April 22, 1958 R. W. MUESSEL 2,831,291

MUSICAL DOLL CARRIAGE

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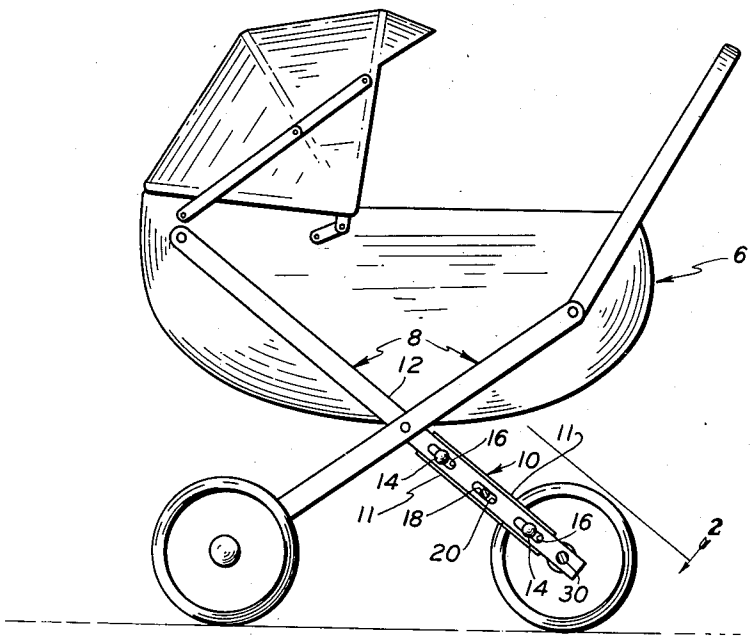


Fig. 1

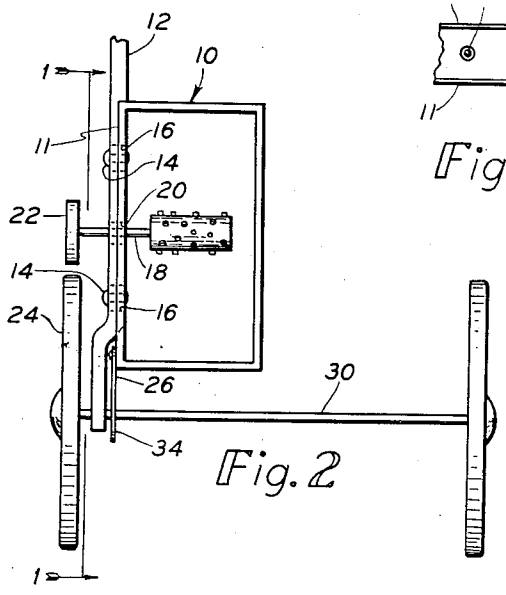


Fig. 2

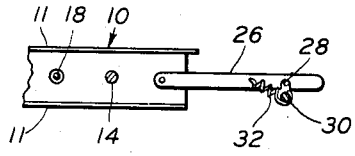


Fig. 3

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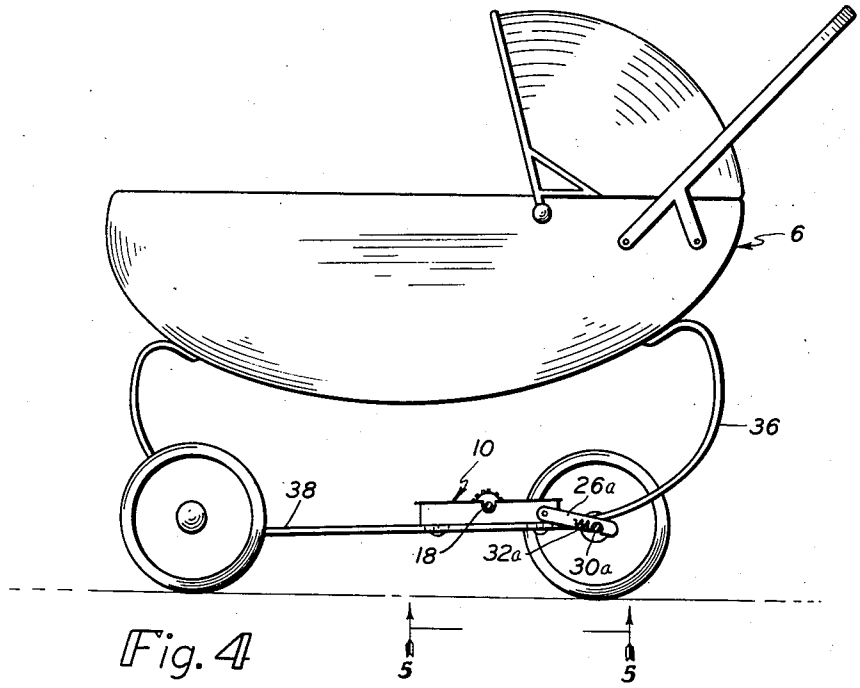


