

(No Model.)

2 Sheets—Sheet 1.

C. A. HOTCHKISS.

MECHANICAL TOY.

No. 368,833.

Patented Aug. 23, 1887.

Fig. 1.

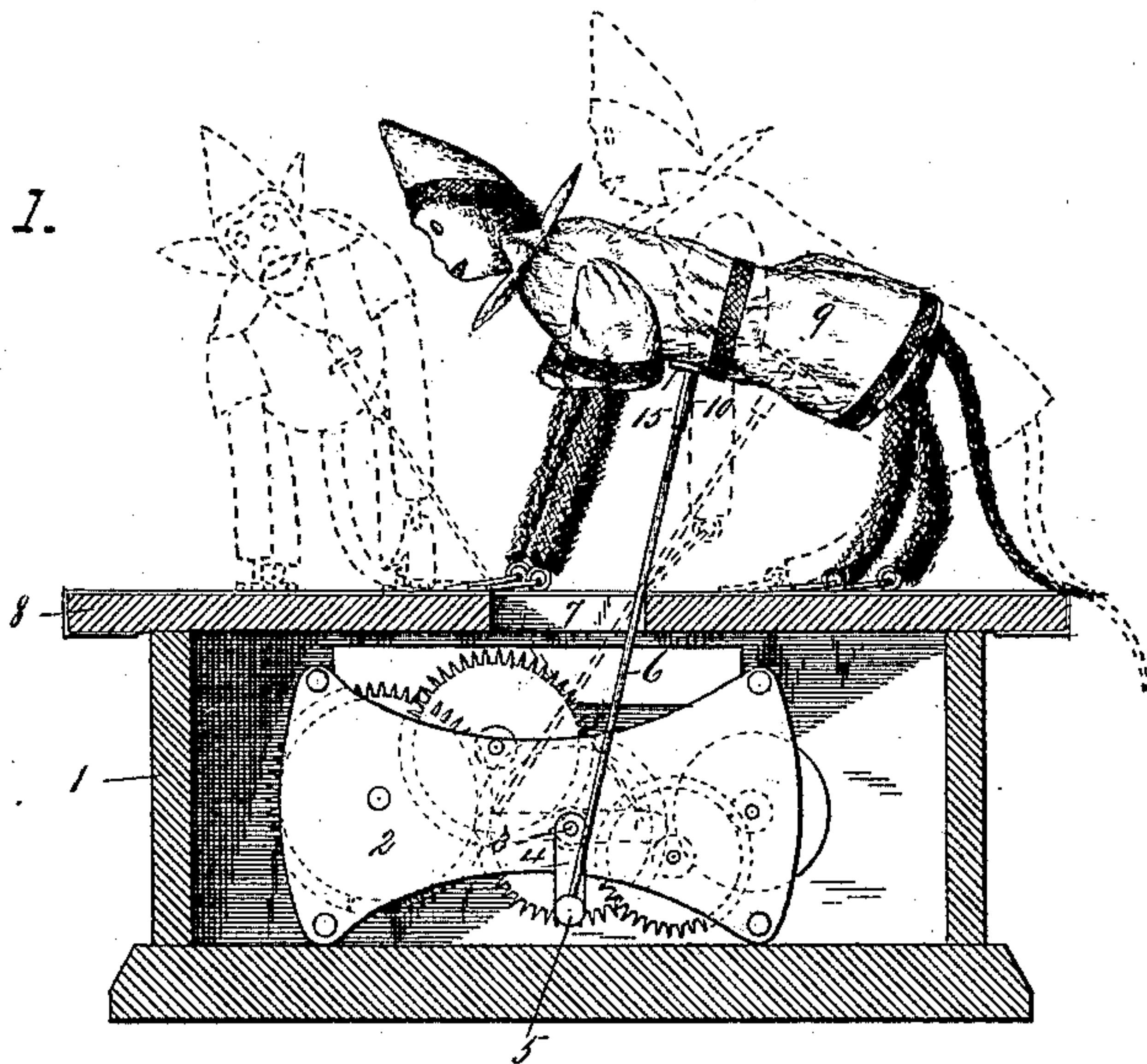


Fig. 2.

