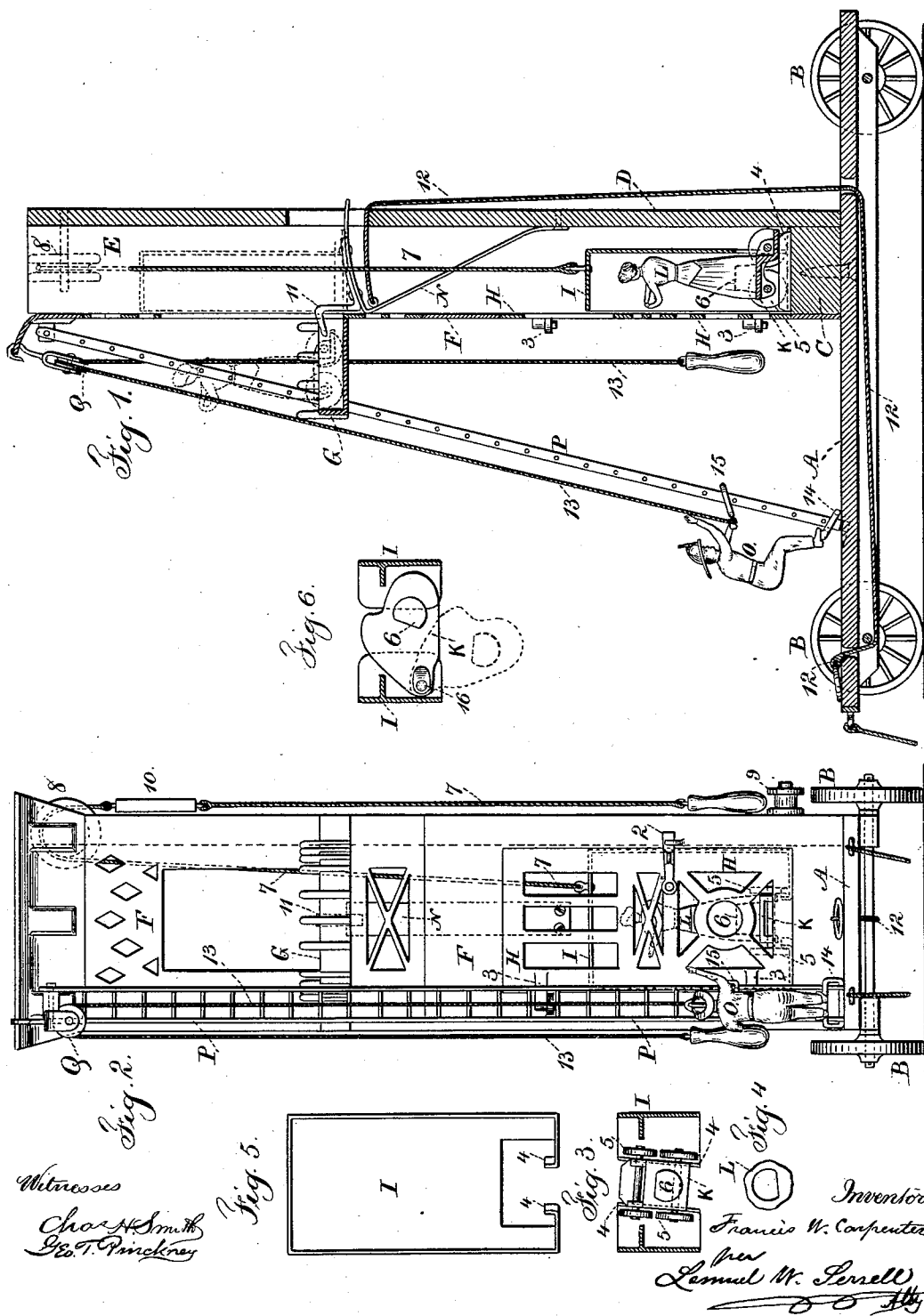


(No Model.)

F. W. CARPENTER.
TOY.

No. 475,486.

Patented May 24, 1892.



UNITED STATES PATENT OFFICE.

FRANCIS W. CARPENTER, OF HARRISON, NEW YORK.

TOY.

SPECIFICATION forming part of Letters Patent No. 475,486, dated May 24, 1892.

Application filed January 27, 1892. Serial No. 419,371. (No model.)

