

H. C. WORK.
Dolls.

No. 140,605.

Patented July 8, 1873.

Fig. 1.



Fig. 2.

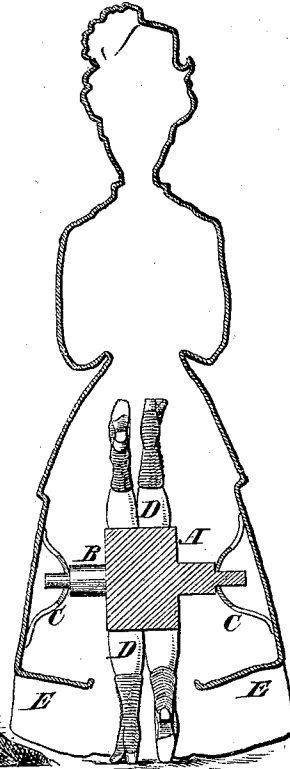
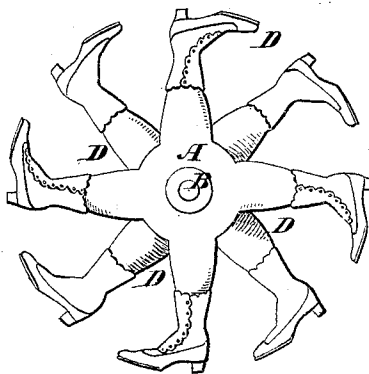


Fig. 3.



Witnesses:

*Gustav Dietrich.
John Becker.*

Inventor:

Henry C. Work.

UNITED STATES PATENT OFFICE.

HENRY C. WORK, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN DOLLS.

Specification forming part of Letters Patent No. **140,605**, dated July 8, 1873; application filed November 19, 1872.

To all whom it may concern:

Be it known that I, HENRY C. WORK, of the city of Brooklyn, county of Kings and State of New York, have invented an Improved Walking Doll; and I hereby declare that the following, taken in connection with accompanying drawings and letters of reference marked thereon, embraces a full, clear, and exact description of my improvement, sufficient to enable any person skilled in such arts to make use of the same.

My invention consists in so constructing a doll that the act of walking or running shall be represented with sufficient accuracy by very simple mechanism, which can be manufactured and applied far more economically than any heretofore employed for that purpose.

Figure 1 is a perspective view of my improved walking doll. Fig. 2 is a sectional view taken on the line $z z$ in Fig. 1. Fig. 3 is a detached view of the multipedal wheel hereinafter described.

Corresponding parts are in each case indicated by similar letters.

The entire doll (with the exception of the lower limbs) may be made of two thin metal plates, cut and stamped so as to form, respectively, the right and left sides of the figure, and joined by soldering; or any other suitable material may be employed.

Instead of jointed lower limbs, I use the multipedal wheel A, the axis of which may be supposed to intersect both knee-joints. Cast-iron is, perhaps, the most available material for this wheel, and its essential form may be thus described: From the shaft B, which has suitable bearings C C in the stiff material of the skirt or frame, (or attached thereto,) or from a rotating disk, project at regular intervals several pairs of legs, D D D D, or the necessary portions thereof, arranged alternately right and left. The soles of the shoes form the periphery of the wheel, and, in order that

the circle may be as continuous as possible, the space between the toe of one foot and the heel of the next preceding should not greatly exceed fifteen degrees. In my experience four pairs of legs have secured the most satisfactory results; but another number may in some cases be preferable.

I arrange the folds of the skirt so that, while in front and at the back they fall nearly or quite to the level on which the doll walks, they are considerably lifted at or about the middle, as at E. By this arrangement one or two feet can always be seen as the wheel revolves, but no more than two can become simultaneously visible. The figure is so balanced that, while the trailing skirt F touches the floor very lightly and creates little friction, it serves as a support to the doll, and gives it a firm footing.

If necessary, small casters or rollers may be interposed, still further to lessen the friction; or, if preferred, the figure may be attached to a carriage, in which case the support of the skirt will not be required.

The doll may be propelled by clock-work, attached in any convenient way, or simply by pushing or pulling it with the hand.

Having thus fully shown the construction and operation of my improvement, I claim and desire to secure by Letters Patent—

1. The multipedal wheel A, substantially as described, or the device for bringing successively into use several pairs of feet, which revolve on a common axis.

2. In connection with said wheel, the partly-lifted and partly-trailing skirt, substantially as specified.

Signed by me at Brooklyn, N. Y., this 18th day of November, A. D. 1872.

HENRY C. WORK.

Witnesses:

WM. H. BARRETT,
A. H. PULCIFER.