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MOTOR MOUNTING FOR TOY LOCOMOTIVES

Original Filed Aug. 2, 1934

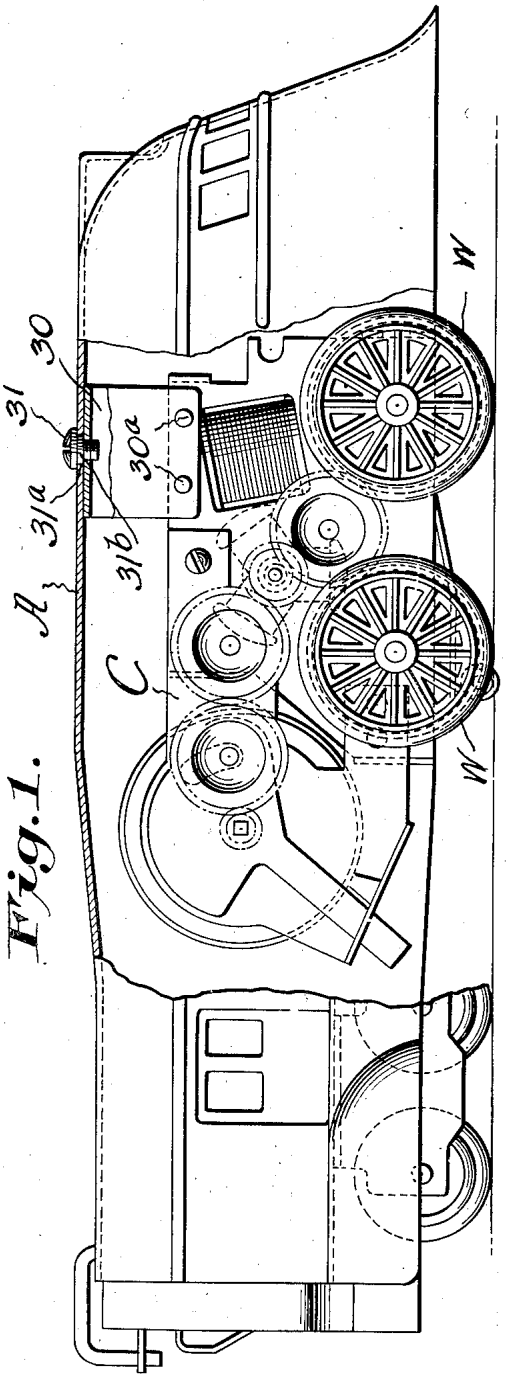

Fig. 1.

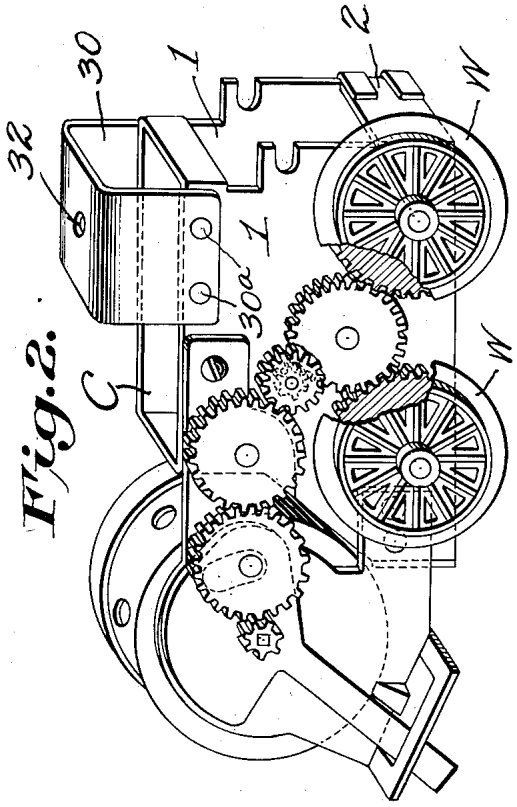

Fig. 2.

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MOTOR MOUNTING FOR TOY LOCOMOTIVES

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5 Claims. (Cl. 46—48)

This invention relates to toy trains and more particularly to an improvement in toy locomotives whereby the motor unit may be easily and conveniently mounted.

To that end, the invention contemplates a novel arrangement for connecting the motor unit with the casing or housing in a simple, expeditious and reliable manner. Heretofore, it has been the practice to mount the motor unit in such a way that it is more or less difficult to readily and easily remove the same from the body or housing in the event that repairs or adjustments are necessary, and the present invention seeks to overcome this objection and at the same time permit the motor unit to swivel or pivot freely with reference to the casing, thereby to adapt the locomotive to readily follow track curves.

