

(No Model.)

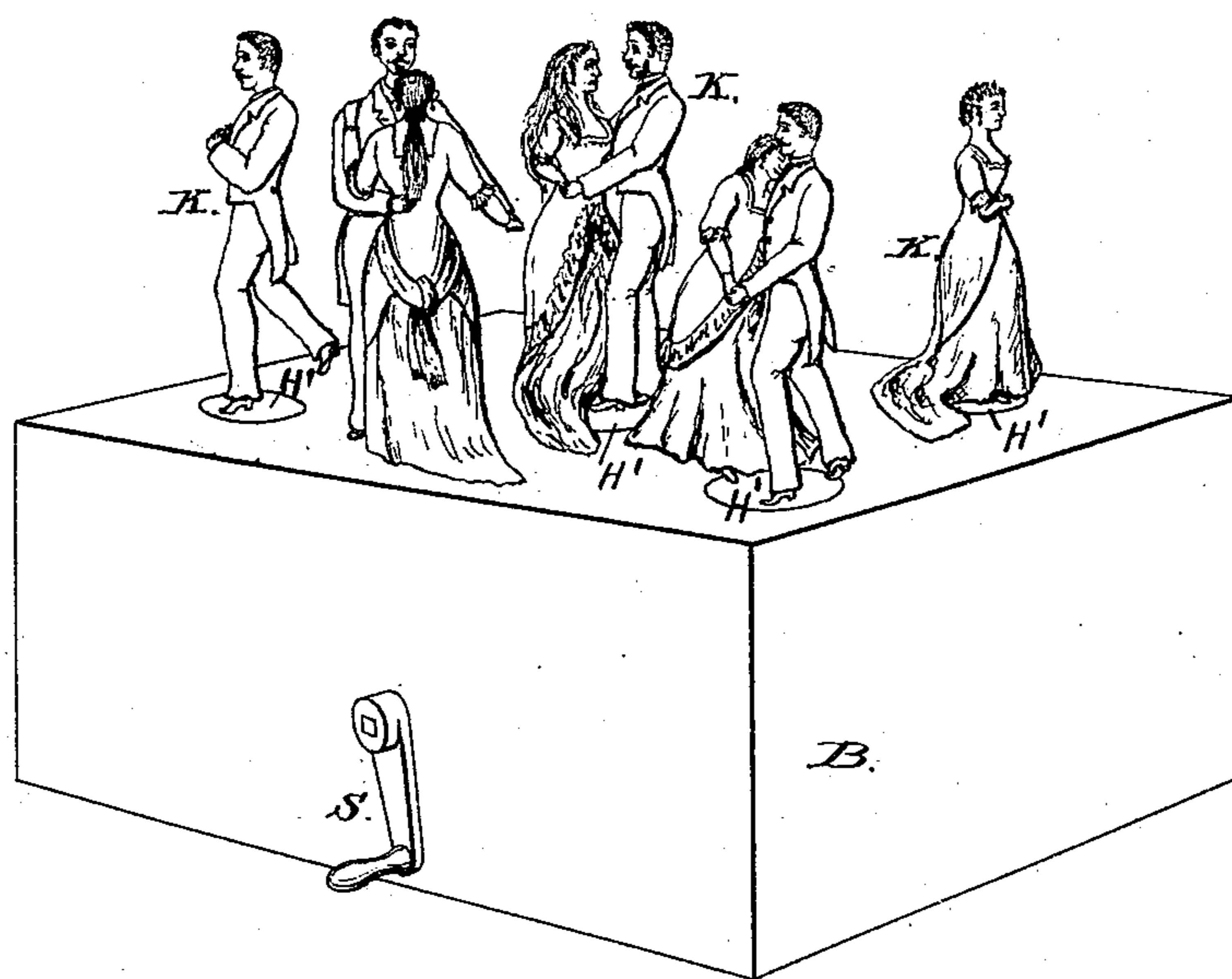
D. HEINEKE.

ROTATING TOY.

