

PATENT SPECIFICATION

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(54) IMPROVEMENTS IN AND RELATING TO INFANTS COT

(71) I, ANTONIO DARDER ALOMAR, a Spanish citizen, of Paseo Marítimo, 12 Edificio Bellver, Palma de Mallorca, Balearic Islands, Spain, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:-

The present invention relates to a folding frame assembly for an infants cot, particularly for such a cot as is used for travelling.

It is an object of the present invention to provide such a frame assembly that is simple to fold and erect and that folds into a small and convenient bundle.

The present invention is a frame assembly for an infants cot comprising a pair of end frames of substantially rectangular configuration, and spacing members interconnecting the end frames, each said end frame having four members interconnected by three pivotal joints and being maintained in said rectangular configuration by engagement of said spacing members with two members of each end frame.

An embodiment of the present invention will now be described by way of example, with reference to the accompanying drawings, in which:-

Figure 1 is an elevation of an end frame of a folding frame assembly according to the present invention;

Figure 2 is a detail view showing how bottom bracing elements are connected to the end frame of Figure 1;

Figure 3 illustrates the end of a top bracing element for the frame of Figure 1;

Figure 4 is a view of a top bracing element;

Figure 5 is a fragmentary view of the element of Figure 4, partly broken away to illustrate the internal construction.

Figure 6 is a cross section on the line VI-VI

of Figure 5; and

Figures 7-9 illustrate stages in the erection of the end frame of Figure 1.

Referring now to the drawings, and in particular to Figure 1, a substantially rectangular end frame 10 of a folding frame assembly comprises top and bottom members 11 and 13 respectively and side members 12 and 14. The top member 11 is attached to the side member 12, the latter to the bottom member 13 and the latter in turn to the side member 14 by means of pivotal connections 15, in this embodiment rivets. In addition to this two clearance holes 16 are formed in the top part of the top member 11, to coincide exactly with clearance holes formed in the top part of the side members 12 and 14. At the bottom ends of these side members, above the location of the bottom member 13, similar clearance holes 17 are formed.

Assuming the end frame 10 to be in the folded state as shown in Figure 7 of the attached drawing in which the members 11 to 14 are in substantially superimposed alignment, in order to make it ready for use the first step is to place the top member 11 in a horizontal position by swinging it backwards through 90° about its articulated joint on the side member 12 which is maintained in the vertical attitude (Figure 8). This is followed by the joint folding downwards through 90° of the hitherto bottom member 13 and the side member 14 so that the former occupies a horizontal attitude and the latter, commencing from this position, executes a full 270° swing into the vertical working position, bringing its clearance hole 16 opposite the corresponding one in the top member 11 (Figure 1).

These operations having been performed for both end frames; i.e. at the top and bottom ends of the cot, the next step is to introduce the bottom bracing elements 19, these having an appropriate cross-section and terminal spigots 18 (Figure 2) which locate in

and pass through the clearance holes 17 formed in the bottom ends of the side members 12 and 14. This is followed by the bracing elements 19 which have at their ends spigots 20 and threaded extensions 21 (Figure 3). The spigots 20 are fitted into the top holes 16 in the side members and at the same time the threaded extensions pass through the corresponding openings in the top member 10 to be engaged by fixing nuts 22 which are tightened down to hold together and stabilize the complete frame assembly.

In order to reduce the length of the top and bottom bracing elements 19, each is split into two equal halves with reduced central zones where a sleeve 25 is fitted to establish and protect the joint formed by a screwed rod 23 or the like incorporated in one of the halves and a tapped hole 24 incorporated in the other.

Finally, the cot is finished off by a flexible fabric member of adequate strength containing appropriate loops to receive the bracing elements and suspended therefrom to form the sides and base of the cot.

It can be seen that when the end frames are folded and placed together with the dismantled bracing elements, a compact and convenient bundle is obtained.

WHAT I CLAIM IS:-

1. A frame assembly for an infants cot

comprising a pair of end frames of substantially rectangular configuration, and spacing members interconnecting the end frames, each said end frame having four members interconnected by three pivotal joints and being maintained in said rectangular configuration by engagement of said spacing members with two members of each end frame.

2. A frame assembly as claimed in claim 1, in which each said spacing member comprises interconnected portions.

3. A frame assembly as claimed in claim 2, in which said portions are interconnected by threaded members.

4. A frame assembly as claimed in claim 2 or claim 3, including a sleeve located over each said joint between said interconnected portions to conceal each said joint.

5. A frame assembly substantially as hereinbefore described with reference to the accompanying drawings.

6. A frame assembly as claimed in any preceding claim in combination with a flexible member suspended from said frame assembly.

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5 and pass through the clearance holes 17 formed in the bottom ends of the side members 12 and 14. This is followed by the bracing elements 19 which have at their ends spigots 20 and threaded extensions 21 (Figure 3). The spigots 20 are fitted into the top holes 16 in the side members and at the same time the threaded extensions pass through the corresponding openings in the top member 10 to be engaged by fixing nuts 22 which are tightened down to hold together and stabilize the complete frame assembly.

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