To all whom it may concern:

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

I make use of a toy elevator with a swinging door or gate, which when the door is opened is adapted to receive a toy figure, preferably mounted on a base; and I employ a pusher that acts to project the figure from the elevator when the same has been drawn up to the proper place, so that the figure is automatically moved, and with these devices I provide a representation of the front of a building with a balcony upon which a toy figure is projected, and a toy ladder placed against the front of the building receives a toy figure, such as a fireman, and there is a cord and pulley for drawing up such toy figure, and the extended arm thereof passes into the opening between the clasped hands and arms of the figure on the balcony, lifting the same so that the two figures can be lowered upon the ladder together. The ladder and the movable figure correspond generally to those represented in Patent No. 467,332, granted to me January 19, 1892.

In the drawings, Figure 1 is a vertical section of the elevating device and of the representation of the building. Fig. 2 is a front view. Fig. 3 is a detached plan view of the rolling carriage for the toy figure and a section of the elevator. Fig. 4 is an inverted plan of the base of the figure. Fig. 5 is an elevation of the elevator, and Fig. 6 is a sectional plan view showing a swinging base for the figure.

I make use of a carriage A upon the wheels B, so that the toy can be drawn around upon such wheels, and upon the carriage is a base-block C, and the toy representation of a building is made hollow to set upon this base-block C or be removed therefrom for packing, and the toy building is composed of the back D, sides E, and front F, and it is advantageous to make the front as an ornamental casting to represent doors, windows, cornice, &c., and a representation of a balcony is shown at G, and the swinging door or gate H is provided at

the lower part of such front, and this is preferably ornamental open-work and provided with a latch 2 and hinges 3.

Within the toy building is an elevator I, which is preferably of sheet metal, cut out, bent up, and soldered at the angles and having a track or guides 4 upon the bottom thereof for the figure-base K, having wheels 5, and the toy figure L is hollow and sets upon the base K, and there is an upwardly-projecting flange or rib 6 upon the base K, passing into the hollow toy figure, so as to steady such toy figure while in position upon the base.

A cord 7, passing over a pulley 8, is made use of for raising and lowering the elevator I, and there may be a second pulley or roller 9 for the cord to pass beneath, and usually a counter-weight 10 is provided to take up slack in the cord 7 and to partially counterpoise the elevator I; but the elevator should be of superior weight, so that it descends when the cord 7 is not acted upon.

After the elevator I has been raised so that the bottom thereof is on the same level as the floor upon which the figure is to be discharged a suitable automatic device is made use of to project the figure and its base, the parts rolling upon the wheels 5, and in this toy the floor upon which the figure is thus projected is the floor of the balcony. As a convenient device for projecting the toy figure and its rolling base, I employ a spring N, having a finger 11 projecting forward therefrom, and this spring is upon the inside of the back D, and a cord 12, passing back through the back D, down through the carriage A, and along to the front is connected at its upper end to this spring N, and by this cord the spring N can be drawn backwardly, and the lower part of the elevator I is slotted or made open for the free passage of the finger in a forward direction.

As the elevator and the figure contained therein are drawn up, the upper portion of the elevator presses back the spring N, and as the elevator reaches its highest point the finger 11 passes freely into the slot at the back of such elevator and presses against the figure-base K and causes the same to roll forward upon its wheels 5 to the position shown by dotted lines, Fig. 1, and as this movement

is rather sudden it is advantageous to make use of a projection in the form of a latch at the upper end of the finger 11, which, passing over the back edge of the figure-base K, prevents such base from rising up at the back edge or the figure tipping forward as the rolling base K and figure are arrested in their movements by coming in contact with the railing of the balcony G.

When the elevator is to be lowered, the cord 12 is drawn upon to move the spring N backwardly and carry it and the finger away from the elevator, so that the latter may descend automatically by its weight being greater than the counter-weight, as before mentioned.

The figure L is somewhat similar to that in my aforesaid patent, the arms being extended and the hands clasped, and it is desirable that when this figure is used with a toy fire-escape the figure should occupy such a position to the base K that the hands and arms will be in a position to be taken by the toy figure O upon the ladder P, and to insure this position the flange or rib 6 should either be irregular or formed in such a manner that the figure can only set down upon the base K when it is in the proper position, the opening inside the figure corresponding to the contour of the flange or rib 6.

