No. 809,092. PATENTED JAN. 2, 1906.

F. W. CARPENTER.

TOY.

APPLICATION FILED MAY 11, 1904.

4 SHEETS—SHEET 1.

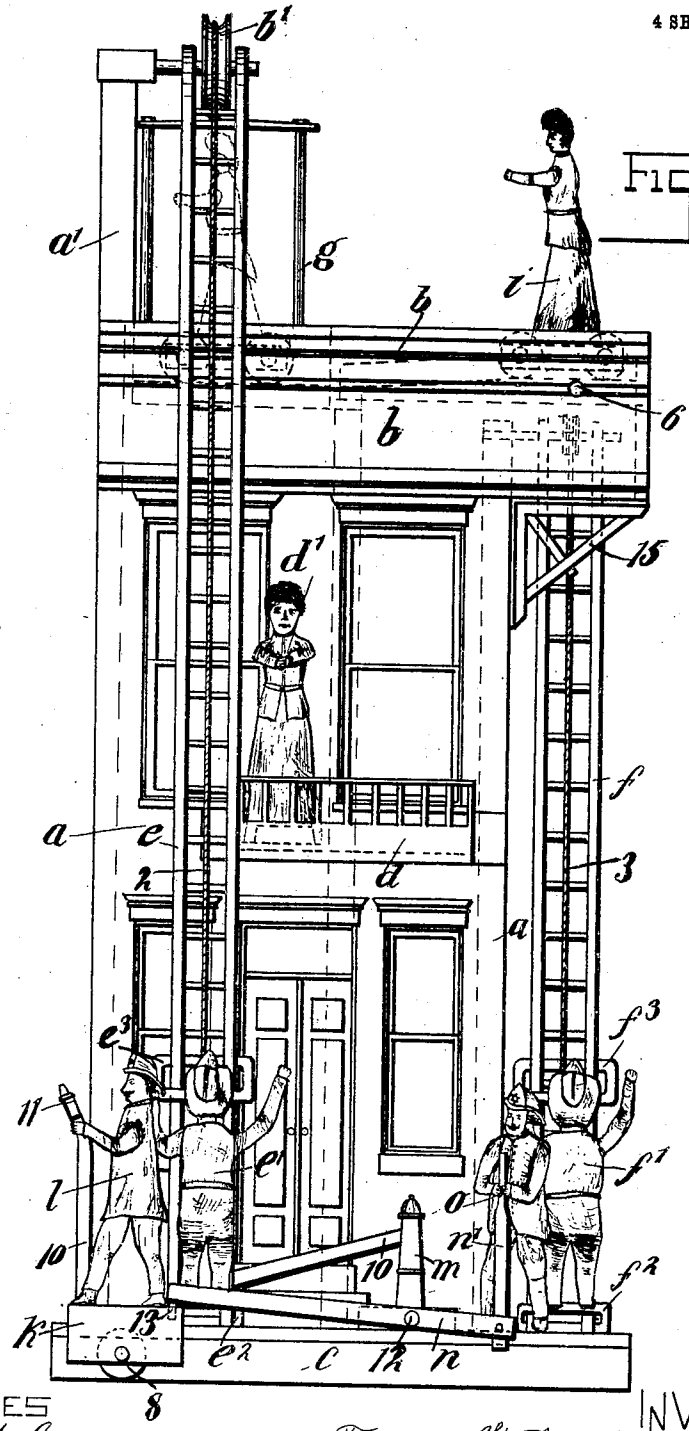

Fig. 1

WITNESSES

Leopold Hell

Chas. H. Smith

INVENTOR

Francis W. Carpenter

