L. W. Taylor,

Automaton Toy.

No. 90,700. Patented June 1. 1869.

Fig. 1.

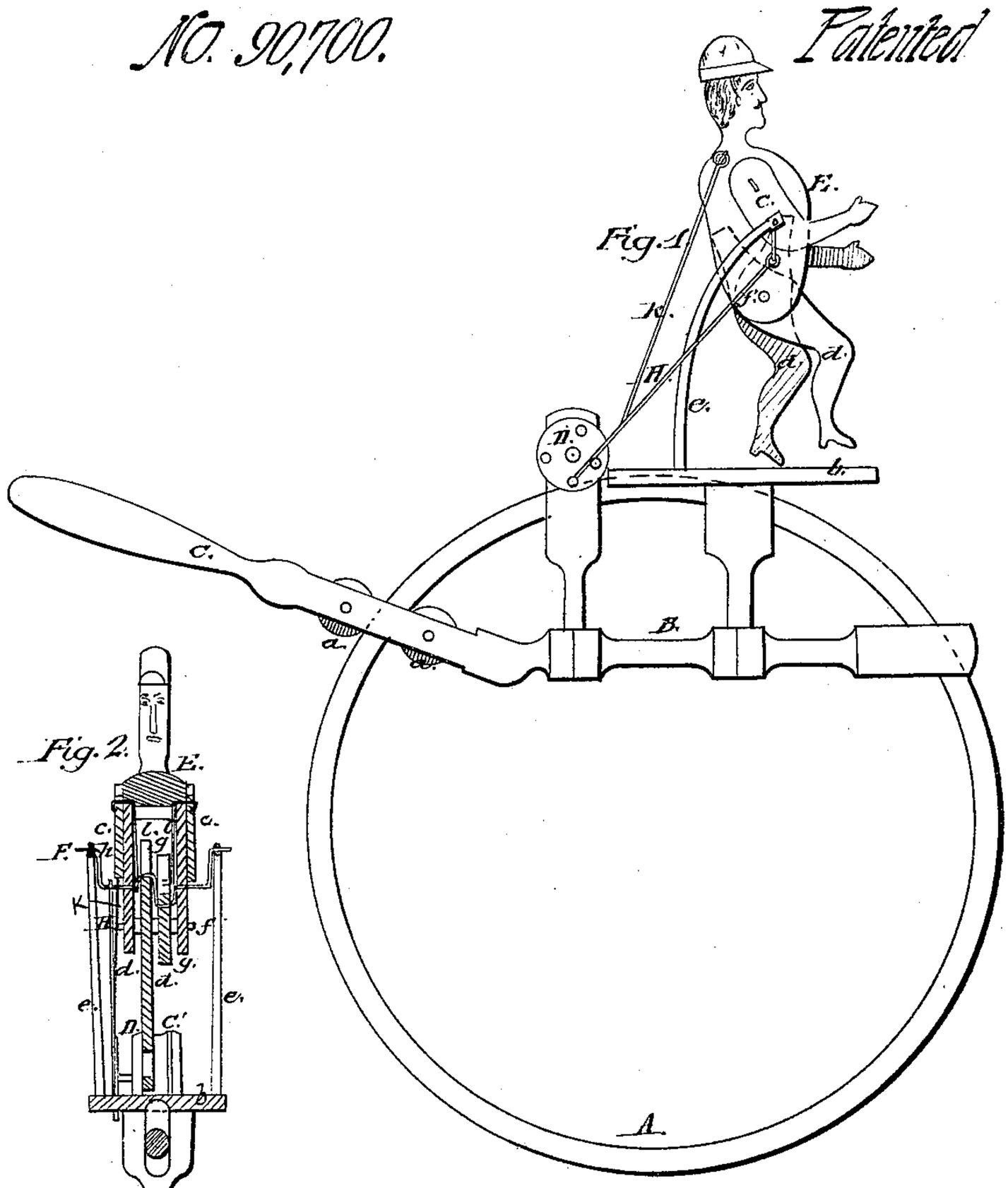


Fig. 2.

