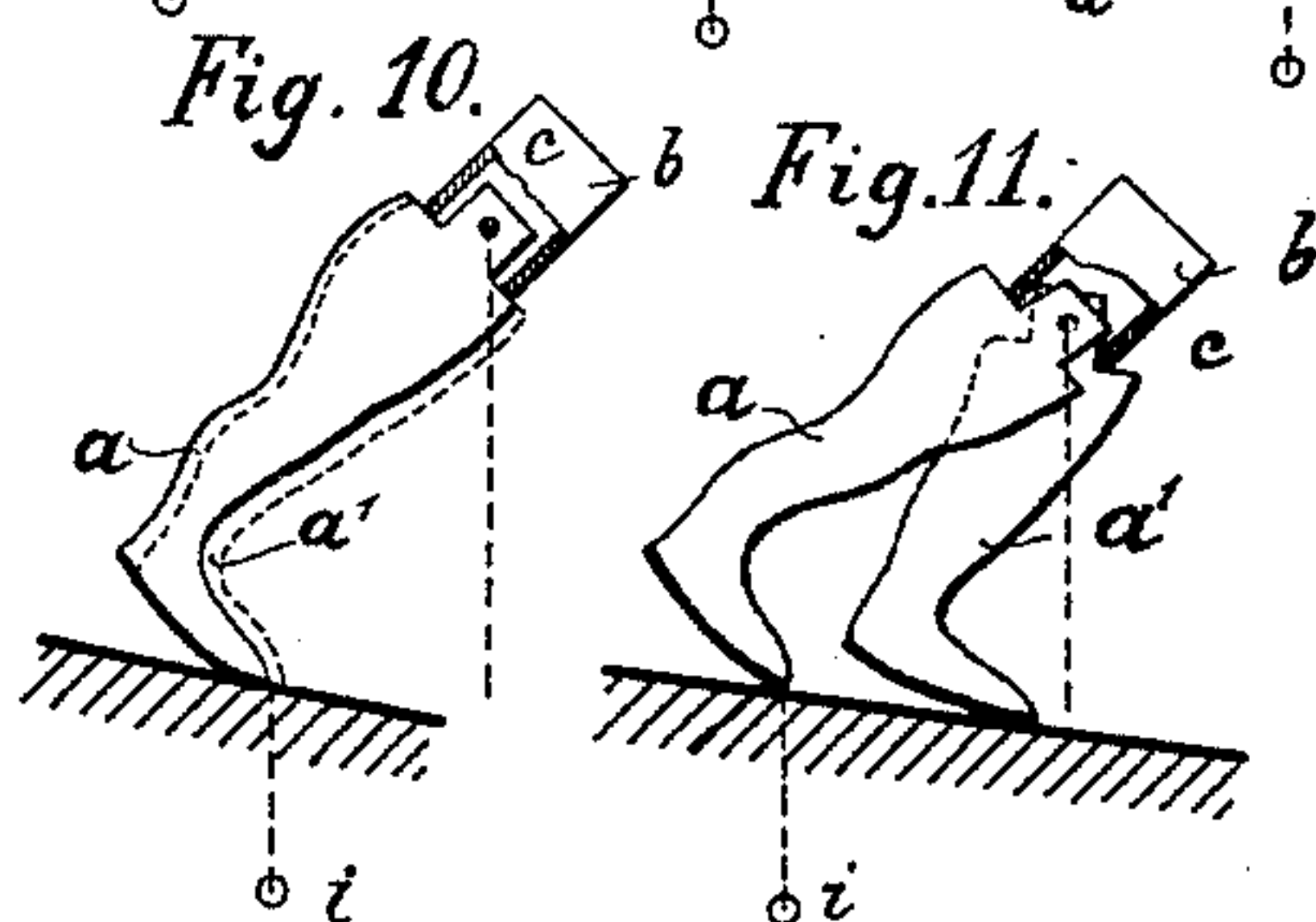