Harold Serrell

PER

ATTY

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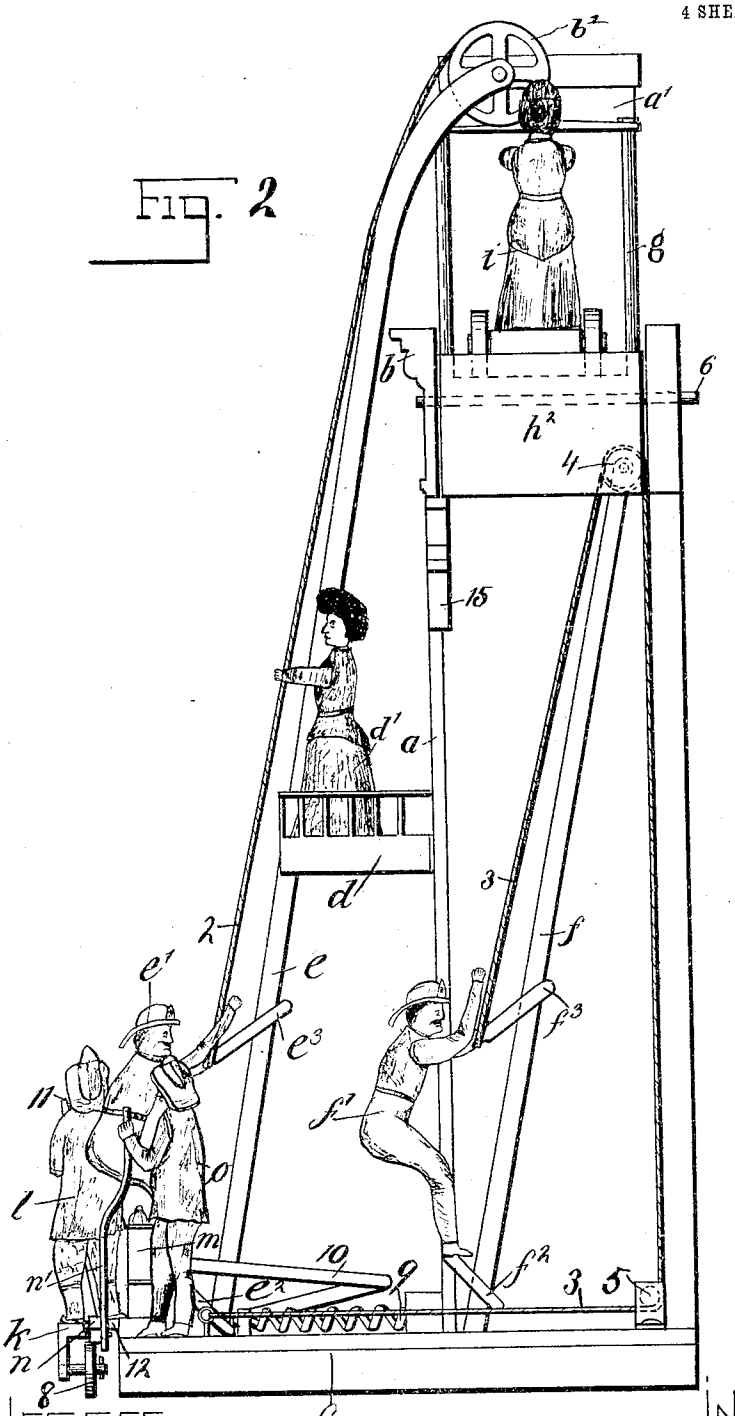
4 SHEETS—SHEET 2.

Fig. 2



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4 SHEETS—SHEET 3.