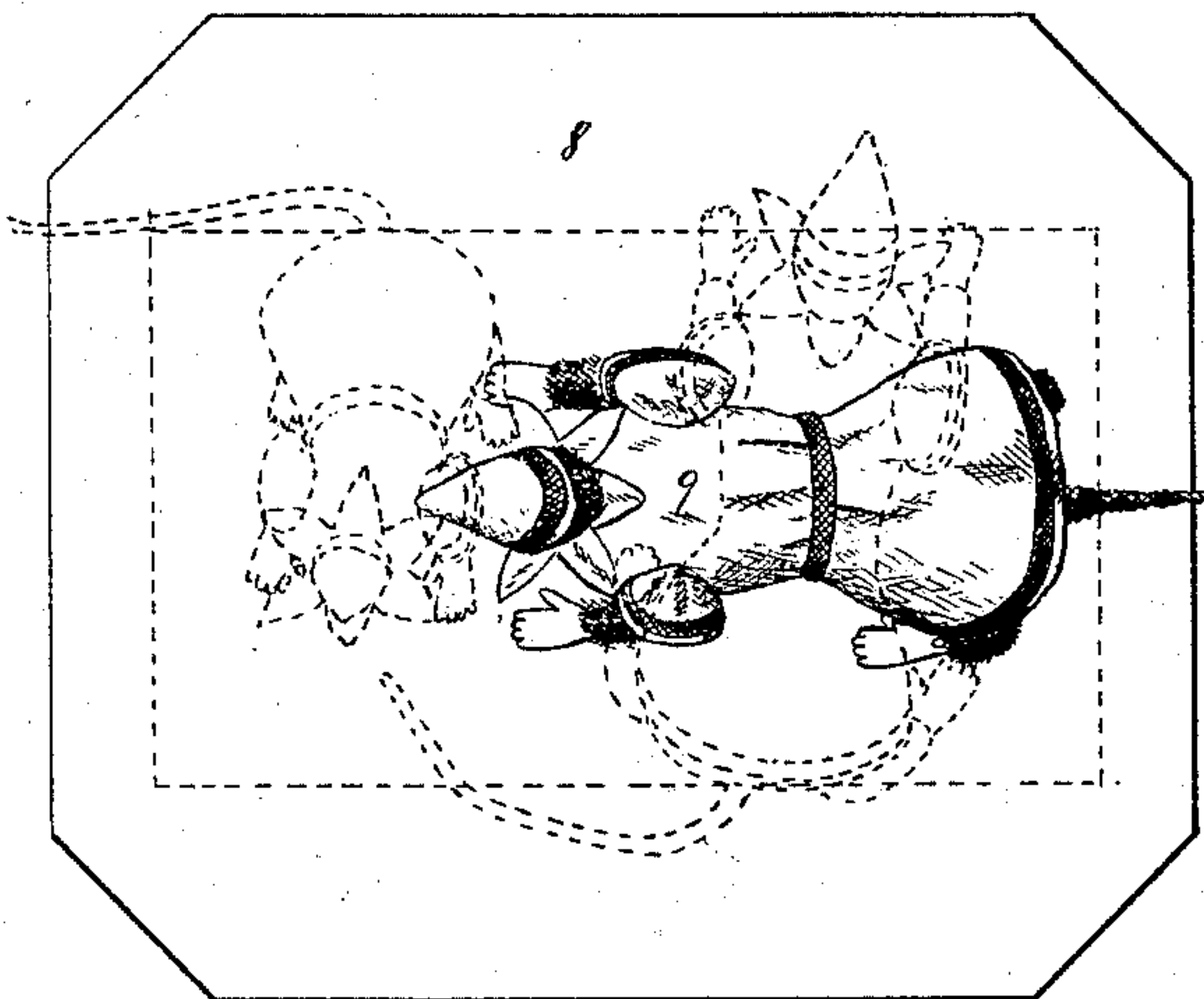
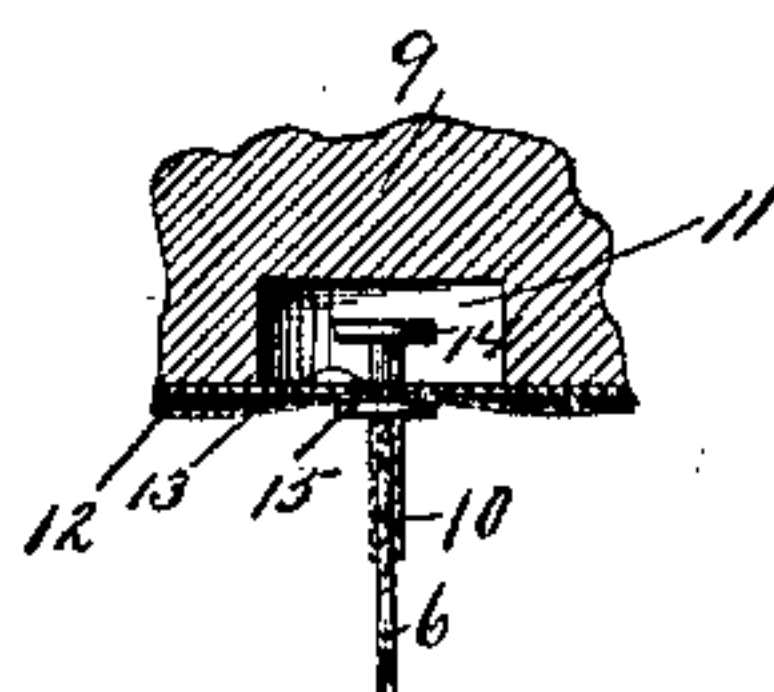


