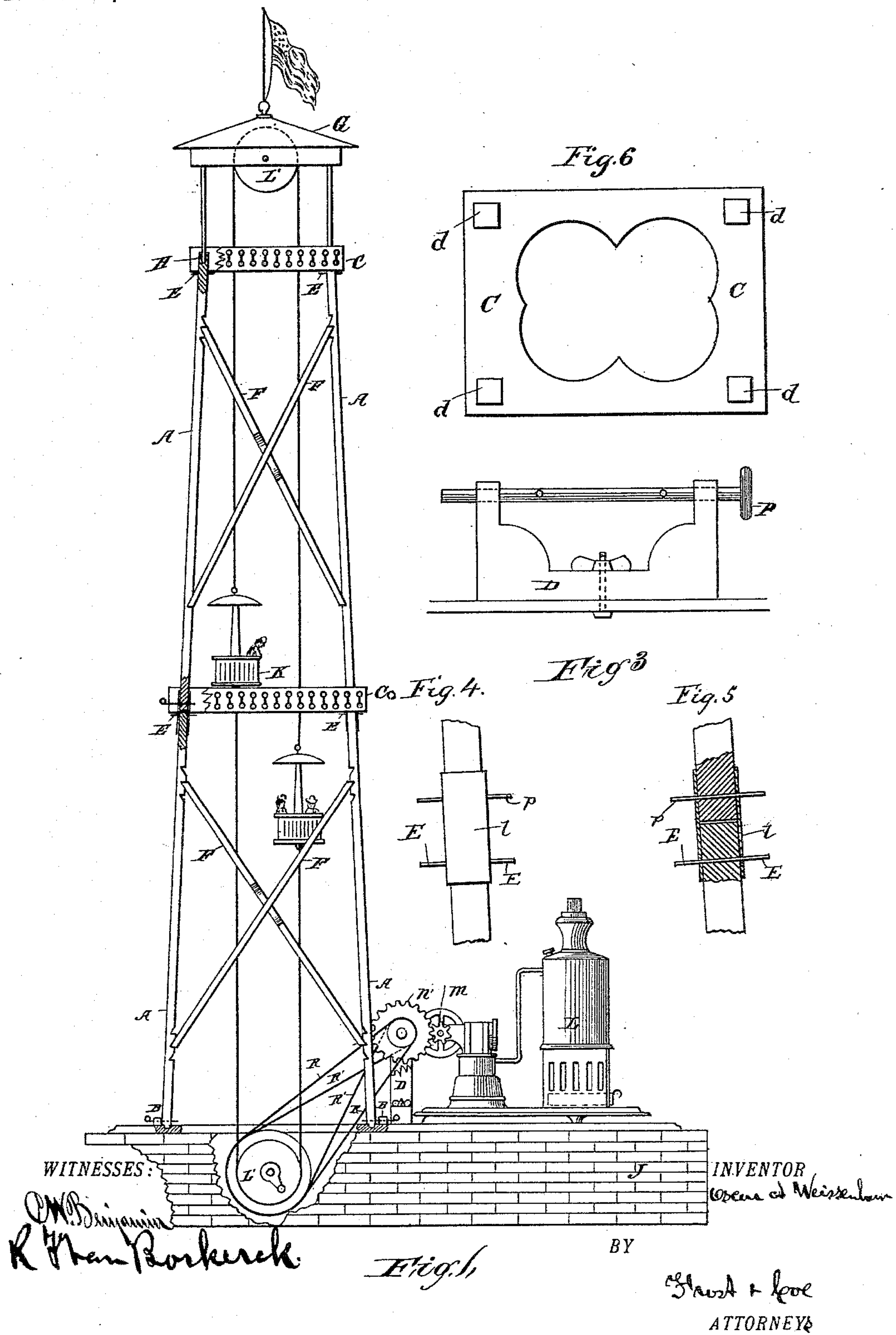


2 Sheets—Sheet 1.

No. 411,847.

Patented Oct. 1, 1889.



