This invention relates to crib motivating apparatus of the type disclosed by my Patent No. 3,040,532, and particularly to improved structure for attaching the motivator to the frame of the crib to impart a more uniform rocking motion to the mattress thereof.

It is the primary object of this invention to provide an improved assembly for mounting a crib motivator as described in my prior patent, in underlying relationship to a portion of the mattress supporting wire grid of the baby bed so that reciprocatory motion of the motivator may be transferred to the support grid in a more effective and efficient manner.

Another important object of the invention is to provide an improved mounting bracket for the crib motivator which is adapted to span the distance between the side frame rails of the crib so that the motivator may be located in underlying relationship to a portion of the crib mattress in spaced relationship from the side rails. In this respect, it is another significant object of the invention to provide a mounting bracket as described which may be easily and readily adjusted in length to permit attachment thereof to baby beds having frame members disposed in different relative spaced relationship and of varying cross-sectional configuration.

A still further important object of the invention is to provide novel means adapted to be operably coupled to the reciprocating mechanism of the motivator, and which is engageable with a considerable area of the mattress supporting grid structure of the bed, to thereby impart an even rocking motion to the mattress to more effectively rock a baby to sleep.

It is a further important object of the invention to provide a novel and simple means of mounting the motivator to the crib assembly, and illustrating the way in which the mounting structure for the motivator is secured to the side rail members of the bed, and the manner of coupling of the reciprocatory mechanism of the motivator to the mattress supporting grid structure.

FIG. 3 is a fragmentary cross-sectional view taken substantially on the line 3—3 of FIG. 2 and looking in the direction of the arrows; and FIG. 4 is an end elevational view of the motivator assembly, showing the components illustrated in FIG. 2 and with the rail members and the grid structure of the bed thereby being shown in cross-section.

The motivator broadly designated 18 in the drawings is of conventional design and has a pair of upright end sections 12 and 14 which are interconnected by side sections 16 only one of which is shown in detail. The visible side section 16 is adapted to be raised and lowered along the guide members 19 carried by the end sections 12 and 14 respectively. A rectangular frame 20 mounted on end sections 12 and 14 between the side sections of the bed, normally is constructed of four angle irons suitably interconnected at respective ends thereof, to present a rigid structure. The side rails 22 and 24 each have a horizontal, longitudinally extending leg 26 and a vertical leg 27 integral therewith. A mattress supporting grid broadly designated 28 is carried by the frame 20 and has a series of individual links 30 which are pivotally interconnected at the ends thereof as illustrated in FIG. 2, to define a rectangular pattern. The grid 28 is preferably secured to the legs 26 of the frame 32 by means 32 to provide a resilient support for mattress 34.

The crib motivator embodying the improved concepts of the present invention is broadly designated 36 and includes an elongated mounting assembly 38 removably secured to frame rails 22 and 24, and carrying the grid support actuator 40 which is located on the links 30 of support 40 in direct overlying relationship thereto.

The mounting assembly 38 includes a pair of elongated, longitudinally arcuate, transversely U-shaped elements 42 and 44 with the element 42 being slightly wider transversely thereof than the corresponding dimension of element 44, to permit the latter to be positioned in complementary, slideable engagement therewith as is evident from FIG. 3. The normally horizontal bight portions 42a and 44a of elements 42 and 44 respectively, are each provided with elongated slots 46 therein and which are in alignment as is evident from FIG. 2. A large headed bolt 48 extending through aligned slots 46, has a wing nut 50 thereon to facilitate tightening and release of the fastener means interconnecting elements 42 and 44.

The depending leg portions 42b and 44b of elements 42 and 44 are provided with notches 52 therein aligned transversely of the longitudinal length of assembly 38, for complementally receiving corresponding leg portions 26 of side rails 22 and 24. In this manner, the assembly 38 may be releasably secured to rectangular frame 20 in underlying relationship to grid support 28. As is evident in FIG. 4, the elements 42 and 44 are sufficiently arcuate longitudinally thereof to permit the grid support 28 to deflect to a maximum extent in the central area thereof, under the weight of a baby on mattress 34, without engagement of the grid with the assembly 38.

The actuator 40 includes a housing 54 carried by element 44 in generally underlying relationship thereto, and serving as a protective cover for an electric motor 56 adapted to be connected to a suitable source of electrical power. The output shaft 58 of motor 56 is operably coupled to the grid support 28 and is provided with gear box 58 to an eccentric 60 which is substantially identical in construction and operation to the eccentric set forth in detail in Patent No. 3,040,532. During operation of motor 56, the outer sleeve 62 of eccentric 60 is moved in an orbital path of travel.

An elongated steel bar 64 is located across the links 50 of grid support 28 in direct overlying relationship to eccentric 60, with the coil spring 66 serving to operably couple sleeve 62 to bar 64.

The crib motivator 36 is mounted in position on crib 10 by loosening of nut 50 on bolt 48 until the elements 42 and 44 can be shifted relatively limited only by the engagement of bolt 48 with the ends of slots 46. The element 44 is positioned with the notches 52 therein receiving the horizontal leg portion 26 of side rail member 24, whereupon the element 42 is then shifted in a direction away from element 44, until the notches 52 in element 42, complementally receive the leg portion 26 of side rail 22. Then, the wing nut 50 is tightened to rigidly secure motivator 36 to the bed frame 20. Next, the rod 64 is positioned over the actuator 40 and the spring 66, secured to sleeve 62, is coupled to the rod. This is normally accomplished by pulling the spring 66 upwardly through
3. In apparatus for imparting reciprocatory movement to a mattress supporting grid of a bed and formed of yieldable wire connected to a pair of frame rails of the bed, the combination with said grid means and rails of: drive structure having reciprocable means thereon operable to move in an up and down direction; means mounting the drive structure on the rails in spanning relationship thereto below said grid means, said mounting means comprising a pair of elongated members in slideable interengagement, and means for releasably locking the members in any selected relative disposition to permit the effective length of the mounting means to be varied to accommodate beds of different widths, each of said members being of longitudinally arcuate configuration of a radius to clear the grid means during normal depression thereof under the weight of an individual on the mattress; and means interconnecting said reciprocating means and said grid means for effecting up and down movement of the latter as said reciprocating means is driven by said drive structure.

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