Fig. 6.



Witnesses.

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2 Sheets—Sheet 2.

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Fig. 3.

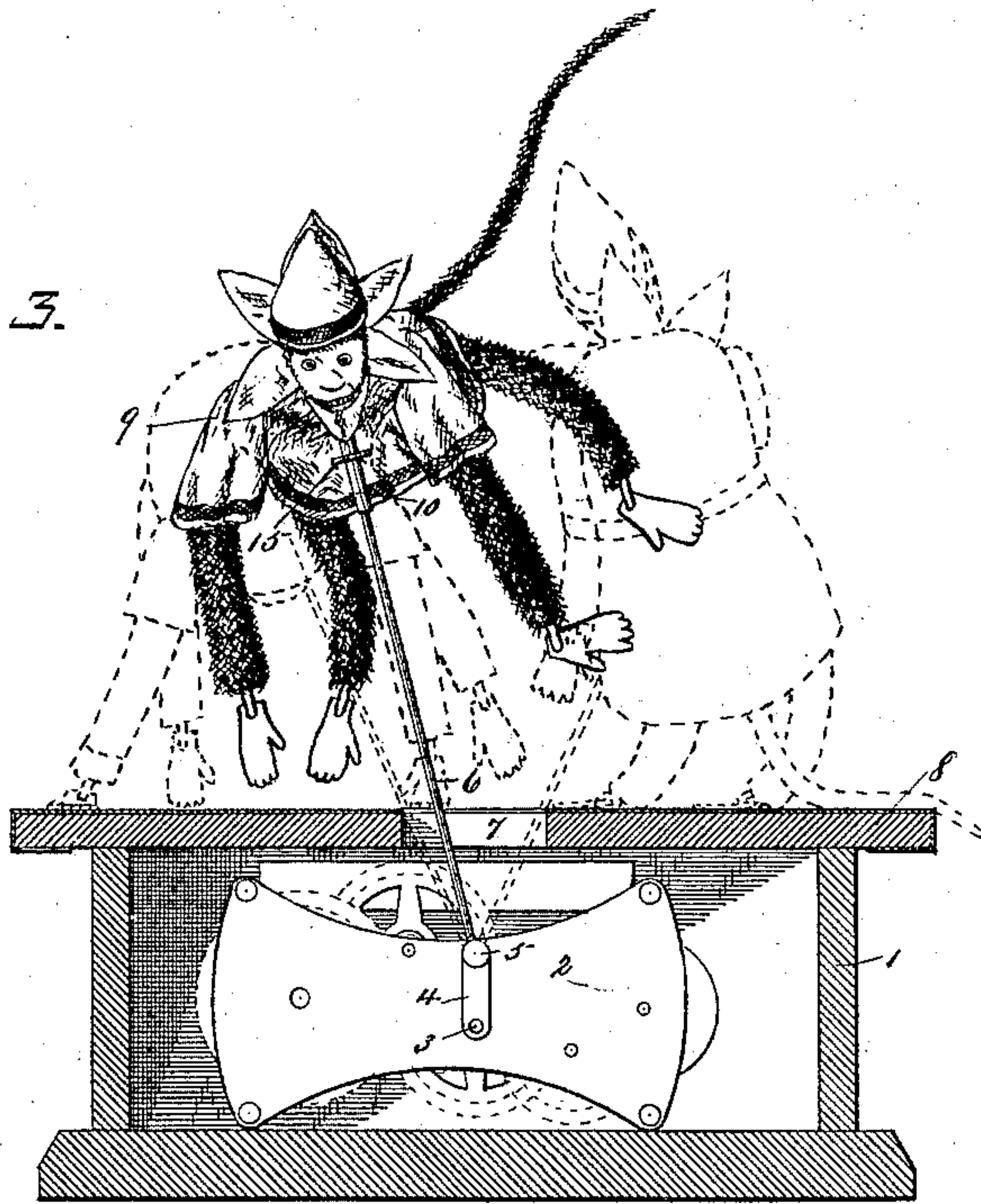


Fig. 4.

