To all whom it may concern:

Be it known that I, THOMAS M. GLEASON, a citizen of the United States, and resident of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Portable Cradles for Bath-Tubs; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to certain new and useful improvements in plumbers' appliances, and refers more particularly to a portable cradle especially adapted for moving bath tubs or the like, which will be readily adjustable, whereby the same may be inserted under a bath tub and then adjusted to lift or transport the same for any desired purpose.

A further object of this invention is to provide novel means for connecting the sustaining wheels with the supporting frame; and a more specific object is to provide novel means for raising the supporting frame.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claim.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, in which:

Figure 1 is a view part in section and part in elevation and taken on the line 1—1 of Fig. 2.
Fig. 2 is a top view thereof with a portion of one side sill broken away and in section to illustrate the construction thereof.

Fig. 3 is a transverse sectional view therethrough on the line 3—3 of Fig. 1.
Fig. 4 is a transverse sectional view through one side sill of the supporting sill 55 and taken on the line 4—4 of Fig. 1, and Fig. 5 is a detailed view part in section and part in elevation and taken on the line 5—5 of Fig. 1.

Referring now more particularly to the accompanying drawings, 1 represents a rectangular supporting frame of the cradle comprising a pair of channeled side sills 2 U-shaped in cross section and a pair of transverse end sills 3 and a central transverse sill 4.

The supporting frame 1 is mounted upon suitable sustaining wheels or casters 5 having their forks 6 pivotally carried by a suitable U-shaped bracket 7, each bracket 7 being provided with an inwardly inclined ear or arm 9 as later described.

The transversely aligned brackets 7 are connected with a suitable transverse bar or axle 9 and each bracket 7 is connected with one side sill of the frame 1 by means of suitable end links 10 and floating links 11. The link 10 has its upper end pivoted as at 12 in the channel of sill 2 near the end thereof and has its lower end pivotally engaging the end of axle 9 disposed in the U-shaped portion of bracket 7, and the link 11 has its lower end pivoted as at 13 to the ear 8 of the bracket 7 and has Journally carried by its upper end an anti-friction roller 14 tracking in the channel of sill 2 and bearing on the top wall thereof. Each sill 9 is provided in its inner face with a pair of elongated openings or guide slots 15 and each pair of transversely aligned links 11 have their upper ends connected by means of a transversely disposed spindle suspension rod 16 which passes through guide slots 15 and serves as a journal for the rollers 14. The walls of the guide slots 15 do not at any time engage rods 16 as the wheels 14 bear all of the weight and thus greatly reduce the friction, and the guide slots 15 also limit the movement of the rollers 14 in the sills 2 as will be obvious.

Each spindle suspension rod 18 has loosely mounted thereon intermediate of its ends an arm 17 of a bored cross-coupling, the bore of the other arm 18 of which is threaded and adapted to receive the screw-threaded end of a spindle 19. The screw spindle 19, intermediate of its ends, is fitted into slots 20 of a pair of ears 21, which ears are
struck downwardly from the central sill 4 of the frame. Cast or otherwise secured to the central portion of the spindle is a hubbed wheel 22 which is employed for manually adjusting the height of the cradle, the hub of the wheel being adapted to frictionally engage the side walls of the ears whereby the spindle is held against end play. As shown, the center sill 4 of the cradle is also provided with a central opening 28 through which the periphery of the spindle wheel 22 projects to permit accessibility thereto.

Attention is directed to the fact that the structure throughout is arranged and designed for the purpose of cheapness in construction and ready assemblage without machine work, riveting or the like and it will be seen that the adjusting mechanism for the cradle comprising the several sets of links, spindle and its supporting mechanism, when connected, are not subject to the vertical strains due to the fact that the anti-friction wheels 14 take the load and the cross-couplings serve as suspension means for the spindle, which spindle is not subject to lateral strain but only end thrust incidental to a turning movement.

Attention is further called to the fact that the end-links 10, after being mounted between the side sill flanges, are connected to the floating-links as stated, and that the floating-links in turn are simply mounted or fulcrumed upon the ends of the spindle-sustaining rods 21, and, owing to the fact that these links are confined between the walls of the side sills, end play of them is prevented and no bolts or other fastening means other than that described are necessary to add rigidity. Before the spindle-supporting rods are adjusted in position, the cross-couplings are slipped over them and the spindle 19 is thus held in suspension by these cross-couplings. This spindle connection needs no further means for holding it in position and, owing to the simple construction of downturned ears on the center sill 4, the spindle is held against lateral movement.

From the foregoing description taken in connection with the accompanying drawings it will be readily apparent that when it is desired to set a bath tub or the like in position, the screw bolt 19 is rotated by means of its head 21 to move the rods 16 inwardly and thus lower the cradle when the same is then inserted under the tub and then screw bolt 19 is rotated to move rods 16 outwardly which will raise the cradle and with it the tub mounted thereon. Then the tub is moved to its position and the fittings secured in place and the cradle lowered by means of its screw bolt 19 and moved from under the tub.

To those skilled in the art to which an invention of this character appertains it will be readily apparent that the uses of my device may be greatly varied and hence I do not wish to restrict myself to the operation just described.

I claim:

In a cradle of the class described having a frame including inverted U-shaped side sills provided with companion sets of slots in their inner walls, end sills and a center sill having depending slotted ears; the combination of raising and lowering instrumentalties including a spindle provided with a central wheel fitted between the sill ears, the spindle being extended through the ear slots, a pair of bored cross-couplings each having an arm in threaded union with an end of the spindle, spindle suspension rods extending through the other arms of the cross-couplings and side-sill slots, friction wheels carried by the rods and located between the side-sill walls, pairs of end-links pivotally mounted between the walls of the aforesaid side-sills, whereby they are held against lateral movement, pairs of floating-links in pivotal union with the rods and located between the side-sill walls, whereby they are held against lateral movement, a pivotal connection between the other end of each pair of floating-links and the companion pair of end-links, and caster-wheels mounted at the pivotal union of the sets of links.

In testimony that I claim the foregoing I have hereunto set my hand at Racine, in the county of Racine and State of Wisconsin.

THOMAS M. GLEASON.