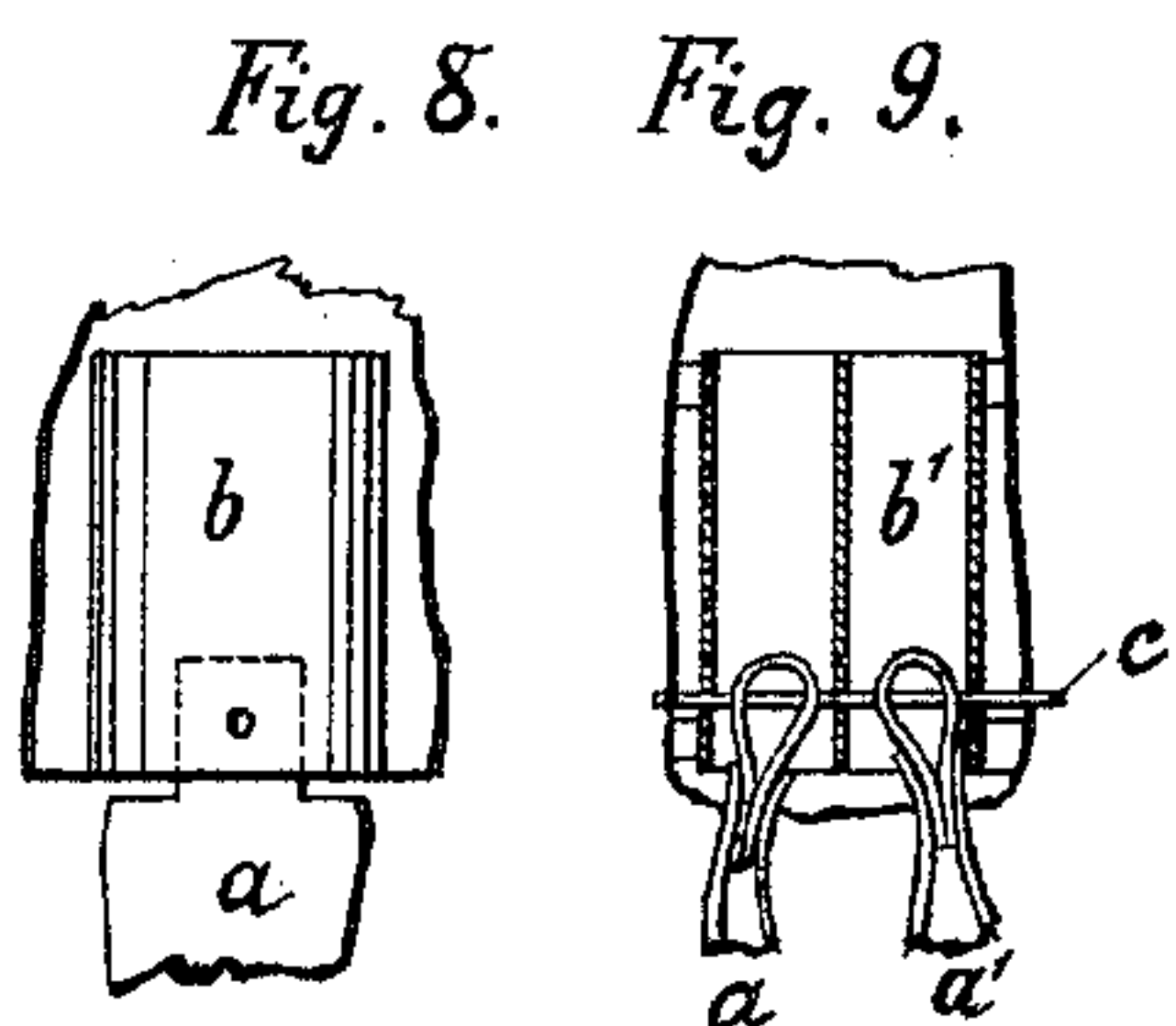
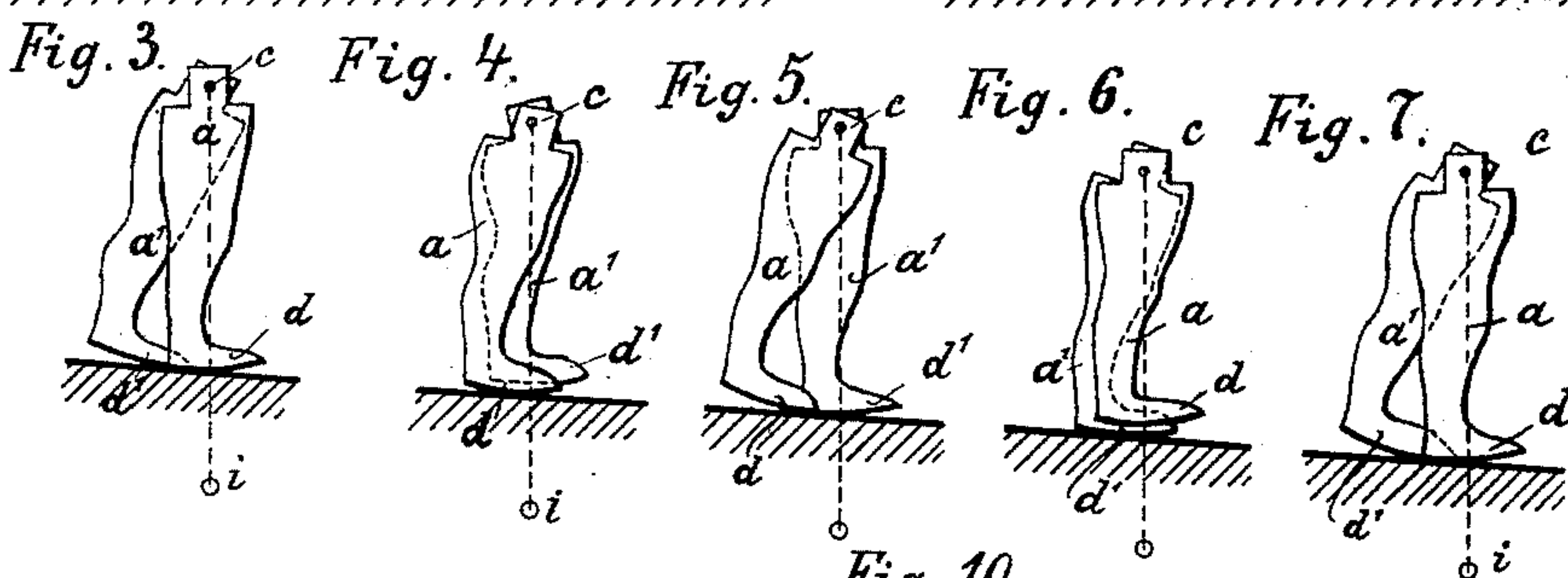
