

D. R. COLLIER.
SANITARY NURSERY CHAIR.
APPLICATION FILED JULY 17, 1912.

1,061,935.

Patented May 13, 1913.

2 SHEETS-SHEET 1.

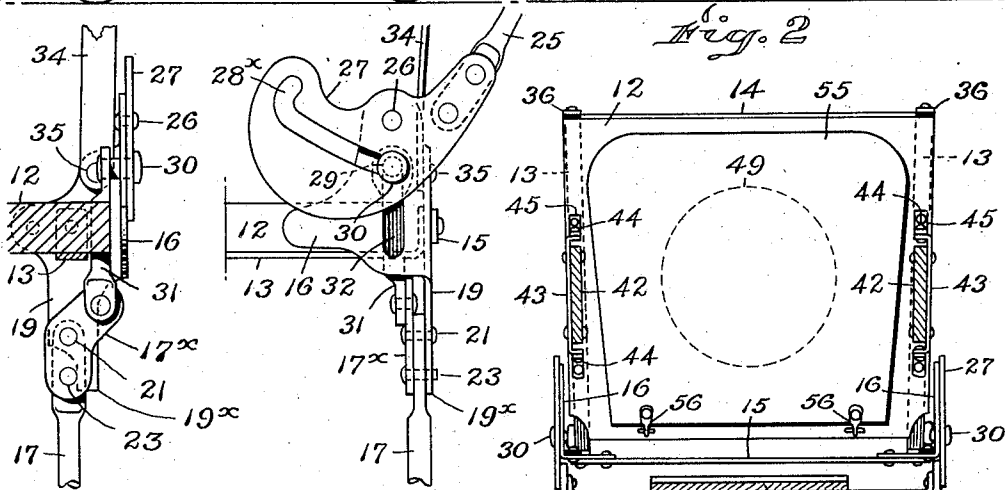
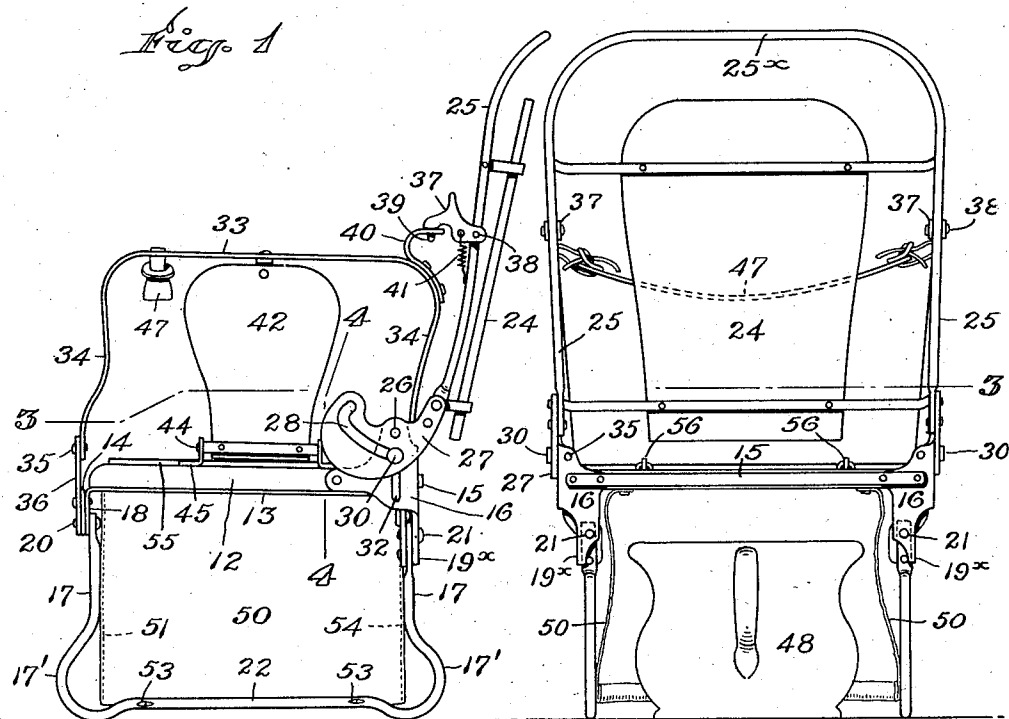


Fig. 4

Fig. 5

Fig. 3

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2 SHEETS—SHEET 2.