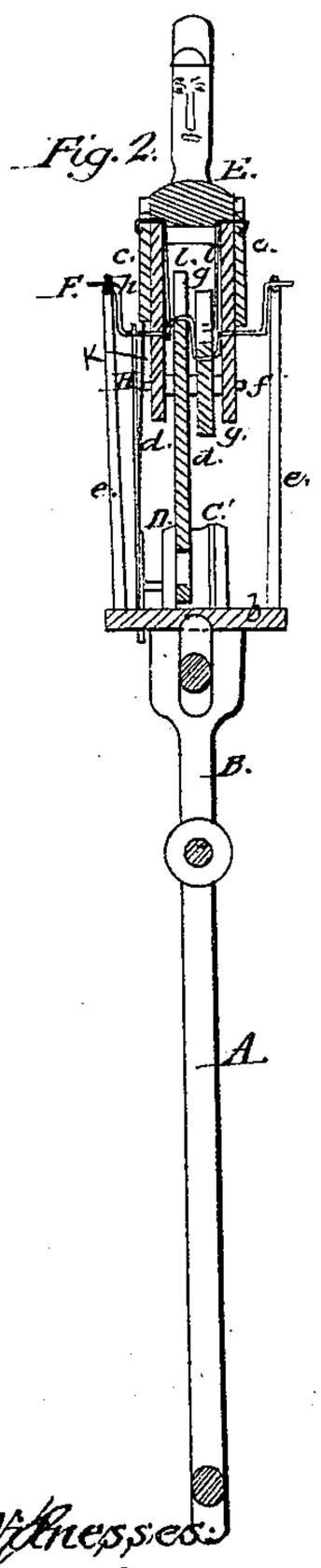


Fig. 3.

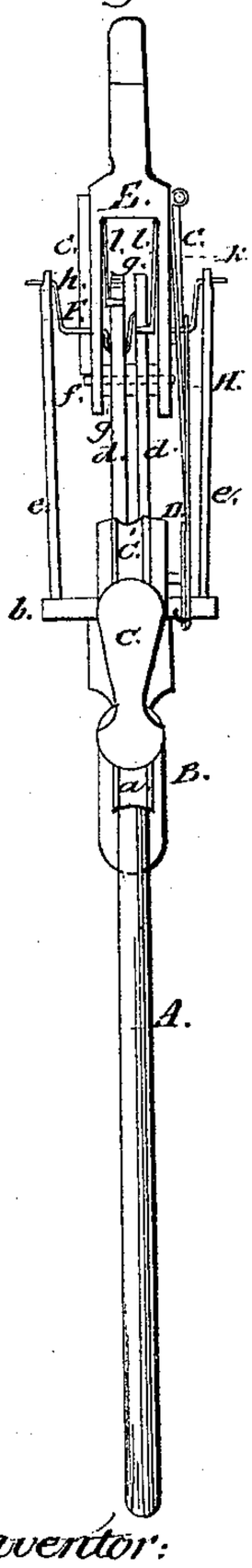
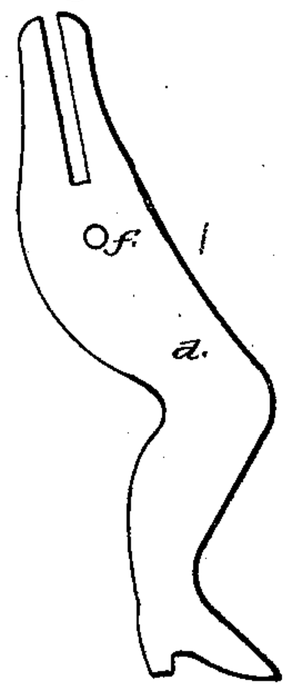


Fig. 4.



Witnesses:
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LUKE W. TAYLOR, OF WEATHERSFIELD, VERMONT.