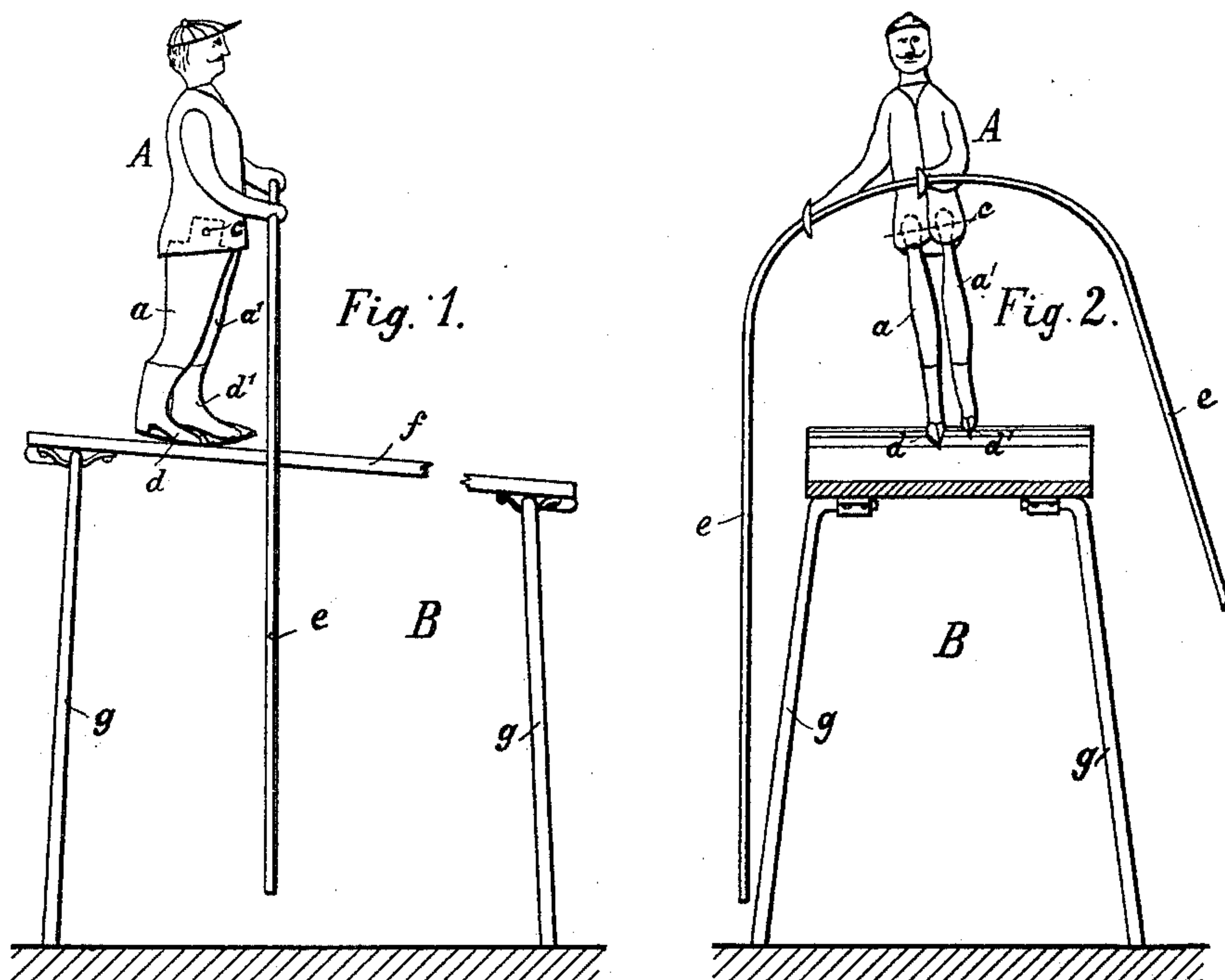


