

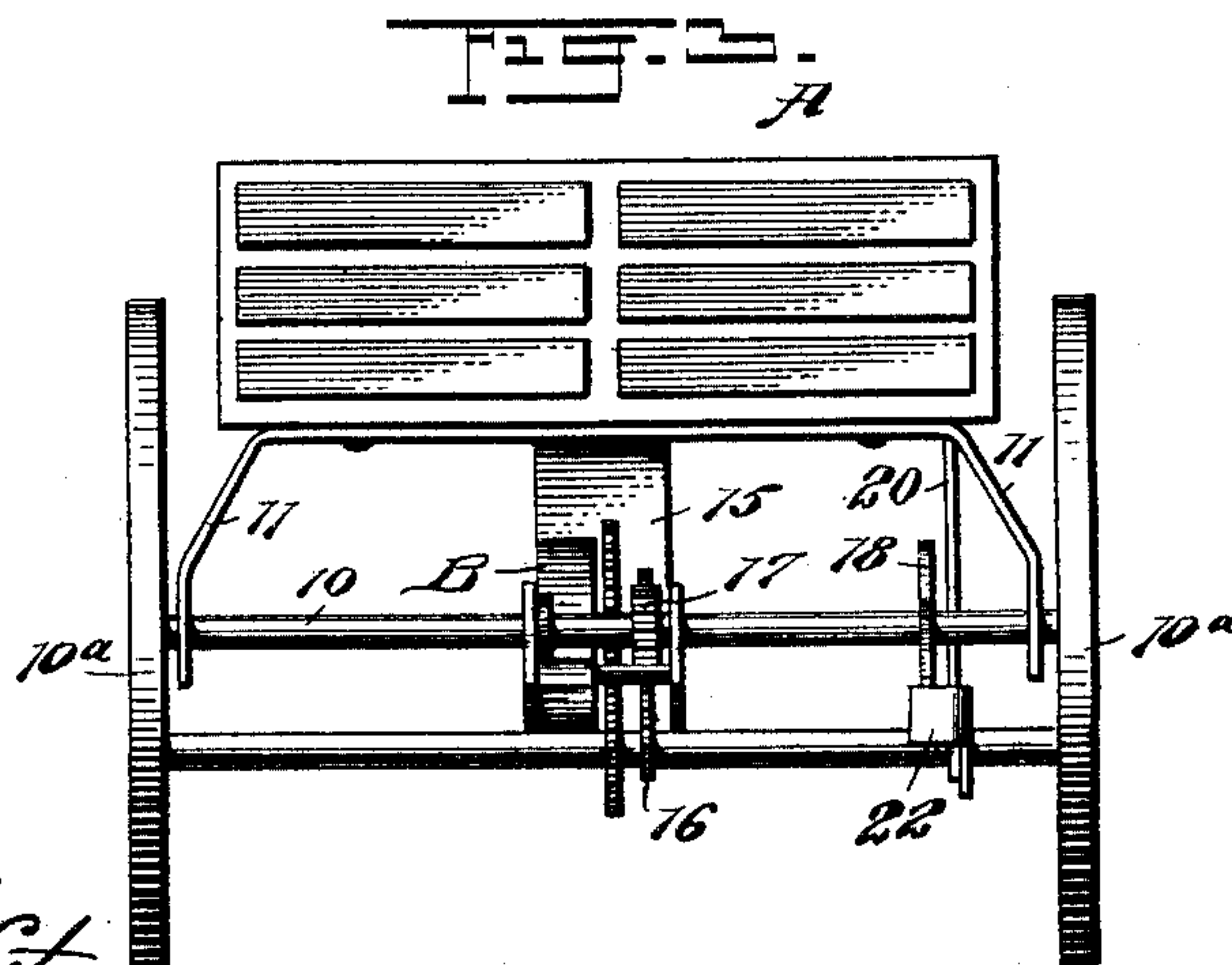
