T. A. KILLMAN.

WALKING TOY.

APPLICATION FILED DEC. 29, 1908.

950,536.

Patented Mar. 1, 1910.

2 SHEETS—SHEET 1.

Fig. 3.

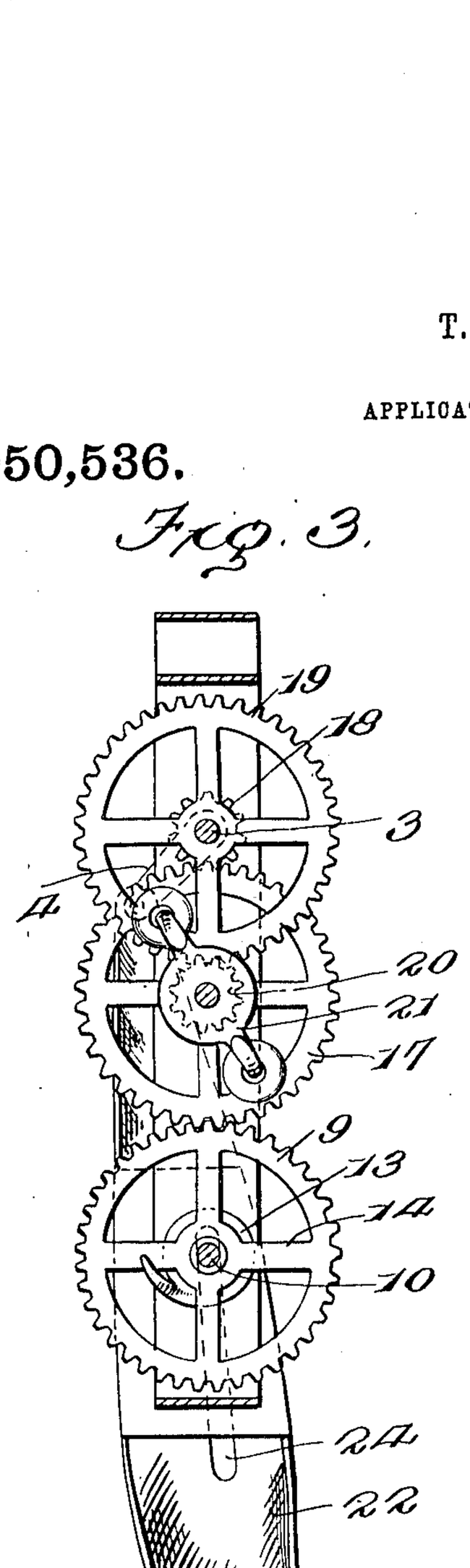
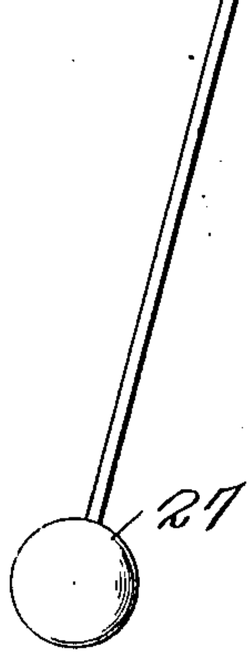


Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

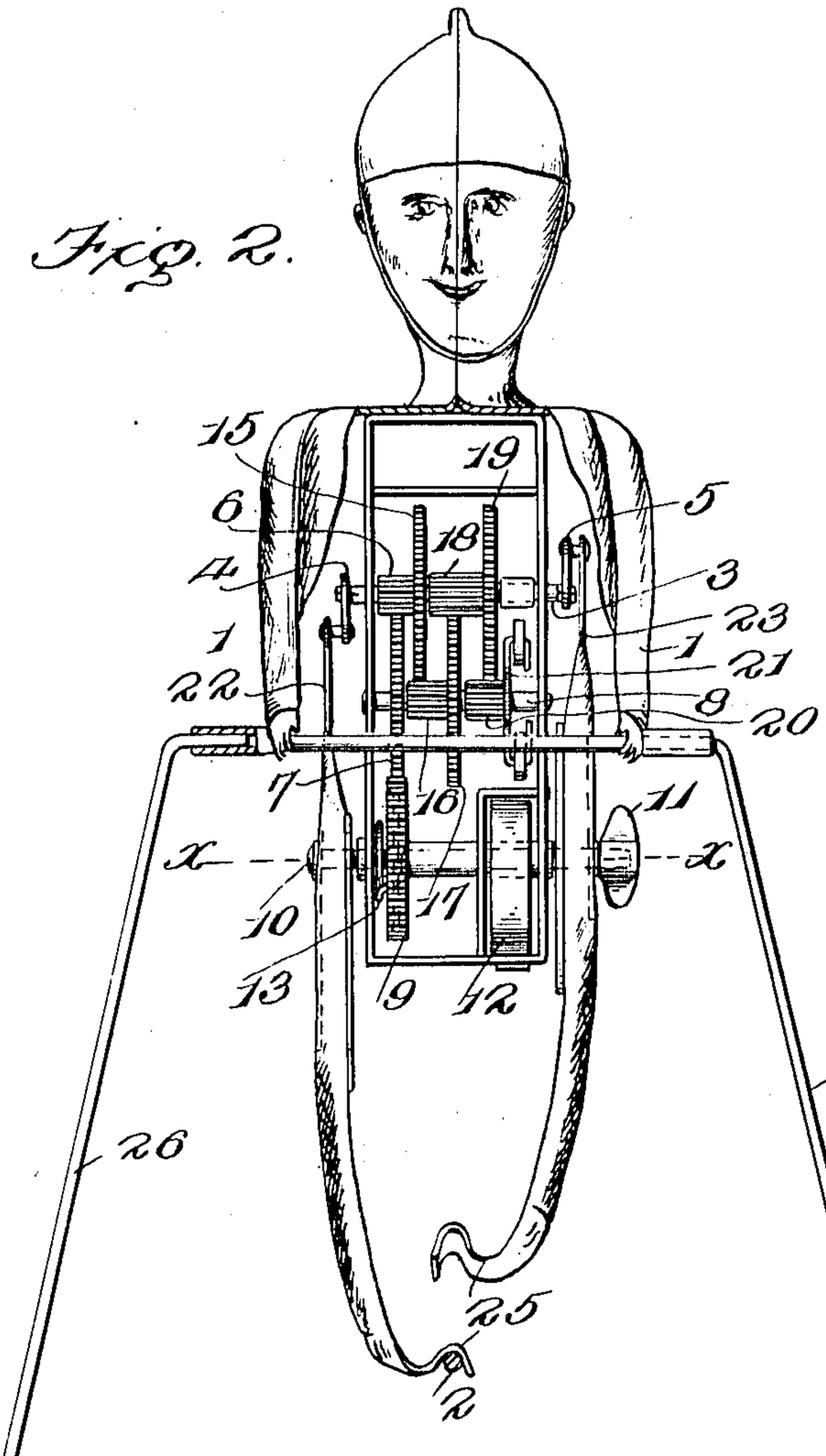
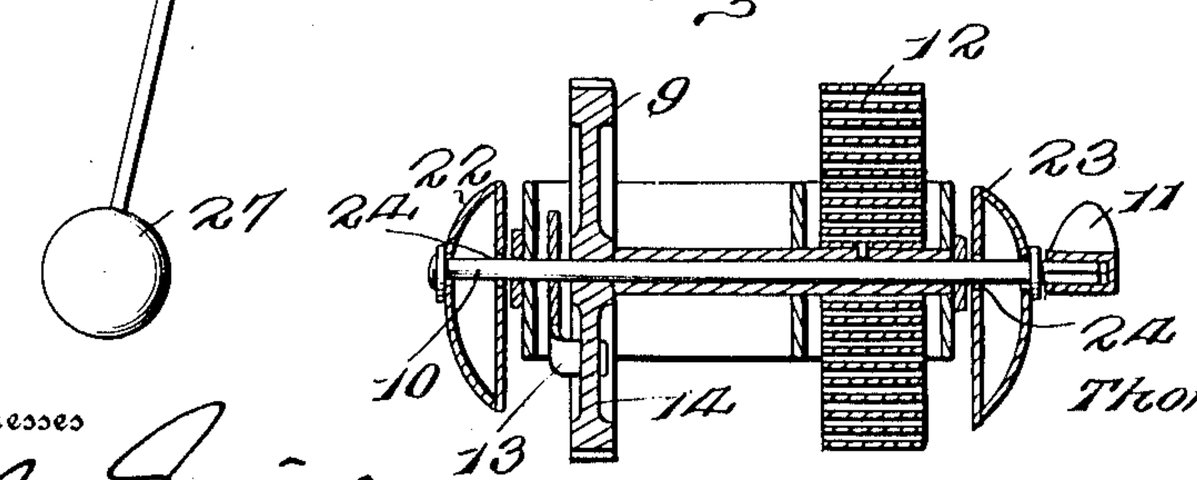


Fig. 4.



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UNITED STATES PATENT OFFICE.

THOMAS A. KILLMAN, OF NASHVILLE, TENNESSEE, ASSIGNOR TO AMERICAN TOY COMPANY, OF NASHVILLE, TENNESSEE.

WALKING TOY.

950,536. Specification of Letters Patent. Patented Mar. 1, 1910.

Application filed December 29, 1908. Serial No. 469,809.

To all whom it may concern:

Be it known that I, THOMAS A. KILLMAN, citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Walking Toys, of which the following is a specification.

