Jan. 19, 1932. W. SALAMON 1,842,290

CRADLE

Filed May 1, 1931

Fig. 1.

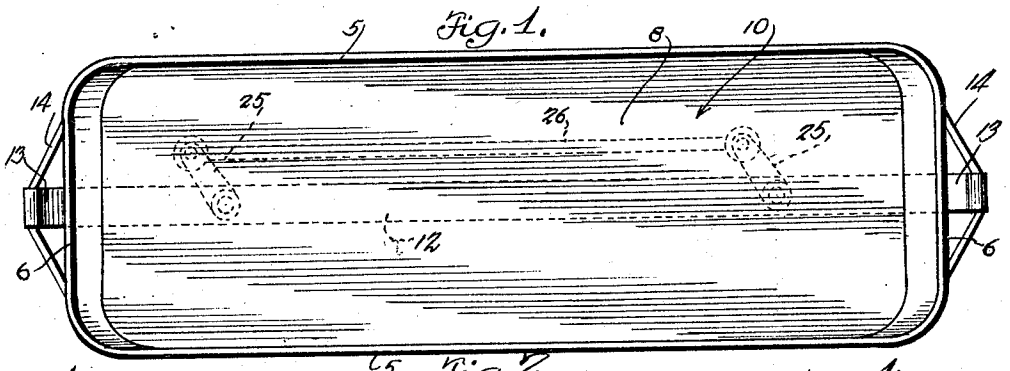


Fig. 2.

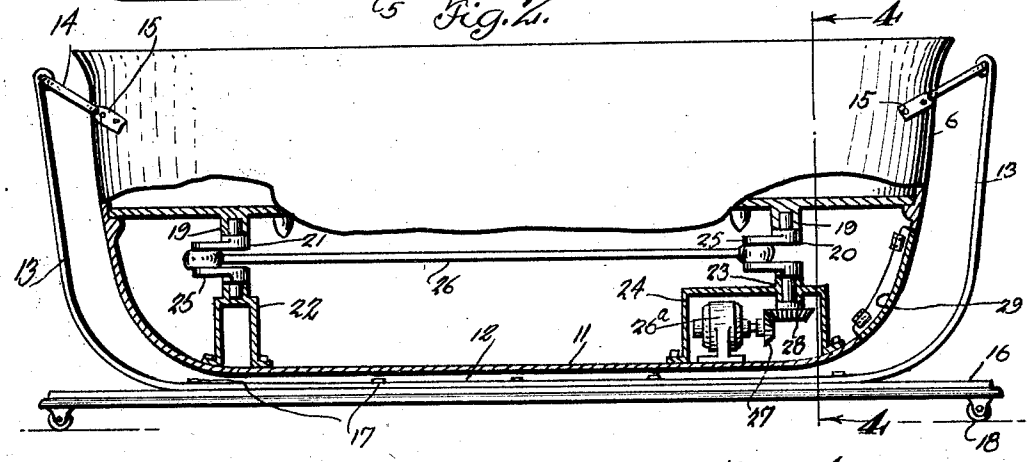


Fig. 3.

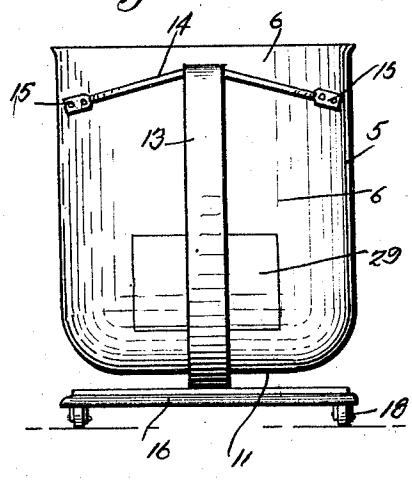
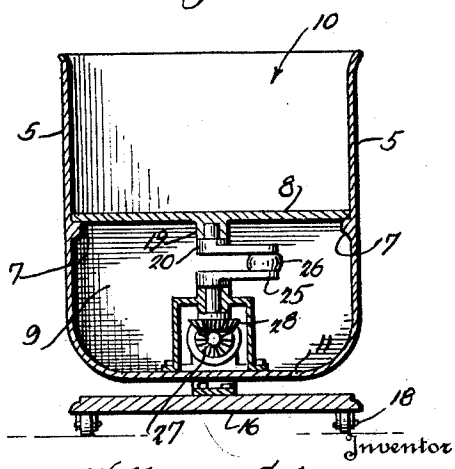


Fig. 4



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UNITED STATES PATENT OFFICE

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CRADLE

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This invention relates to certain new and useful improvements in cradles.

The primary object of the invention is to provide a motor operated cradle i. e., to associate motor driven spaced and connected crank members associated with a cradle structure for effecting vibratory movement thereof.

Another object of the invention is to provide a spring suspension for a cradle with motor operated devices within the body of the cradle for imparting vibratory movement to the cradle.