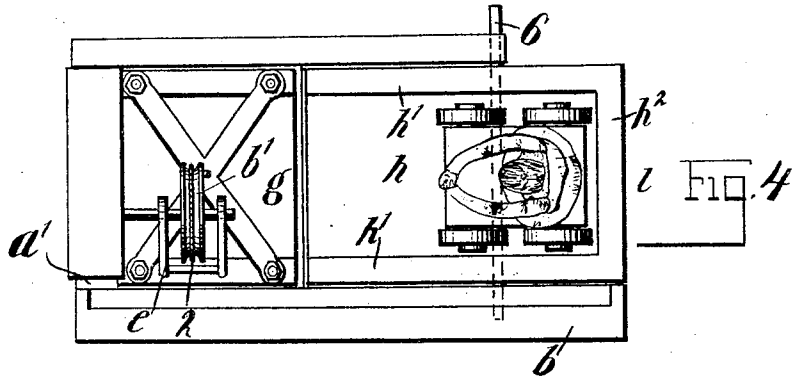

Fig. 4

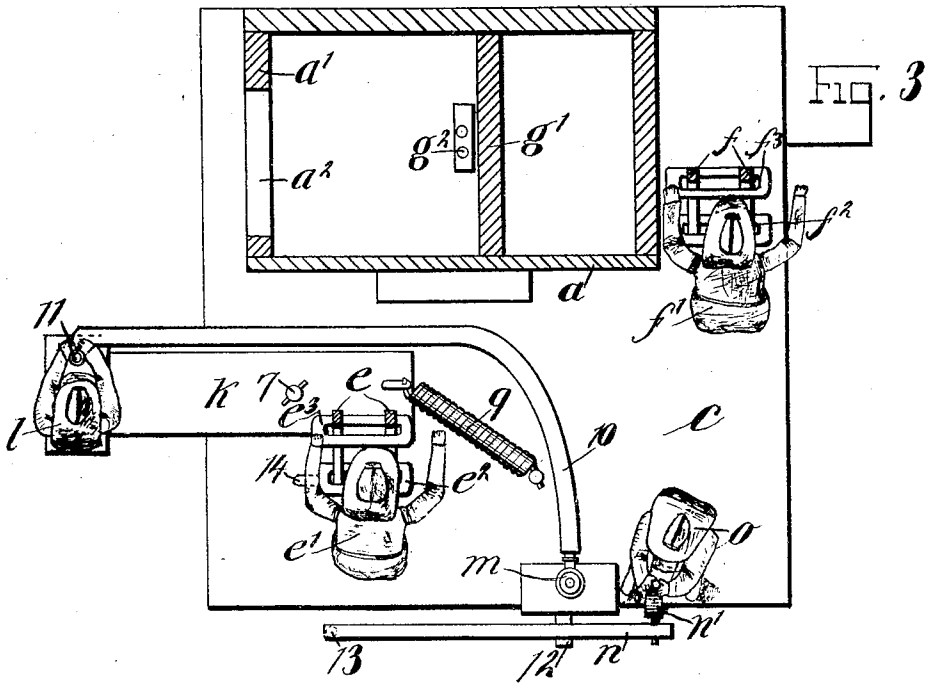

Fig. 3

WITNESSES

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Chas. H. Smith

INVENTOR

Francis W. Carpenter

PER Harold Terrell

ATTY

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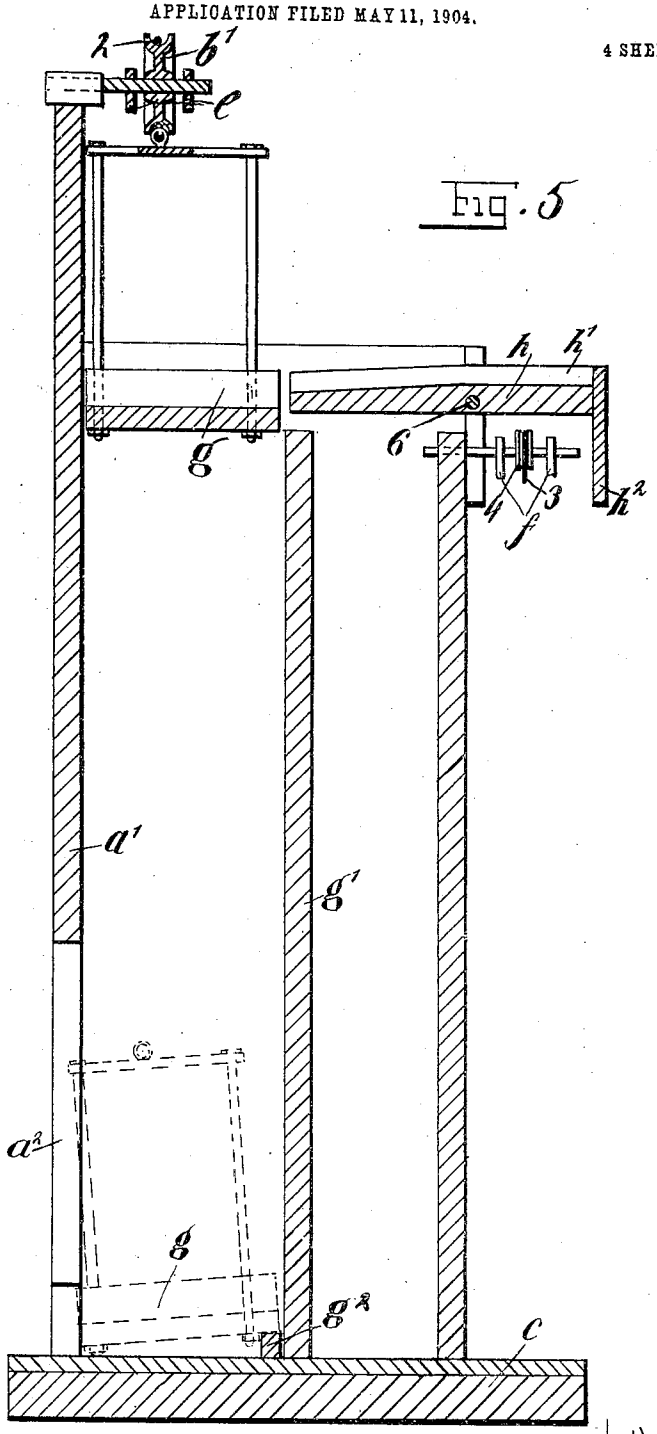
4 SHEETS—SHEET 4.