(No Model.)

G. CARETTE.
TOY.

No. 435,796.

Patented Sept. 2, 1890.



Witnesses:
J. A. Rutherford
Lucy B. Hills.

Inventor:
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UNITED STATES PATENT OFFICE.

GEORGES CARETTE, OF NUREMBERG, GERMANY.

TOY.

SPECIFICATION forming part of Letters Patent No. 435,796, dated September 2, 1890.

Application filed May 14, 1890. Serial No. 351,755. (No model.)

To all whom it may concern:

Be it known that I, GEORGES CARETTE, a citizen of the State of Bavaria, Germany, residing at Nuremberg, Bavaria, Germany, have
5 invented certain new and useful Improvements in 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
10 make and use the same.

The toy which forms the subject of this invention represents a human figure carrying in its hands a balancing-pole, and imitates the movements of a rope-dancer as it walks
15 down in an inclined plane, continually swinging to and fro. A special motive power is not needed for producing these movements, its own weight and the weight of the balancing-pole being utilized for the purpose.

20 In the accompanying drawings, Figure 1 is a side view, and Fig. 2 a front view, of the improved toy. Figs. 3 to 7 represent several positions of the legs of the figure during two steps. Figs. 8 and 9 show the device for attaching the legs. Figs. 10 and 11 show special
25 positions of the legs.

