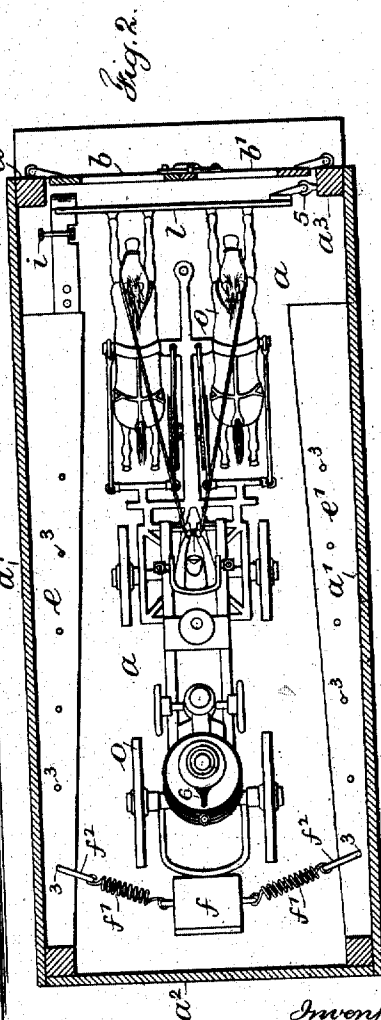
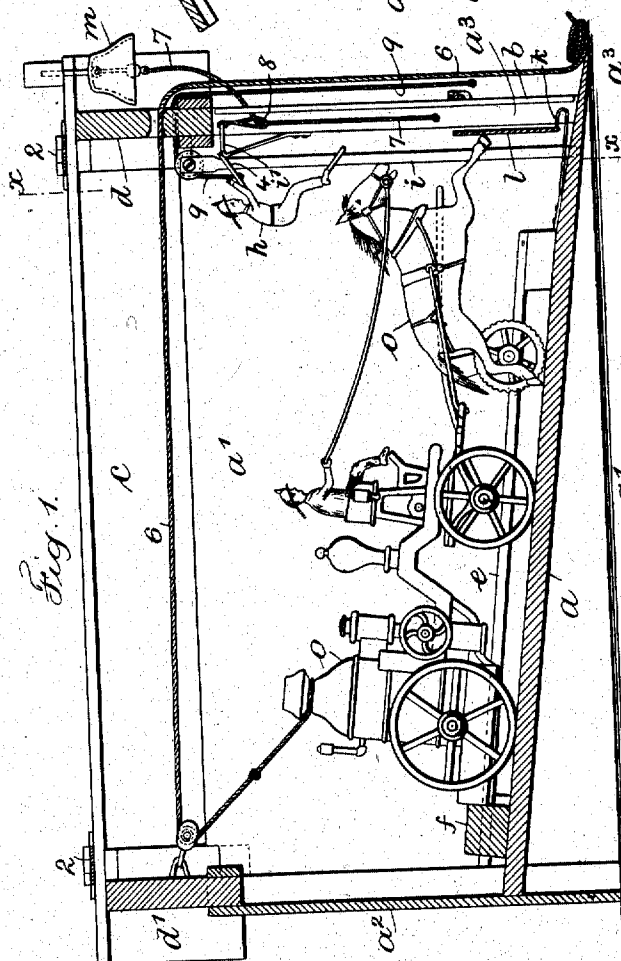
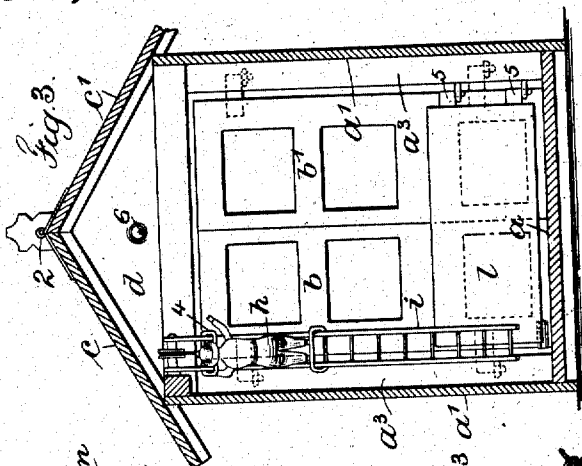


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981,977.



Witnesses
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UNITED STATES PATENT OFFICE.

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TOY.

981,977.

Specification of Letters Patent.

Patented Jan. 17, 1911.

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To all whom it may concern:

Be it known that I, FRANCIS W. CARPENTER, a citizen of the United States, residing at Greenwich, in the county of Fairfield and State of Connecticut, have invented an Improvement in Toys, of which the following is a specification.

My invention relates to a toy for children, of the substantially indestructible class, or in other words, one in which the parts are very strong and well made and adapted to stand considerable use and even abuse, and the object of my invention is the provision of a toy establishment similar to a fire-engine house or stable.

