

N° 7453



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DUPLICATE

Date of Application, 27th Mar., 1912—Accepted, 5th Dec., 1912

COMPLETE SPECIFICATION.

Improvements in and relating to Toys.

We, BALDUIN BERNHARD BECHSTEIN, Manufacturer, and PAUL OSWALD UHLIG, Foreman, of Mittelsaida and Niedersaida, respectively, small towns in Germany, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improvements in toy animals or human figures of the kind which imitate walking on a declining path without requiring any actuating mechanism and which perform an alternate sidewise swaying motion in order to lift successively one of the legs for the forward movement.

10 It has previously been proposed to provide a human figure of the aforesaid kind with a balancing pole so as to impart the required lateral swaying motion, while the soles of the feet form smooth arcs of a circle having for centre the pivot on which the legs swing.

15 It has also been proposed to form the feet of walking figures with outwardly slanting soles leaving at the inner or adjacent edges of the soles longitudinal ridges upon which the swaying motion is carried out without the use of extraneous means.

20 According to our invention, an almost natural walking movement is obtained by providing each foot of a human figure with a sole and heel similar to an ordinary boot and to provide several ridges in different positions on the heel and the sole as hereinafter set forth.

The subject matter of the invention is illustrated on the accompanying drawing.

25 Fig. 1 is a side view of a human figure walking downhill on the inclined plane.

Fig. 2 is a front view of said figure,

Fig. 3 is an underside plan view of the sole and heel of the two feet of the figure,

30 Figs. 4 to 6 are vertical transverse sections on the lines G—H, C—D and E—F of Fig. 3 respectively,

Fig. 7 is a side view of the leg and foot,

Fig. 8 shows the curve of movement produced by the feet of the figure, and

Fig. 9 is a vertical longitudinal section on the line A—B of Fig. 3.

The characteristic points of said sole and heel are:

35 1.) The front ridge on the heel whereby the latter is somewhat raised towards its tilting point *a* (Figs. 3, 5 and 9), said point being situated slightly away from the inside edge of the heel.

40 2.) The rear ridge on the sole, coming to a point beneath the ball of the big toe, whereby the sole is somewhat raised at its tilting point *b* (Figs. 3, 6 and 9), and

3.) The little front ridge *c*, forming a line *c, c, c* on the sole near the small toe, along the front portion of the outer edge of the boot, (Figs. 3, 4, and 9).

Arrows marked *x*, *x*<sup>1</sup> and *x*<sup>2</sup> respectively indicate the line of thrust at each tilt.

*Bechstein and Uhlig's Improvements in and relating to Toys.*

On an inclined plane (Fig. 1) the figure tilts forwards from point *a* of the advanced foot, once to the right and then to the left, while it is then, from the somewhat inwardly situated point *b*, turned outwards towards raised points *c*, *c*, *c* (Figs. 3 and 7) in order to tilt then again, so-to-say in opposite inward direction, to the point *a* of the other foot, which meanwhile has moved on the inclined plane to the front by gravity during the forward inclination of the figure. The action is continuously repeated until the figure has arrived at the end of the inclined plane. Owing to the thrusts *x*, *x*<sup>1</sup>, *x*<sup>2</sup>, whilst tilting in the directions from *a* to *b* and *c* (Fig. 3) a curved path *y* (see Fig. 8) is negotiated by the figure due to the tilting points provided on the boot, and which resembles the natural walk of living creatures. For, assuming that the left foot is first advanced, the figure tilts forwards on said foot from *a* to *b*, in order to move thereupon from the inwardly situated sole point *b* to the points at *c*. As here at *c* the forward outer edge of the sole is raised, a tilting action from the outside to the inside of the boot is effected. During the movement from point *b* to the ridge-points *c*, the right foot is advanced, owing to the figure inclining at first to the left, and this foot now takes up the thrust caused by the tilting of the figure on its left foot from the ridge-point *c* in the direction of the arrows *x*<sup>2</sup>, *x*<sup>2</sup>. Thereupon, the same series of motions is repeated, but with tilting action from right to left.

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

A toy figure of the kind which imitates walking on a declining path and which performs an alternate sidewise swaying motion whilst lifting successively one of the legs for the forward movement, characterized by the fact that each foot is provided with a sole and heel similar to a boot and that the sole and heel are formed with separate ridges in different positions, substantially as hereinbefore described with reference to and shown in the accompanying drawings.