Fig. 7

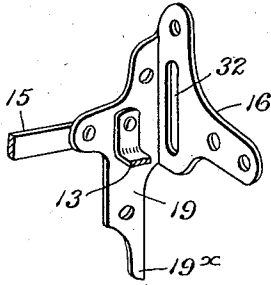


Fig. 6

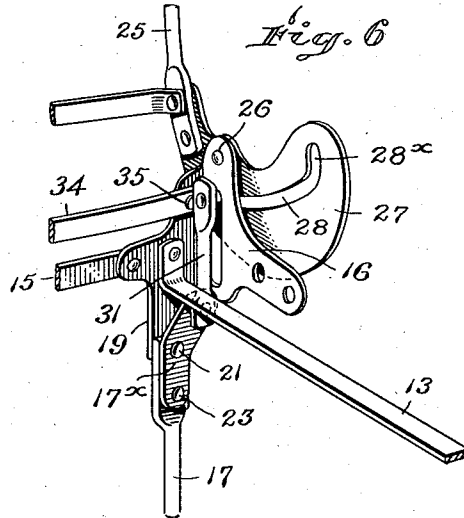


Fig. 8

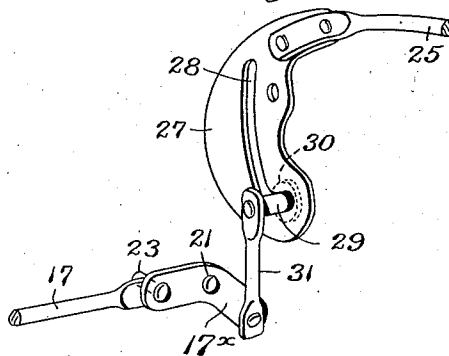


Fig. 9

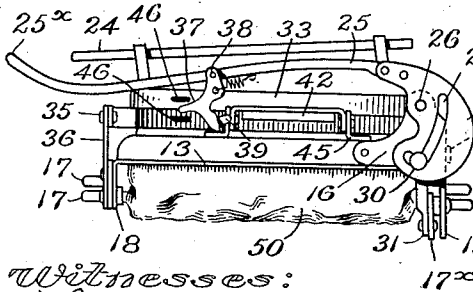
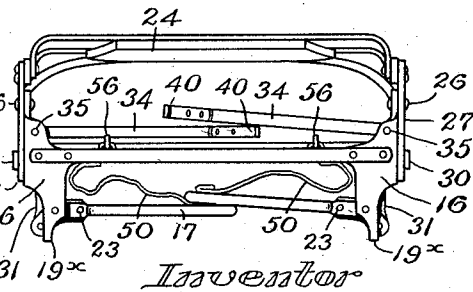


Fig. 10



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UNITED STATES PATENT OFFICE

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SANITARY NURSERY-CHAIR.

1,061,935.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DAVID R. COLLIER, a citizen of the United States, and resident of Gardner, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Sanitary Nursery-Chairs, of which the following is a specification.

The object of the present invention is to provide a sanitary nursery chair which is capable of being folded so that it may be easily carried or stored in a small space.

Of the accompanying drawings which illustrate one form in which the invention may be embodied: Figure 1 represents a side elevation of the chair in open position ready for use. Fig. 2 represents a rear elevation of the same. Fig. 3 represents a horizontal section in the planes indicated by line 3—3 of Figs. 1 and 2. Fig. 4 represents a vertical section, on a larger scale, looking toward the rear from the plane indicated by line 4—4 of Fig. 1. Fig. 5 represents a side elevation of the structure included in Fig. 4. Fig. 6 represents a perspective view of the structure shown by Fig. 5, omitting the portion of the seat which is included in Fig. 5. Fig. 7 represents a perspective view of those portions of the stationary frame structure which are included in Figs. 5 and 6. Fig. 8 represents a perspective view of the movable elements included in Fig. 8, the same being shown in the position corresponding to closed or folded condition of the chair. Fig. 9 represents a side elevation of the chair in folded condition. Fig. 10 represents a rear elevation of the chair in folded condition.