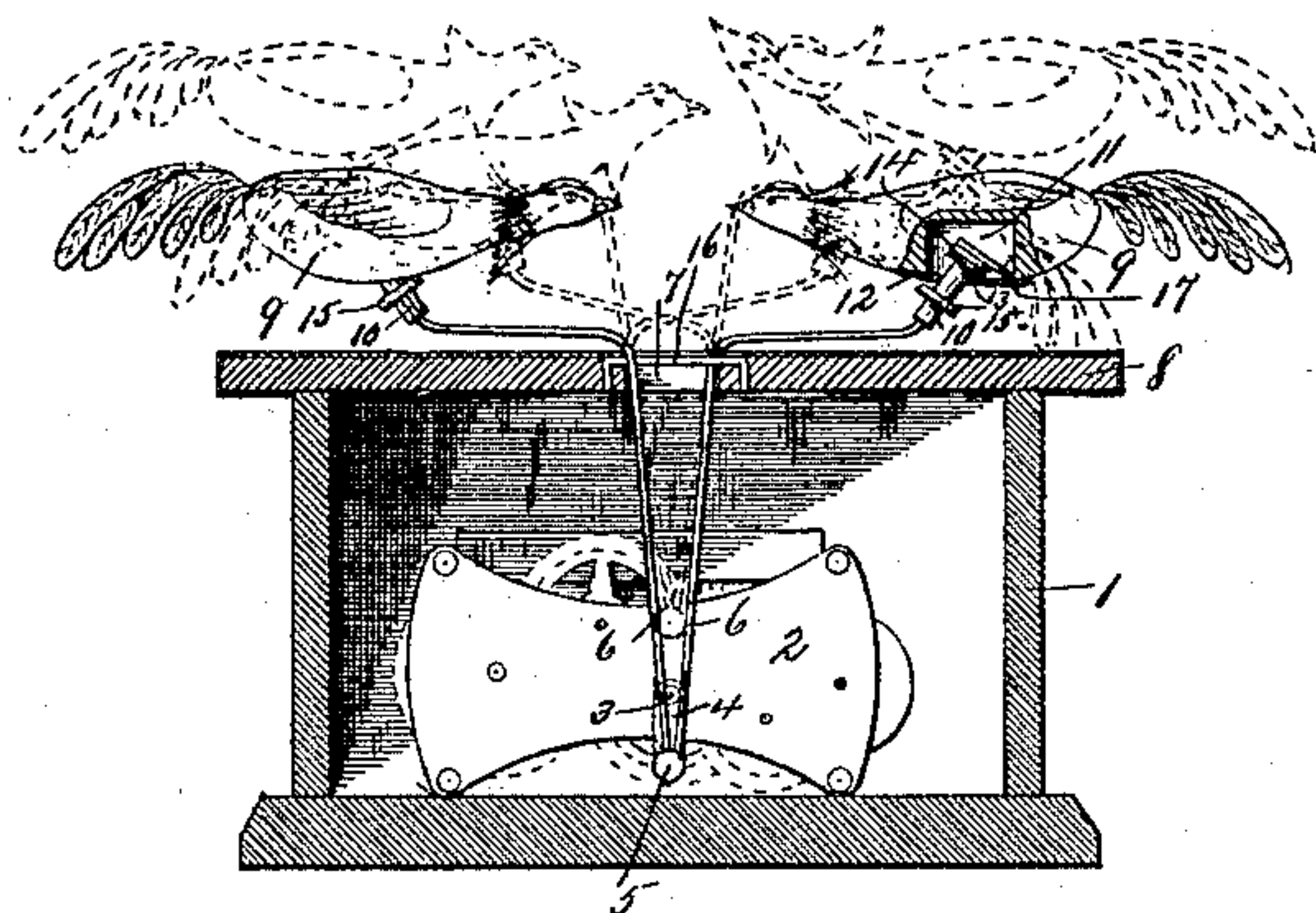