Fig. 5



WITNESSES

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PER Harold Serrell

ATTY

UNITED STATES PATENT OFFICE.

FRANCIS W. CARPENTER, OF GREENWICH, CONNECTICUT, ASSIGNOR TO FREDERICK F. CARPENTER, OF NEW YORK, N. Y.

TOY.

No. 809,092. Specification of Letters Patent. Patented Jan. 2, 1906.

Application filed May 11, 1904. Serial No. 207,377.

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 the amusement of children of a substantially indestructible character, partaking, essentially, of the nature of a toy fire-escape; and the same is an improvement upon the toy structures shown and described in Letters Patent granted to me January 19, 1892, No. 467,332, and May 24, 1892, No. 475,486. The device of the former patent related, essentially, to the toy figure of a fireman with extended arms to be drawn up a toy ladder for the removal of companion toy figures upon adjacent balconies, while the device of the latter patent related, essentially, to a toy elevator structure, means for raising the same, and a toy figure and rolling base thereon, with means for projecting the figure and rolling base from the elevator, the devices of the first patent being associated therewith for the purpose of bringing the figure without its rolling base down from the height to which it had been elevated. In my present invention I combine with the representation of a building and sidewalk and a balcony to the building fixed inclined toy ladders and toy figures of firemen adapted to be drawn up the ladders. One ladder terminates at the top of the building and at a toy elevator, and a flexible device, such as a cord or chain, from the toy figure of the fireman extends over a pulley at the top of the ladder and is connected with the top of the elevator. An opening is provided in connection with toy building for the descent of the elevator, and an opening in the side of the toy building at the point where the elevator stops. A tilting platform is provided and forms part of the roof of the toy building, and a toy figure of a woman on a rolling base is provided to be placed on the platform. The upper end of the other toy ladder terminates beneath this platform, and a string is provided at this latter ladder for raising the toy figure of the fireman, the outstretched arm of which when the figure reaches the top of the ladder strikes the tilting platform, upsets the equilibrium of the figure, and causes the same to roll down the platform onto the elevator. On the balcony is placed the toy figure of a woman with outstretched arms and clasped hands. This figure is directly in the line of movement up the ladder of the toy figure of the fireman, the cord connecting which is attached to the top of the elevator, and I provide, connected to the sidewalk, the toy figure of a hydrant, a hose extending therefrom, a lever connected thereto, the toy figure of a fireman upon the sidewalk grasping an arm of said lever, and a toy figure of another fireman holding a toy nozzle at the end of the hose. This latter figure is on a swinging plate pivoted to the sidewalk and held in position by a pin on the arm of said lever and normally holding in position the toy figure of the fireman adjacent thereto.

In the drawings, Figure 1 is a front elevation of my improved toy. Fig. 2 is a side elevation of the same. Fig. 3 is a plan view and section of the toy building. Fig. 4 is a plan view of the roof of the building alone, and Fig. 5 is a vertical section through the toy building between the front and back and centrally through the tilting platform and the elevator.

a represents the front of the toy building, which is advantageously made of metal and outlined with windows and a door and a cornice. *b* represents the roof portion; *a'*, one side wall having an opening a^2 therein at the level of the sidewalk *c*. A toy balcony *d* is projected from the front of the building and provided with a support for a toy figure *d'* of a woman with outstretched arms and clasped hands.

e f represent toy ladders connected to the sidewalk *c* at their lower ends and rising therefrom, the ladder *e* extending up above the roof and connected to the upper end of the side wall *a'* and to the pivot of a pulley *b'*, while the toy ladder *f* rises to an overhanging bracketed portion of the roof and cornice portion of the building and is connected to and terminates at the pivot of the pulley 4.

e' and *f'* are toy figures of firemen provided at their feet with loops e^2 f^2, that extend around the ladders, and at the outstretched arm with loops e^3 f^3, that also extend around the ladders. These toy figures of firemen are connected by flexible devices or cords 2 3. The cord, chain, or flexible device 2 passes

up the ladder *e*, over the pulley *b'*, and is connected to the top frame of the elevator *g*, while the cord 3 passes up the ladder *f*, over the pulley 4, down around the pulley 5, and forward through a guide to a ring adapted to be grasped by the fingers.

