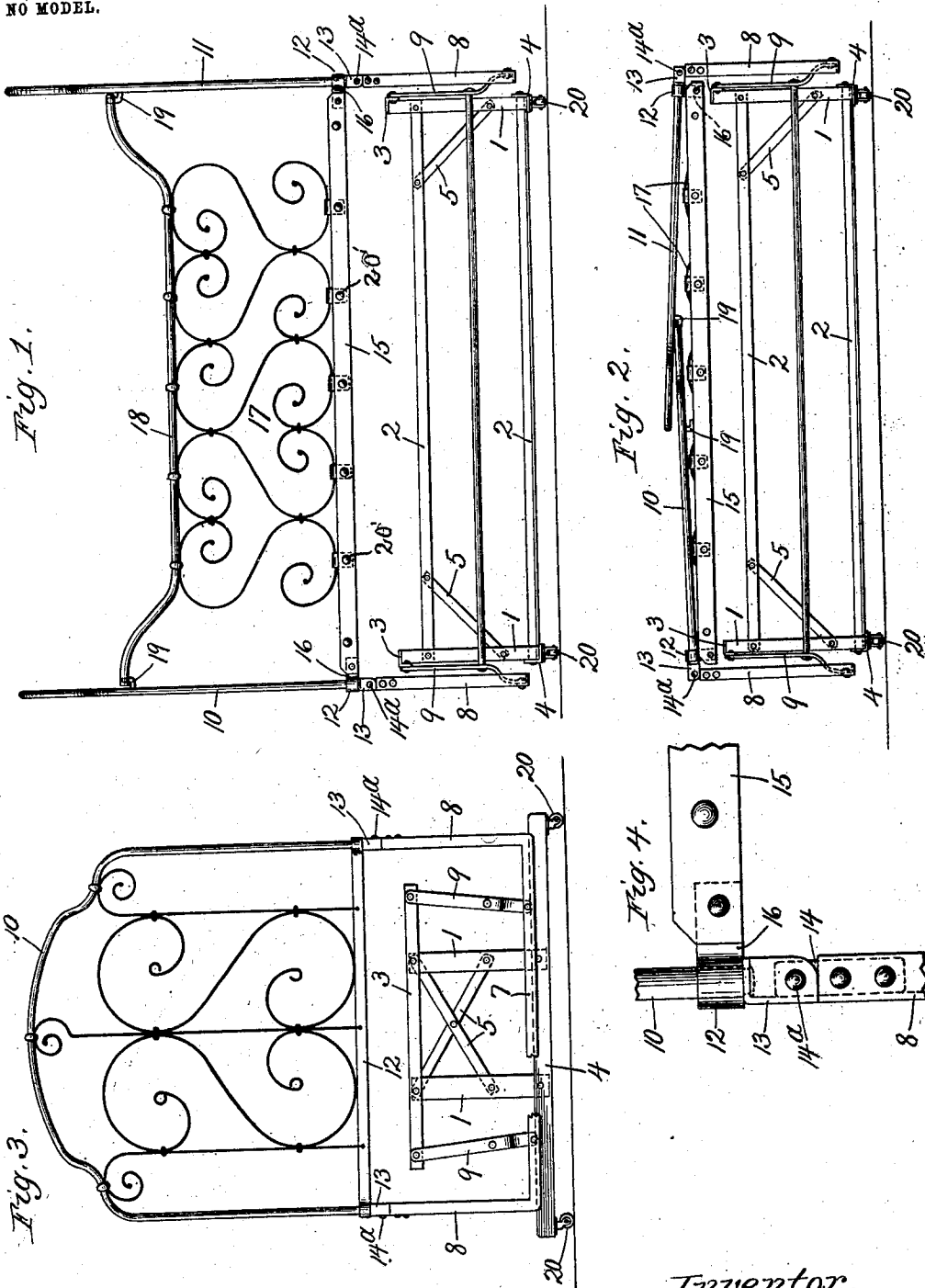


No. 720,410.

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S. DRUBECH.
FOLDING SWING BED.
APPLICATION FILED FEB. 24, 1902.

NO MODEL.



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UNITED STATES PATENT OFFICE.

