Feb. 21, 1928.

1,660,252

J. BUTTIGIEG

ANIMATED TOY

Filed June 11, 1926

Fig. 1.

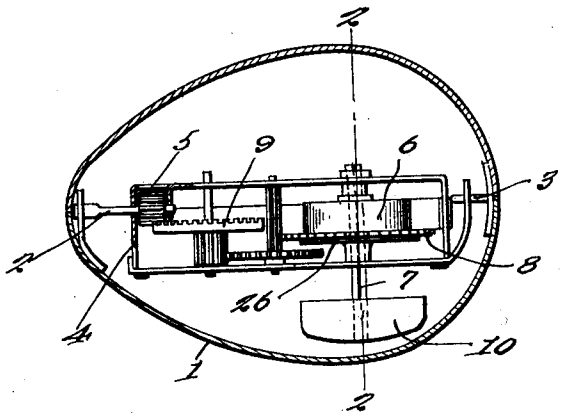
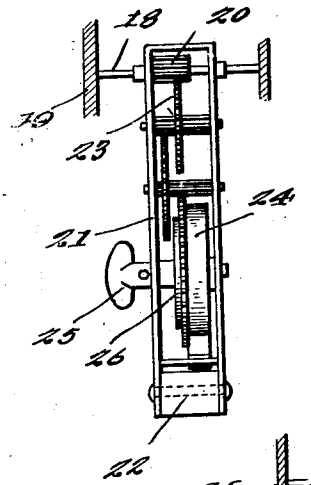


Fig 2.

Fig 4.



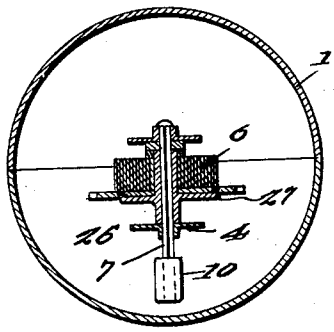
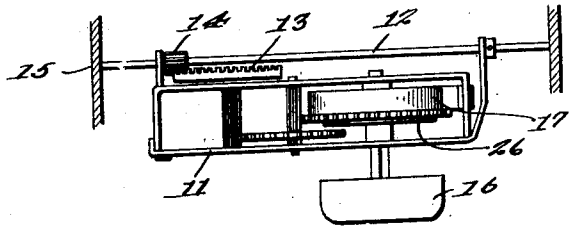


Fig. 3.



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WITNESS:

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UNITED STATES PATENT OFFICE.

JOHN BUTTIGIEG, OF ELGIN, ILLINOIS.

ANIMATED TOY.

Application filed June 11, 1926. Serial No. 115,318.

My present invention has reference to what I will term animated toys, that is, toys representing different objects and having motor actuated means concealed therein for imparting varying motions to the toys.

A further object is the provision of a mechanical movement for toys, in which the body of the toy has fixed thereon the ends of a shaft which carries a pinion and from which shaft there is hung a light frame that carries a spring motor driven train of gears, one of which gears being in mesh with the pinion, and which frame is normally hung pendent on the shaft, but the turning of the gears will impart a rotary motion thereto so that the said shaft which is fixed to the body of the toy will cause the rolling thereof; a manipulation of the toy figure, however, will cause the frame to revolve on the shaft and thereby cause the body to be alternately balanced and unbalanced and thus caused to jump, dance or wiggle.

To the attainment of the above broadly stated objects and others which will appear as the nature of the invention is better understood, the improvement further resides in certain novel features of construction, combination and operative association of parts, a satisfactory embodiment of which is illustrated by the drawings which acompany and form part of this application.

In the drawings:

Figure 1 is a view of a toy in accordance with this invention, the casing being in section.

Figure 2 is a sectional view on the line 2—2 of Figure 1.

Figure 3 is a side elevation of a slightly modified form of motor, the casing on which the fixed shaft is supported being in section.

Figure 4 is a view substantially similar to Figure 3 but illustrating a further modified form of motor.

In Figures 1 and 2 of the drawings, the hollow casing 1 is egg shaped. The casing is constructed of two sections, which when assembled, are soldered or otherwise secured together.