In the lower part of the trunk of the figure, which is denoted by A in the drawings, is soldered a frame b, Figs. 8 and 9. This
30 frame is divided into two compartments separated from each other by a partition, and it is traversed by a pin c. From the pin are suspended the two legs a and a', the said pin being passed through a loop formed by the
35 piece of sheet metal, of which one-half of each leg consists. A sure guide is thus obtained for the legs, which can turn backward and forward, but cannot pass laterally from their position. The soles of the feet d d' of
40 the figure form arcs of a circle the center of which coincides with the pivot for the legs. These feet are soldered in the lower part of the legs, so that they are covered on their sides, Fig. 1, and have the appearance of
45 ordinary feet. The figure carries in its hands a balancing-pole e, made of wire and bent downward, so as to form a large arch, the pole being of such length that the center of gravity of the whole will be at a certain distance
50 below the figure. This pole cannot be displaced in the hands, and it imparts to the

figure a swinging movement if pulled to one side. The inclined plane on which the figure walks down is formed by the plate f of the frame B. The feet g of this frame are pivoted
55 to the board and can be folded underneath the latter, so as to enable the whole frame to be easily packed.

In order to cause the figure to walk, it is so placed upon the inclined plane that it has its
60 face turned downward, and the balancing-pole is drawn a little to one side. This, however, is not necessary in most cases, as extremely small oscillations of the balancing-pole, which take place of themselves, will set
65 the figure in motion. The figure then swings from one side to the other, puts one foot alternately before the other, and steps slowly forward. The several positions which the legs then occupy are shown in Figs. 3 to 7. Fig.
70 3 shows the legs at the beginning of a step. The figure stands upright and is about to incline to the right-hand side. The center of gravity i of the trunk is vertically below the pin e. The legs also stand upright. The right
75 foot d touches the plane at a point of the heel. The left foot d' touches it at the toe. When the figure inclines to the right-hand side, the foot d' is raised a little and the foot d bears the whole weight of the figure. As
80 the soles of the two feet constitute arcs of a circle which has for its center the pin c, and as the weight of the trunk of the figure and of the balancing-pole rests upon this pin, the foot d rolls forward, while the foot d' falls for-
85 ward. In these movements the trunk always remains in an upright position, and the center of gravity moves with the pivot for the legs downward parallel with the inclined plane. When the figure has inclined to its
90 extreme position on the right-hand side, the legs occupy approximately the position indicated in Fig. 4. The foot d touches the inclined plane with its middle part, and the foot d' hangs vertically by the side. In the
95 further movement the legs will then pass to the position shown in Fig. 5, inasmuch as the foot d continues to roll and the foot d' continues to fall to the vertical position. The new position is the converse of that shown in
100 Fig. 3. The foot d stands with the toe upon the inclined plane and the foot d' with the

heel. A step has then been completed, and the figure now begins the same movement to the other side in order to return to the first position Fig. 7. This play is repeated until
5 the figure has arrived at the lower part of the inclined plane, because under the action of the balancing-pole it will swing to and fro for a comparatively long time. In case the figure is well made, the movements, owing to
10 the balancing-pole, will be sufficiently regular. The velocity can be regulated by changing the inclination of the plate, only a very slight inclination being required for causing the figure to advance slowly.
15 In order that the steps shall not be longer than corresponds to the reality, the legs and the frame *b* are made of such form that the legs will come in contact with the frame after they have turned through a suitable
20 distance. If the figure is caused to oscillate through a long distance, it can during the forward movement occupy, for example, the position shown in Fig. 11, wherein the upper part of the leg *a* has touched behind and the
25 upper part of the leg *a'* in front, and wherein the center of gravity of the figure, which now constitutes, with the leg *a*, a whole, is not ver-

tically below the pin *c*, but vertically below the point or toe of the foot *d*.

By providing a stop for the legs the figure 30 is prevented from falling either quite to the front or quite to the rear. If the figure is, for example, put up in such a manner that both feet are side by side, it will occupy the position indicated in Fig. 10. 35

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

A toy consisting of a figure having pivoted 40 legs, feet forming arcs of circles struck from the pivot of the legs, and forwardly-projecting arms carrying a rigidly-attached and arched balancing-rod projecting downward below the feet to place the center of gravity 45 below the figure, substantially as and for the purpose described.

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

GEORGES CARETTE.

Witnesses:

SIEGMUND MORZ,
LEONHARD LANG.