PORTABLE BABY CAGE

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To all whom it may concern:

Be it known that I, EMMA READ, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Portable Baby Cages, of which the following is a specification, reference being had to the accompanying drawings.

It is well known that a great many difficulties arise in raising and properly housing babies and small children in crowded cities, that is to say from the health viewpoint. This is especially true with reference to babies and young children, who at present are being raised in large apartments, as a result of not obtaining the proper fresh air, as well as being outdoors, for such air and exercise. In crowded cities, where the houses are closely arranged, and in large apartments, there is no way for proper ventilation. Back and front yards are small, while those living in apartments have no facilities whatever, to permit the children and babies to receive proper fresh air from the outside. With these facts in view it is the purpose of the present invention to provide an article of manufacture for babies and young children, to be suspended upon the exterior of a building adjacent an open window, wherein the baby or young child may be placed. This article of manufacture comprises a housing or cage, wherein the baby or young child together with proper toys may be placed. The baby is enabled to receive fresh air through the screen or wire fabric, and it will be noted that the baby has sufficient room or space for playing with toys. Furthermore suitable bed clothing may be arranged in the cage or housing, when suspended adjacent the window of the house or apartment, so that when it is time for the baby to take a nap, the bed clothing may be made up in one corner wherein the baby may sleep.

Another purpose is to provide a device of this kind made up of sections, and provided with suitable curtains, which, when the baby is sleeping may be lowered, and arranged so as to prevent draft, and yet permit the baby to receive sufficient fresh air. When the baby has finished taking a nap, the curtains may be rolled up out of place, so as to permit a thorough supply of fresh air to pass through the cage, which is mostly of open work or wire fabric, which will prevent the baby from falling from the cage.

Still another purpose is the provision of a baby cage of the present character, which is made up of a plurality of foldable sections properly interlocked, in order to provide a rigid construction.

A still further purpose is the provision of improved means for supporting the cage in position adjacent the window, and properly braced.

It is to be understood that the particulars herein given are in no way limitation and that while still keeping within the scope of the invention, any desired modifications of detail and desired proportions may be made in the apparatus according to circumstances.

The invention comprises further features and combination of parts, as will be herein after set forth, shown in the drawings and claimed.

In the drawings:

Figure 1 is a view of a baby cage constructed in accordance with the invention and showing the same applied to a window;
Figure 2 is a vertical sectional view on line 2—2 of Figure 1;
Figure 3 is a horizontal transverse sectional view on line 3 — 3 of Figure 1;
Figure 4 is an enlarged detail view of the construction of means for supporting a bracket and for assisting in supporting the cage or housing;
Figure 5 is an enlarged detail view of the connection between one of the horizontal slotted beams of the cage, showing how the outer section is connected to the bottom section;
Figure 6 is an enlarged sectional view through the construction shown in Figure 5;
Figure 7 is a detail perspective view, showing how the braces are connected to the slotted beams of the bottom, sufficiently to reinforce the structure;
Figure 8 is an enlarged detail view of the connection between one of the roof sections and the side section;
Figure 9 is a sectional view through the construction shown in Figure 8;
Figure 10 is an enlarged detail view of one of the lower outer corners of the cage or housing, showing how the outer section and the end sections are operatively connected,
to reinforce one another, and to permit the end sections to retain the outer section in position.

Figure 11 is a detail view showing how the corner angle irons are fastened to the corners of the housing or cage.

Referring to the drawings, 1 designates the window of a building, and 2 denotes the usual sill. Arranged on the inner sill, and in engagement with the head 3 of the sill is an angle iron 4. Also engaging the sill, outwardly beyond that portion which is engaged by the angle iron, is a woodenbsub-sill 5. Engaged with the exterior sill 6 of the window is an angle iron 7, and riveted or otherwise fastened thereto as at 8 are depending bracket arms 9. The upper ends of the bracket arms are extended beyond the angle iron 7, and are provided with openings 10, through which the shanks 11 of the bolts 12 pass. The heads of the bolts 12 engage the exterior surfaces of the bracket arms 9.

