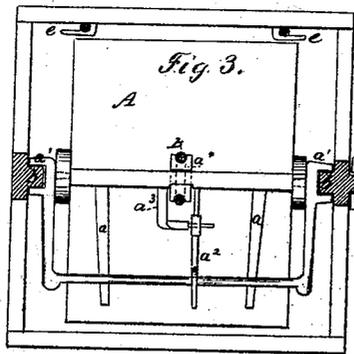
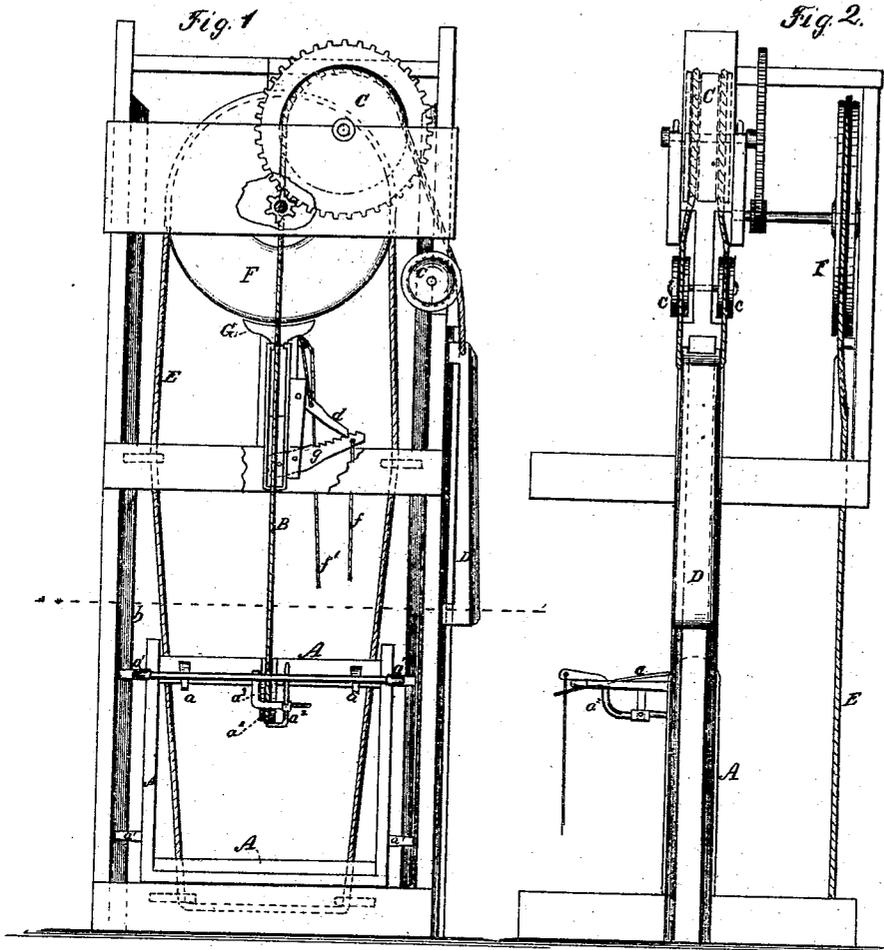


G. Scott,

Elevator.

No. 109676.

Patented Nov. 29. 1870.



Witnesses.  
 A. Ruppert.  
 E. D. Callahan

Inventor.  
 George Scott  
 by Edwin Smith  
 Atty

# United States Patent Office.

GEORGE SCOTT, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 109,676, dated November 29, 1870.

## IMPROVEMENT IN ELEVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE SCOTT, of the city of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and improved Elevator; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing.

*Drawing.*

Figure 1 is a point elevation of our improved elevator.

Figure 2 is a side elevation.

Figure 3 is a transverse section taken on the line  $x$   $y$  of fig. 1.

Similar letters of reference refer to like parts wherever used in each of the figures.

This invention relates to elevators, and

It consists in securing to the elevating-frame or platform catches, which slide over guides or grooves, and operated by springs, and in such a manner as to prevent the platform from falling in case the rope should break;

Also, in the manner of adjusting a brake by means of a lever, dog, and cords; and

Lastly, in the construction, combination, and arrangement of the parts composing the same, as will be hereinafter more fully explained in the description and claim which follows.

To enable others skilled in the art to which my invention relates to make and use the same, I will proceed to describe its construction and operation.

In the annexed drawing forming a part of this specification—

A represents the elevator, with the cross-beam which secures the side parts having springs  $a$   $a$  secured thereto, and thence projecting out, their ends being placed under the cross-bar of the upper safety-catches of the elevator.

$a$   $a$  are safety-catches secured to the elevator or platform, and moving upon ways or guides  $b$   $b$ . (See figs. 1 and 3.)

To the cross-beam of the elevator there is attached a bracket,  $a^3$ , upon which a lever,  $a^2$ , is pivoted, the outer end of which passes over the cross-bar of the upper safety-catches, the inner end passing under or into the saddle  $a^4$ , its office being to afford the means of depressing the said cross-bar, thereby relieving the safety-catches from the guides  $b$   $b$  wherever they shall have been caused to gripe the same by the action of the springs  $a$   $a$ , throwing them cant.

Such action of the springs upon the catches are oc-

curing when the lever  $a^2$  is let up, either intentionally or by some accident, as the breaking of the hoisting-rope, for which emergency these safety-catches are especially designed as a precaution against injury to persons and property.

This lever  $a^2$  has a cord attached to its center end, which reaches to the platform of the elevator.

B is the hoisting-rope, which passes under a saddle,  $a^4$ , of the cross-beam of the elevator, and thence over a double-grooved roller, C, sheaves  $c$   $c$ , and secured to the balance-weight D, which has flanges, which clamps a guide, as shown in fig. 3.

E is the hand-rope, by means of which the platform or elevator may be raised or lowered. It is an endless rope, which passes through eyes  $e$   $e$  and over the fly or band-wheel F, the shaft of which has a small pinion, which gears with a larger one, upon which the shaft upon which the wheel C is secured, and thus the process of controlling the platform is effected.

The object of having the eyes open upon one side is to allow the rope to be removed therefrom by the attendant from that side upon which he stands while operating it.

The lock or brake G is applied by pulling the cord  $f$  attached to lever  $g$ , which is held by a dog or pawl,  $d$ , entering one of the notches in said lever. The brake can then be removed by pulling on cords  $f$   $f'$  until the pawl  $d$  is relieved, when the cord  $f$  being slackened, the brake will fall by its own gravity.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In the elevator A, having catches  $a^1$   $a^1$  secured thereto, moving over guides or ways  $b$   $b$ , and operated by the springs  $a$   $a$ , substantially as shown and described.

2. The combination, in the elevator A, of catches  $a^1$   $a^1$ , springs  $a$   $a$ , lever  $a^2$ , bracket  $a^3$ , ropes B E, wheels C F, sheaves  $c$   $c$ , and balance-weight D, substantially as shown and specified.

3. The combination of the brake G, lever  $g$ , pawl  $d$ , and cords  $f$   $f'$ , as shown and described, and for the purpose set forth.

In testimony whereof, I have signed my name to this specification this 6th day of September, A. D. 1870, in the presence of two attesting witnesses.

GEORGE SCOTT.

Witnesses:

VINTON A. FELLOWS,  
LENNOX THOMPSON.