Fig. 4

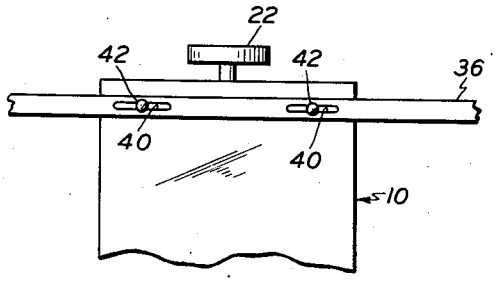


Fig. 5

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MUSICAL DOLL CARRIAGE

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Application February 16, 1953, Serial No. 337,111

5 Claims. (Cl. 46—111)

The present invention relates to doll carriages, and more particularly to doll carriages which may be operated by a child to produce music.

The primary object of this invention is to provide a musical doll carriage capable of being operated by a child to produce music as the carriage is being pushed or pulled.

Another object of this invention is to provide a doll carriage with a music box which is actuated in response to movement of the doll carriage.

Another object of this invention is to provide a combination doll carriage and music box having operating connections which may be manipulated to cause actuation of the music box in response to movement of the carriage, and which is further manipulable to prevent actuation of the music box during operation of the carriage.

Other objects will become apparent as the description proceeds.

To the accomplishment of the above and related objects, my invention may be embodied in the forms illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that specific change may be made in the specific constructions illustrated and described, so long as the scope of the appended claims is not violated.

In the drawings:

Fig. 1 is a side elevation of a doll carriage of this invention, which is shown in part section substantially along section line **1—1** of Fig. 2;

Fig. 2 is a fragmental section taken substantially along section line **2—2** of Fig. 1;

Fig. 3 is an enlarged fragmentary side elevation, shown in part section, of the music box and connecting operating lever;

Fig. 4 is a side elevation of another embodiment of this invention; and

Fig. 5 is an enlarged fragmental section taken substantially along section line **5—5** of Fig. 4.

Referring to the drawings, and more particularly to Figs. 1, 2 and 3, a doll carriage **6** comprised of a collapsible, scissors frame **8**, is equipped with a music box **10** of the type conventionally referred to as a "Swiss" music box. While a "Swiss" music box has been indicated, it is to be understood that any musical instrument of the rotary type or of the type which is actuated by means of a rotary member may be used without departing from the spirit of this invention.

The operating mechanism of the music box **10** (such mechanism being shown only in part) is supported in a cup-shaped rectangular box having along one longitudinal side thereof parallel extending lateral guide flanges **11** which slidably engage the opposite longitudinal edges of one leg **12** of the scissors frame **8**. The engagement between this leg and guide flanges is such as to permit easy longitudinally sliding movement of the box **10** on the leg for a purpose which will become apparent from the following description.

The music box **10** is fastened to the leg **12** by means of two headed rivets **14** which extend through companion, longitudinally extending slots **16** in the leg **12**, this fastening being of such character as to permit easy sliding movement of the music box with respect to the leg **12** but secure enough to prevent undue looseness. The rotary music box drive shaft **18**, which serves in driving the music-producing mechanism, extends through a clearance slot **20** in the leg **12**, an operating wheel **20** being secured to the outer end of the shaft **18** as shown more clearly in Fig. 2.

The mounting of the music box **10** is made such as will position the operating wheel **22** in radial alignment with a carriage wheel **24**, whereby the music box, as viewed in Fig. 2, may be slid downwardly along the leg **12** to make a driving engagement between the two wheels **22** and **24**, respectively.

An important feature of this invention resides in the fact that the mechanism may be operated easily and properly by a child to provide music only when it is desired. For this purpose, an operating lever **26** is pivoted to the side of the music box support, as seen more clearly in Fig. 3, and extends rearwardly to a point aft of the rear carriage axle **30**. This lever **26** is provided with a notch **28** engageable with the axle **30**, and is held against the axle by means of a spring **32** connected between the axle and the lever in such a manner as to urge the lever in a clockwise direction about its pivot. The notch **28** is so located on the lever **26** as to space the music box, and consequently the driving wheel **22**, away from driving engagement with the carriage wheel **24**. This broken engagement is shown in Fig. 2. When the child desires to have music, he merely lifts upwardly on the end **34** of the lever **26** so as to break the locking engagement between the notch **28** and axle **30** whereupon the spring **32** slides the entire box rearwardly and into operative driving engagement with the wheel **24**. Now as the carriage is moved along the floor, the wheel **22** will be rotated for operating the music-producing mechanism in the music box **10**. It will be appreciated at this point, that even the most unskilled person can operate this arrangement to produce music only when it is desired.