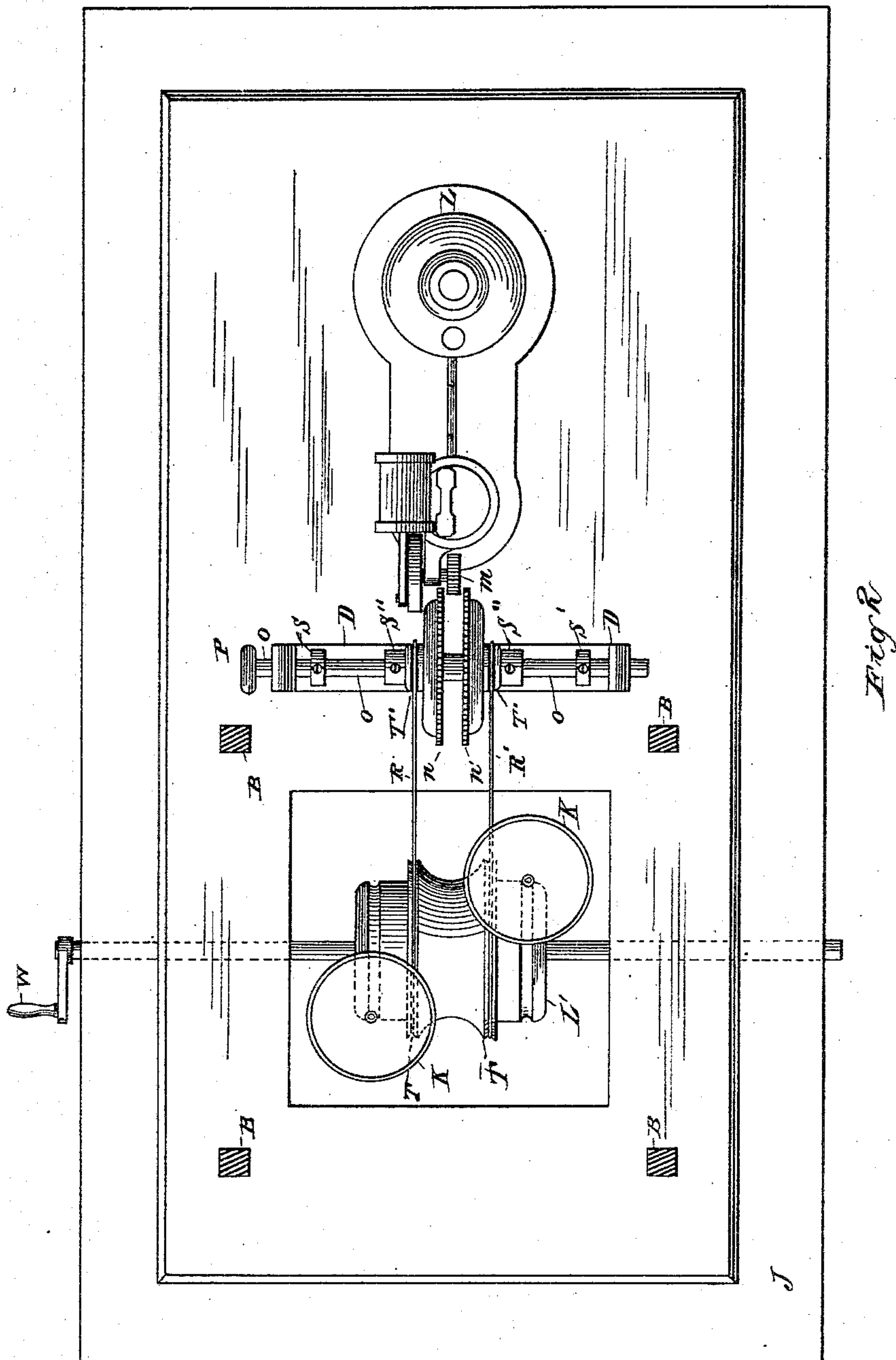
(No Model.)

2 Sheets—Sheet 2.

O. A. WEISSENBORN.
TOY ELEVATOR.

No. 411,847.

Patented Oct. 1, 1889.



WITNESSES:

O. A. Weissenborn
R. H. Roskerck

INVENTOR

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BY

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ATTORNEYS

UNITED STATES PATENT OFFICE.

OSCAR A. WEISSENBORN, OF JERSEY CITY, NEW JERSEY.

TOY ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 411,847, dated October 1, 1889.

Application filed August 16, 1888. Serial No. 282,869. (No model.)

To all whom it may concern:

Be it known that I, OSCAR A. WEISSENBORN, a citizen of the United States, residing at Jersey City, county of Hudson, and State of New Jersey, have invented a new and useful Improvement in Toy Elevators, of which the following, taken in connection with the accompanying drawings, is a full, clear, and accurate description.