SAM DRUBECH, OF CHICAGO, ILLINOIS, ASSIGNOR OF TWO-THIRDS TO JULIUS BAMBERGER AND MYER WINER, OF CHICAGO, ILLINOIS.

FOLDING SWING-BED.

SPECIFICATION forming part of Letters Patent No. 720,410, dated February 10, 1903.

Application filed February 24, 1902. Serial No. 95,420. (No model.)

To all whom it may concern:

Be it known that I, SAM DRUBECH, a subject of the Emperor of Russia, residing at 445 Desplaines street, Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Folding Swing-Beds, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an improved child's bed in the nature of a cradle that is adapted to have oscillatory movement and which may be collapsed or folded when not in use, so as to occupy as little height from the floor as possible, and which when set up for use shall present a dignified and ornamental appearance.

It consists in the novel features of construction by which the oscillatory action is obtained and in the novel features of construction which permit of the folding inward of the sides and ends, and the simultaneous depression of the bottom or mattress-carrying frame.

In the drawings, Figure 1 is a side elevation showing the bed erect as for use. Fig. 2 shows the same collapsed or folded out of use. Fig. 3 is an end elevation of the same. Fig. 4 is a detail elevation of a folding joint connection between the horizontal and upright portions of the bed-frame.

In the construction of my improved bed I first erect a rigid frame which constitutes a support for oscillating and collapsing parts. This frame is made of angle-iron bars and posts, comprising four corner-posts 1, connected longitudinally by upper and lower rails 2 2 and transversely by top and bottom rails 3 and 4, respectively, which preferably are of angle-iron and cap the posts, as seen in Fig. 1. Diagonal braces 5 5 may be employed to stiffen the frame in both directions. I next construct frames 9 9, which are preferably made, as seen in Fig. 3, of angle-iron folded to form two right angles between the reach 7 and the up-standing arms 8 8, projecting at opposite sides of the bed. These end frames are both suspended from the top transverse bar 3 by means of links 9 9, which are of equal length, but which are connected to the horizontal reach 7 at their lower ends nearer together than at their upper ends to the transverse bar 3. I next construct a head-frame 10 and a foot-

frame 11, which may be of any ornamental design in open metal-work; but of whatever design as to the upper part, each of these frames comprises at the lower part the transverse bar or sill 12, at the opposite end of which there are formed the downwardly-projecting angular lugs 13 13, the side web of which in each case is hinged to the post 8 at that side, a plate 14 being bolted to the side web of the post and projecting above the upper end of the latter so as to pass within and be pivotally attached at 14^a to the corresponding web of the angular lug, as may be clearly seen in Figs. 1 and 4. The head and foot frames 10 and 11 are connected at the lower part by the longitudinal rails 15 15, connected by slats or other framing to support spring and bedding. The rails 15 15 are pivoted to lugs 16, projecting inward from the end of the transverse rails or sills 12, said pivot being a distance inward from the vertical line of the pivot 14^a equal to its distance above the level of said pivot. To the rails 15 15 at 20 20 I hinge the sides 17 17, which may be made in any ornamental form having an upper rail 18, which is adapted to be engaged at the ends with hooks 19 19, projecting from the posts or side bars to the head and foot frames, respectively, the rail 18 being adapted to spring sufficiently to permit such engagement and disengagement. The sides are constructed to fold inward, the two opposite sides thus meeting at the middle of the width of the bed; but if they are higher than one-half the width and overlap somewhat no inconvenience is thereby caused. The longitudinal rails 15 15 are designed to be of sufficient depth to accommodate a mattress and other bedding, which may be retained in place when the sides are folded in over it.

It will be seen that when the sides are erect and engaged with the hooks 19 the top rail 18 of said sides keeps the head and foot frames from folding inward or outward, retaining them erect and holding the side rails 15 15 and the slats or rods or other mattress-supporting structure extending between them at the proper horizontal position shown in Fig. 1. When it is desired to collapse the bed, the sides 17 being disengaged from the hooks 19 and folded inward, the head and foot frames may be folded inward about their pivots 14^a,

and in that movement the longitudinal rails 15 and connecting bedding-supports and bedding thereon and also the infolded sides 17 17 will be carried downward to position shown in Fig. 2, reaching that position when said head and foot frames are substantially horizontal, overlying the remainder of the collapsed structure. The entire height is then reduced to the height of the posts 8 8.