The toy building is provided with a central partition *g'*, which, with the side wall *a'* and the back and front walls, forms a shaft for the elevator, while at the bottom of this shaft on the line of the sidewalk and adjacent to the opening a^2 there is a block g^2, which when the elevator comes to rest at the bottom of the shaft causes the same to tilt into the dotted position, Fig. 5. A tilting platform *h* forms a part of the roof about on a line with the platform of the elevator. It is supported between the front and back of the toy building by the pivot-pin 6. It is provided with raised sides or guides *h'* and a side h^2 and is adapted to tilt upon the pivot.

i represents the rolling toy figure of a woman—that is, a toy figure mounted on a base with wheels. This is adapted to normally rest upon one end of the tilting platform, as shown in Figs. 1 and 4, the said platform being provided, as shown in Fig. 5, with a depending side h^2. A plate *k* is connected to the sidewalk *c* by a pivot 7. It supports the toy figure *l* of a fireman, and its outer end is provided with a roller 8. A spring 9 is connected to the inner end of the plate *k* and to a post in the sidewalk.

A toy hydrant *m* with a base is secured to the sidewalk, and from the same projects a toy hose 10 with a nozzle 11, the nozzle being held in the hands of the toy fireman *l*. A rocking arm *n* is connected by a pivot-pin 12 to the base of the hydrant. One end of this arm is provided with a pin 13 and the other end of the arm with a pivoted upright arm *n'*, the rounded upper end of which passes between and is guided by the almost touching hands of the toy figure *o* of a fireman standing upon the sidewalk.

The loop e^2 of the toy figure *e'* of the fireman is provided with a projection 14, and Figs. 1 and 2 show the initial position of the parts in which the plate *k* extends over the projection 14, holding the toy figure *e'* down in place. The pin 13 passes into an opening in the end of the plate *k*, holding said plate in position with the spring 9 under tension, while the toy rolling figure *i* of the woman rests upon the tilting platform *h* and the toy figure *d'* upon the projected platform *d*.

I have shown and prefer to employ a bracket 15, the inner edge of which serves as a support for the tilting platform *h* when the rolling toy figure *i* is supported thereon, the lower end of the side h^2 of the platform resting on the bracket.

The operation of the toy for the amusement of children is as follows: The cord 3 is grasped at its free end by the fingers and pulled upon. This raises the toy figure of the fireman *f'* upon the ladder *f*. His outstretched right arm strikes the lower end of the side H^2 of the platform, tilting the same and causing the rolling figure *i* to descend by gravity and roll upon the platform of the elevator *g*. The release of the cord 3 permits the toy figure of the fireman *f'* to return to its initial position by gravity. A pressure of the finger then upon the upper end of the arm *n'* forces this arm down, rocks the arm *n* on its pivot 12, withdraws the pin 13 from engagement with the plate *k*, permits the spring 9 to contract and to swing the said plate 13 and the toy figure of the fireman *l*, supported thereby, from the position Figs. 1 and 2 to the position Fig. 3. This releases the projection 14, and owing to the greater weight of the rolling figure *i* upon the platform of the elevator the elevator descends with the figure, drawing the toy figure of the fireman *e'* up the ladder *e*. This upward movement of the toy figure *e'* causes the outstretched right arm thereof to pass within the loop formed by the outstretched arms and clasped hands of the toy figure *d'* of the woman on the balcony, and the further movement raises this figure off its support and the balcony onto the arm of the toy figure of the fireman, as if the woman were hanging from the arm. This position enables the toy figure *d'* to swing clear of the balcony, and when the elevator strikes the bottom of the shaft and is tilted the rolling figure runs off the elevator, passes out of the opening a^2, where it can be picked up, and the elevator being relieved of its weight ascends the shaft, because of the greater and combined weights of the toy figures *e'* and *d'*, the elevator passing up the shaft to its initial position and the toy figure of the fireman *e'*, supporting the toy figure *d'* of the woman, descends to the bottom of the ladder, completing the movements of the toy. Thereafter the toy *d'* may be replaced on the balcony, the rolling figure *i* replaced on the platform, the plate *k* swung into the position shown in Figs. 1 and 2 and secured, and all the parts be in position to repeat the movements hereinbefore described. I do not herein limit myself to the employment of a tilting platform and the figure of a fireman drawn up a ladder for overbalancing the same, as the toy figure, ladder, and tilting platform may be dispensed with and the rolling base and figure thereon be moved upon the elevator-platform in some other way.