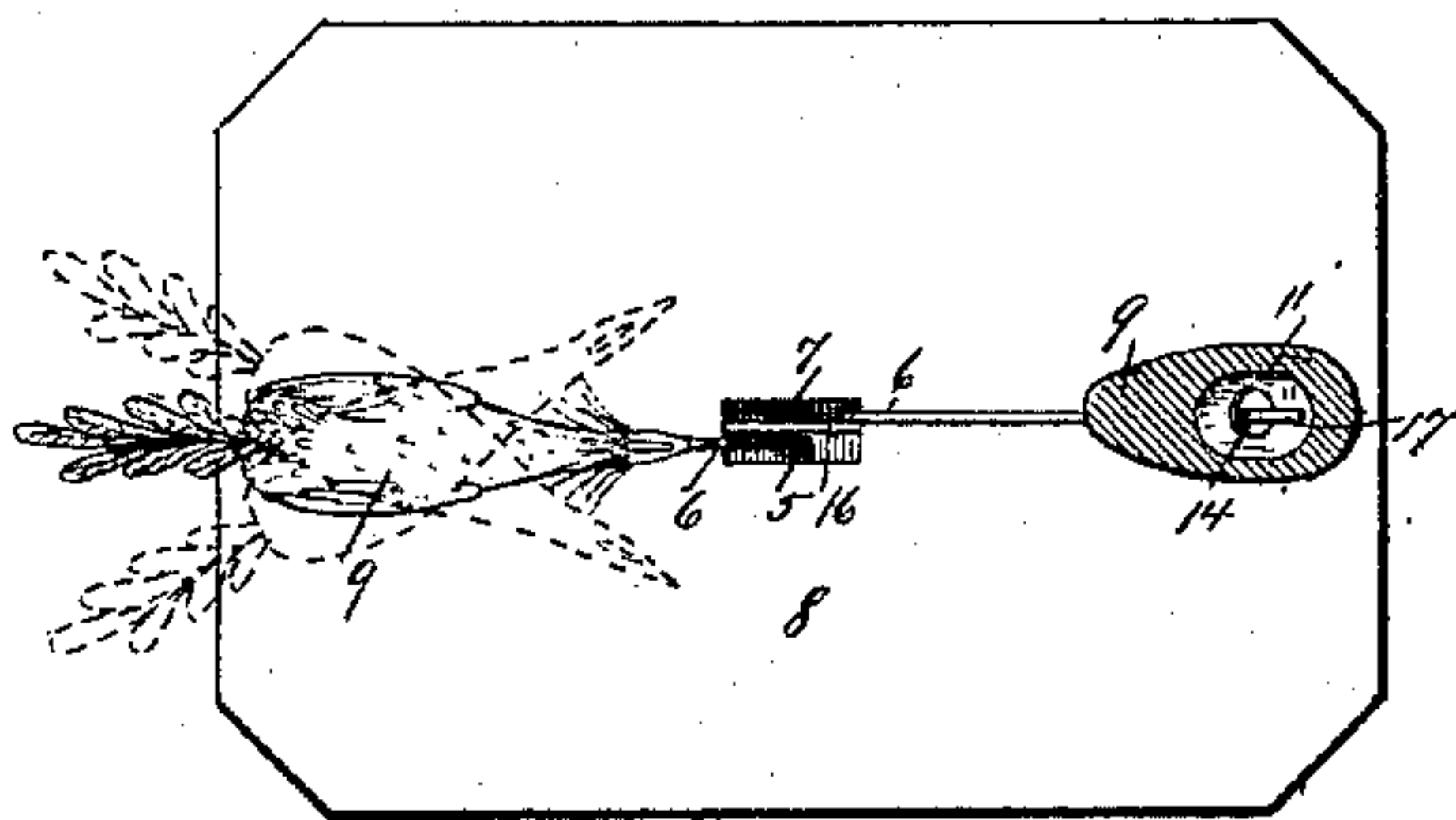