An alternative arrangement of this invention is shown in Figs. 4 and 5 in which the carriage **6** is provided with a metal frame piece **36** having a flat horizontal upper surface **38** on which the music box **10** may be mounted. This frame piece **36** is provided with two longitudinally extending slots **40** through which extend fastening rivets **42** which serve in allowing movement of the box **10** longitudinally of the frame piece **36**, but which are sufficiently tight to prevent undue looseness. The operating lever **26*a*** is pivotally secured to one side of the music box the same as in the embodiment of Fig. 1, selectively to provide music as desired. A spring **32*a***, identical to spring **32** in Fig. 3, serves to draw the music box **10** rearwardly into operating engagement with the buggy wheel when the operating lever **26*a*** is lifted out of locking engagement with the rear axle **30*a***.

From the foregoing it will be appreciated that a selectively operable musical doll carriage is provided which is the ultimate in simplicity of construction and operation and which therefore may be enjoyed without encountering undue expense or operational complexities.

What is claimed is:

1. A musical doll carriage of the character described comprising a doll carriage having a frame and supporting wheels and axles, a music-producing device mounted on said frame and having an operating connection therewith which provides for relative movement between said device and said frame, an operating wheel operatively connected to said device and being positioned adjacent one

of the carriage wheels, said device being movable to provide an operative connection between said one carriage wheel and said operating wheel for actuating said device, and a manipulable linkage for moving said device selectively into and out of operative engagement with said one carriage wheel and comprising a lever pivotally affixed to said device and provided with a notch engageable with one carriage axle for positioning said device out of actuating engagement with said one carriage wheel, and a spring operatively connected between said device and said one axle and serving to urge said device into actuating engagement with said one carriage wheel.

2. A musical doll carriage of the character described comprising a doll carriage having a frame and supporting wheels and axles, a music-producing device mounted on said frame and having an operating connection therewith which provides for relative movement between said device and said frame, said device having guide flanges slidably engaging said frame and fastening means for supporting said device on said frame, an operating wheel operatively connected to said device and being positioned adjacent one of the carriage wheels, said device being movable to provide a driving engagement between said one carriage wheel and said operating wheel for actuating said device, and a manipulable linkage for moving said device selectively into and out of engagement with said one carriage wheel and comprising a lever pivotally affixed to said device and provided with a notch engageable with one carriage axle for positioning said device out of actuating engagement with said one carriage wheel, and a spring operatively connected between said device and said axle and serving to urge said device into actuating engagement with said one carriage wheel.

3. A musical doll carriage of the character described comprising a doll carriage having a frame and supporting wheels and axles, a music-producing device mounted on said frame and having an operating connection therewith which provides for relative movement between said device and said frame, said device having guide flanges slidably engaging said frame and fastening means for supporting said device on said frame, an operating wheel operatively connected to said device and being positioned adjacent one of the carriage wheels, said device being movable to provide a driving engagement between said one carriage wheel and said operating wheel for actuating said device, and a manipulable linkage for moving said device selectively into and out of engagement with said one carriage wheel and comprising a lever pivotally affixed to said device and provided with a notch engageable with one carriage axle for positioning said device out of actuating engagement with said one carriage wheel, and a spring operatively connected between said lever and said one axle and serving to urge said lever into locking engagement with said axle and said device into actuating engagement with said one carriage wheel.

4. A musical doll carriage of the character described comprising a doll carriage having a frame and supporting wheels and axles, a music-producing device mounted on said frame and having an operating connection therewith which provides for relative movement between said device and said frame, an operating wheel operatively connected to said device and being positioned adjacent one of the carriage wheels, said device being movable to provide an operative connection between said one carriage wheel and said operating wheel for actuating said device, and a manipulable linkage for moving said device selectively into and out of operative engagement with said one carriage wheel and comprising a member pivotally affixed to said device and provided with locking means operable to lock said device in position with respect to said axle and frame, said means serving to position said device out of engagement with said one carriage wheel, and means operatively engaging said device and said doll carriage and serving to yieldably urge said device into actuating engagement with said one carriage wheel.

5. A musical doll carriage of the character described comprising a doll carriage having a frame which carries two transporting axles at the lower extremities thereof, supporting wheels on said axles, a music-producing device reciprocably mounted on the lower portion of one leg of said frame adjacent the respective axle, a pin and slot attachment for mounting slidably said device on said frame and having one part thereof on said frame and the other part on said device, said attachment permitting only rectilinear movement of said device with respect to said lower leg portion, a lever pivotably secured to said device and extending generally parallel to said one frame leg, locking means on said lever and operative to lock said device against movement on said one frame leg, an operating wheel operatively connected to said device and being operatively engageable with one carriage wheel for actuating said device, said locking means being operable to hold said operating wheel into operative engagement with said one carriage wheel whereby transporting movement of said carriage will serve to operate said device.

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