While I have shown and described the elevator as adapted to move down and up a shaft in the toy building, it is optional with me to employ a shaft therefor, and I do not limit myself in this particular, as any suitable devices adapted to form guides for the elevator may be employed.

I claim as my invention—

1. The combination in a toy, of a toy building and sidewalk, a toy elevator adapted to descend through a shaft in the building, a tilting platform in line with the elevator and pivotally connected to the roof of the toy building, a toy rolling figure adapted to normally rest upon the platform and with its movement to descend and roll upon the platform of the elevator, a toy device adapted to overbalance the tilting platform to cause the gravity action of the rolling figure and its change of position, a cord connected to the elevator, a pulley over which the same passes and a toy figure connected to the other end of said cord, means for temporarily holding down the toy figure and releasing the same to permit the descent of the elevator with the rolling figure, and a toy device coacting with the latter toy device as an overbalance-weight for returning the elevator to an initial position.

2. The combination in a toy, of a toy building and sidewalk, a toy elevator adapted to descend through a shaft in the building, a tilting platform in line with the elevator and pivotally connected to the roof of the toy building, a toy rolling figure adapted to normally rest upon the platform and with its movement to descend and roll upon the platform of the elevator, an inclined toy ladder at one end resting upon the sidewalk and at its other end supported upon the toy building, the toy figure of a fireman, and means connecting the same with the ladder and a cord for drawing said toy figure up the ladder so that it may strike the tilting platform and overbalance the same.

3. The combination in a toy of a toy building and sidewalk, a toy elevator adapted to descend through a shaft in the building, a tilting platform in line with the elevator and pivotally connected to the roof of the toy building, a toy rolling figure adapted to normally rest upon the platform and with its movement to descend and roll upon the platform of the elevator, an inclined toy ladder at the lower end connected to the sidewalk and at the upper end to a support of the toy building, a pulley mounted upon said support, a toy figure and means connecting the toy figure to the inclined toy ladder, a cord from the toy figure over said pulley and connected to the top of the elevator, a projected balcony from the toy building, and a toy figure resting upon said platform and having outstretched arms and clasped hands forming a loop, the toy figure connected to the ladder having an outstretched arm adapted to pass within the loop of the toy figure upon the balcony.

4. The combination in a toy, of a toy building and sidewalk, a toy elevator adapted to descend through a shaft in the building, a tilting platform in line with the elevator and pivotally connected to the roof of the toy building, a toy rolling figure adapted to normally rest upon the platform and with its movement to descend and roll upon the platform of the elevator, an inclined toy ladder at the lower end connected to the sidewalk and at the upper end to a support of the toy building, a pulley mounted upon said support, a toy figure and means connecting the toy figure to the inclined toy ladder, a cord from the toy figure over said pulley and connected to the top of the elevator, a projected balcony from the toy building, a toy figure resting upon said platform and having outstretched arms and clasped hands forming a loop, the toy figure connected to the ladder having an outstretched arm adapted to pass within the loop of the toy figure upon the balcony, a projection from the lower support to the ladder of the toy figure of the fireman, means normally extending over said projection for holding down said figure and supporting the elevator in its raised position, and a device manually operated for releasing this holding device so as to permit the elevator to descend.

5. The combination in a toy, of a toy building and sidewalk, a toy elevator adapted to descend through a shaft in the building, a tilting platform in line with the elevator and pivotally connected to the roof of the toy building, a toy rolling figure adapted to normally rest upon the platform and with its movement to descend and roll upon the platform of the elevator, an inclined toy ladder at the lower end resting upon the sidewalk and at the upper end secured to a support of the toy building, a pulley mounted upon said support, a toy figure and means connecting the same to the inclined toy ladder, a cord from the toy figure over said pulley and connected to the elevator, a projected balcony from the toy building and a toy figure resting upon said balcony and having outstretched arms and clasped hands forming a loop, the toy figure connected to the ladder having an outstretched arm adapted to pass between the arms of the toy figure upon the balcony, a projection upon the lowermost means connecting the toy figure to the ladder, a platform *k* pivoted to the sidewalk and normally extending over said projection, the toy figure of a fireman mounted upon said platform, a pivoted arm manually operated and adapted to engage said platform to hold the same in an initial position, and a spring for moving the platform.

