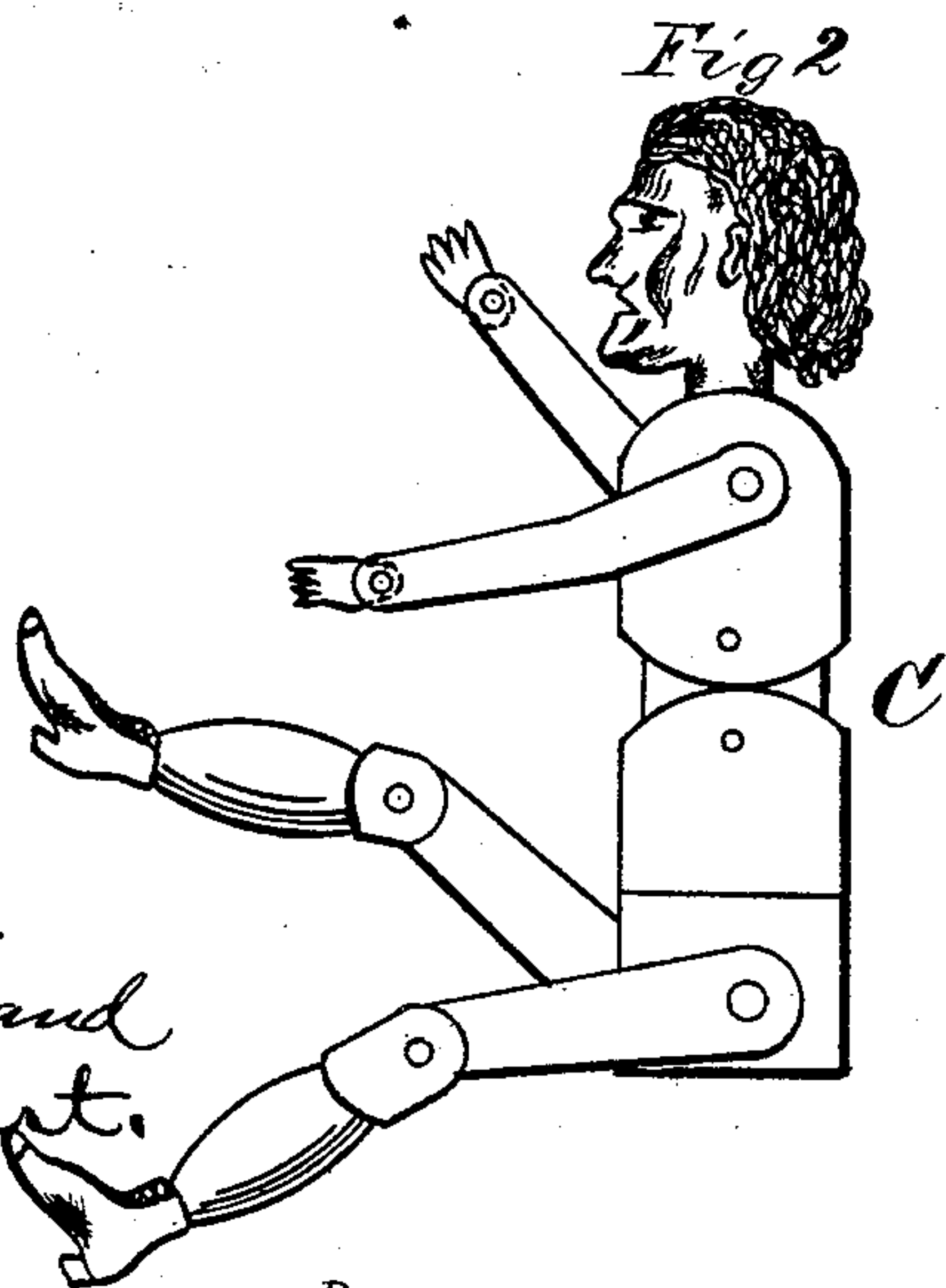
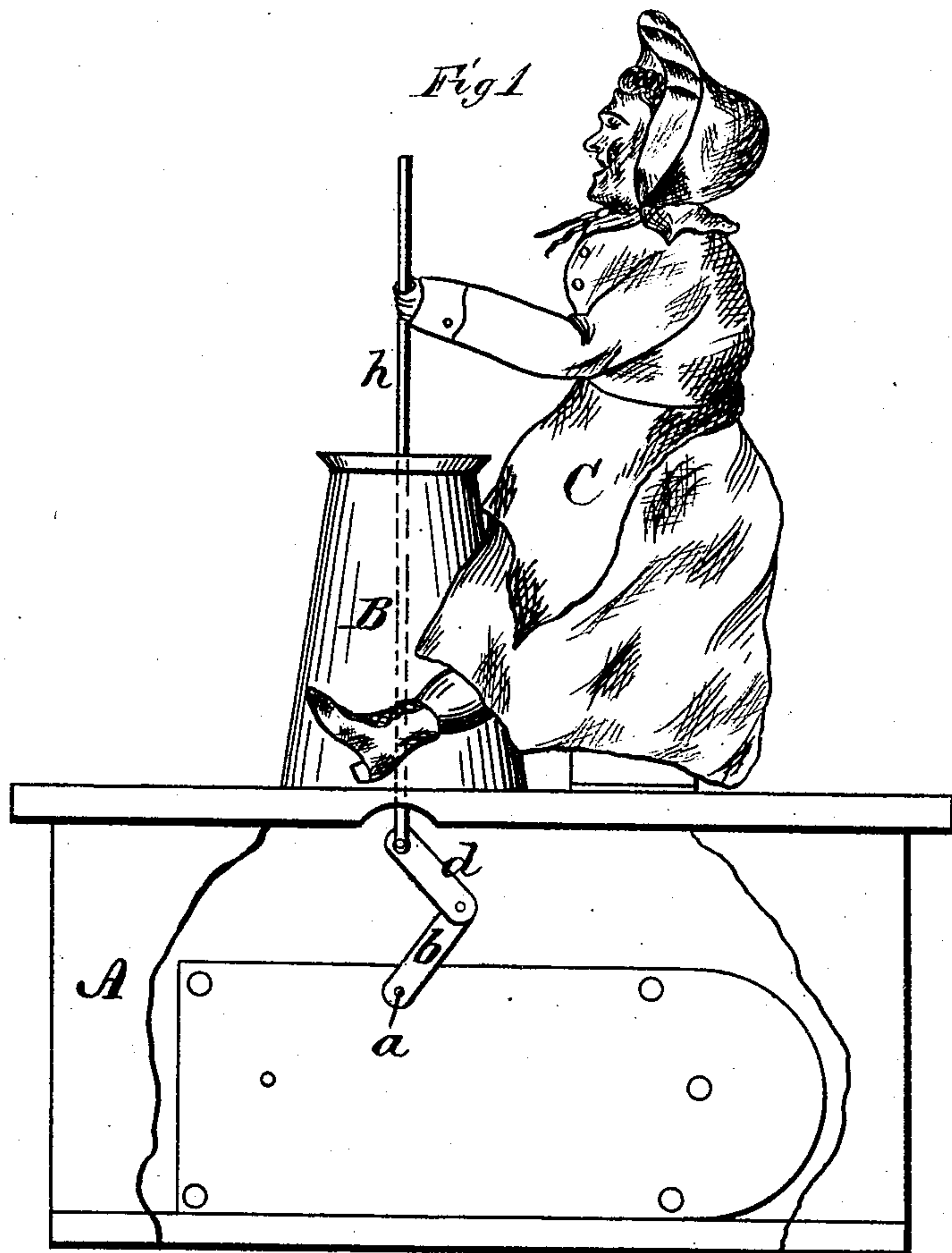


