door in a wall of the incubator, together with means enabling at least partial withdrawal of the infant support and thus of the infant out of the incubator for more complete access, without, however, requiring the lifting of the hood.

How the foregoing objects and advantages are attained will appear more fully from the following description referring to the accompanying drawing illustrating an incubator constructed according to the present invention and in which the single figure is an isometric view of the incubator with the access door above referred to in open position.

Referring to the drawing the incubator is adapted to be mounted on a base 1, preferably carried by casters 2, the base having appropriate equipment therein for conditioning the air circulated through the incubator, all of which equipment forms no part of the present invention and therefore need not be considered herein. At the top of the base is mounted the hood of the incubator indicated generally by the numeral 3, this hood desirably being made of transparent wall panels, for instance panels made of polymethyl methacrylate such as that available in the market under the trade names "Plexiglas" and "Lucite." The hood is generally of oblong plan form, having side walls 4-4a, a top 5, a wall 6 at one end, and a door 7 which constitutes the other end wall when the door is in closed position.

On top of the base 1 and within the hood 3 tracks 8 and 9 are provided for mounting a mattress support 10 on which the mattress 11 is carried. Tracks 12 and 13 similar to tracks 8 and 9 are provided on the inside surface of the door 7, the tracks 12 and 13 preferably being aligned with tracks 8 and 9 respectively. Tracks 8 and 12 may desirably comprise a simple strip, but tracks 9 and 13 preferably are arranged to interengage with track guides 14 provided on the underside of the mattress support 10 and presenting a downwardly open groove in which the tracks 9 and 13 are received, thereby providing for guiding of the mattress support when it is moved lengthwise of the tracks. This will prevent undesired cocking of the mattress support.

The door 7 is advantageously mounted by means of a hinge arranged at an elevation below the mattress support so that the door when it is swung down to the hori-

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zontal position as shown in the figure will bring the tracks 12 and 13 to horizontal supporting position in alignment with tracks 8 and 9. The door is adapted to be supported in horizontal position by struts 15 secured to the base 1 and working in slides on the outside surface of the door.

The side walls 4-4a of the hood are preferably both provided with access ports having iris type closures 16 through which the hands and arms may be inserted. The side wall 4 may if desired be arranged for displacement and removal in order to open up an entire side of the incubator.

By virtue of the arrangement of the door 7, and the tracks for mounting the mattress support 10, the mattress and the infant thereon may readily be displaced at least partway out of the hood and this will provide convenient access to the infant for various purposes and also facilitates insertion of an infant in the incubator or removal of an infant from the incubator without requiring lifting of the entire hood or even opening of a side wall thereof. A stop 17 is provided at the outer end of one of the tracks on the door in order to limit the outward movement of the mattress support.

According to the foregoing the incubator according to the invention not only provides the armhole type of access through the iris ports 16 but also enables more complete access to the infant by at least partial displacement of the infant support out of the end of the incubator. Even though displacement is only partial, it will be noted that in addition to the access provided through the end of the hood when the door is open, the iris port 16 may still be employed for access to the inner end portion of the partially displaced infant support.

Although in the embodiment of the invention illustrated in the accompanying drawing, the access door is located in an end wall of the incubator, the access door may be located in a side wall, as is disclosed in the co-pending application of James R. Grosholz and John D. Wallace, Ser. No. 321,491 filed Nov. 5, 1963, and entitled "Infant Incubator."

I claim:

An incubator comprising a base having an infant support and a box-like hood of oblong plan form surmounting the base and adapted to enclose the infant support with an infant resting thereon, the hood having side and end walls and having an armhole in a side wall thereof and an access door in an end wall thereof, the door being pivotally mounted on an axis below the level of the infant support and providing for outward and downward pivotal opening movement of the door, means limiting the outward and downward movement of the door to a position in which the door is substantially horizontal, and tracks on the base and on the inside of the door adapted to carry the infant support and providing for shifting movement of the support to different positions with respect to the armhole when the door is open.

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