6. The combination in a toy, of a toy building and sidewalk, a toy elevator adapted to descend through a shaft in the building, a tilting platform in line with the elevator and pivotally connected to the roof of the toy building, a toy rolling figure adapted to normally rest upon the platform and with its movement to descend and roll upon the plat-

form of the elevator, an inclined toy ladder at the lower end resting upon the sidewalk and at the upper end secured to a support of the toy building, a pulley mounted upon said support, a toy figure and loops connecting the same to the inclined toy ladder, a cord from the toy figure over said pulley and connected to the elevator, a projected balcony from the toy building and a toy figure resting upon said balcony and having outstretched arms and clasped hands forming a loop, the toy figure connected to the ladder having an outstretched arm adapted to pass between the arms of the toy figure upon the balcony, a projection upon the lower loop of the toy figure, a platform *k* pivoted to the sidewalk and normally extending over said projection, the toy figure of a fireman mounted upon said platform, a pivoted arm manually operated and adapted to engage said platform to hold the same in an initial position, a spring for moving the platform, a toy hydrant attached to the sidewalk, a hose therefrom to the toy figure of the fireman upon the platform *k*, a toy nozzle held by the outstretched hands of said toy figure, and another toy figure *o* of a fireman with outstretched arms and approaching hands, and an upright arm *n'* from one end of the pivoted arm passing through the hands of the toy figure *o* and guided thereby, whereby the arms *n'* and *n* may be manually operated for the release of the pivoted plate *k* and the parts carried thereby.

7. The combination in a toy, of a toy building and a sidewalk extending out from the base of the building, a plate *k* pivotally connected to the sidewalk and adapted to swing around one corner of the sidewalk, the toy representation of a hydrant, a toy hose therefrom, a toy figure of a fireman connected upon the outer end of the pivoted plate *k* and to the outstretched hands of which the toy hose passes, a toy nozzle terminating the hose in the hands of the toy figure, a rocking arm *n* pivoted to the base of the toy hydrant, a toy figure *o* of a fireman mounted upon said sidewalk, an upright arm *n'* passing between the outstretched hands of said toy figure and guided thereby, a pin 13 depending from the opposite end of the rocking arm and entering an aperture in the end of the pivoted plate *k*, a spring 9 at one end connected to one end of the plate *k* and at its other end to a post of the sidewalk and adapted upon the swinging of the arm *k* and the release of its pin 13 to move the said pivoted plate and change the position of the toy figure of the fireman.

8. The combination in a toy, of a toy building and a sidewalk extending out from the base of the building, a plate *k* pivotally connected to the sidewalk, means manually operated for holding the plate in a predetermined position, a toy figure of a fireman connected upon the outer end of the pivoted plate and a spring at one end connected to one end of the plate *k* and at its other end connected to a post of the sidewalk and adapted upon the release of said plate *k* to swing the same with the figure of the fireman into a new position.

9. The combination in a toy, of a toy building and a sidewalk extending out from the base of the building, a plate *k* pivotally connected to the sidewalk, a support-roller at the outer end of the plate, means manually operated for holding the plate in a predetermined position, a toy figure of a fireman connected upon the outer end of the pivoted plate and a spring at one end connected to one end of the plate *k* and at its other end connected to a post of the sidewalk and adapted upon the release of said plate *k* to swing the same with the figure of the fireman into a new position.

10. The combination in a toy, of a toy plate and a sidewalk extending out from the base of the plate, a plate *k* pivotally connected to the sidewalk, means manually operated for holding the plate in a predetermined position, a toy figure of a fireman connected upon the outer end of the pivoted plate, and a spring at one end connected to one end of the plate *k*, and at its other end connected to a post of the sidewalk and adapted upon the release of said plate *k* to swing the same with the figure of the fireman into a new position.

11. The combination in a toy, of a toy building and base, a toy elevator and guides in which the same is adapted to descend, a ladder from the base to near the top of the elevator, a toy figure exceeding the weight of the elevator, and guides therefor to the ladder, a pulley, a cord connecting the elevator and toy figure over the pulley, a rolling base having a toy figure and means for projecting the same onto the elevator where its added weight causes the elevator to descend the first-named guides drawing up the figure on the ladder and means causing the rolling base in its lowered position to run off the elevator permitting the figure to return the elevator to a normal position.