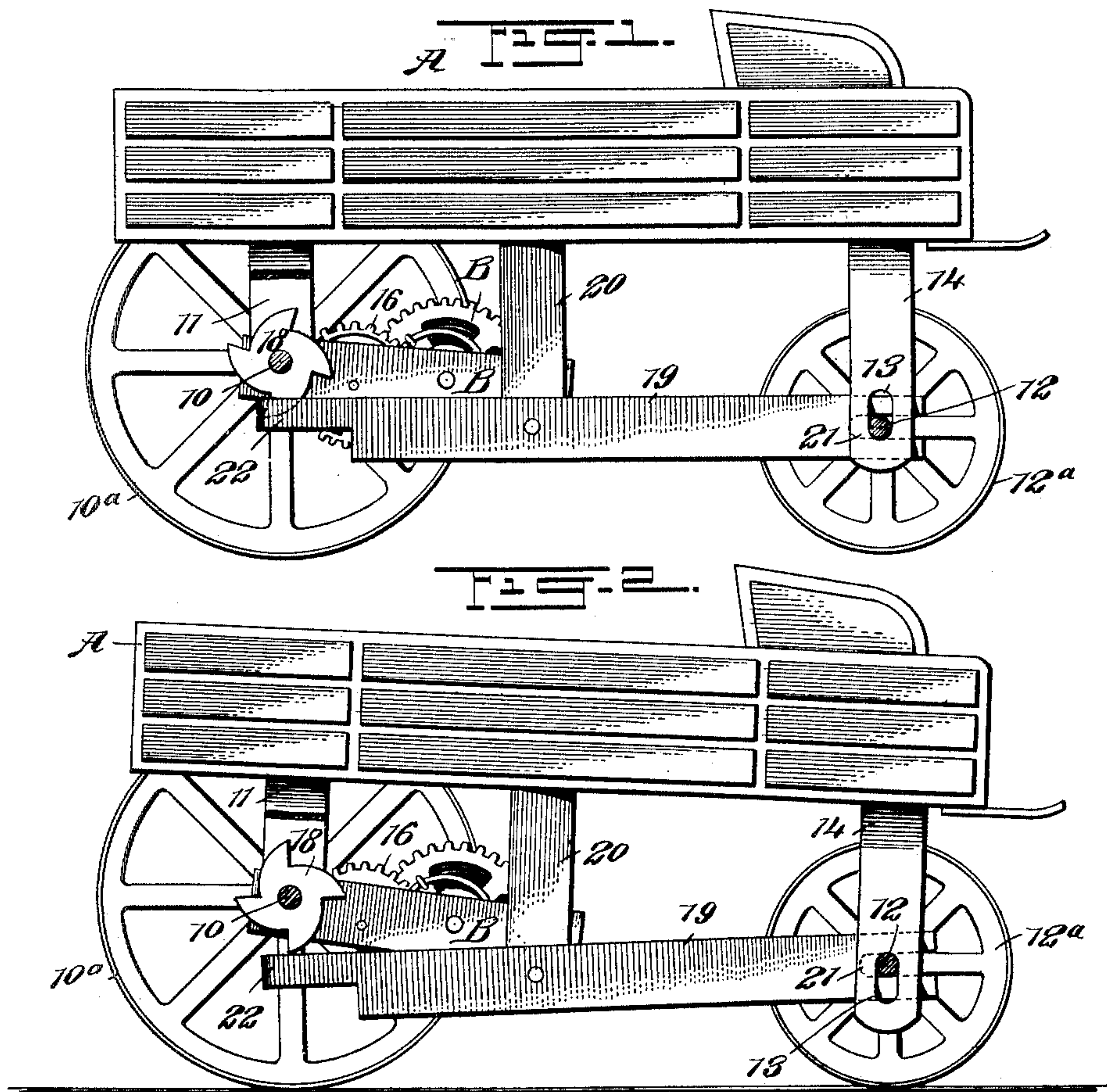
No. 675,718.

