

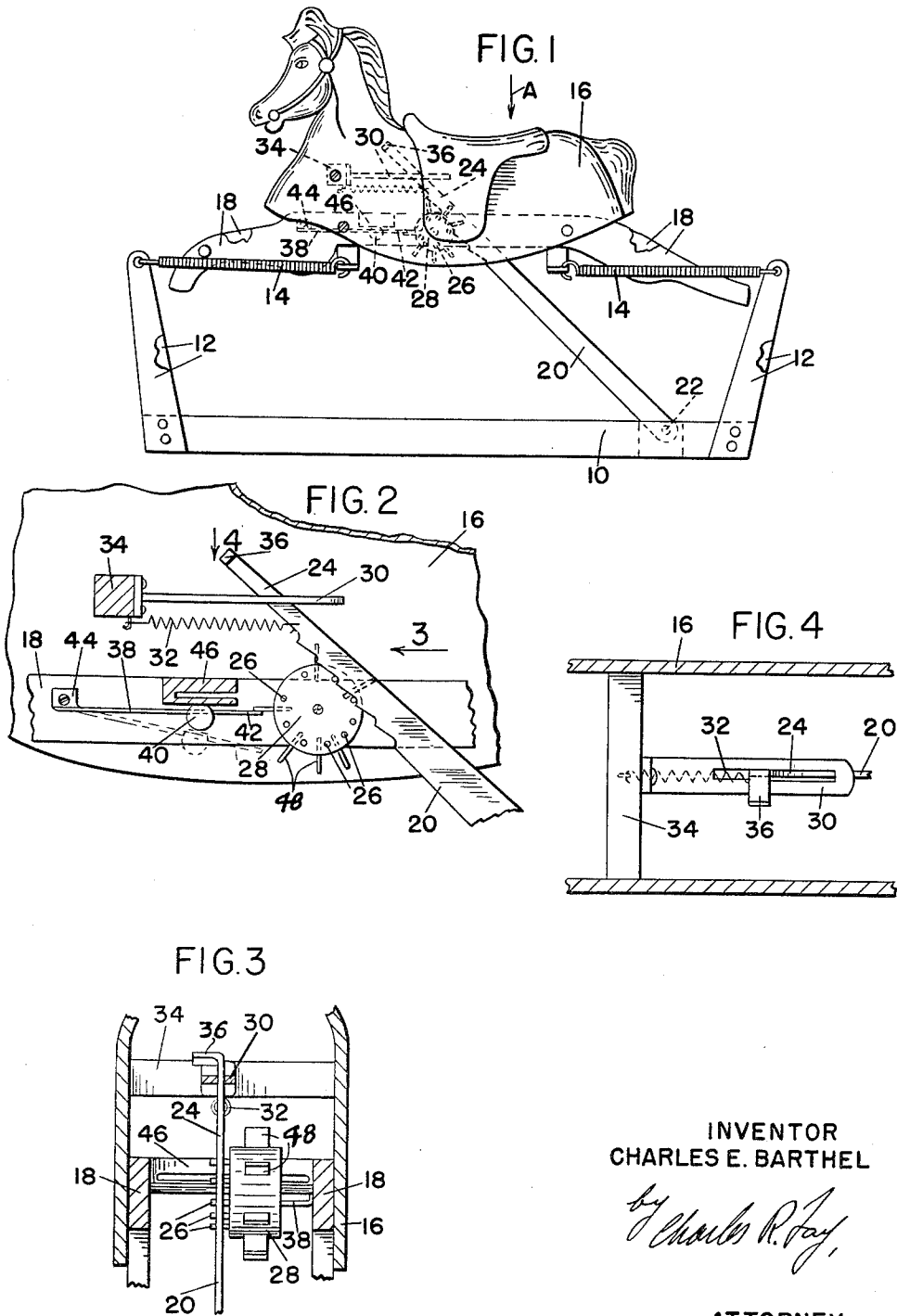
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SOUND-PRODUCING MECHANISM FOR A CHILD'S AMUSEMENT DEVICE

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SOUND-PRODUCING MECHANISM FOR A
CHILD'S AMUSEMENT DEVICE

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3 Claims. (Cl. 272—53.2)

This invention relates to a sound-producing mechanism for a child's amusement device and in general the invention is particularly adapted to be applied to a bouncing seat which may be spring-mounted or otherwise arranged for vertical motion under influence of the child. More particularly, the seat may assume the form of an animal such as a horse, and the primary object of the invention resides in the provision of sound-producing means associated with said device to imitate the sound of a horse trotting or galloping, although the mechanism may be used to imitate other sounds also.