The angle iron 4 is disposed to receive the tubular shanks 13 of the bolts 12. These shanks also pass through the sub-sill 5, and are interiorly threaded, to receive the shanks 11 of the bolts 12. Obviously by tightening up the bolts 12 and 14, the frame may be rigidly in position. The lower ends of the bracket arms 9 have riveted or otherwise secured thereto a wooden strip 15, which lies flat against the wall of the building, to hold the bracket arms out of contact with the wall.

In fact the angle iron 7 which engages the exterior sill of the window also prevents the depending bracket arms from contacting with the wall of the building.

Hingedly connected to the depending bracket arms 9 as at 16 adjacent their lower extremities are brace bars 17. Hingedly connected at 18 to the depending bracket arms 9, adjacent their upper ends are hollow beams 19. These beams are square or rectangular in cross section and are tubular. The upper walls of the beams 19 are slotted as shown at 20 substantially for their full length. The central portions of the slots 20 have enlarged openings 21, for facilitating the attachment of the inner and outer sections of the baby cage, as will be explained later.

The bottom walls of the beams 19 adjacent their outer ends are provided with slots 22, the inner ends of which terminate in rectangular enlarged portions 23. The beams 19 including the braces 17, together with the hangers or bracket arms 9, act to support the entire structure exteriorly of the window of the building. The housing or cage for the baby comprises the outer wall sections, the inner wall section, and the two end wall sections, designated respectively 24, 25 and 26. The outer wall section comprises a lower sheet metal base portion 27, and an upper screen or wire fabric section 28. The screen or wire fabric portion proper is fastened in any suitable manner to the sheet metal base portion 27 and the end rails 29, which rise from the ends of the sheet metal base portion 27. The upper ends of the rails 29 are connected by an angle piece 30. The outer wall section is in two parts, which are hingedly united as at 31, so that the two parts are capable of folding, when the outer wall section is removed. The lower portion or edge of the sheet metal base portion 27 of the outer wall section has secured to it an angle bar 32. Riveted or otherwise secured to the angle bar 32 are plates 33 havin g T-shaped lugs 34 projecting downwardly. Obviously when arranging the outer wall section in position, it is disposed so that the T-shaped lugs 34 will pass through the rectangular openings 21, centrally of the beams 19. The outer wall section then moves outwardly to the outer ends of the beams 19, causing the restricted necks of the lugs 34 to engage the outwardly extending portions of the slots 20. Therefore, it is obvious that when the outer wall section is moved to the outer ends of the beams 19, the lugs 34 will act to lock and hold the outer wall section substantially perpendicularly.

The outer upper ends of the braces 17 also terminate in T-shaped lugs 35, which are designed to pass through the rectangular enlargements 23 of the slots 22 in the under or bottom walls of the beams 19, and then by allowing the beams 19 to move to horizontal positions, the lugs 35 will move outwardly in the slots 22, and therefore lock the braces detachably to the beams 19.

The inner wall section 25 comprises a sheet metal base portion 26, and an upper sheet metal portion 27. The inner wall section 25 also is in two parts 38, which are hingedly united as at 39, so that the two parts are capable of folding, when collapsing the various sections of the cage. The sheet metal base portion 36 of the inner wall section extends from the outer sill of the window downwardly to a position approximating the supporting beams 19, and has at its lower edge an angle bar 40, the lower horizontal flange of which has riveted or otherwise secured thereto plates 41 provided with T-shaped lugs 42. These lugs 42 are inserted through the rectangular openings 21, 120 of the beams 19, and then the inner wall section is moved toward and in a position adjacent the inner ends of the beams. Positioning of the inner wall section 25 in this manner will cause the restricted necks of the lugs 42 to engage the inwardly extending portions of the slots 29 of the beams 19. Obviously the lugs 42 will lock and hold the inner wall section supported upon the beams in a perpendicular position.
inner wall section is provided with hingedly mounted doors 43, which may be opened and closed, for the purpose of permitting access to the interior of the cage or housing. When the cage is occupied, the doors 43 may be locked from the interior of the room. The ends of the inner wall section 25 are in the form of vertical members 44, whereas the upper portion of the inner wall section 25 terminates in a laterally extending flange 45. This flange 45 extends outwardly.