In carrying out my invention, I employ a toy building having a floor base, side and end walls, a removable top and removable end gables suitably fitting upon the end walls and front doors at the entrance portion, a toy vehicle or wheeled toy of any suitable character adapted to be backed into the toy building, a hinged gate for maintaining the wheeled toy within the building, a spring latch or locking device for holding the gate and which is actuated to release the gate by the descent by gravity of a toy figure down a guide placed within the toy building and adjacent to the latch. The toy figure is held in an elevated position to which it has been raised by a drawing cord and in which position it is held by a spring latch; the latter being released by pulling upon another cord. A further cord is employed for pulling the wheel toy into the building in a backward direction and a spring device bearing upon the rear of the wheeled toy is employed for starting its forward movement when the latch-held gate is released. A bell is preferably provided to be rung by a cord in imitation of a fire-alarm and said cord may also actuate and preferably does actuate the latch which releases the toy figure; all of which is hereinafter more fully described.

In the drawings, Figure 1 is a vertical central section and elevation, Fig. 2 a sectional plan and Fig. 3 a vertical cross section at the dotted line x, x , of Fig. 1, looking toward the front.

The toy building comprises a floor base a which may be level but the upper surface of which is preferably inclined toward one end of the building.

The side walls are represented at $a^1 a^1$, the rear wall at a^2 and the front wall at a^3

and the hinged front doors at $b b^1$ filling the opening in the front wall a^3 . These doors are preferably of metal; in other words, of malleable iron and of open-work character. The side and end walls are covered with a two-part hinged roof $c c^1$; the hinges being represented at 2 and the roof is supported in a peaked form by end gables $d d^1$ which are removable and which fit upon and above the end walls.

Within the toy building and extending along the side walls near the floor base are guide rails $e e^1$ which are narrow at the rear of the toy building and increase in width toward the front of the building, forming guides directing the path of the wheeled toy as the same leaves the toy building. These guide rails are provided with holes 3 at spaced intervals and I employ a spring device comprising a block f , oppositely disposed springs f^1 connected thereto and which springs f^1 terminate in hooks f^2 . This spring device is held in its operative position by placing the ends of the hooks f^2 in the holes 3 at opposite sides of the building according to the length of the wheeled toy so that whatever may be the length of the wheeled toy, the block f may be positioned so as to bear upon the rear of the wheeled toy with the springs f^1 under tension so as to assist in ejecting the wheeled toy when released as hereafter described.

h represents a toy figure which in the case of the toy building representing a fire-engine house is the toy figure of a fireman provided with a loop 4 adapted to encircle a guide. In the present instance the guide is a ladder i placed near the front doors $b b^1$ in one corner of the toy building resting upon the floor and rising toward the front gable; the loop encircling the ladder and the ladder forming the guide for the figure.

I provide a latch i^2 which when the toy figure is elevated comes beneath the loop and holds the toy figure in the elevated position and I provide another latch k at the bottom of the guide ladder i and upon which the toy figure rests when in its lowest position and also which latch the toy figure moves when it falls by gravity from its elevated position.

Within the toy building just back of the front doors $b b^1$ is a gate l connected by hinges 5 to one side of the toy building and the free end of this gate is engaged and held by the latch k and when the wheeled

toy *o* is within the toy building the front of the same which may be the pole or the horses, bears against the inner face of the said gate with the rear of the wheeled toy bearing against the block *f* and applying a slight tension to the springs *f*¹.

I employ a bell *m* hung at the center of the roof parts *c c*¹ in front of the front gable and a cord 7 extending from the clapper of the bell. I also employ a cord 6 passing through a hole in the front gable, extending rearward around a pulley and provided with a loop to engage the rear end of the wheeled toy. I also employ a cord 9 passing through a hole in the front gable and connected to the toy figure *h* and a loop of cord 8 connected to the top latch *i*¹. The bell cord 7 preferably passes through the loop 8 from the latch.

In the operation of this toy the toy figure *h* is elevated by its cord 9 until caught and held in the elevated position by the latch *i*¹. The wheeled toy, with the front doors *b b*¹ and the gate *l* open, is drawn into the toy building by its cord 6 and is forced to place with gentle pressure so as to shut the gate *l* and cause the same to be held closed by the bottom latch *k*. In this position the parts may remain until the child for its amusement desires to bring the wheeled toy out of the toy building, in which case, with the front doors *b b*¹ thrown open, the bell cord 7 through the loop 8, is pulled upon; a gentle pull simply rings the bell but a slight force applied also pulls the loop 8, releases the toy figure which in turn descends by gravity, striking the bottom latch *k* and pressing the same down, releases the gate, and the moment the gate is released, the spring device bearing against the rear of the wheeled toy, ejects the same rapidly, particularly if the floor base is inclined; the wheeled toy running out of the toy building and entirely clear of the same upon the floor of a room.

The wheeled toy is preferably a fire-engine and team of horses if the building is made to simulate a fire-engine house, or if the same is made to simulate a stable the wheeled toy may include a carriage or wagon of any description.

