No. 754,861. PATENTED MAR. 15, 1904.

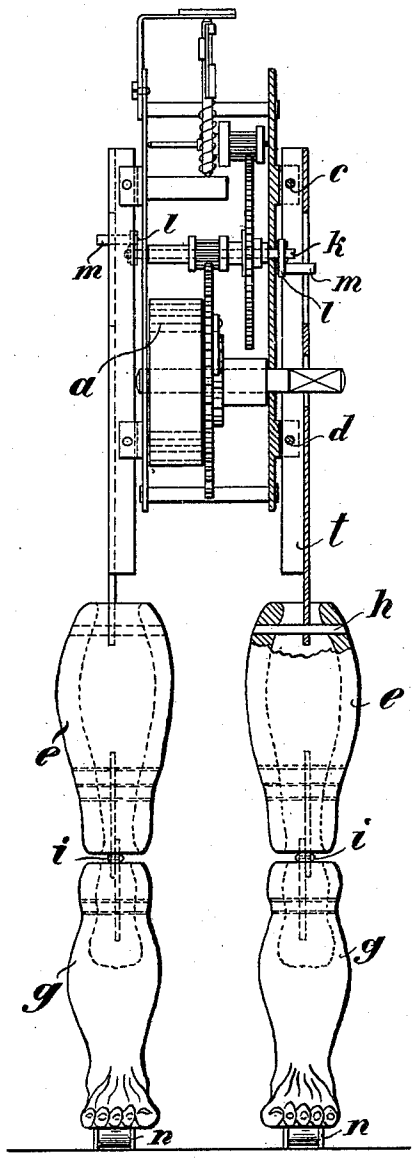
P. FUCHS.

MECHANISM FOR WALKING DOLLS OR OTHER TOY FIGURES GOING ON ROLLS.

APPLICATION FILED FEB. 6, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig 1



Witnesses:
Geo. Heinicke,
William L. Ellerich.

Inventor
Paul Fuchs
by G. Dittmar
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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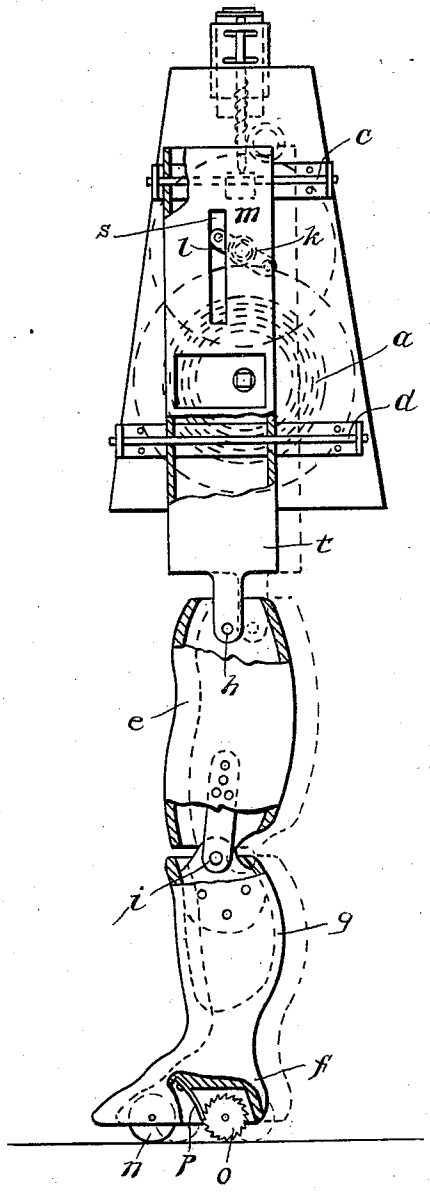
P. FUCHS.

MECHANISM FOR WALKING DOLLS OR OTHER TOY FIGURES GOING ON ROLLS.

APPLICATION FILED FEB. 6, 1903.

NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.



Witnesses
T. P. Britt
Geo. Hermicke

Inventor
Paul Fuchs
By G. Dittmar
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 754,861. Patented March 15, 1904.

UNITED STATES PATENT OFFICE.

PAUL FUCHS, OF BERLIN, GERMANY, ASSIGNOR TO THE FIRM OF TREUDE AND METZ, OF LAASPHE, WESTPHALIA, GERMANY.

MECHANISM FOR WALKING DOLLS OR OTHER TOY FIGURES GOING ON ROLLS.

SPECIFICATION forming part of Letters Patent No. 754,861, dated March 15, 1904.

Application filed February 6, 1903. Serial No. 142,230. (No model.)

To all whom it may concern:

Be it known that I, PAUL FUCHS, a subject of the Emperor of Germany, residing at Sickingenstrasse 2, Berlin, Germany, have invented certain new and useful Improvements in Walking Dolls or other Toys, of which the following is a specification.

The easiest motion for walking dolls and other toy figures is on rolls, which are prevented from turning backwardly by a ratchet-wheel, so that the doll can only move in a forward direction.

In order to give to the legs of the doll the motion necessary for forward stepping, said legs are guided in a manner that they can move only to and fro in a direction parallel to the plane of the table, floor, &c. The displacement of the legs in this direction must be limited, of course, to the suitable length of steps.

In the accompanying drawings, Figure 1 represents the new mechanism adapted to a walking doll in front elevation, partly in section. Fig. 2 is a side elevation, partly in section.

An ordinary leg with the driving-spring *a* is secured in the hollow space of the body of the doll, and on each side of the casing guides are provided for the legs. As shown, the guides consist of two horizontal rods *c* and *d* of circular section. Said rods pass through suitable holes of guide-pieces *t*, which may be of U-shaped cross-section, in such a way that the guide-pieces can move to and fro in lines parallel to the plane of motion of the feet *f* on a floor, table, &c. The upper joint *e* is hinged to a guide-piece *t* and the lower joint *g*, with the foot *f*, is hinged to the part *e*. The hinges *k* and *i* of these parts should have sufficient friction (or should be provided with some device to produce such friction) that the whole stretched leg remains sufficiently stiff for the stepping motion, while at the same time the hinges *h* and *i* will admit of the doll being brought into a sitting or kneeling position.

A shaft *k* carries at both ends cranks *l*, displaced at one hundred and eighty degrees apart and having a length to correspond to the desired length of steps. The crank for the left side is shown in full lines and that of the right side in dotted lines. Both cranks are provided with crank-pins *m*, which project into vertical slots *s* of the guide-pieces *t*.

During the operation of the gear the cranks *l* will alternately advance and bring back the guide-pieces *t*, causing them to slide on their rods *c* and *d*, and thus the legs of the doll will move horizontally to and fro.

Each foot of the doll is provided with rollers *n* and *o*, one of which is provided, in a well-known manner, with a ratchet-wheel and ratchet *p* to prevent backward motion, whereby the rolls can turn only in the direction which produces the forward stepping of the doll.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination in a walking doll or other moving toy figure of a body having two sides vertically slotted, horizontal guides on said sides, a leg secured to each of said guides, a spring-actuated shaft in the body and two cranks, one on each end of said shaft, engaging in the respective vertical slots of the guides, substantially as described.

2. In a walking doll or other moving toy figure the combination with the two sides of the body, of a horizontal rod on each side, a guide-piece slidable on each rod and provided with a vertical slot, a leg secured to each guide-piece, a shaft journaled in the body, a crank at each end of the shaft engaging in the slot of the respective guide-pieces, said cranks being on opposite sides of the shaft, and rolls on the legs provided with means to prevent backward movement, substantially as described.

In testimony whereof I affix my signature.

PAUL FUCHS.

In presence of—
HENRY HASPER,
WOLDEMAR HAUPT.