The ends of the lateral flanges of the angle bars 32 and 40 are provided with short slots 46 and 47, the ends of which remote from the ends of the angle bars have rectangular enlargements 48 and 49.

Each end section 26 comprises a sheet metal base portion 50, an upper section or wire fabric panel 51, and the sheet metal panels 52 having inclined upper edges. The end sections 26 are in two hingedly united parts, which have their hinges shown at 53, allowing the two parts of the hinge sections to fold inwardly, when removed. The inclined edges of the triangular panels 52 have lateral flanges 54, which correspond with the flange 45 and the flange at the top of the inner wall section of the cage.

The lower edges of the sheet metal base portions 50 of the end sections of the cage have riveted thereto angle strips or bars 55, to the end portions of which plates 56 are riveted or otherwise secured. These plates 56 have T-shaped lugs 57, which enter the rectangular enlargements of the slots 46 and 47 of the angle bars 32 and 40. Obviously by moving the end wall sections laterally in opposite directions, the restricted necks of the T-shaped lugs 57 will engage the slots, and thereby lock and hold the end wall sections in perpendicular positions, with their inner and outer edges adjacent the end edges of the inner and outer wall sections.

Obviously the end wall sections 26 act to hold the inner and outer wall sections in position, while the flooring 58 rests upon the lateral or horizontal flanges of the angle strips or bars 32, 40 and 55, thereby holding the end wall sections in position. These wall sections cannot detach, until the flooring is raised or elevated or otherwise removed from the cage or housing. The flooring 58 comprises three sections 59, which have their adjacent edges provided with dowel pin and socket connections 60. The pins of these connections are very short, just long enough to engage shallow sockets, to prevent the three sections of the flooring from movement relatively to each other.

Corner angle strips 61 are arranged to overlap the joints at the corners of the cage or housing. In other words the angle strips or bars 61 are arranged in position to preclude the weather, especially when the curtains 68 are lowered. These angle strips or bars 61 have their upper ends provided with lugs 63 with which the hooks 64 engage. The hooks 64 are carried by the upper edges of the angle strips or bars 54 of the triangular sheet metal bars 52 of the end sections. There are also hooks 64 carried by the upper portions of the inner and outer wall sections, which also engage similar pins or lugs 63 carried by the angle strips or bars 61. The lower portions of the angle strips or bars 61 have additional lugs 65, with which hooks 64 similar to the hooks 64 engage, thereby locking the angle bars or strips 61 in position, so as to cover the joints at the corners of the cage or housing, and thereby further preclude the weather.

Suitable rollers 67 are carried by the outer and end wall sections, in positions immediately adjacent the upper portions of the screen or wire fabric of these respective sections. The rollers are mounted in bearings, and have curtains 68. The rollers may be of the usual spring type, whereby they may roll up the curtains when unreeled, and due to the conventional form of detent means (not shown) at certain ends of the rollers, the curtains may be held in different adjusted positions. In other words the curtains are in the form of shades, and may be drawn, for the purpose of keeping out the light and rain, when the baby is asleep. The edges of the curtains or shades, and the ends of the sticks or bars (not shown) but usually carried by the lower edges of the curtains or shades, engage between the flanges of the angle bars or strips 61 and the wall sections, thereby guiding the curtains or shades in their movements when adjusted.