Patented June 4, 1901.

A. D. CONVERSE.
STOP MOTION FOR MECHANICAL TOYS.

(Application filed Apr. 8, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ATHERTON D. CONVERSE, OF WINCHENDON, MASSACHUSETTS.

STOP-MOTION FOR MECHANICAL TOYS.

SPECIFICATION forming part of Letters Patent No. 675,718, dated June 4, 1901.

Application filed April 6, 1901. Serial No. 54,615. (No model.)

To all whom it may concern:

Be it known that I, ATHERTON D. CONVERSE, a citizen of the United States, and a resident of Winchendon, in the county of Worcester and State of Massachusetts, have invented a new and Improved Stop-Motion for Mechanical Toys, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a means for automatically preventing the wheels or axles of a motor-controlled vehicle from turning until the vehicle is placed upon the support upon which it is to travel.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a vehicle to which the improvement is applied, the axles being shown in section and the driving-axle and its wheels held against turning. Fig. 2 is a view similar to Fig. 1, the motor, however, being shown as unchecked; and Fig. 3 is a rear elevation of the vehicle and attachment.

The wagon-body A (shown in the drawings) may be of any desired construction, and it is provided with a driving-axle 10, held to turn only in hangers or pedestals 11, which are usually attached to the body. The body is further provided with a second axle 12, and this second axle 12 has rotary and vertical movement in slots 13, produced in hangers or pedestals 14, secured to the body. The driving-axle 10 is provided with wheels 10^a, secured thereto, and the vertically-movable axle 12 is provided with attached wheels 12^a. A motor B, preferably a spring-motor, is used in connection with the driving-axle 10, and the frame of this spring-motor is connected at one end by a hanger 15 with the bottom portion of the vehicle-body A, while the other end of the frame of the motor is loosely supported on the driving-axle 10. One of the gears 16 of the motor is shown in engagement with a pinion 17, attached to the driving-axle 10, as is best illustrated in Fig. 3.

A ratchet-wheel 18 is secured to the axle 10; but instead of this ratchet-wheel one or

more projections may be carried upon the driving-axle. In connection with the ratchet-wheel 18 or its equivalent a stop-lever 19 is employed. This stop-lever is fulcrumed between its ends upon a hanger 20, which is usually attached to the bottom of the vehicle-body, as is shown in Figs. 1 and 2, and at one end of the stop-lever 19 a longitudinal slot 21 is produced, which receives the vertically-movable axle 12, while at the opposite end of the said stop-lever a head 22 is formed, adapted in one position for engagement with the teeth of the ratchet-wheel 18 or with the projections from the driving-axle when such projections are used.

In operation when the vehicle is lifted from the support upon which it is designed to travel the axle 12 will drop to the bottom portion of the slot 13 and the head 22 of the stop-lever 19 will be carried upward and will engage with a tooth of the ratchet-wheel 18 or the projection on the axle 10, thus preventing the driving-axle and the wheels connected therewith from turning and enabling the motor to be safely wound up without loss of power. The moment, however, the vehicle is placed upon a support the wheels 12^a, connected with the vertically-movable axle 12, will cause the said axle to move upward in the slot 13, and thus carry the head 22 of the stop-lever from out of engagement with the tooth of the ratchet-wheel or the projection on the axle 10, with which it was in contact, permitting the motor to immediately exercise its full power on the driving-axle 10.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In mechanical toys, a vehicle, a motor-controlled driving-axle and its wheels, a second axle and its wheels, and a check for the motor, controlled by the movement of the second axle.

2. In a mechanical toy, a driving-axle, a motor in operative connection with said driving-axle, a projection from the driving-axle, a second axle mounted to turn and slide, and a check device operated by the second axle and arranged for contact with the projection from the driving-axle.

3. In a mechanical toy, a motor-controlled driving-axle and its wheels and a second axle

and its wheels, the second axle being mounted to turn and to slide vertically, a lever having a sliding connection with the second axle, and an extension from the said lever, adapted for
5 engagement with the projection from the driving-axle, as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

ATHERTON D. CONVERSE.

Witnesses:

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