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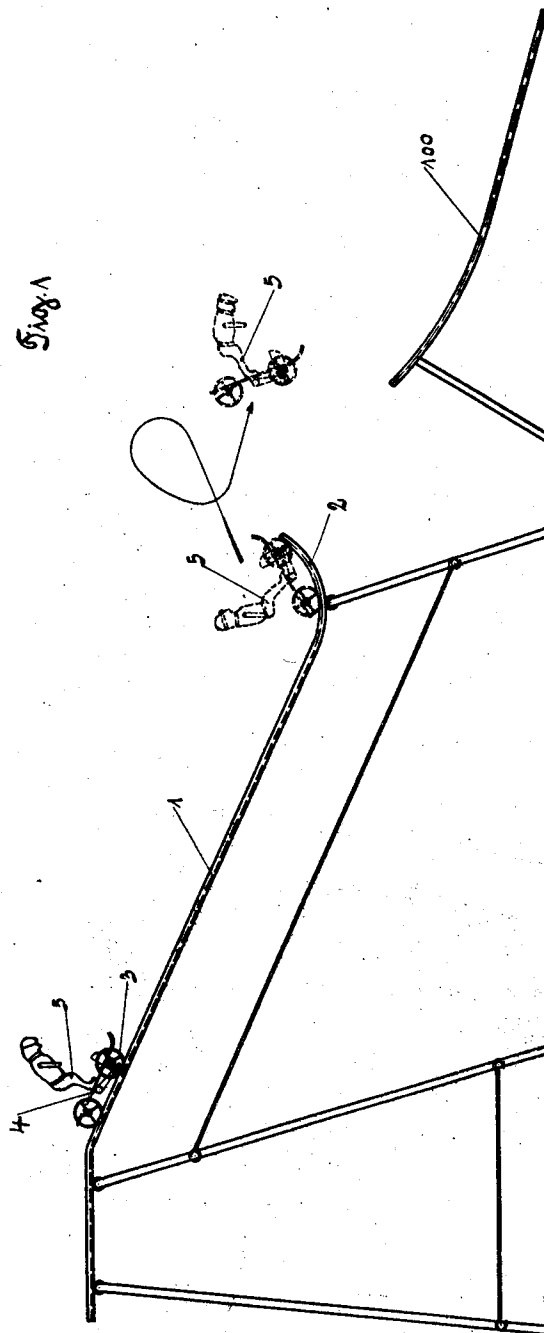
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P. WÜSTENDÖRFER