The ladder P and figure O may be similar to those shown in my aforesaid patent, the figure having one or both arms projected upwardly, so as to pass in between the arms and hands of the toy figure upon the balcony, and the cord 13 over the pulley Q is connected with this figure O, and such figure O, instead of being provided with a base upon which the same can stand, is represented as having a loop 14 passing around the ladder from the feet portions of the figure and a second loop 15 to which one arm of the figure is connected. These become guides as the figure is drawn up or down the ladder.

It is to be understood that when the door or gate H is opened and the base K and figure introduced into the elevator, as represented in Fig. 1 by full lines, the wheels of the base can touch at the front and back of the vertical inclosure, provided the back of the elevator has openings through it for the back wheels of the figure-base to pass into, and in this way the parts will be guided and friction lessened.

It is advantageous to attach the ladder at its top end to the front of the building and at its bottom end to pass it into recesses in the carriage A or against a projection thereon.

The toy as a whole can be drawn around by a string upon the floor, or it can be made use of for the amusement of children and others in the manner heretofore indicated.

When the base K for the figure is not provided with wheels, such base may be connected within the bottom of the toy elevator by a stud or pivot 16, as seen in Fig. 6, so as to swing thereon and carry the base and figure out of the toy elevator and over the floor or balcony to the position before described for the figure

to be taken by the figure that is moved up the ladder.

The means for moving the figure out of the elevator may be varied to suit the other parts of the toy.

I claim as my invention—

1. The combination, in a toy elevator, of an inclosing case, a door for giving access to the elevator, a pulley and a cord or chain passing over the pulley and connected with the elevator, a toy figure and a rolling base for supporting the same, and means for projecting the base and figure from the elevator when raised, substantially as set forth.

2. The combination, in a toy elevator, of a vertical frame or support, an elevator guided by the frame or support, a pulley, and a cord or chain over the pulley for raising the elevator, a figure-base, and wheels for supporting the same adapted to be received in the elevator, and a device for projecting the base from the elevator upon the floor or support to which the elevator is raised, substantially as set forth.

3. The combination, with a toy elevator and its inclosing case, of a door or opening to admit a toy figure near the bottom of the case, a toy figure adapted to be placed within the elevator, a pulley and cord or chain for raising the elevator, and a spring to discharge the figure from the elevator, substantially as set forth.

4. The combination, in a toy elevator, of a vertical frame or support, a pulley, and a cord or chain passing over the pulley and connected with the elevator, a toy figure and a base for supporting the same, and means for projecting the base and figure from the elevator when raised, substantially as set forth.

5. The combination, in a toy, of a carriage and wheels, a case resting upon the carriage, a connecting device for holding the case in position upon the carriage, an elevator within the case, a pulley and cord over the pulley for raising or lowering the elevator, a door near the lower portion of the case to give access to the elevator, a floor and a balcony at the level to which the elevator is raised, and a toy figure adapted to be moved out of the elevator, substantially as set forth.

6. The combination, in a toy, of a carriage and wheels, a base-block permanently fastened upon the carriage, a case resting upon the carriage and held in position by the base-block, an elevator within the case, a pulley and cord over the pulley for raising or lowering the elevator, a door near the lower portion of the case to give access to the elevator, a floor and a balcony at the level to which the elevator is raised, a spring within the case pressed back by the elevator as it is raised, a finger upon the spring, and a toy adapted to be placed within the elevator and to be projected therefrom by the finger, substantially as set forth.

7. The combination, in a toy, of a carriage and wheels, a base-block permanently fast-

ened upon the carriage, a case resting upon
the carriage and held in position by the base-
block, an elevator within the case, a pulley
and cord over the pulley for raising or lower-
5 ing the elevator, a door near the lower por-
tion of the case to give access to the elevator,
a floor and a balcony at the level to which
the elevator is raised, a spring within the case
pressed back by the elevator as it is raised, a
10 finger upon the spring, a toy adapted to be
placed within the elevator, a base with rollers
to support the toy, a ladder connected at its

upper end with the upper part of the case
and resting at its lower end upon the car-
riage, a figure adapted to be moved up or 15
down the ladder, and a cord connected with
such figure and a pulley over which the same
passes, substantially as set forth.

Signed by me this 25th day of January,
1892.

FRANCIS W. CARPENTER.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.