Fig. 5.



WITNESSES.

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UNITED STATES PATENT OFFICE.

CHARLES A. HOTCHKISS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO
IVES, BLAKESLEE & CO., OF SAME PLACE.

MECHANICAL TOY.

SPECIFICATION forming part of Letters Patent No. 368,833, dated August 23, 1887.

Application filed April 25, 1887. Serial No. 235,960. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. HOTCHKISS, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Mechanical Toys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the class of mechanical toys which are operated by clock-movements; and it consists of one or more figures loosely connected to rods operated by a clock-movement in such a manner that the figures are caused to jump and turn about like a prancing monkey, to jump like a bucking horse, or to rush forward and strike each other and then move backward like fighting cocks or goats. In order to accomplish these effects, while at the same time the article shall be simple in construction and economical in cost, I have devised the novel toy of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to indicate the several parts.

Figure 1 is a longitudinal section of the case, showing the operating mechanism in elevation, the crank being at its lowest position, the figure being shown in full lines in one of the positions it assumes, other positions being indicated by dotted lines; Fig. 2, a plan view, the positions of the figure corresponding with Fig. 1; Fig. 3, a longitudinal section showing the crank in its raised position, the figure being shown in full lines in one of its positions, and other positions being indicated by dotted lines; Fig. 4, a longitudinal section showing two figures upon independent rods operated by the same crank; Fig. 5, a plan view, partially in horizontal section, showing the manner in which one of the figures, when two are used, is attached to the rod; and Fig. 6 is a detail sectional view showing the manner in which a single figure, when used, is attached to the rod.