The flanges 54 have T-shaped slots 69 in their horizontal flanges, for the reception of the T-shaped lugs 70 of the roofing 71. In fact the roofing 71 comprises three sections 72, which are corrugated as shown, and secured to the end edges of each section are angle strips or bars 73, which have the downwardly extending T-shaped lugs 70. The lugs 73 engage through the enlarged portions of the T-shaped slots 69, so as to lock the roof sections in position. In other words each roof section is applied in position individually. In other words the first roof section is placed, so that its lugs 73 may engage the T-shaped slots 69, then the roof section is moved downwardly and outwardly toward the outer wall section, until the roof section overlies the outer wall section. The next roof section is fastened to the flanges 54 in a similar manner, and so is the third section, which is located at the inner portion of the roofing. The adjacent edges of the several roof sections overlap, for the purpose of shedding the water and the drippings from snow and rain. The inner edge
of the last roof section is provided with hooks 74, to engage eyes 75 on the flange 45 of the inner wall section, to assist materially in holding the last mentioned roof section, as well as the other roof sections in place. It will be noted that the downwardly extending flanges of the angle strips overlie the hooks 63, and thereby retain them in locked positions, hence preventing accidental displacement of the angle strips or bars 61.

The curtains or shades have connected thereto cords 76, which pass over pulleys 77 carried by the under part of the cage or housing, and extend into the room, whereby the curtains may be actuated from the interior of the room.

Obviously a cage or housing of this kind arranged exteriorly of the window of a room, will permit babies, or small children to be housed therein and kept from the rain and snow, and yet be permitted to breathe the fresh air, and thereby become more healthful. This construction of cage will be very useful in cities where the houses are very close together and in apartments, where there are no front and back yards or lawns, for the babies and children to play on.

The sub-sill and the angle clamping bars 4 and 7 are capable of adjustment, so that the clamping means can accommodate itself to windows of different sizes.

The ends of the angle bar 32 (which is secured by rivets or spot welding or the like to the base portion 27 of the outer wall section) are extended as shown clearly in Figures 10 and 11, on which the lower ends of the angle strips or bars 61 rest, in order to support them in position.

The invention having been set forth, what is claimed is:

1. A baby cage or housing comprising a floor supporting frame including outwardly extending beams, inner and outer wall sections interlocked to the inner and outer ends of said beams and rising perpendicularly therefrom, end wall sections having interlocking connections with the inner and outer wall sections, and acting to hold the latter in position, a flooring resting upon said beams and engaging between the end wall sections, thereby reinforcing all the wall sections in position, and a roofing provided with interlocked connections with the several wall sections, to hold their upper portions in place.

2. A baby cage or housing comprising a floor supporting frame including outwardly extending beams, inner and outer wall sections interlocked to the inner and outer ends of said beams and rising perpendicularly therefrom, end wall sections having interlocking connections with the inner and outer wall sections, and acting to hold the latter in position, a flooring resting upon said beams and engaging between the end wall sections, thereby reinforcing all the wall sections in position, and a roofing provided with interlocked connections with the several wall sections, to hold their upper portions in place.

3. In a baby cage, a floor supporting frame comprising outwardly extending beams, inner and outer and end wall sections, supported by and connected to said beams, said wall sections having wire fabric panels, a sectional roofing provided with interlocked connections with the several wall sections to retain them in position, angle members engaging the corners where the several wall sections unite, hooks carried by the upper ends of the angle members and being detachably connected to the end wall sections, and means carried by the sections of roofing overlying the hooks, to retain them in place.

4. In a baby cage, a cage supporting frame comprising outwardly extending beams, means for supporting said frame exteriorly of a window of a building, said cage comprising inner and outer and end wall sections interlocked at their lower portions, means for interlocking the inner and outer wall sections removably to the beams, and means for holding the upper portions of the inner and outer sections connected and in position, and a roofing for the cage, said supporting means for the frame comprising a sub-sill to engage the sill of the window, a clamping bar on the inner sill, a clamping bar upon the outer sill, depending hangers or arms connected to the outer clamping bar and carrying said supporting frame, and means passing through the clamping bars and through the sub-sill for adjustably connecting and supporting the frame to the sill of the window.

In testimony whereof I hereunto affix my signature.

EMMA READ.