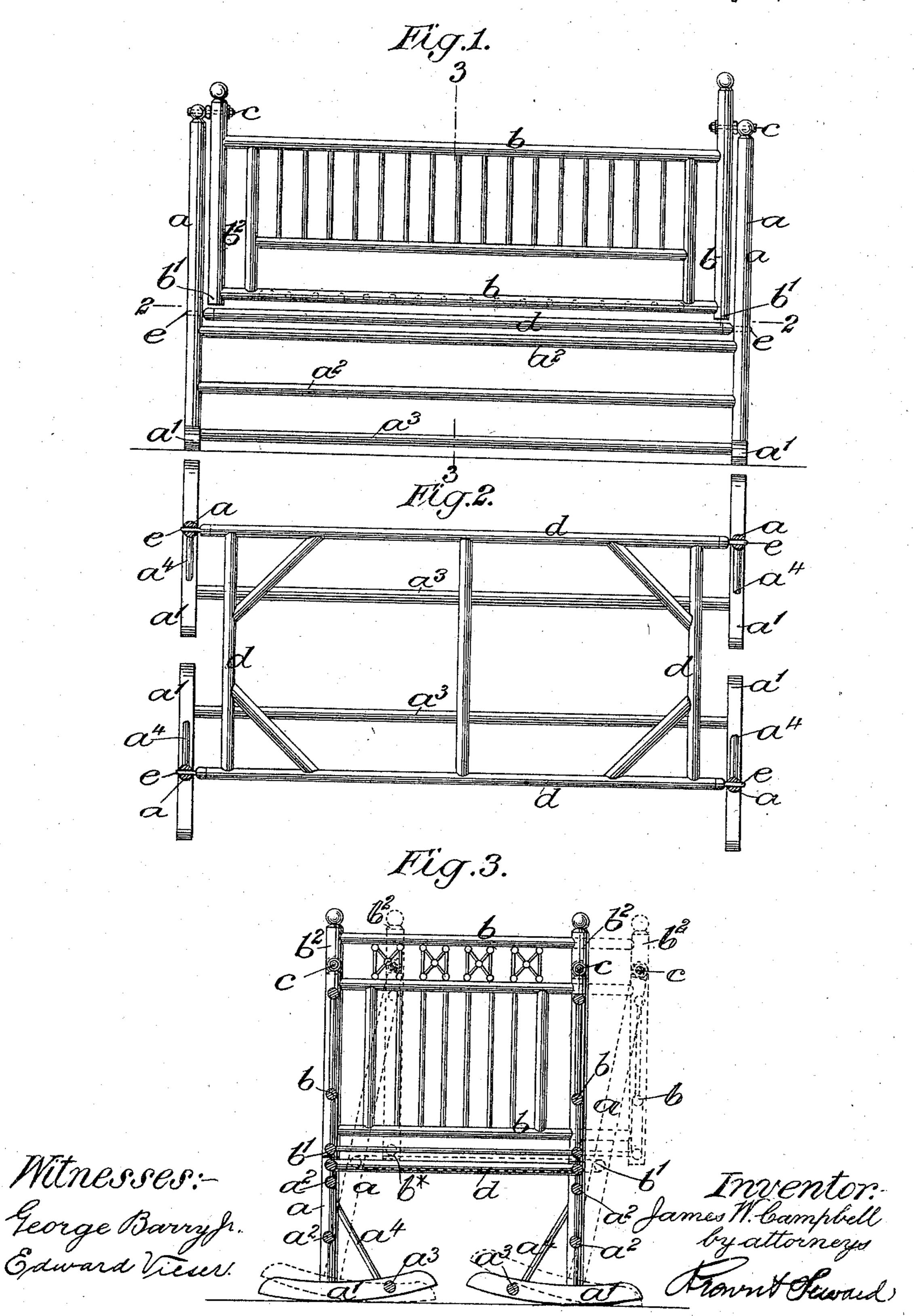
## J. W. CAMPBELL. COMBINED CRADLE AND CRIB.

No. 581,975.

Patented May 4, 1897.



## United States Patent Office.

JAMES W. CAMPBELL, OF BROOKLYN, NEW YORK, ASSIGNOR TO FERGUSON BROTHERS, OF NEW YORK, N. Y.

## COMBINED CRADLE AND CRIB.

SPECIFICATION forming part of Letters Patent No. 581,975, dated May 4, 1897.

