

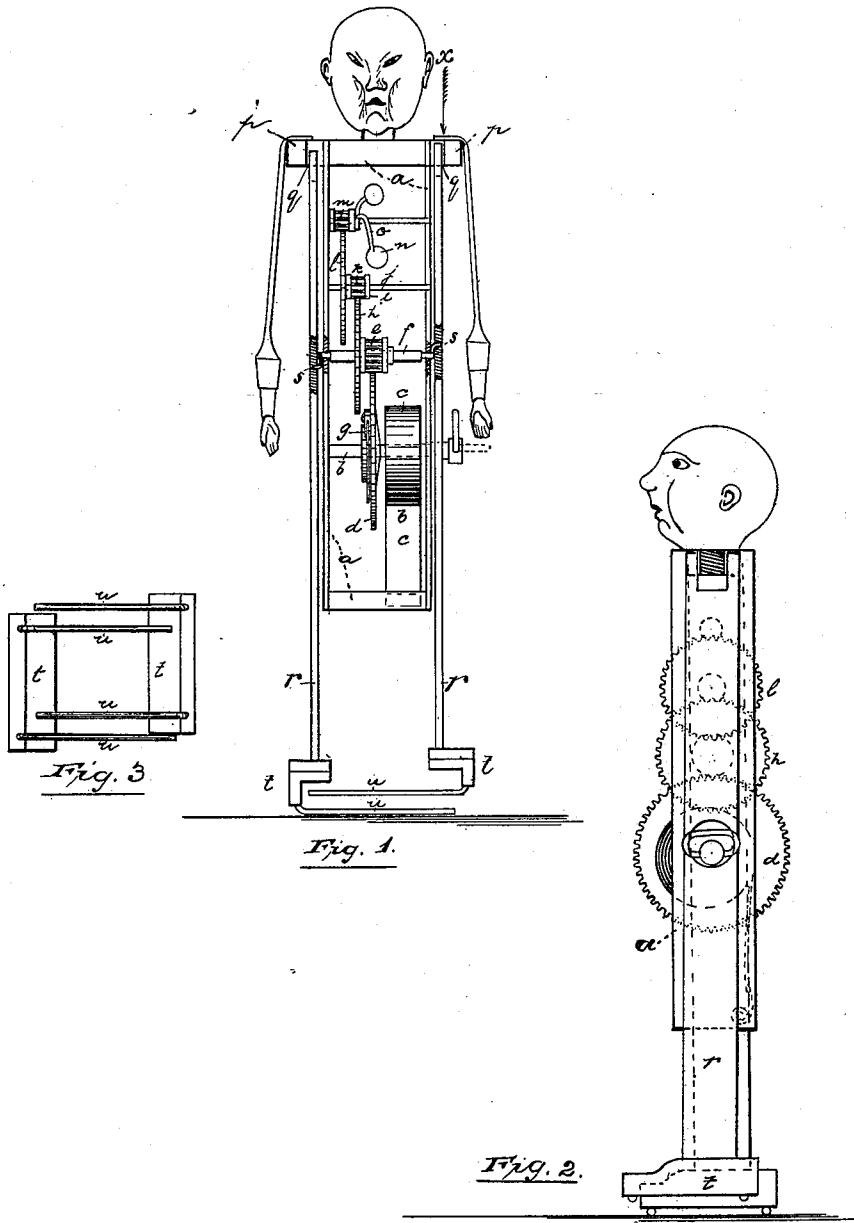
(No Model.)

F. W. PELOUBET.

WALKING DOLL.

No. 335,302.

Patented Feb. 2, 1886.



Attest:

Frederick F. Campbell.
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UNITED STATES PATENT OFFICE.

FRANCIS W. PELOUBET, OF NEWARK, NEW JERSEY.

WALKING DOLL.

SPECIFICATION forming part of Letters Patent No. 335,302, dated February 2, 1886.