Letters Patent No. 90,700, *dated June* 1, 1869; *antedated May* 28, 1869.

AUTOMATON HOOP.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, LUKE W. TAYLOR, of Weathersfield, in the county of Windsor, and State of Vermont, have invented a new and useful Improvement in Automaton Hoops; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, and

Figure 2, a transverse section of such a hoop, provided with my invention.

Figure 3 is a rear view of the automaton.

In such drawings—

A denotes an annulus or hoop, extended through slots in a frame, B, provided with a handle, C, the said handle being extended from the said frame in manner as represented.

The hoop or annulus goes between grooved friction-rollers *a a*, arranged within the handle, and at top rests against the periphery of a grooved wheel, C′, whose axle has a cranked wheel, D, fixed on it, and is supported by the frame A.

The frame A also carries a platform, *b*, over which is an automaton, E, having movable arms *c c*, and legs *d d*.

A cranked shaft, F, extends transversely through the body of the automaton, and has its journals supported in bearings formed in two curved standards *e*, projecting upward from the platform.

The two legs of the automaton are levers, which are pivoted to the lower part of the body, so as to be capable of turning on a fulcrum, *f*, going through it and them.

That part of each leg which extends above the fulcrum is forked or slotted, to receive one of two bell-cranks, *g g*, which project from the shaft F.

Figure 4 is a side view of one of the lever-legs, showing the upper part of it as forked or slotted, to receive the crank.

The form of the shaft and its cranks is shown in fig. 2, which exhibits the shaft as provided with two plain cranks, *h h*, whose wrists enter, and are supported by the standards *e e*.

A connecting-rod, H, having a branch, *k*, is pivoted to the crank-wheel, or crank of the driving-wheel shaft, and also to the shaft F, the upper end of the said branch being pivoted to the upper part of the body of the automaton.

Each of the arms *c c* is pivoted, near its upper part, to the body, so as to be capable of swinging in a plane parallel therewith.

From the journal of each primary arm, an auxiliary arm, *l*, bent near its lower end, at a right angle, extends, the part so bent being projected back of one of the upper parts of the leg-levers, in order that by the action of such parts of the leg-levers against the auxiliary arm, while the legs are in movement, and by the gravitating power of the primary arm, vibratory movements may be imparted to the said primary arms.

From the above, it will be seen that when a person having hold of the handle, and resting the hoop on the ground, moves such hoop along the surface of the ground, a rotary movement will be imparted to it, which will cause the ground-wheel C to revolve, and thereby revolve the crank-wheel D.

This will put the mechanism of the automaton in operation, whereby not only will its body be vibrated back and forward, but also each arm and leg will be put in vibration.

The whole constitutes a toy, designed for the amusement and exercise of a child.

I am aware that it is not new to arrange an automaton within a hoop, provided with a handle, and surrounded by another hoop, having wheels to support it on the periphery of the internal hoop, there being applied to the automaton and the internal hoop, a mechanism, which, by the action of the wheels of the outer hoop, while it is rolled on the ground, will put the legs of the automaton in vibration. I therefore make no claim to an automaton hoop so constructed and made to operate.

What I claim as my invention in my improved automaton hoop, as described and represented, is as follows:

I claim the arrangement, as well as the combination of the annulus A, the frame B, the driving-wheel C, and its crank or crank-wheel D.

Also, the arrangement of the automaton E, and its supporting frame B, with the annulus A, and the driving-wheel C.

Also, the combination for effecting the movements of the body and legs of the automaton, such combination consisting of the posts or standards *e e*, the shaft F, with its four cranks, the crank-wheel D, or its equivalent, and the branched connecting-rod, the whole being applied to the body and legs of the automaton, as set forth.

Also, the combination of the auxiliary arms *l* with the primary arms *c*, and the body and legs of the automaton, provided with mechanism as described, for operating them, in manner as set forth.

LUKE W. TAYLOR.

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