Dated this 27th day of March, 1912.

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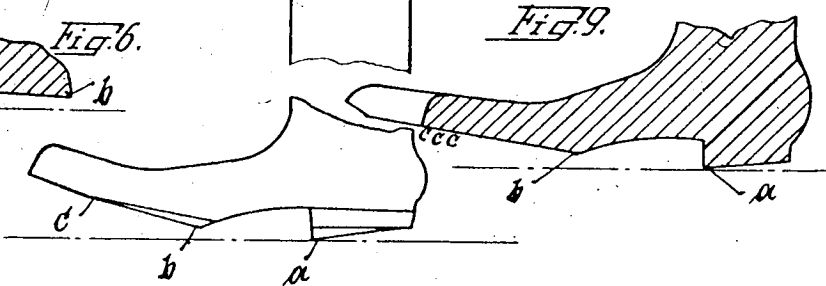
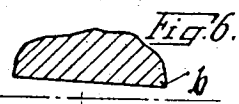
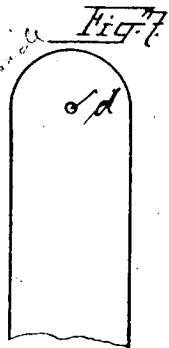
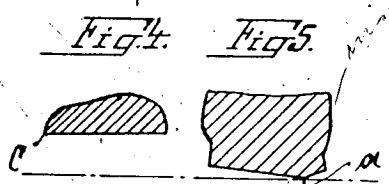
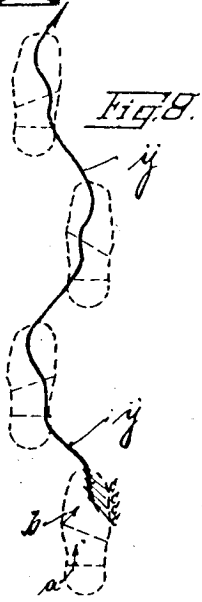
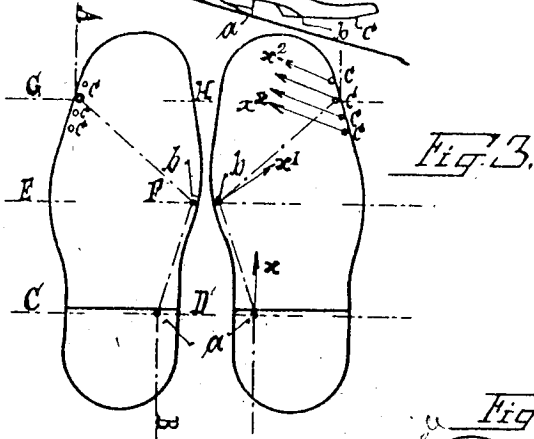
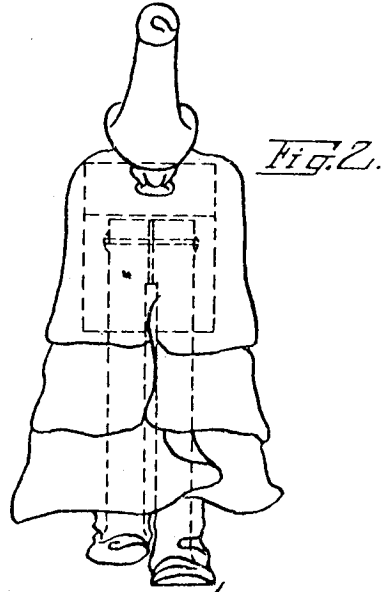
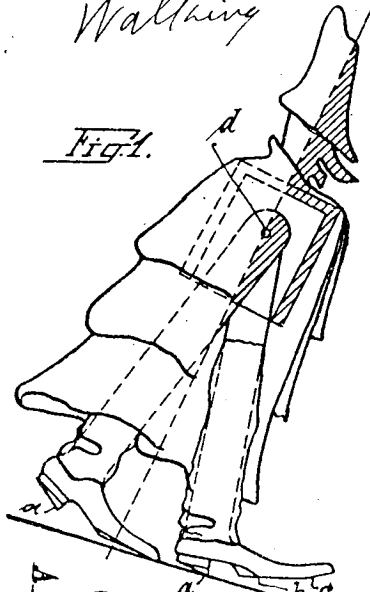
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48  
Fig. 9

CLASSIFICATION: CLASS 21, NO. 1453

BECHSTEIN & another's COMPLETE SPECIFICATION: P-1912-12 (1 SHEET)

# 48. GAMES & TOYS, Figure Toys. *Walking*



[This Drawing is a reproduction of the Original on a reduced scale.]