A. H. DEAN.
Automatic Toys.

No. 149,204.

Patented March 31, 1874.



WITNESSES.
A. L. Curand
C. L. Evert.

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By

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UNITED STATES PATENT OFFICE.

ALBERT H. DEAN, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO EDWARD R. IVES AND CORNELIUS BLAKESLEE, OF SAME PLACE.

IMPROVEMENT IN AUTOMATIC TOYS.

Specification forming part of Letters Patent No. 149,204, dated March 31, 1874; application filed February 26, 1874.

To all whom it may concern:

Be it known that I, ALBERT H. DEAN, of Bridgeport, in the county of Fairfield and in the State of Connecticut, have invented certain new and useful Improvements in Mechanical Toys; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a toy, in which a suitable figure is combined with a mechanical movement in such a manner that it will have the appearance of performing the familiar act of churning.

For this purpose I provide a small box, in which a mechanical movement, composed of the usual train of gearing, is made to operate a vertical rod or wire by means of a crank attached to one of the axles, and a connecting-rod giving it the up and down motion, such as is common in the process of churning. This vertical wire or dasher I extend upward through the cover of the box, and through a miniature churn. In front, or by the side of, the churn I seat the figure, with the hands fastened to the vertical wire. The figure may be provided with suitable joints in the arms and other parts of the body, to enable it to accommodate itself to the motion of the vertical wire. When the wires move up and down the hands move up and down also, and seem to the beholder to be the cause of the motion of the wire. The figure may also be so jointed that it can move backward and forward, and thus imitate precisely the motions of a person churning.

In the accompanying drawing, Figure 1 is a side elevation of my toy; and Fig. 2 is a side view of the jointed figure forming part of the same.

A represents a box of any suitable dimensions, with a miniature churn, B, placed on

top thereof. Within the box A is an ordinary clock-work, of which *a* is the axle or main shaft. On the axle *a* is attached a crank, *b*, to the outer end of which is pivoted a rod, *d*, connecting it with a vertical wire, *h*. This wire passes up through an opening in the top of the box, and through the churn B, which is placed over said opening. C represents the figure, seated by the side of the churn, with its hands attached to the vertical wire or dasher *h*. The mechanism employed consists, simply, of a train of gearing actuated by a clock-spring, wound up in the usual manner.

The operation is as follows: The spring drives the wheels, and, as the axle *a* turns, the crank *b* revolves, and, by means of the connecting-rod *d*, communicates a reciprocal motion to the vertical wire or dasher *h*.

I do not claim the mechanism employed, as I am aware that is old and often used.

The dasher *h* may be worked through the figure C by means of a fulcrum and lever, or by using the joints in the arms as a fulcrum, and the arms as levers, in which case it would be necessary to use another vertical wire descending into the churn, to which the levers would be attached, and which would be lifted up and down in the churn by the action of the levers.

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

The toy figure C, in combination with the dasher *h*, passing into or through the churn B, and operated by a clock-work mechanism, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto my hand this 19th day of February, 1874.

ALBERT H. DEAN.

Witnesses:

F. W. SMITH,
C. BLAKESLEE.