The same reference characters indicate the same parts wherever they occur.

The main seat of the chair is indicated at 12. The seat is affixed to a substantially rectangular frame which comprises side bars 13, 13, a front bar 14, and a rear bar 15. (See Fig. 2.) The ends of the rear bar are connected to the rear ends of the side bars by corner pieces 16. One of these corner pieces is shown in detail by Fig. 7.

The legs of the chair are indicated at 17. For the purpose of attaching the legs to the seat frame just described, the forward ends of the side bars 13 are bent downwardly, as indicated at 18, and the corner pieces 16 are provided with depending por-

tions 19. The front legs 17 are connected to the portions 18 by pivot studs 20, and the rear legs 17 are connected to the portions 19 by pivot studs 21. The axes of these pivot studs are substantially in alignment with each other. The lower ends of the legs are curved, as indicated at 17', for the purpose of giving a neat appearance and for the additional purpose of extending the base from front to rear. Each front leg is connected with the corresponding rear leg by a connecting portion 22. For convenience in manufacture, the two legs and connecting portion on each side are made from a continuous strip or bar. The pivotal connections between the legs and the seat frame enable the legs to swing under the seat to the position shown best by Fig. 10. The rear legs are provided with stop pins 23 which are adapted to abut against the lower ends 19* of the corner pieces when the legs are opened for use, for the purpose of limiting the opening movement of the legs. Figs. 2 and 4 show these stop pins engaging the portions 19*.

A back-rest or support is indicated at 24. This back-rest is carried by a swinging frame 25 which is connected to the corner pieces 16 by the pivot studs 26. The swinging frame is adapted to swing forwardly and downwardly from the position shown by Fig. 1 to the position shown by Fig. 9, so that the back will lie close to the seat. The swinging frame 25 is shown as being made of a strip or rod which is bent to the form resembling an inverted letter U, the horizontal connecting portion indicated at 25* (see Fig. 2) affording a convenient handle whereby the frame may be grasped to open or close the same and whereby the chair may be carried. The ends of the rod are fixed to plates 27 which constitute intermediate connections between the ends of the rod and the corner pieces 16. The plates 27 are provided with cam slots whose function is to open and close the legs when the back is opened or closed. These cam slots are occupied by studs 29 (see Fig. 8) which have heads 30 at their outer ends. The cam studs are connected with the rear legs by links 31. Connecting pieces 17* are affixed to the rear legs by means of the pivot studs 21 and stop pins 23 to afford convenient means for providing the desired connection with the links 31.

The cam plates 27 are adapted to move the studs 29 vertically and thus swing the legs in the manner hereinbefore explained. The movements of the stud 29 are guided by the corner pieces 16 which are provided with vertical slots 32 through which the studs extend. The ends 28* of the cam slots which are farthest from the pivots 26 are substantially concentric with relation to the pivots. When the back and legs are folded as shown by Figs. 8 and 9, the cam studs 29 occupy the portions 28* and the legs are thereby locked in folded position so that their weight will not have any tendency to open the chair.

Swinging arm rests are indicated at 33. These arm rests are preferably made of strips of flat metal whose ends are bent downwardly as indicated at 34. The lower extremities of the portions 34 are mounted upon pivot studs 35. The pivot studs at the front are carried by pieces 36 which are affixed to the rectangular seat frame. The pivot studs 35 at the rear are mounted in the corner pieces 16, as shown by Figs. 2, 4 and 6. When the arm rests are open for use they are locked to the back frame by latches 37. These latches are connected to the sides of the back frame by pivot studs 38, and they are provided with projections 39 which are adapted to enter suitable openings formed in locking pieces 40 affixed to the arm rests. Springs 41 anchored to the back frame and connected to the latches normally hold the latter in locking position. When it is desired to fold the chair, the arm rests are folded inwardly before the back and legs are folded. Fig. 10 shows the arm rests extending toward each other and overlapping each other in folded position directly over the seat.