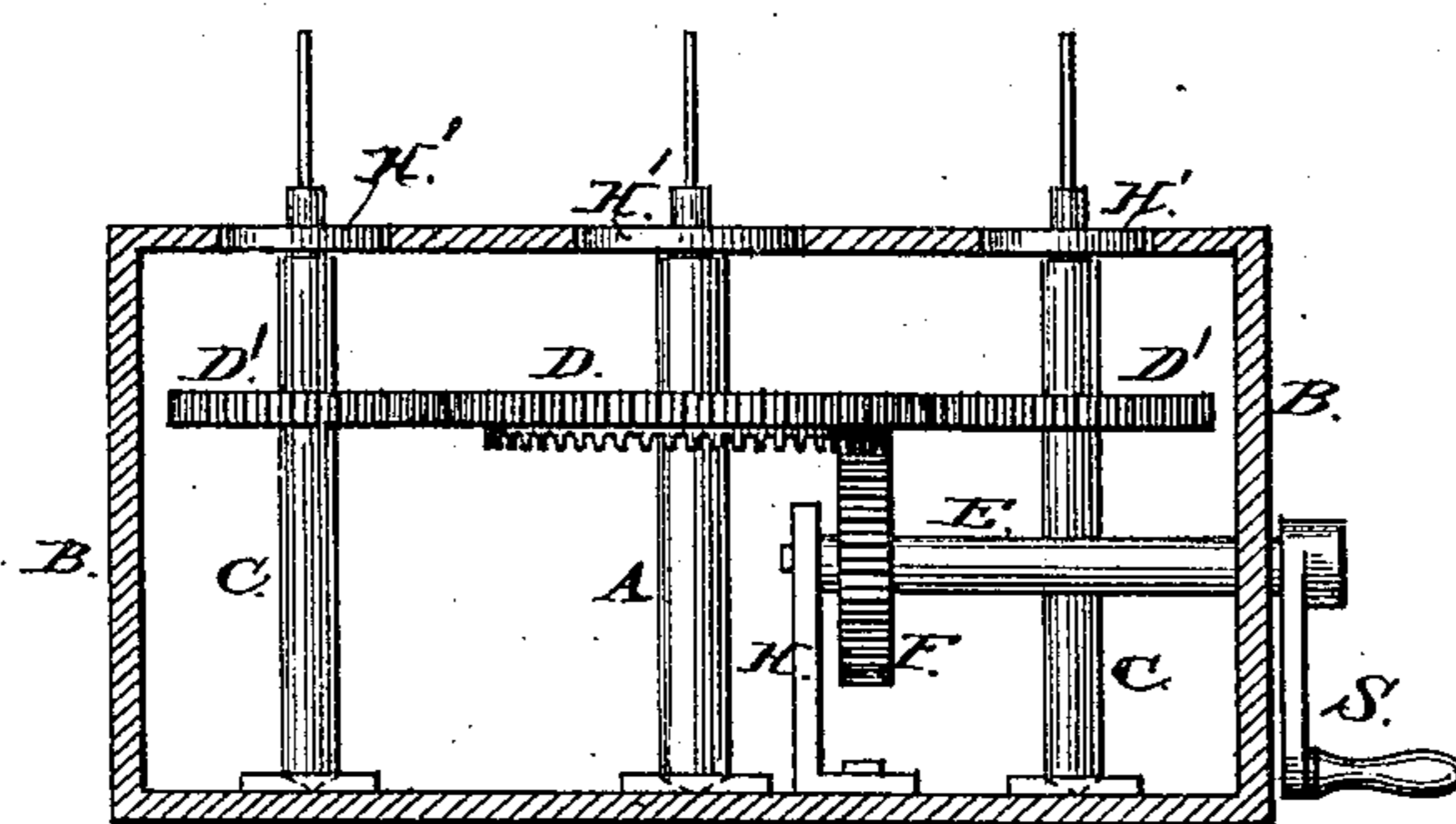
No. 275,209.

Patented Apr. 3, 1883.

*Fig. 1.*



*Fig. 2.*



Witnesses:

John A. Ellis.  
Walter H. Wolfe.

Inventor:

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# UNITED STATES PATENT OFFICE.

DIETRICH HEINEKE, OF BROOKLYN, NEW YORK.

## ROTATING TOY.

SPECIFICATION forming part of Letters Patent No. 275,209, dated April 3, 1883.

Application filed February 13, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, DIETRICH HEINEKE, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Rotating Toys; and I do hereby declare that the following is a full 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.

My invention relates to that class of mechanical toys in which rotating figures constitute the attractive feature; and it involves the combination, with a central figure or figures mounted upon a central vertical spindle to rotate in a fixed position upon its own axis, of a series of additional figures mounted singly or in pairs upon parallel spindles arranged to encircle the central spindle, and geared thereto to move in unison therewith and rotate, each in a fixed position upon its own axis, the central spindle being actuated by a horizontal crank-shaft and bevel-gear, or by a spring or other suitable motor.

In the accompanying drawings, Figure 1 is a perspective view of my improved waltzing toy; and Fig. 2, a central section, illustrating the gearing of its spindles.

A represents a vertical spindle mounted to rotate in suitable bearings provided therefor at the top and bottom of an inclosing-case, B.

C C are vertical spindles mounted in like manner in fixed bearings at such suitable distances from the spindle A as may be desired to produce the effect sought for in the arrangement of the figures employed in the toy. Each of the parallel spindles C C is geared to the central spindle, A, by means of teeth formed upon the perimeter of a horizontal contrate-wheel, D, adapted to engage pinions D' D' on the encircling spindles. Motion is imparted to the central spindle by means of a crank, S, upon the outer end of a horizontal shaft, E, which is fitted with a pinion, F, to engage the cogs projecting from the under face of the double contrate and spur wheel D, as is illustrated in Fig. 2. The inner end of the crank-shaft is supported in a pillar, H, under the wheel C, and its outer end projects through bearings formed in the side of the case B, as shown in Fig. 2.

Upon the upper end of each of the spindles A and C C a disk or circular plate, H', is secured to rotate with the spindle, preferably in a plane on a level with the top of the box or case B.

Upon each of the rotating plates or disks H' one or more dolls or figures, K K, are secured, by pins or wires or other suitable device, so as to revolve therewith about the axis of the spindle.

The rotation of the spindle A by means of the crank S, or by the action of a spring or other motor, not only produces a rotation of the figures connected thereto, as described, but also a rotation of all the figures or groups of figures encircling it, each upon its own axis, with greater or less speed, dependent upon the size of the pinion by which its spindle is geared to the central spindle, this independent rotation of each and all of the figures or groups of figures in harmony with the central figure producing a pleasing effect as a toy.

I claim as my invention—

1. The combination, in a toy, with a central figure or group mounted upon a vertical rotating spindle, of a series of encircling figures or groups mounted upon parallel rotating spindles geared to the first to turn simultaneously therewith, each upon its own axis, substantially in the manner and for the purpose herein set forth.

2. The combination, in a toy, with a central spindle, A, a series of encircling parallel rotating spindles, C C, toy figures or groups supported by and upon said rotating spindles, and a horizontal shaft, E, of a double contrate and spur wheel, D, upon the central spindle, adapted to gear simultaneously with a pinion upon the horizontal shaft E, and upon each of the vertical spindles C C, substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DIETRICH HEINEKE.

Witnesses:

WALTER M. WOLFE,  
JOHN A. ELLIS.