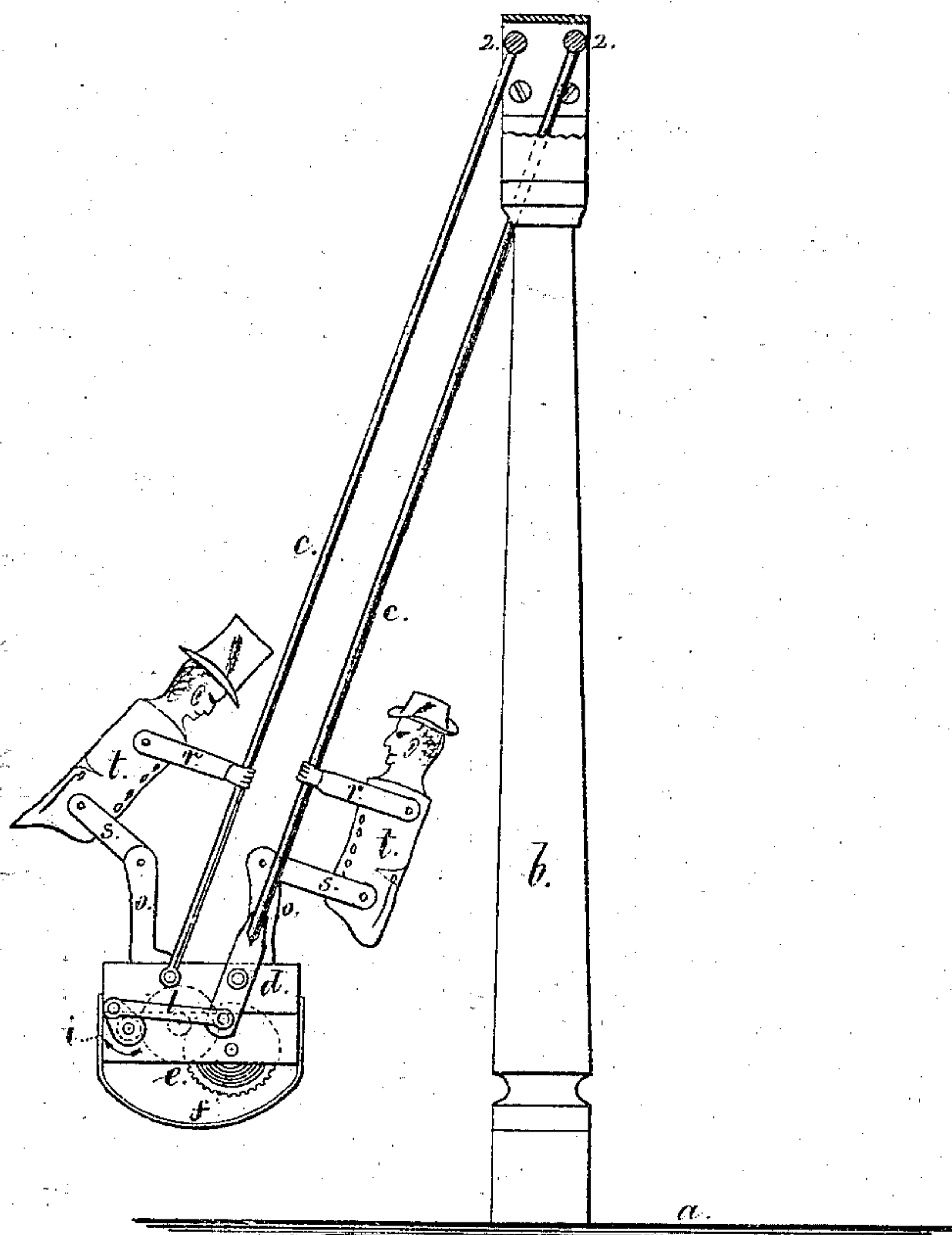


A. W. BROWNE.

Automatic Toys.

No. 135,770.

Patented Feb. 11, 1873.



Witnesses,

Charles Smith
Geo. D. Pickney

Inventor.

Arthur W. Browne
Lemuel M. Perrell atty.

UNITED STATES PATENT OFFICE.

ARTHUR W. BROWNE, OF BLOOMFIELD, NEW JERSEY, ASSIGNOR TO ALTHOF,
BERGMAN & CO., OF NEW YORK, N. Y.

IMPROVEMENT IN AUTOMATIC TOYS.

Specification forming part of Letters Patent No. 135,770, dated February 11, 1873.

To all whom it may concern:

Be it known that I, ARTHUR W. BROWNE, of Bloomfield, in the county of Essex and State of New Jersey, have invented an Improvement in Toys, of which the following is a specification:

A swing has been heretofore made to operate by means of clock-work in the stand and a lever to move the uprights or swing-rods.

In my toy the clock-work or train of gearing is attached to a swinging platform, suspended by parallel or nearly parallel rods, to one of which rods a link is connected and passes to a crank that is revolved by the train of gearing and the spring, and as said crank revolves the necessary force is applied to continue the swinging movement until the spring runs down or the swing is checked in its movements. The platform remains horizontal or nearly so while swinging, and the change of angle between the suspending rods and the platform, as the parts swing, is made to give motion to a figure or figures placed upon the platform or swing.

In the drawing this toy is represented by a side view. The base *a* is provided with one or two standards, *b*, from the head of which the parts swing, there being either two or four parallel or nearly parallel rods *c c* hinged at the top at 2, and at or near the bottom to the platform *d*, so as to maintain the platform in nearly a level position as the parts swing. Connected with the platform *d* is a train of gearing, *e*, spring *f*, and crank *i*, and from the

crank *i* a link, *l*, extends and is jointed to one of the swinging rods *c* either above or below the connection to the platform. The position of the parts is such that the crank *i* can only turn its center when the swing is approaching its extreme movement, and in so doing gives to the swing the necessary power or propulsion to maintain the movement.

The change in the angle between the rods *c c* and platform *d*, as the swing moves, is availed of to move the toy or figure of any desired character.

I have shown the two figures with legs *o o* secured at their lower joints to the platform, and with arms *r r* secured at right angles to the rods *c*; the arms are jointed to the body *t* at the shoulders, and the links *s*, representing the upper parts of the legs, are hinged to *o* and *t* so that the whole figure appears to be moving and working the swing as the rods and platform assume different angles.

I claim as my invention—

A train of clock-work and revolving crank, swinging with the seat or platform to which they are attached, in combination with the suspending-rods and a connecting-link from the crank to one of said rods, substantially as and for the purposes set forth.

Signed by me this 29th day of November, 1872.

A. W. BROWNE.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.