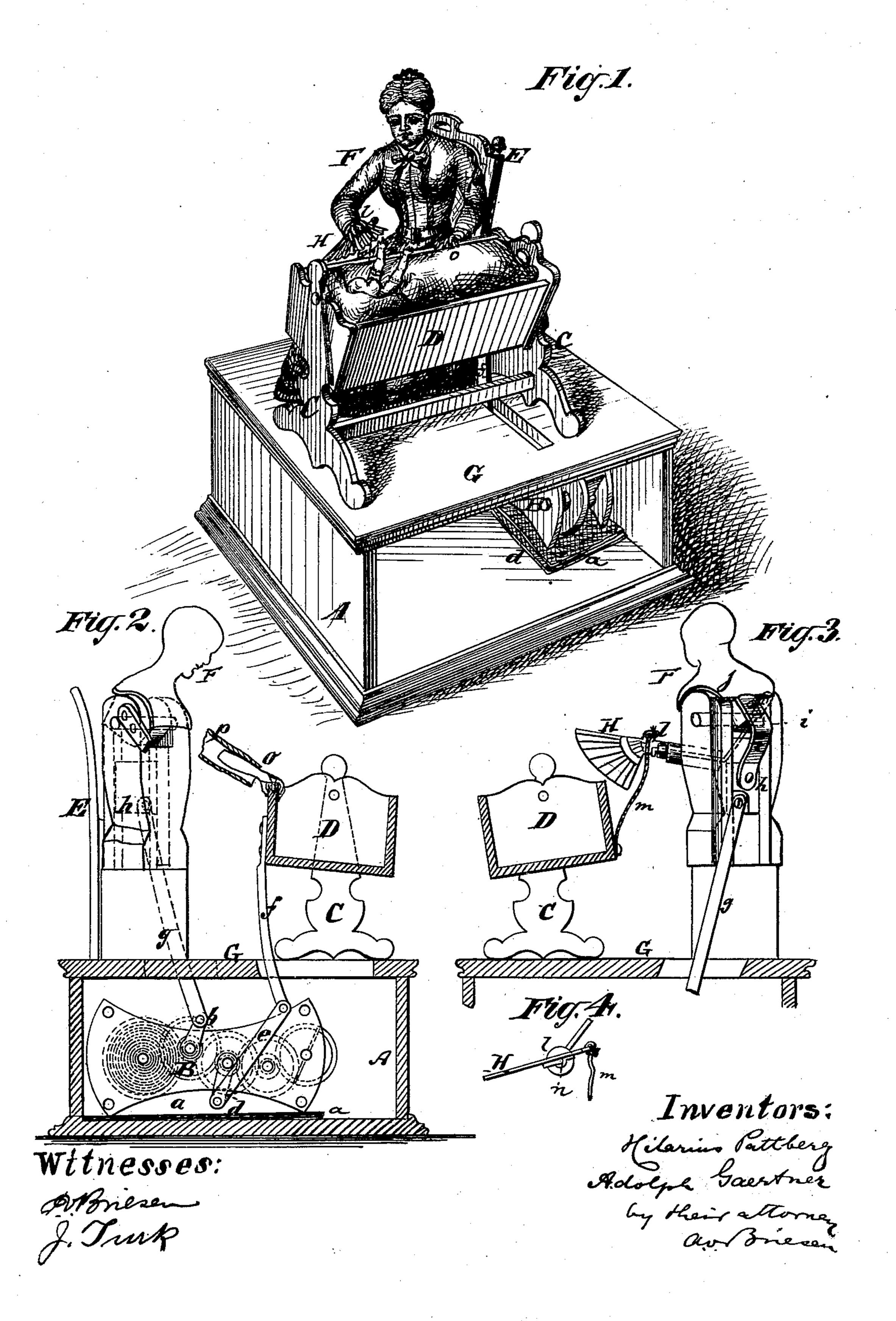
## H. PATTBERG & A. GAERTNER. Automatic Toy.

No. 199,858.

Patented Jan. 29, 1878.



## UNITED STATES PATENT OFFICE.

HILARIUS PATTBERG, OF JERSEY CITY HEIGHTS, N. J., AND ADOLPH GAERTNER, OF NEW YORK, N. Y., ASSIGNORS TO LEWIS PATTBERG AND BROTHERS, OF NEW YORK, N. Y.

## IMPROVEMENT IN AUTOMATIC TOYS.

Specification forming part of Letters Patent No. 199,858, dated January 29, 1878; application filed December 10, 1877.