SOMERSAULTING TOY

Filed Oct. 11, 1927

2 Sheets-Sheet 1



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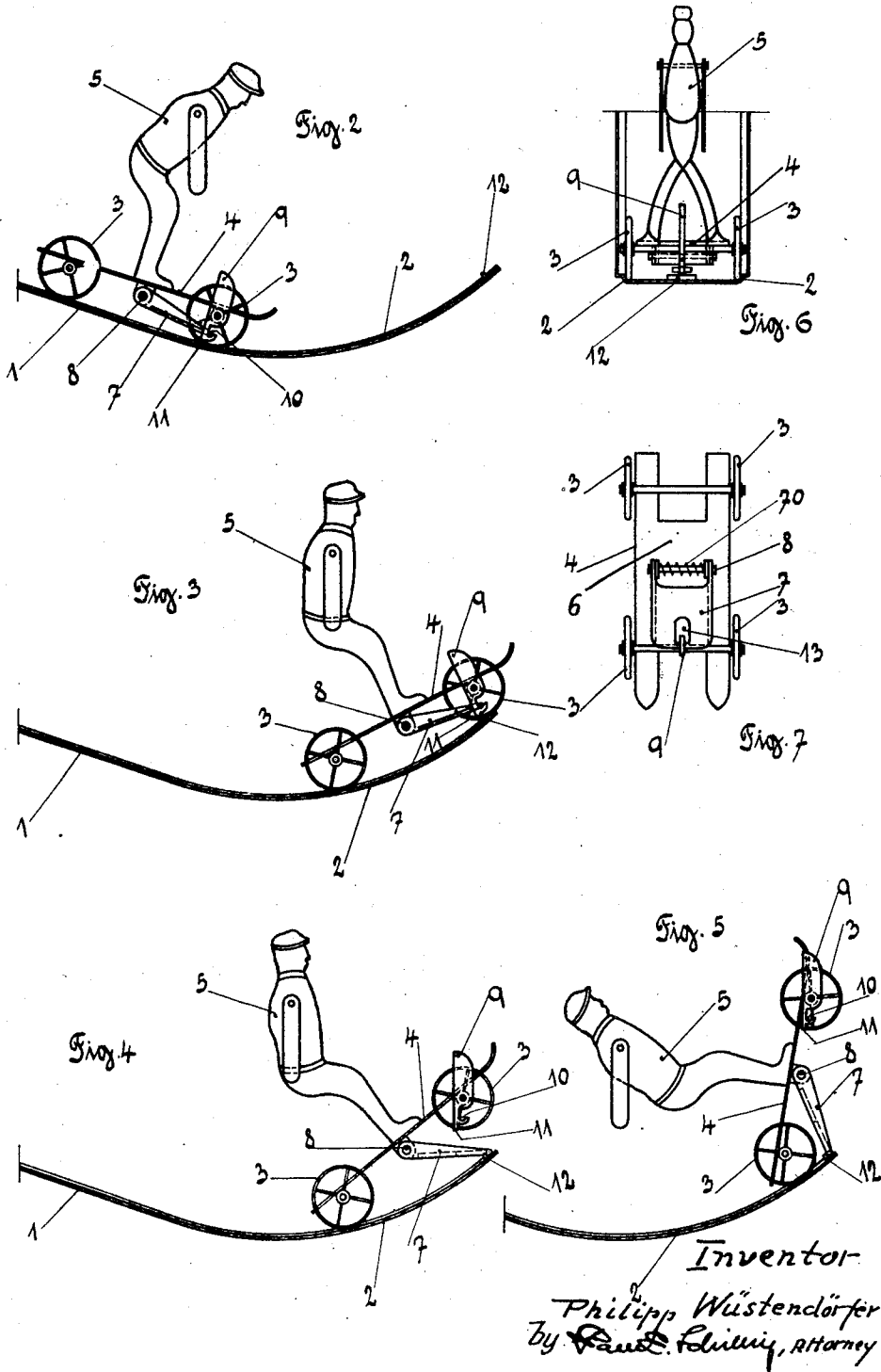
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2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE.

PHILIPP WÜSTENDÖRFER, OF FURTH, GERMANY.

SOMERSAULTING TOY.

Application filed October 11, 1927, Serial No. 225,465, and in Germany May 4, 1927.

The present invention has reference to a mechanical toy, and relates more particularly to a toy device comprising generally an inclined interrupted track or runway and a toy figure designed for sliding down this incline. In rushing down the runway the toy figure is suddenly momentarily halted at the break in the track, is then catapulted by its own momentum across the track interruption and is at the same time by a power storing means caused to execute a complete somersault in the air, and finally lands in proper upright position on the run-out section of the runway down which it continues to the end of the track.

In order to make my invention more readily understood, I will now describe it in detail in connection with the accompanying drawings, in which Fig. 1 shows, on a reduced scale, a side elevation of the complete track structure with the toy figure in various positions of movement, the full-line figure showing the jumper immediately after it has started from the level platform down the runway, and the dash-line figures respectively showing the jumper at the moment of being momentarily arrested and then shot up and upset at the upwardly curved lower end of the track, and, again, in the air completing the loop-the-loop and about to drop onto the upper end of the run-out section of the runway. Figs. 2, 3, 4, and 5 are side elevations, partly in section, of the toy jumper in different operative positions to be described in detail further down. Fig. 6 is a front elevation of the jumper on the track, the latter partly in section, and Fig. 7 shows the underside of the wheeled truck, to the upper face of which the toy figure proper is fixed.