The present invention appertains to toys and more particularly to the class of toys which are constructed to be self-propelling and designed as walking toys, the purpose being specifically to devise a toy to move along an elevated wire or cord, the toy being counterbalanced to maintain an equilibrium and supplied with actuating means to impart an oscillatory movement to the propelling members, whereby the toy receives a step by step movement along the supporting wire or cord as it advances.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side view of a toy embodying the invention; Fig. 2 is a front view thereof; Fig. 3 is a side view of the train of gearing showing the parts on a larger scale, the frame being in section; and, Fig. 4 is a horizontal section on the line *x*—*x* of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The toy may be of any configuration and designed according to the object represented thereby. As illustrated the figure represents a human form and comprises a body and oscillating members, the latter representing the legs or lower limbs and having positive movement imparted thereto. The body is provided with forwardly extended arms 1 which are fitted and counterbalanced for holding the toy in upright position upon the wire or cord 2. Within the body is arranged the propelling means consisting of a train of gearing and a driving spring. The train of gearing embodies a governor and balance whereby the movement of the toy is controlled or rendered comparatively steady and uniform. A shaft 3 has its end portions extended and provided with cranks 4 and 5 which are fast thereto. A pinion 6 fast to the shaft 3 meshes with a gear wheel 7 fast to a shaft 8 which in turn is in mesh with a gear wheel 9 loose upon a shaft 10 whose end portions extend and which is provided at one of its ends with a key 11. A spring 12 mounted upon the shaft 10 has one end connected thereto and its opposite end attached to the frame or other part of the toy. A pawl 13 is carried by the shaft 10 and coöperates with ratchet teeth 14 fitted to the gear wheel 9. When winding the spring 12 the pawl 13 rides upon the teeth 14 without imparting movement to the gear wheel 9. The governor mechanism for controlling the speed and carrying the vibratory members past dead points comprises a gear wheel 15 fast to the pinion 6 and in mesh with a pinion 16 loose upon the shaft 8. A gear wheel 17 fast to the pinion 16 meshes with a pinion 18 loose upon the shaft 3 and having a gear wheel 19 connected therewith and in mesh with a pinion 20 loose upon the shaft 8, said pinion having weighted arms 21.

The vibrating members 22 and 23 are pivotally connected at their upper ends to the respective cranks 4 and 5 and are formed intermediate of their ends with longitudinal slots 24 through which end portions of the shaft 10 pass. The lower ends of the vibrating members are provided with feet 25, which are grooved in their lower faces, so as to fit over the wire or cord 2 and prevent lateral displacement of the toy when placed in position upon the wire or cord. The feet 25 face inward so as to aline and engage with the wire or cord 2. The longitudinal slots 24 are the width to receive the projecting end portions of the shaft 10 upon which the members 22 and 23 both oscillate and have a longitudinal movement. The cranks 4 and 5 have a diametrical arrangement, hence the feet 25 of the members 22 and 23 pass over each other in the operation of the members 22 and 23. The cranks 4 and 5 impart a two-fold movement to the members 22 and 23, whereby said members both vibrate and move longitudinally with the result that the feet 25 are alternately carried forward, thence downward, rearward and backward. When the advancing feet engage the wire or cord and continue to move downward the toy is lifted, thereby permitting the foot previously engaged with the wire or cord to rise and clear the wire or cord and in turn move upward, forward and downward, so as

to impart a continued forward movement to the toy. This operation is continued so long as the spring 12 is wound sufficient to impart movement to the vibrating members 22 and 23. By having the feet 25 extended laterally inward from the vibrating members they are enabled to clear each other in the forward movement of the toy.

The counterbalancing means consists of a wire 26 having its end portions bend downwardly and provided with weights 27. For convenience the end portions of the wire may be separated from the intermediate horizontal portions, so as to be disconnected and admit of the toy being packed in small space. The joints between the sections of the wire may be of any nature to admit of the parts being readily separatd or connected, a slip joint being preferable.

It is to be understood that the operating mechanism may be housed within the body, so as to be protected and concealed from view, thereby preventing any one tampering therewith.

The toy may be of any size or construction and may be formed of pressed metal or other material suitable for the purpose.

Having thus described the invention, what is claimed as new is:

1. A walking toy comprising a body portion having arm members, a transverse bar connecting said arm members and provided with depending rods diverging laterally on opposite sides of the body and provided with terminal weights, vibrating members fitted to the body and provided with longitudinal slots, extensions projected from the body and arranged to operate in the longitudinal slots of said vibrating members, a shaft having oppositely disposed cranks connected with the respective vibrating members to impart a combined oscillatory and sliding movement thereto, and means for operating said shaft.

2. In a toy of the character specified the combination of a body, vibrating members fitted to the body, means for imparting a combined sliding and oscillatory movement to said members, and feet projecting laterally inward from said vibrating members and provided with transverse grooves adapted to aline and engage with supporting wire or cord.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS A. KILLMAN. [L. S.]

Witnesses:

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