With the above and other objects in view that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawings and claimed.

In the drawings—

Figure 1 is a top plan view of a cradle constructed in accordance with the present invention;

Figure 2 is a side elevational view, partly broken away and shown in section to illustrate the motor operating device imparting vibratory movement to the cradle body and also showing the spring suspension means for the cradle body;

Figure 3 is an end elevational view showing an entrance door to one end of the cradle through which the conductor cable to the motor may be inserted when the cradle is out of use; and

Figure 4 is a vertical cross-sectional view taken on line 4—4 of Figure 2.

The cradle comprises a body portion of tub or basket formation having side walls 5, end walls 6 and a bottom wall 11, the cradle being open at its upper end and carrying spaced lugs 7 upon the inner faces of its side and end walls to provide a support for the false bottom 8 that defines a lower mechanism compartment 9 and an upper occupant section, 10.

The cradle is resiliently supported by a leaf spring comprising a bottom section 12 with upstanding ends 13, the terminal ends of which carry straps 14 that are secured as at 15 to the end walls 6 of the cradle. The base portion 12 of the spring is mounted upon a platform 16 and is secured thereto as at 17, the platform carrying casters or rollers 18 to facilitate movement thereof over a floor or other support.

Mechanism is provided in the compartment 9 to impart vibratory movement to the cradle body and as shown in Figures 2 and 4 the lower face of the false bottom 8 adjacent each end thereof carries a bearing 19 for the upper end of crank shafts 20 and 21, the lower ends of the crank shaft 21 being journalled in a bearing 22 rising from the bottom wall 11 of the cradle body while the lower end of the crank shaft 20 has a journal bearing 23 in the upper wall of a housing 24 within the compartment 9 that is supported upon the bottom wall 11. Each crank shaft 20 and 21 carries a crank portion 25 and these portions are connected by a relatively long rod or link 26.

The operating means for the crank shaft includes an electric motor 26*a* located within the housing 24 and carrying a bevel pinion 27 upon its projecting shaft end that is engaged with the bevel gear 28 upon the lower end of the crank shaft 20 that enters the housing 24 as shown in Figures 2 and 3. The end wall 6 of the cradle adjacent the housing 24 has an opening therein closed by a hinged door 29 and an electric conductor in communication with the motor 26*a* extends through the door opening to a source of electric energy, and when the cradle is out of use, the electric conductor may be stored within the compartment 9 and the door 29 closed.

In the operation of the device, the motor

26 operates the crank shaft 20 and motion of the crank shaft 20 is communicated to the crank shaft 21 by the connecting rod 26, the throw of the rod 26 or movement thereof in an orbital path effecting longitudinal reciprocating movements of the cradle body which are increased by the spring mounting comprising the leaf spring ends 13 forming supports for the ends of the cradle body. The operating mechanism being confined within the compartment 9 beneath the false bottom 8 is entirely separate from the occupant section 10 and said false bottom 8 may be removed to permit access to the operating mechanism.

While there is herein shown and described the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

I claim:

1. In a cradle of the character described, a platform, a substantially U-shaped spring attached thereto, a cradle body suspended at the ends of the spring, means within the cradle body for imparting vibratory movements thereto, comprising a pair of spaced crank shafts, a rod connecting the crank shafts, and a motor for operating one of said crank shafts.

2. In a cradle of the character described, a platform, a substantially U-shaped spring attached thereto, a cradle body suspended at the ends of the spring, means within the cradle body for imparting vibratory movements thereto, comprising a pair of spaced crank shafts, a rod connecting the crank shafts, a motor for operating one of said crank shafts, a false bottom in the cradle body defining a mechanism compartment and an occupant section, bearings on the under side of the false bottom for the upper ends of the crank shafts, and bearings for the lower ends of the crank shafts supported on the bottom of the cradle body.

3. In a cradle of the character described, a platform, a substantially U-shaped spring attached thereto, a cradle body suspended at the ends of the spring, means within the cradle body for imparting vibratory movements thereto, comprising a pair of spaced crank shafts, a rod connecting the crank shafts, a motor for operating one of said crank shafts, and a door opening in one end of the cradle body adjacent the motor for the inlet of an electric conductor and to permit access to the motor mechanism.

4. In a cradle of the characted described, a platform, a substantially U-shaped spring attached thereto, a cradle body suspended at the ends of the spring, means within the cradle body for imparting vibratory movements thereto, comprising a pair of spaced crank shafts, a rod connecting the crank shafts, a motor for operating one of said crank shafts, a false bottom in the cradle body defining a mechanism compartment and an occupant section, bearings on the under side of the false bottom for the upper ends of the crank shafts, bearings for the lower ends of the crank shafts supported on the bottom of the cradle body, and a door opening in one end of the cradle body adjacent the motor for the inlet of an electric conductor and to permit access to the motor mechanism.

In testimony whereof I affix my signature.

WILLIAM SALAMON.