Another object of the invention resides in the provision of sound-producing means which is substantially concealed within the body of the seat of a hobby-horse and which is automatically actuated by the action of the seat of the hobby-horse in moving up-and-down under the influence of jouncing thereon on the part of the child. Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which:

Fig. 1 is a view in elevation illustrating the invention, parts being broken away and in section;

Fig. 2 is a view in elevation on an enlarged scale showing the sound-producing mechanism; and

Figs. 3 and 4 are detail views with parts omitted and looking in the directions of the respective arrows in Fig. 1.

In carrying out the present invention, it is to be understood that the same may be applied to any seat or amusement device of the nature described, but the invention has been illustrated as applied to a hobby-horse. This hobby-horse has a base 10 and end supports 12 to which are secured springs 14, there being a hollow horse's body indicated at 16 mounted on spaced, longitudinal bars 18 to which these springs are attached for vertical motion of the body 16 in the direction of the arrow A, as the child sits upon the horse's back and jounces thereon. Of course the springs allow some lateral and tilting motion also, and the construction of the invention is such that these motions do not disturb the apparatus in any way but the same continues to make the wanted sounds as long as there is a component of vertical motion present.

The invention comprises a bar 20 loosely pivoted at 22 to the base 10 and extending slantingly upwardly and forwardly into the body and hollow head of the hobby-horse. This bar is provided with an end portion 24 provided with slanted teeth which engage lateral pins 26 on a rotary toothed wheel 28 mounted between the side bars 18 of the hobby-horse and completely concealed inside the body.

As the horse's body moves up and down, the bar 20 will cause the toothed wheel 28 to rotate intermittently in a counter-clockwise direction by engaging the pin 26 and bar 20 may be made to continuously engage the pins by means of a slotted guide-bar 30 and a spring 32 which are conveniently mounted on a cross-piece 34 in the body of the horse. The bar 20 has an end limit flange 36.

A leaf-spring 38 having a clapper 40 and an actuator extension 42, is mounted in fixed relation at 44 also on a bar 18 within the body of the horse, and when actuator 42 is moved downwardly and then released by a tooth on the

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wheel 28, the clapper 40 will snap back under influence of the spring 38 and strike the sound-block 46. This sound-block is also conveniently mounted by any means in fixed relation within the body of the horse, preferably between the bars 18.

It will be seen that the percussion noise occasioned by the clapper striking the sound-block will imitate the sound of the horse's hooves and the sounds will take place according to the amount of up-and-down reciprocation of the horse's body under influence of the child sitting thereon and jouncing upon it. These sounds can imitate the horse's hooves or they may be made to sound like a gun, so that the child can pretend to be shooting a toy pistol, or the like, or he may pretend that the noises are those of the horse's hooves in running or galloping.

By arranging the teeth 48 circumferentially of the wheel in irregular sequences, the sounds may be made in a sequence to imitate cantering, trotting, etc. By locating the bar 20 in the position shown, it will extend into the hollow head of the hobby-horse upon violent up-and-down motion thereof, but in any case it will not strike the low, saddle portion of the hobby-horse at any time, regardless of the action of the hobby-horse.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A child's amusement device comprising a base, springs on the base, a hollow seat floatingly mounted by the springs for vertical motion of the seat relative to the base, said seat being spaced vertically from the base, a bar on the base, said bar being substantially exposed and having a toothed portion extending into the seat, a sound-block in the seat, means to strike the block to create a percussive sound, means to actuate the sound-block striking means, said toothed bar being engaged with the actuating means and operating the same upon motion of the seat relative to the frame.

2. A child's amusement device comprising a base, springs on the base, a hollow hobby-horse body floatingly mounted by the springs for vertical motion of the body relative to the base, a toothed bar on the base, said bar extending into the body, a sound-block in the body, resilient clapper means to strike the block to create a percussive sound, a rotary toothed wheel to actuate the sound-block striking means, said toothed bar being engaged with the wheel and operating the same upon motion of the body on the frame, said bar extending into the head of the hollow hobby-horse body.

3. A child's amusement device comprising a base, springs on the base, a hollow headed body floatingly mounted by the springs for vertical motion of the body relative to the base, a toothed bar on the base, said bar extending into the body, a sound-block in the body, resilient clapper means to strike the block to create a percussive sound, a rotary toothed wheel to actuate the sound-block striking means, said toothed bar being engaged with the wheel and operating the same upon motion of the body on the frame, said bar having a free end extending into the head of the body, means on the clapper at one side of the toothed wheel and engaged by the teeth thereof seriatim to cause the clapper alternately to be drawn from the sound-block and released to strike the same.

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