Application filed February 11, 1897. Serial No. 622,929. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. CAMPBELL, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Combined Cradle and Crib, of

which the following is a specification.

The object of this invention is to provide a combined cradle and crib in which the occupant may be subjected to a motion sidewise ro in opposite directions without the ascent and descent involved in the movement of the ordinary cradle mounted on rockers and in the movement of an ordinary crib suspended pendulously, or, in other words, may be subjected 15 only to a movement in a truly horizontal direction. To accomplish this object, a cradle and crib embodying my invention in its complete form consists of two side frames mounted independently of each other, each on sepa-20 rate rockers, a crib pendulously suspended on each of said frames independently of the other one, and an independent rigid horizontal quadrangular frame pivoted at its four corners to said frames below the crib.

I will first describe my invention in detail with reference to the accompanying drawings and afterward point out its novelty in claims.

Figure 1 represents a side elevation of a combined cradle and crib embodying my in-30 vention complete; Fig. 2, a horizontal section in the line 2 2 of Fig. 1; Fig. 3, a transverse vertical section in the line 3 3 of Fig. 1.

Similar letters of reference designate corre-

sponding parts in all the figures.

The side frames or supports are represented as both alike, consisting each of two uprights a, mounted on similar rockers a' and braced together by horizontal braces  $a^2$  and a³ (see Figs. 1 and 3) and transverse diago-

40 nal braces  $a^4$ . (See Fig. 3.)

The crib b b' b2, which may be of any suitable form, has four rods or corner-posts  $b^2$ , by which it is pendulously suspended between the upper parts of the uprights of the two 45 side frames at four points by pivots c c, of which there is one at each end of each of the two side frames, the said pivots being severally at such height and the rockers having such curvature that the bottoms or roll-50 ing faces of the rockers are arcs of circles de-

scribed from the centers of the said pivots.

The corner-posts or suspension-rods b<sup>2</sup> are preferably extended some distance above the top of the body b of the crib in order that the suspension-pivots may be some distance 55

above the occupant of the crib.

The independent horizontal frame d, which is represented in Fig. 2 as of quadrangular form, rigidly braced at its corners, is arranged between the uprights a of the two side frames 60 a little below the bottom of the crib, as shown in Figs. 2 and 3. The said frame is pivoted at its four corners into the said uprights by pivots e. This frame serves the purpose of bracing together the lower parts of the up- 65 rights of the two side frames and holding them in square relation to each other and serves the further purpose of a stop to limit the lateral pendulous movement of the crib, as will be presently described. The upper 70 parts of the side frames are braced by their pivotal connections with the crib, while the said frames are left open above the frame d, so that the crib may swing inward and outward between the uprights a a, as indicated 75 by dotted outlines in Fig. 3.

In the operation of this combined cradle and crib the two side frames rock together, but independently of each other, on their rockers a', the pivots c, from which the crib 80 is suspended, by reason of their being concentric to the arcs of the rockers, moving in perfectly horizontal planes. The crib, being pendulously suspended from the said pivots, moves in corresponding planes without any 85 of the upward-and-downward motion which is so objectionable with cradles and cribs of ordinary construction. The movement of the crib is limited by the pivoted frame d, which in the rocking movement of the side frames 90 is caused to have such a rising-and-falling movement that when the lateral movement of the crib reaches a certain limit the said frame comes in contact with the bottoms of the corner-posts b' of one side of the crib, as 95 indicated at b\* in Fig. 3, and thereby acts as a stop to prevent the further movement of

the crib.

Although in carrying out my invention in the most perfect way the points of suspension 100 c of the crib should be perfectly concentric with the arcs of the rockers, a considerable

departure from this concentricity would be within the scope of my invention.

What I claim as my invention is—

1. The combination of four upright sup5 ports each having a separate rocker, a crib
suspended at four points from said four supports, and a rigid quadrangular frame pivoted at its four corners to said supports and
serving to maintain the said supports squarely
io in relation to each other, substantially as
herein described.

2. The combination of two parallel frames having separate rockers and a crib suspended from both of said frames at points above the

body of the crib and approximately concentric with the axes of the arcs of the rockers, substantially as herein described.

3. The combination of two parallel independently-rocking upright frames, a crib suspended from both of said frames, and a rigid 20 horizontal frame pivoted at four points to said rocking frames under the crib, and serving as a stop to the oscillating movement of the crib substantially as herein described.

JAMES W. CAMPBELL.

Witnesses:

FREDK. HAYNES, GEORGE BARRY, Jr.