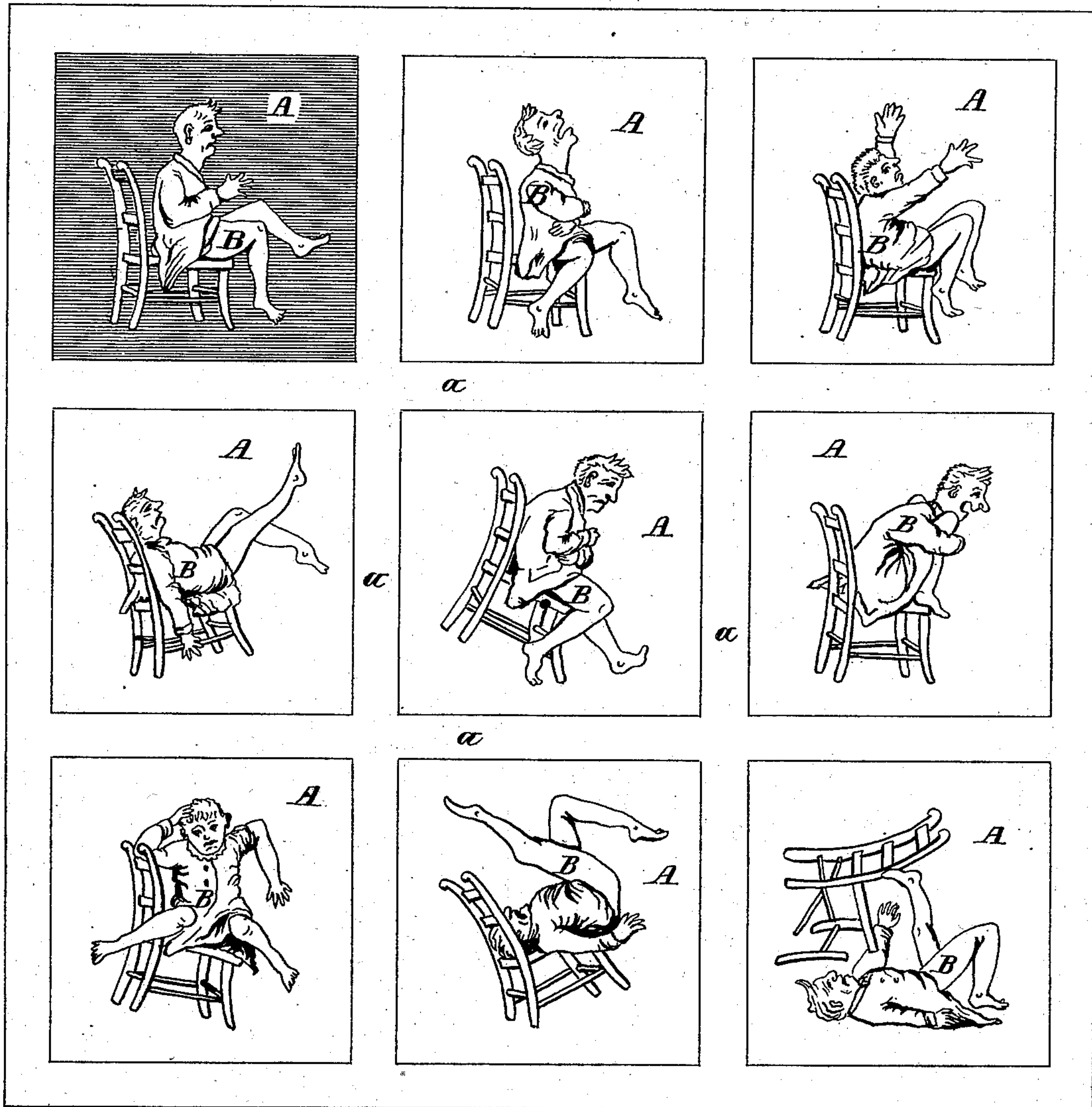


(Model.)

G. E. KING.
Optical Toy.

No. 237,389.

Patented Feb. 8, 1881.



ATTEST=

E. B. Bolton

Geo. Bainton

INVENTOR=

George E. King,
by his attys.
Burke, Fraser & Hornett.

UNITED STATES PATENT OFFICE.

GEORGE E. KING, OF NEW YORK, N. Y.

OPTICAL TOY.

SPECIFICATION forming part of Letters Patent No. 237,389, dated February 8, 1881.

Application filed December 21, 1880. (Model.)

To all whom it may concern:

Be it known that I, GEORGE E. KING, a citizen of the United States, residing in the city, county, and State of New York, have invented certain Improvements in Optical Toys, of which the following is a specification.

My invention is in the nature of an optical illusion, the effect depending partly upon rapid vibration and partly upon the colors employed. The object is to amuse and instruct, and the toy may be employed in advertising.

Referring to the drawings for a better understanding of the invention, A A are squares of a blue color on a larger square of stiff paper or board, and B B are grotesque figures in red on the blue ground. I prefer to arrange nine squares in a group, and to leave stripes or spaces *a a* of a different color between them. This arrangement is not, however, essential, and it is not essential that there be nine squares or that they be square. There may be more or less than nine figures variously grouped on a blue ground, and they may be of various forms or shapes. I prefer, however, the number and arrangement shown as producing a good effect. When the card thus prepared is held by one corner and gently but rapidly vibrated (the movement of the sheet being edgewise) the figures will seem to be detached from the blue ground and to move their limbs independently in a grotesque manner. I find the best effect to be produced when an artificial light is employed and the face of the card is somewhat shaded. The eye then appears to lose some of its power of fixing the figures, and the illusion is thereby rendered more perfect. In some cases, also, the illusion will be best produced by viewing the figures indirectly or askance, and this I attribute to the same cause as that just mentioned. As before stated, I

employ a blue ground with red figures, and I prefer, as producing the most satisfactory results, a dark-blue ground and scarlet or cardinal-red figures.

In the drawing I have tinted one of the squares, the tinted surface indicating the blue ground.

The card bearing the squares and figures might be vibrated by mechanical means; but it is sufficient to give it a gentle vibratory movement in the hand. The movements should be short and rapid. Instead of a card, the print may be stretched on a frame.

The spaces between the squares may be white and may be utilized for advertising, if desired.

Having thus described my invention, I claim—

1. An optical toy consisting of separate figures or images imprinted in red on a blue ground and grouped substantially as set forth.

2. An optical toy consisting of a series or group of blue grounds arranged on a card or board, each ground bearing a figure or image in red imprinted thereon, substantially as and for the purposes set forth.

3. An optical toy consisting of the blue squares or grounds A A, separated by white spaces *a a*, said grounds bearing figures or images B B, imprinted in red thereon, and the whole mounted on a stiff backing capable of being vibrated, substantially as and for the purposes set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE E. KING.

Witnesses:

HENRY CONNETT,
GEO. BAINTON.