The object of my invention is a toy elevator in the shape of a tower with platforms, pulleys, and cars which are moved up and down, and simple mechanism for imparting motion to said cars, all so arranged and constructed that the parts can be attached and detached from each other at will, thus giving the possessor an opportunity to develop his constructive faculties.

In the drawings, Figure 1 shows a side elevation of the toy elevator when the cars are moved by a toy steam-engine. Fig. 2 shows a plan view of the same, and Fig. 3 a side elevation of the part for the reversing of the motion of the car. Figs. 4 and 5 are details showing the joints of the supports in elevation and vertical section. Fig. 6 is a plan view of one of the platforms.

The toy elevator is constructed as follows: A A A A are uprights or supports, preferably of wood, constituting the frame of the elevator. The bottoms of the lower supports A A are loosely mortised into the platform J, on which the whole apparatus stands, and are secured thereto by pins passing through holes in said supports, and also through the blocks B B, fastened to the platform J. The top ends of said lower supports A A are surrounded by small pieces of tin, into the projecting parts of which the lower portions of the upper supports A A fit, and are secured by pins passing through holes in the tin and ends of the supports. Into the upper ends of the upper supports A A are mortised the supports of the roof G, which consists of a roof or cover with small supports attached thereto and provided with flag-staff or weather-cock or other desired device.

F F are braces fitting into notches in the supports A A for the purpose of steadying the structure.

C C are small balconies or frames open in

the interior and held in position by pins E passing through holes in the supports A.

L' are pulleys placed one in the roof G and the other fixed in the platform J.

K K are elevator-cars attached to a cord passing over the pulleys L' L'.

In the drawings the cars are shown as being worked by a toy engine L. Attached to this engine is the gear-wheel *m*. Between the engine and the elevator is placed the support D, secured to the platform J by a thumb-screw. Through the arms of the support D passes the axle or shaft *o*, provided with the push-button P. On the axle *o* are loosely mounted two gear-wheels *n* and *n'*, provided at their outer ends with pulleys T'. On said axle *o* are also placed the collars S and S', so arranged that when the collar S' rests against the upright of the support D the gear-wheel *n* will engage with the gear-wheel *m*, and when the collar S rests against the upright of the support D the gear-wheel *n* will mesh with the gear-wheel *m*, this change being effected by pushing in or pulling out the shaft *o* by means of the push-button P.

S'' are collars holding the gear-wheels *n* and *n'* in their proper positions on the axle *o*.

The pulley L', fixed in the platform J, is provided with proper grooves T for the reception of cords passing from the pulleys T'. One of these R is passed around the pulley T' and groove T, but is crossed in its passage. It will thus be seen that by simply engaging the gear-wheel *m* with one or the other of the gear-wheels *n* and *n'* the direction of the motion of the pulley L' is changed, and the consequent upward or downward direction of the car K is thereby changed.

If desired, a simple clock-work mechanism properly attached to the gear-wheels *m* may be used instead of the toy engine, or both of these may be dispensed with, and also the support D, with its attachment, and a simple crank W mounted on the shaft which supports the pulley L', used to give the desired motion to the cars.

Having thus described my invention, what I desire to claim is—

1. A toy elevator composed of detachable supports fitting into each other and into a bottom platform and secured by pins, a roof

supported by uprights, balconies surrounding
said supports, braces fitting into notches in
the supports, pulleys placed one in the roof
and another in the bottom platform, a cord
5 passing over said pulleys, small elevator-cars
attached to said cord, and a crank or other
means for imparting motion to the cord and
elevator-cars, substantially as described.

2. A toy elevator composed of detachable
10 supports fitting into each other and into a
bottom platform and secured by pins, a roof
supported by uprights, balconies surround-
ing said supports, braces fitting into notches
in the supports, pulleys placed one in the roof
15 and another in the bottom platform, a cord

passing over said pulleys, small elevator-cars
attached to said cord, a toy engine, clock-work,
or other means of imparting motion to the
cord and elevator-cars, the gear-wheel *m*, the
support *D*, axle *o*, push-button *P*, gear-wheels 20
n n', pulleys *T'*, collars *S S'*, pulley *L'*, grooves
T, collars *S''*, and cords *R R'*, substantially
as described.

In testimony whereof I have hereunto set
my hand this 10th day of August, 1888.

OSCAR A. WEISSENBORN.

In presence of—

R. F. VAN BOSKERCK,
CHARLES G. COE.