Application filed July 7, 1884. Serial No. 137,036. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. PELOUBET, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Walking Dolls and other Automaton; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to that class of dolls for children having levers for legs, which are given reciprocating or walking movements by means of cranks and spring-actuated clock-work, the object of the invention being more especially to secure a gait or movement of the legs more closely resembling that of human beings.

It consists in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally embodied in the clause of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the figures, Figure 1 is a front elevation of the improved doll devoid of dress coverings, and partly in section, to more clearly show the arrangement of mechanism whereby the peculiar movements are attained. Fig. 2 is a side elevation of the same and partly in section, the line of which is taken through line *x*; and Fig. 3 is an inverted plan of the feet, showing the construction of the same.

In said drawings, *a* is a body or frame providing bearings for a train of wheels and other parts of clock-work which are arranged therein, *b* being the mainspring-arbor; *c*, the mainspring, secured at one end to said arbor and at the other to the body or other fixture of the doll; and *d*, a cog-wheel working on the arbor *b*, and communicating with a pinion, *e*, on the crank-arbor *f*. Said cog *d* is also provided with a ratchet-and-pawl attachment, *g*, to prevent back motion in winding the mainspring. The crank-shaft *f* has its bearings in side pieces or parts of the frame-work, the cranks

thereon projecting through or working on the outside of the said side pieces, as shown in Fig. 1. A train of cogs, pinions, and their arbors, *h i j k l m*, transmit motion to governors or regulating-weights *n*, formed or arranged on the ends of spring-arms *o*. Undue rapidity of motion causes the weights, by centrifugal force, to strike the frame *a*, whereby their motion is impeded and that of the said cogs held in check. The upper portion or cross-piece of the frame projects beyond the side pieces of the frame, holding said side pieces together and forming shoulders *p*, which hold the arms of the doll away from the levers and provide fulcrumal bearings *q* for the legs or levers *r r*. At about the middle of the levers they are engaged by the crank-pins *s* of the crank-shaft. The cranks on said shaft project in opposite directions therefrom, to give an alternating movement to the legs. The legs or levers are without movable joints from the end where they engage the ground—as at the feet—to the fulcrumal bearings. At these bearings they are allowed to slide vertically; but they or the bearings are so formed or constructed as to prevent any material lateral and backward and forward play or movement. When the shaft *f* and the cranks thereon are caused to revolve under the influence of the mainspring *c*, the feet *t* or lower ends of the levers are given alternately a compound movement peculiar to this doll—that is to say, each of the feet is alternately raised clear of the ground, so that the doll stands on one foot and is carried forward, coming down on the heel thereof. When rocking over to the toe, it is again raised and the motion repeated in very close resemblance to the walk of mankind. The feet *t* of the doll are provided with arms or projections *u u*, which extend in each laterally toward the opposite foot, beyond the center of gravity of the doll, so that said doll will not fall when on the one foot.

A cam or eccentric may be employed in lieu of a crank, and other minor changes may be made in the construction of the doll, without departing from the spirit of the invention.

I am aware of the device shown in English Patent No. 1,664 of 1861, and I do not claim anything therein shown. In said English device the feet in their stepping movements re-

main parallel with the ground, coming down thereon "flat-footed," the legs of said doll being each composed of double and jointed levers. In the improved device, because of the peculiar construction described, the feet are given a heel-and-toe movement, to cause the doll to walk more closely in resemblance to the ordinary human action in walking.

What I claim is—

10 A doll combining therein a body, footed levers fulcrumed on said body and rigid, or of parts immovable in their relations to one another from the points of bearing on the ground to the fulcrumal ends, cranks adapted to give

a reciprocating motion to said levers, and 15 clock-work to actuate said cranks, lateral projections *u* extending from the feet across the center of gravity of the doll, the said doll working its feet automatically, so that they come down alternately, first on the heel, 20 then rock over to the toe, then rise and move forward, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of July, 1884.

FRANCIS W. PELOUBET.

Witnesses:

CHARLES H. PELL,
ERNEST D. WINANS.