This invention has been divided out of my application, Serial No. 738,144, filed August 2, 1934.

With the above and other objects in view which will more readily appear as the nature of the invention is better understood, the same consists in the novel features of construction, combination and arrangements of parts as will be hereinafter more fully described, illustrated in the accompanying drawing and defined in the appended claims.

A preferred and practical embodiment of the invention is shown in the accompanying drawing, in which:—

Figure 1 is a side elevation of a toy locomotive with a portion of the casing or housing broken away to expose the motor unit and its mounting.

Figure 2 is a detail perspective view of the motor illustrating a portion of the mounting means.

Similar reference characters designate corresponding parts throughout the several figures of the drawing.

According to the embodiment of the invention shown in the drawing, the same includes in its organization a locomotive including a casing or body A, the same being provided with a wheeled motor unit C which may be of the electrical or spring motor type. The said motor unit C comprises a frame including the side plates 1—1 suitably connected and spaced by end walls 2 to receive therebetween the motor which is suitably geared to the track wheels W so that the motor may propel the locomotive in accordance with the well known practice.

The distinctive feature of the invention resides in providing means for connecting the motor to the casing or housing in such a way that it may be readily detached when desired, while on the other hand, when the motor unit is assembled to the body it will be securely held in place and have the capacity to swivel or pivot with reference to the body so that the locomotive may freely adjust itself to track conditions. As will be observed from the drawing, the particular means shown for accomplishing the above object comprises an attaching bracket 30 which cooperates with a single fastening element 31. As will be observed from Figures 1 and 2, the bracket is of substantially U-shaped formation so as to straddle the side plates 1—1 of the motor frame to which it may be secured by the fastenings 30a. The upper portion or web of the bracket 30 may be provided with a threaded opening 32 for receiving the threaded shank of the headed clamping and fastening screw 31 which passes through an opening in the casing A. The single fastening 31 is readily accessible from an exposed face of the body or casing A so that in assembling the motor unit and the body, it is only necessary to position the bracket with the opening 32 beneath the opening 31a in the casing or body and insert the fastening 31, which may be tightend to unite the motor and the body. The removal of the screw will readily release the entire motor unit from the body.

The type of motor mounting or fastening means above described, clearly provides a simple and expeditious means for connecting the motor frame with the casing.

As will be observed from the drawing, the opening 31a in the body or casing A is preferably larger than the opening 32 so as to receive the shoulder or collar portion 31b of the fastening 31. This shoulder or collar serves to space the bracket 30 properly with reference to the inside face of the casing or housing so that when the fastening is placed in position the parts will be securely united, yet sufficient play is permitted between the parts to permit the motor to swivel with reference to the body.

Although the present disclosure is based on a screw type of fastening or connection between the motor frame and the body, nevertheless it will be understood that it is within the scope of the invention to use any type of fastening which will perform the functions of holding the motor unit assembled to the casing while at the same time permitting of relative pivotal movement between the motor unit and the body or casing of the car or locomotive which houses the same.

Without further description it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art.

and it will of course be understood, that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention and scope of the appended claims.

I claim:—

1. A toy locomotive including in combination, a casing simulating a locomotive body and including a roof portion, a propelling unit concealed within the casing, means arranged between the propelling unit and the under side of the roof of the casing for supporting and spacing the latter with reference to the propelling unit proper, and means for connecting said last named means and the roof of the casing.

2. A toy locomotive including in combination, a casing simulating a locomotive body and having a roof portion, a propelling motor unit including a frame, and a single fastening detachably connecting said frame to said roof portion.

3. A toy locomotive including in combination, a casing simulating a locomotive body and including a roof portion, a propelling motor unit including a frame, and a single fastening pivotally connecting said frame to said roof portion of the locomotive body.

4. A toy locomotive including in combination, a casing simulating a locomotive body and including a roof portion, a propelling motor unit including a frame, and a fastening connection movably suspending said frame from the roof portion of the locomotive body, said fastening connection being accessible from outside of said body.

5. A toy locomotive including in combination, a casing simulating a locomotive body and having a roof portion, a propelling motor unit including a frame, and a single fastening screw detachably connecting said frame with the said roof portion of the body and accessible to manipulation from the outside of the body.

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