Fixed in diametrically opposite bearings or members in the ends of the hollow body 1, there are shafts 2 and 3, respectively. Hung from these shafts there is a light substantially rectangular frame 4. The shaft 2 has fixed thereon a pinion 5 which is received in the frame 4, the top of the frame having a down bent portion provided with a bearing opening for the end of said shaft 2. Having its shafts journaled in bearings in the upper and lower walls of the frame there is a clock train, the spring for imparting motion to the train being indicated by the numeral 6. The clock train is of the usual construction, the spring being wound by a key operated shaft 7 to impart motion to a toothed wheel 8 which revolves the remaining gears, one of which is indicated by the numeral 9, being in mesh with the pinion 5. The depending handle or key 10 for the shaft 7 is weighted and, as disclosed by the drawings, is positioned near the end of the frame farthest from the pinion 5. It is to be noted that the clock train does not include the escapement wheel or the pallet therefor so that the spring motor driven train will revolve rapidly. The body 1 rests on a floor, table or like surface. When the clock train is in motion and the frame is held stationary in the body 1, the gear 9 will revolve the pinion 5, which being fixed to the body 1 will impart a rotary motion to the said body. Now if the operator manipulates the body 1 to cause the motor carrying frame to revolve on the shafts 2 and 3, the weighted key or handle 10 will serve as a fly wheel, with the result that a dancing, jumping or wiggling motion will be imparted to the body. When the body is held in the hand of the operator and his hand is imparted a gyratory or rotary motion, the frame will be revolved, but should be turned in an opposite direction from that just described so that the spring may be thus wound.

In Figure 3 of the drawings the frame 11 for the spring influenced train of gears is hung directly from a shaft 12, one of the gears 13 being in mesh with a pinion 14 which is fixed on the shaft 12 and the ends of the shaft are fixed on the sides of the body 15 of the toy figure. The winding key or handle 16 for the spring 17 of the motor train is weighted so that the frame will normally hang pendent from the shaft 12. In this instance, the body 15 is hollow so that the motor may be wound by turning the handle 16, and primarily the frame is not designed to be revolved around the shaft, but the clock train will impart movement to the said shaft which will cause a dancing or jumping movement as is true with respect to the constructions disclosed in Figures 1 and 2 if the said toy is placed on a table so that the spring motor is in a

horizontal position. However, when the device is suspended and the spring motor is in a vertical position then a whirling or wiggling motion will be effected.

In Figure 4 a shaft 18 is fixedly secured to the sides 19 of the frame. On this shaft there is a fixed pinion 20 and suspended from the shaft there is a frame 21 for a clock train similar to that above described. The lower end of the frame is weighted, as indicated by the numeral 22 and one of the gears of the clock train is in mesh with the pinion 20. The spring 24 for the clock train has a handle 25 on its shaft whereby the spring can be wound. All of the shafts for the springs may have fixed thereon ratchet wheels. These wheels are in the nature of thin flat discs 26 that are indented to provide the same with fingers or pawls 27, the latter engaging in suitable notches or depressions in the toothed wheels of the winding springs. The operation of the figure by the motor in the construction disclosed by Figure 4 is similar to that above described.

It will be apparent that my improved motor construction can be readily attached in the bodies of toys that represent various objects, animals, reptiles, etc., and that the motor will cause such bodies to roll, dance, jump or wiggle. Should a toy, such as illustrated in Figures 1 and 2 of the drawings be suspended in a handkerchief or the like a mysterious wiggling action will be imparted to the portion of the handkerchief in which the toy is arranged, which illustrates only one of a number of perplexing and amusing uses of which the improvement is susceptible.

While I have illustrated satisfactory embodiments of my improvement as it now appears to me it is, of course, to be understood that I do not wish to be restricted to the precise details of construction herein set forth and hold myself entitled to make all such changes therefrom as fairly fall within the scope of what I claim.

Having described the invention, I claim:—

A toy of the character described comprising an egg shaped hollow body, a stationarily mounted shaft coincident with the longitudinal axis thereof and secured at its ends with respect to the body, a rectangular frame eccentrically pivoted upon said shaft, a pinion fast upon said shaft within one end portion of the frame, a spring motor mounted in said frame and embodying a shaft carrying a weight, and a train of gears driven by the spring motor and engaging said pinion for effecting rotation of the first named shaft and consequently the body when the frame remains in a certain position with the weight lowermost, the body on account of its shape being furthermore capable of a plurality of compound erratic movements upon shifting of the weight and frame and spring motor with respect to the body.

In testimony whereof I affix my signature.

JOHN BUTTIGIEG.