The runway or track, as shown by way of example, is made in two sections 1 and 100 and is preferably, but not necessarily, provided with parallel grooves 2 for guiding the wheels 3 of the little truck 4 upon which the toy jumper 5 is rigidly mounted. The truck comprises the platform 6, on which the wheels 3 are suitably mounted for rotation. On the underface of the platform 6 is provided a power storing device, comprising a spring-actuated member 7 which, as shown by way of example, is formed of sheet metal with a cut-out 13 near its front edge. However, this member 7 may also be in the form of a simple wire loop or yoke. In either case it is fulcrumed at its inner end at 8 to the plat-

form and is controlled by a helical wire spring 70 (Fig. 7).

This power device is nothing other than that so well known in the construction of mouse and other traps, the power storing, spring-actuated member of which is normally retained in the stressed position by a trigger, or a releaser lever which in turn is controlled by a trigger.

In the "set" position of the toy jumper, the member 7 is held in tensioned position by means of the trigger member 9, which for this purpose is provided with the lipped retaining recess 10, as shown in Figs. 2 and 3. From the recessed end of the trigger, which latter is suitably mounted on the truck frame for vertical oscillation thereon, extends a nose 11. The runway section 1 is curved upwardly at its lower end and is provided near its cross-edge with a stop member 12. Upon the jumper running down the relatively steeply pitched section 1 of the runway it rapidly gathers momentum so that it will readily and with force run up the upwardly curved track portion where the trigger nose 11 will encounter the track stop 12 (Fig. 3) and will be oscillated backwardly thereby, with the result that instantly the power device is released and, its rebounding power storing member 7 striking the track in front of stop 12 (Fig. 4), will swing around its fulcrum 8 and cause the jumper to turn a back somersault (Fig. 5), the stop 12 serving as outer fulcrum for the member 7 to complete the looping movement. The momentum of the jumper is sufficient to cause a complete somersaulting movement and to also carry the jumper across the track interruption to safely drop onto the lower section of the runway in proper upright position.

The released power member 7, on coming free from the stop 12, folds flat against the underface of the platform, and for again setting the device for a new operation, it is merely swung back again into the tensioned end position and retained therein by the trigger member, as described above.

This toy, without requiring the use of a special actuating mechanism, gives the child a clever demonstration of the execution of a free loop-the-loop or somersault.

Obviously, the track may be made to present a smooth track surface, that is to say without the wheel-guiding grooves shown merely by way of example, and suitably

banked to prevent the jumper from running off the track in its descent.

What I claim is:—

1. In a toy of the character set forth, in combination, an inclined, interrupted runway, comprising a main section and a run-out section, a toy figure adapted to slide down said runway, including a trigger-controlled power device, and a releaser member on said main runway section for cooperation with said power device for sudden release thereof for causing the said toy figure to execute a complete backward somersault during its passage from the main section of the runway to the run-out section.

2. In a toy of the character set forth, in combination, an inclined, two-sectioned runway presenting guide grooves all down its length, a wheeled toy figure designed for guided running in said grooves, comprising

a truck, a spring-influenced power storing member pivoted on the under face of said truck, and a trigger member mounted for oscillation on the truck and adapted to cooperate with, and retain said power storing member in its tensioned end position, and stop means in proximity of the lower cross-edge of the first runway section, adapted primarily to cooperate with said trigger member for release of said tensioned power storing member at a predetermined time in the descent of said toy figure, and secondarily serving the released power storing member as outer fulcrum to throw said toy figure into a backward somersault during its passage from the first to the second section of the runway.

In testimony whereof I affix my signature.

PHILIPP WÜSTENDÖRFER.