12. The combination in a toy, of a toy building and base, a toy elevator adapted to descend in guides, a ladder from the base to near the top of the elevator, a toy figure having an outstretched arm and exceeding the weight of the elevator and guides for the figure to the ladder, a pulley, a cord passing thereover and connecting the elevator and toy figure, a balcony on the face of the building, a toy figure placed thereon with outstretched arms and clasped hands, a rolling base having a toy figure and means for projecting the same onto the elevator, substantially as specified.

13. The combination in a toy, of a toy building and a sidewalk extending out from the base of the building, a plate *k* pivotally

connected to the sidewalk, a toy figure of a fireman connected upon the outer end of the pivoted plate, a toy representation of a hydrant on said sidewalk, a toy hose therefrom and a toy nozzle terminating the hose in the hands of the toy figure of the fireman on the plate, means adapted for holding the plate in a predetermined position and which may be operated for releasing the same and a spring at one end connected to the sidewalk and at the other end to an end of said plate and adapted upon the release of said plate to swing the same with the figure of the fireman to a new position.

14. The combination in a toy, of an upright toy structure and base, a toy elevator adapted to descend in guides, a ladder from the base to near the top of the elevator, a toy figure exceeding the weight of the elevator and guides therefor to the ladder, a pulley, a cord connecting the elevator and toy figure over the pulley, a rolling base and a toy device supported thereby, means for projecting the same onto the elevator where its added weight causes the elevator to descend the first-named guides drawing up the figure on the ladder, and means causing the rolling base to then run off the elevator, permitting the figure to return the elevator to a normal position.

15. The combination in a toy, of a toy building, a toy elevator and means adapting the same to descend from the upper to the lower part thereof, a cord from the top of the elevator and a weighted figure on the other end of the cord overbalancing the weight of the elevator and normally holding the elevator in position at the upper part of the building, a toy rolling device, a tilting support for normally holding the same, and means for actuating the said support to cause the toy rolling device to move therefrom onto the platform and by the increased weight to cause the platform to descend and to raise the weighted figure on the other end of the cord, and a weighted figure in an elevated position so located as to be engaged by the weighted figure as raised by the elevator and to be lifted off its support, and to be temporarily carried by said weighted figure, and means for discharging the rolling toy device from the elevator near the lower part of the building thereby providing for the ascent of the elevator by the combined weights at the other end of the cord.

16. The combination in a toy, of a toy building, a toy elevator and means adapting the same to descend from the upper to the lower part thereof, a cord from the top of the elevator and a weighted figure on the other end of the cord overbalancing the weight of the elevator and normally holding the elevator in position at the upper part of the building, a toy rolling device, a tilting support for normally holding the same, and means for actuating the said support to cause the toy rolling device to move therefrom onto the platform and by the increased weight to cause the platform to descend and to raise the weighted figure on the other end of the cord, a weighted figure in an elevated position so located as to be engaged by the weighted figure as raised by the elevator and to be lifted off its support and to be temporarily carried by said weighted figure, and means for discharging the rolling toy device from the elevator near the lower part of the building thereby providing for the ascent of the elevator by the combined weights at the other end of the cord, and means adapted to be manually actuated and to engage the weighted figure at the end of the elevator-cord and hold the same so that the release of the elevator is at the pleasure of the party operating the toy.

17. The combination in a toy, of a toy building, a toy elevator, and means adapting the same to descend from the upper to the lower part of the building, a platform and a pivot therefor to the upper part of the building providing for the tilting of the platform, a rolling weighted figure adapted to normally rest upon the platform, and means manually actuated for tilting the platform and causing the rolling weighted figure to move off the same onto the elevator-platform.

18. The combination in a toy, of a toy building, a toy elevator and guides therefor adapting the elevator to rise and fall from the upper to the lower part of the building, a tilting platform pivotally connected to the roof of the toy building, a toy device of greater weight than the weight of the elevator and adapted to overbalance the same, a cord connecting the elevator and said toy device, and a pulley over which the same passes, a movable toy device adapted to descend upon the platform of the elevator and overbalance the same, causing its descent from the upper to the lower part of the building, and a manually-operated device engaging the toy device connected to the elevator-rope for temporarily holding the same and the elevator in position, the release of which permits the descent of the elevator with the rolling toy figure.

Signed by me this 2d day of May, 1904.

FRANCIS W. CARPENTER.

Witnesses:

GEO. T. PINCKNEY,

BERTHA M. ALLEN.