Side guards are indicated at 42. The lower edges of these guards are pivotally connected to the seat, and the upper edges are connected to the arm rests so that the guards will open and close with the arm rests. For the purpose of connecting the guards with the seat, the lower edges of the guards are provided with strips 43 whose ends are turned inwardly as shown by Figs. 2 and 9. These ends are mounted upon pivot studs 44 which are supported by brackets 45 affixed to the seat. The axes of the pivots 44 are substantially in alignment with the axes of the pivots 35 which connect the arm rest with the seat frame. The arm rests are provided with slots 46 (see Fig. 9) for the reception of a strap or guard 47 which may extend across from one arm rest to the other to prevent the occupant of the chair from falling forward.

When the chair is open for use there is sufficient space beneath the seat and between the legs for the reception of a vessel such as that indicated at 48 in Fig. 2. The seat 12

is provided with an opening 49 the outline of which is represented by dotted lines in Fig. 2. A collapsible screen for concealing the vessel is anchored to the bottom of the seat 12 and to the connecting pieces 22 which connect the legs. This screen is shown as comprising side pieces 50, 50, of suitable flexible sheet material, and a front piece 51 of similar material. The upper edges of the front and side pieces may be secured to the bottom of the seat by any suitable means, such as tacks. Fasteners indicated at 53 serve to connect the lower edges of the side pieces to the connecting pieces 22. The vertical meeting edges of the front and side pieces are joined, as by stitches or any other desired means. A rear flap or screen, indicated by dotted lines 54 in Fig. 1, may be used to conceal the vessel from the rear, but this flap may be omitted if desired. The vertical meeting edges of the front and side flaps 50 and 51 are preferably joined, as by stitches or otherwise; and if the rear flap 54 is used, the same may be likewise joined with the side flaps.

An auxiliary seat is indicated at 55. This seat may lie upon the seat 12 when desired and is adapted to cover the same so that the opening 49 will not be apparent. As shown by Fig. 2, the rear edge of the auxiliary seat is connected by hinges 56 to the seat 12. When it is desired to uncover the seat 12 the auxiliary seat may be swung upwardly about its hinges so that it will rest against the back 24.

I claim:

1. A folding chair comprising a seat, legs pivotally connected thereto so as to swing upwardly under the seat from supporting position, a back-rest pivotally connected to the seat so as to swing downwardly upon the seat, and connection between the back rest and legs whereby swinging movement of the back-rest is transmitted to the legs to swing them as specified.

2. A folding chair comprising a seat, supporting means therefor, arm rests pivotally connected to the seat so as to swing toward each other and downwardly upon the seat from operative position, a back-rest pivotally connected to the seat so as to swing forwardly and downwardly from operative position, and means for locking said back-rest to said arm rests when the same are open for use whereby the arm rests and back-rest are rigidly locked.

3. A chair comprising a seat, bent metal strips each consisting of downwardly extending ends and an intermediate connecting portion, the ends of said strips being pivotally connected to the seat near the front and rear, and said intermediate connecting portions being disposed to serve as arm rests, said strips being adapted to swing toward each other and downwardly from operative

position, side guards pivotally mounted on the seat between the downwardly extending ends of said strips so as to swing toward each other and downwardly from operative position, and connections between said arm rests and said guards whereby each arm rest moves the corresponding side guard.

4. A chair comprising a seat, supporting means pivotally connected thereto so as to be capable of swinging upwardly under the same, flaps for inclosing the space under the seat, flexible means connecting the flaps with the seat, and means connecting the flaps with said supporting means so that the flaps will be folded and unfolded by the supporting means.

5. A chair comprising a seat, two pairs of legs therefor, means connecting the lower

ends of the legs of one pair, means likewise connecting the lower ends of the legs of the other pair, the upper ends of the legs being pivotally connected to the seat so that the legs may swing upwardly under the seat, and flaps of flexible sheet material for inclosing the space under the seat, the upper edges of said flaps being anchored to the seat, the lower edges of the flaps being anchored to said leg-connecting means, and the meeting edges of the flaps being joined.

In testimony whereof I have affixed my signature, in presence of two witnesses.

DAVID R. COLLIER.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."