When the bed is erect, it is suspended by the links 9 9 described, so that it may oscillate with a movement closely simulating that of a cradle supported on the ordinary form of curved rockers, but with a movement less liable to become jarring or irritating, because by reason of the inward trend of the links 9 9 from their upper pivotal supports the oscillating structure carried by the lower ends of said links moves from the middle position at which the bars are horizontal in either direction laterally with a downward tipping of the outwardly-moving edge and a corresponding upward tipping of the inwardly-moving edge, the middle longitudinal line of the bed having substantially parallel movement, as in the case of the cradle on rockers curved about an axis at the surface of the bed, but with this difference that after the lateral swinging movement has proceeded so far that the outwardly-moving link hangs vertical from its pivot that side will rise instead of descending farther, so that there is no danger of tipping over the bed or emptying the contents, as is the case with a cradle too violently rocked. The same feature renders the bed much safer than a cradle in case the child occupying it climbs up and throws all its weight upon one side, which in the case of the cradle is liable to tip it over, whereas in the case of the suspended bed herein described the only effect will be to swing it laterally and slightly incline it.

The entire structure may be supported by casters 20, secured to the bottom bars 4 of the main supporting-arms, said bars being preferably extended, as illustrated, so as to carry the casters at points sufficiently more widely separated than the suspending points of the links 9 to insure stability of the structure. In practice I find a distance of seventeen inches between the points of suspension of said links and twenty-four inches between the axes of the casters to give a very stable structure.

I claim—

1. In a bed and bedding-carrier comprising head and foot frames having inwardly-jutting lugs; side rails pivotally connected at opposite ends to the lugs of the head and foot frames respectively; folding sides hinged to the side rails and adapted to fold from vertical position inward to a horizontal position, and means for engaging the upper corners of the sides with the head and foot frames at erect position of both the sides and the head and foot frames.

2. In a bed, upstanding supports at the head and foot for the bedding-carrier, and means connecting them, such bedding-carrier comprising head and foot frames hinged to the upper ends of the upstanding supports respectively; side rails pivotally connected at their opposite ends to the head and foot frames their pivots at such junction being above and inward from the pivots of the head and foot frames to the upstanding bars respectively, and releasable means for locking the head and foot frames in erect position.

3. In a bed, upstanding supports for the bedding-carrier at the head and foot; means connecting such supports; such bedding-carrier comprising head and foot frames hinged to the upper ends of the upstanding supports, respectively; side rails pivotally connected at their opposite ends to the head and foot frames, their pivots at such junctions being above and inward from the pivots by which the head and foot frames are connected to the upstanding supports, respectively; sides hinged to the side rails, respectively, and adapted to fold, at such hinges, from horizontal to upright position between the head and foot frames when the latter are upright; and means for engaging such sides with the head and foot frames at the upright position of all four parts.

4. In a folding or collapsing bedding structure, a rigid supporting structure; a bed-carrier comprising supports extending down at the head and foot of the same beyond the head and foot ends, respectively, of the rigid supporting structure; links attached at one end to the supporting structure, and at the other end to said bedding-carrier supports; head and foot frames of such bedding-carrier pivoted at their lower ends to the upper ends of said supports and adapted to fold inward toward each other about their hinges; side rails connected to the head and foot frames, respectively, at pivots inward from the vertical plane of the pivots of said head and foot frames to the supports, and above the horizontal plane of said pivots, their distances from said vertical and horizontal planes being substantially equal; and means for releasably locking the head and foot frames in erect position, whereby when said head and foot frames are released from such locking, and folded down inward toward each other to horizontal position, the supports to which they are pivoted may yield outward, and the side frames are carried downward, and at the lowest position have their pivots directly below the highest position of the same.

Witness my signature, in the presence of two witnesses, at Chicago, Illinois, February 15, A. D. 1902.

SAM DRUBECH.

Witnesses:

CHAS. S. BURTON,
H. J. ADAMS.