1 denotes the box or case for the movement, which may be of any suitable or preferred

form, and 2 the movement, which is secured in place in any suitable manner. The movement is so constructed as to give rotary motion to a shaft, 3, having a crank, 4, with a pin, 5.

6 denotes a rod or rods connected to pin 5 and passing upward through a slot, 7, in the table or top 8 of the box or case.

9 denotes figures attached to the upper ends of rods 6. It is of course essential that these figures shall be loosely connected to the rods, and it is, moreover, preferable that they should be detachable.

10 denotes sockets adapted to fit over the ends of the rods. They may of course, if preferred, be threaded to engage the rods, but are ordinarily held in place by friction alone. The figures may be made in any suitable manner or of any preferred material. The bodies are ordinarily made of wood and provided in their under sides with recess 11.

12 denotes a covering-plate having central opening, 13, through which the shank of the socket passes. At the upper end of the socket, within the recess, is a plate, 14, and on the outer side of the recess is a plate, 15, also secured to the socket. These plates are far enough apart and opening 13 through the covering-plate is made large enough so that the figure has free movement in all possible directions upon the rod. The recess 11 is placed about at the center of the figure, so that when the socket is in place upon the end of the rod the figure is balanced. As soon as the movement is set in motion the action of crank 4 is to throw the rod upward and downward and to cause it to swing backward and forward in slot 7. The figure, being perfectly free to move in all directions upon the rod, is of course caused to assume all imaginable positions as it prances about the table.

In Figs. 1, 2, and 3 I have shown a single figure free to turn upon the rod. The special figure used is of course not of the essence of my invention. It may be a clown, a horse, or a monkey, the latter being shown in the drawings.

Where two figures are used, the construction is the same with slight exceptions. Two rods are attached to crank 4, side by side, a rod, 16, being placed longitudinally in slot 7 to pre-

vent the figures from tilting over toward each other. Instead of being free to turn entirely around, as in the other form, I preferably provide stops 17 in recesses 11, which, by coming in contact with the sides of the recesses, prevent the figures from making more than a partial turn. As illustrating the application of my invention when two figures are required, I have shown in Figs. 4 and 5 figures of a pair of game-cocks fighting. The general construction and arrangement will be the same for a pair of butting goats or any other fighting animals. The figures shown are considered quite sufficient to illustrate the application of my invention. It will of course be understood that the details of construction may be varied to an almost unlimited extent without departing from the principle of my invention.

I claim—

1. A clock-movement having a crank, a table having a slot, and a rod, 16, extending longitudinally of said slot, in combination with two rods, 6, connected to said crank and extending upward through the slot on opposite sides of rod 16, and figures loosely connected to the upper ends of rod 6.

2. In a mechanical toy, a figure having a recess in its lower side and a plate covering said recess, and having an opening, 13, in combination with a socket having a plate within said recess and a plate, 15, below said

recess, and a rod with which said socket engages, substantially as described.

3. The crank, rod, and table, having a slot, 7, in combination with socket 10, having plates 14 and 15, and a figure having a recess, a plate, 12, covering said recess and having a central opening through which the socket passes, plate 14 being within the recess in the figure and plate 15 outside thereof, whereby the figure is held securely in position, but is left free to turn and to move in all directions.

4. Rod 6 and socket 10, having plates 14 and 15, in combination with a figure having a recess, 11, one of said plates being within said recess and the other outside of it, and a stop, 17, within said recess adapted to engage the sides thereof, whereby the figure is prevented from making more than a partial revolution.

5. A clock-movement having a crank and a table having a slot divided longitudinally at the center, in combination with rods on opposite sides of said division, both connected to said crank, and figures at the upper ends of said rods loosely connected thereto, but held against more than partial revolution thereon.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. HOTCHKISS.

Witnesses:

A. M. WOOSTER,
EDWARD R. IVES.