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Zu der Patentschrift 257710

*March 17/1913.*

*H. Lange & Unget.*

**48. GAMES & TOYS**

**Figure Toys**

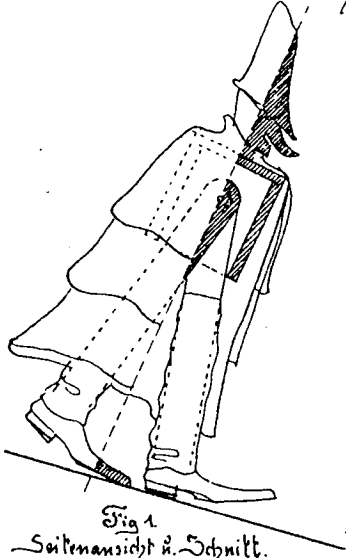


Fig. 1  
Seitenansicht u. Schnitt.

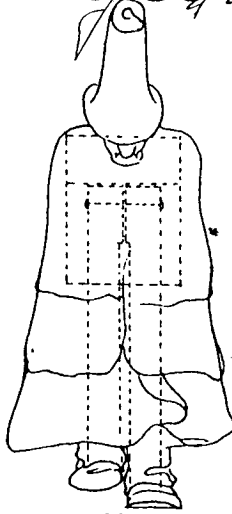


Fig. 2  
Vorderansicht.

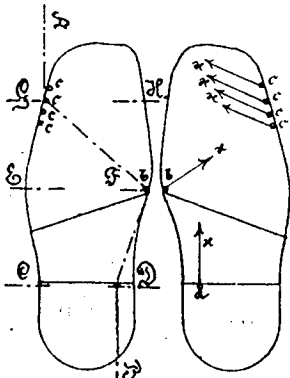


Fig. 3  
Sohlen-Grundriss.

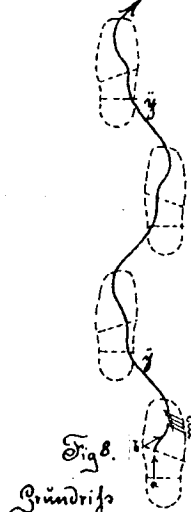


Fig. 4  
Grundriss  
der Schwerpunktkurve.



Fig. 4.  
Schnitte G-H und E-D



Fig. 6 u. E-F (Fig. 3)

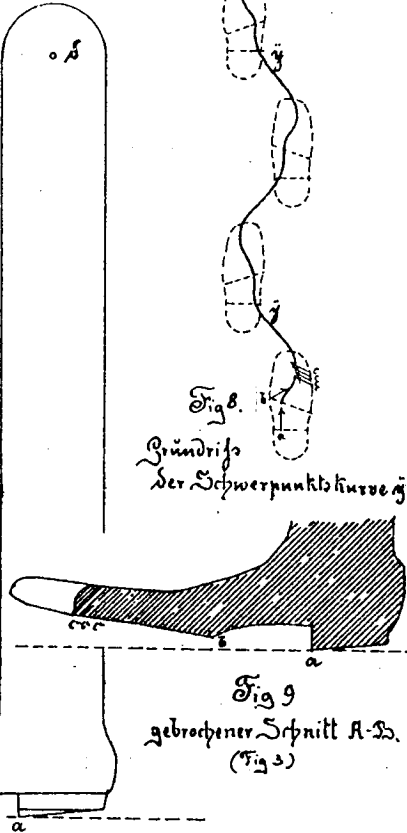


Fig. 7.  
Linker Fuß - Außenansicht

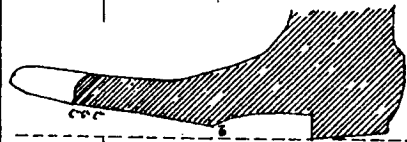


Fig. 9  
gebrochener Schnitt A-B.  
(Fig. 3)