To all whom it may concern:

Be it known that we, HILARIUS PATTBERG, of Jersey City Heights, county of Hudson, and State of New Jersey, and Adolph Gaertner, of the city, county, and State of New York, have invented an Improvement in Mechanical Toys, of which the following is a specification:

Figure 1 is a perspective view of our improved mechanical toy; Fig. 2, a vertical transverse section of the same; and Fig. 3, a vertical transverse section of a portion of the same. Fig. 4 is a detailed end view of the

fan used therein.

Similar letters of reference indicate corre-

sponding parts in all the figures.

The invention relates to a new mechanical toy, which represents a lady rocking and fanning a baby in a cradle, the figure of the lady being seated on a chair, and having appropriate movements imparted to her head and arms, so as to render the device as natural as possible.

This invention consists in a new arrangement of mechanism employed for moving the fan, the cradle, and the female figure; and also in a new arrangement of box which contains the clock-work and supports the figures.

The letter A in the drawing represents the box or case which contains the clock-work B, and which supports the frame C of the cradle D, and also the chair E, on which the female figure F appears to be seated. The top G of the box A is made of pasteboard, while the remainder of the box is made of wood. The pasteboard top or cover serves to support the cradle and the female figure, and to prevent the apparatus from being as noisy as it would be were a wooden cover used instead of pasteboard. For the like purpose strips of flannel a are placed on the bottom of the box, between the same and the clock-work, so that the noise of the clock-work is absorbed as much as possible.

The clock-work, which may be wound up in the usual manner, serves to rotate two cranks, b d, the crank d revolving somewhat faster than the other. A link, e, connects the crank d with a rod, f, attached to the cradle D, so

that the rotation of the crank d serves to rock the cradle in the desired manner, the cradle being properly hung in the frame C, containing a small bed and the doll-baby, as indicated. The other crank, b, connects by a rod, g, with a vertically-sliding block, h, which is inserted in proper guides at the back of the female figure F, and as shown in Figs. 2 and 3.

The block h connects by a strap of leather, i, or other equivalent flexible material, with the neck portion j of the female figure F. Said neck portion is pivoted in the figure, so that the head and neck are capable of vibrating in imitation of the nodding of the head of a human being. When the block h is moved upward the strap i pushes the head forward, so as to cause it to appear to nod to the baby in the cradle, or to bend down to look at the baby. When afterward the block h is moved downward, the head portion j remains unmoved until the strap i is stretched out to its full extent, and thereafter the head is brought back by the pull of the strap. Thereby—that is to say, by the use of the flexible strap i—we retain the head j in its normal position longer than it would remain if the connection between the head and the slide were rigid, and consequently the motion is more natural, being apparently that of a fond mother bending down from time to time to take a long look at her baby.

One hand, l, of the female figure F is swiveled in its socket, so as to be capable of turning as a hand would turn at the wrist; and this hand holds a fan, H, which fan connects by a fine cord or string, m, with the cradle, so that the rocking of the cradle will impart motion to the fan by means of the string m in the following manner: Whenever the string is drawn tight by the cradle the fan is swung out of its normal position to make one vibration, and afterward the weight of the fan brings it back to its normal position to make the other vibration.

Fig. 4 shows clearly that the fan is so placed with reference to its swivel or pivot point n that the string m connects with the lightest part of the fan, thereby enabling the other heavier part to carry the fan back to its nor-

mal position, which is indicated in Fig. 4, as soon as the spring is slackened. The other hand, o, of the figure F is attached to the cradle, and the arm p pertaining to it is made flexible, so that it will yield to the movements of the cradle. This gives the impression as though the female figure was rocking the cradle with the hand o, which connects with it, and fanning it with the other hand, l.

Instead of using the sound-absorbing strips a, the bottom of the box A may be made of

pasteboard.

Having thus described our invention, we claim—

1. The box A, combined with the pasteboard top G and clock-movement B, substantially as herein shown and described.

2. The combination of the sound-absorbing strips a with the box A, clock-movement B, and pastboard top G, substantially as herein shown and described.

3. The combination of the clock-movement B and connecting mechanism with the cradle

D and female figure F, substantially as herein shown and described.

4. The combination of the connecting-rod g and reciprocating block or slide h with the flexible strap i and jointed neck j of the figure F, substantially as specified.

5. The combination of the swiveled hand l and fan H with the string m and cradle D,

substantially as specified.

6. The combination of the hand o and flexible arm p of the figure F with the cradle D, substantially as specified.

7. The mechanical toy representing a female figure, F, in combination with a rocking cradle, D, substantially as herein shown and described.

The foregoing specification of our invention signed this 30th day of November, 1877.

HILARIUS PATTBERG. ADOLPH GAERTNER.

Witnesses:

F. v. Briesen,

J. TURK.