The function of the guide rails *e e*¹ beside forming supports for the spring device for ejecting the toy vehicle is to also act as guides to direct the outward movement of the wheeled toy because the forward end of one guide rail must direct the wheeled toy clear of the hinge of the gate and the other guide rail on its side must direct the wheeled toy entirely clear of the toy figure, its ladder and the latch *k*, so that it will be impossible for the wheeled toy as ejected from the toy building to strike against any projecting part.

From the foregoing description it will

be apparent that it will be very easy to return the wheeled toy and the parts described to their normal position and relation because the loop on the end of the cord 6 connected to the wheeled toy may be employed to pull the wheeled toy backwardly into the toy building, the cord 9 to raise the toy figure to engagement with the latch *i*¹ and when the wheeled toy is in the building the gate *l* may then be closed and be held by the latch *k* when the front door is closed.

I claim as my invention:

1. The combination in a toy with a toy building, of an outer door or doors, a low gate hinged inside the building, means adapted to hold the gate in position when closed, means for releasing the gate-holding device and a wheeled toy acting on the inside of the gate to open the same when the holding device is released.

2. The combination in a toy with a toy building, of a hinged gate, a device for locking the same in position when closed, a toy figure moving by gravity and when so moved adapted to act upon the locking device to release the gate and a wheeled toy resting on the floor of the toy building and acting on the gate to open the same when released by the movement of the toy figure.

3. The combination in a toy with a toy building having an inclined floor, of a hinged gate, a device for locking the same when closed, a toy figure and guide therefor adapted for the ascent and descent of the toy figure, positioned so that it will release the locking device of the gate, and a wheeled toy resting upon the inclined floor of the toy building and acting on the hinged gate to open the same when the locking device is released.

4. The combination in a toy with a toy building having an inclined floor, of an outer door or doors, an inside gate hinged to the toy building, a wheeled toy supported upon the inclined floor, a locking device to hold the said gate at its free end and in a closed position and means acting upon the locking device for releasing the same and automatically releasing the gate so as to permit the wheeled toy to roll down the inclined floor by gravity and in so doing, push open the said gate.

5. The combination in a toy with a toy building, of a hinged gate, a device for locking the same, a wheeled toy supported by the floor of the building, a movable figure acting by its weight on the locking device of the hinged gate to release the same and means for propelling the wheeled toy so as to eject the same and simultaneously open the gate and run the wheeled toy out of the building.

6. The combination in a toy with a toy building, of a hinged gate, a device for locking the same, a toy figure adapted to be

raised and lowered, a guide for the same, means for holding the figure in an elevated position and means actuating the latter device for releasing the figure so that it will descend by gravity and act upon the locking device of the gate and a wheeled toy bearing upon the gate to open the same when released.

7. The combination in a toy with a toy building having a floor and a hinged gate, a device for locking the gate when closed, a wheeled toy resting upon the floor and an adjustable spring device removably connected to the building in such a manner as to help start and propel the wheeled toy over the floor when the locking device is released.

8. The combination in a toy with a toy building having an inclined floor, of a gate, a device for locking the gate when closed, a wheeled toy resting on the inclined floor, a movable spring device connected to the house in such a manner that it can be adjusted so as to contact with the wheeled toy according to its size and position on the said floor and means for releasing the locking device of the gate.

9. The combination in a toy with a toy building having an inclined floor, of a gate, a device for holding the same when closed, a toy figure adapted to be raised and lowered and a guide for the same, a latch device to hold the toy figure in an elevated position, means for releasing the same so that the toy figure will descend by gravity and actuate the locking device holding the gate when closed, thereby releasing the same and permitting the gate to be opened.

10. The combination in a toy with a toy building, of an outer door or doors, a low gate hinged inside the building adjacent

to the outer door or doors, a spring latch secured to the base of the toy building and adapted to hold the gate in its closed position, means for actuating the latch and releasing the gate, a wheeled toy bearing upon the inner surface of the gate when within the toy building and adapted upon the release of the gate to open the same in passing out of the toy building.

11. The combination in a toy with a toy building, of a hinged gate, a latch at the base of the building for holding the gate in a closed position, a toy figure adapted to be raised, a guide therefor, the latch placed so as to be struck by the toy figure in its descent and a latch for holding the toy figure in an elevated position, a cord for drawing the toy figure up into its elevated position and a cord for actuating the latch for releasing the toy figure.

12. The combination in a toy with a toy building, of a hinged gate, a latch at the base of the building for holding the gate in a closed position, a toy figure adapted to be raised, a guide therefor, the latch placed so as to be struck by the toy figure in its descent, a latch for holding the toy figure in an elevated position, a cord for drawing the toy figure up into its elevated position and a cord for actuating the latch for releasing the toy figure, a bell and means for supporting the same from the roof of the toy building, a cord from the clapper of the bell connected to the cord device of the latch holding the toy figure in its elevated position for simultaneous movement.

Signed by me this 22d day of March 1910.

FRANCIS W. CARPENTER.

Witnesses:

GEO. T. PINCKNEY,
E. ZACHARIASEN.