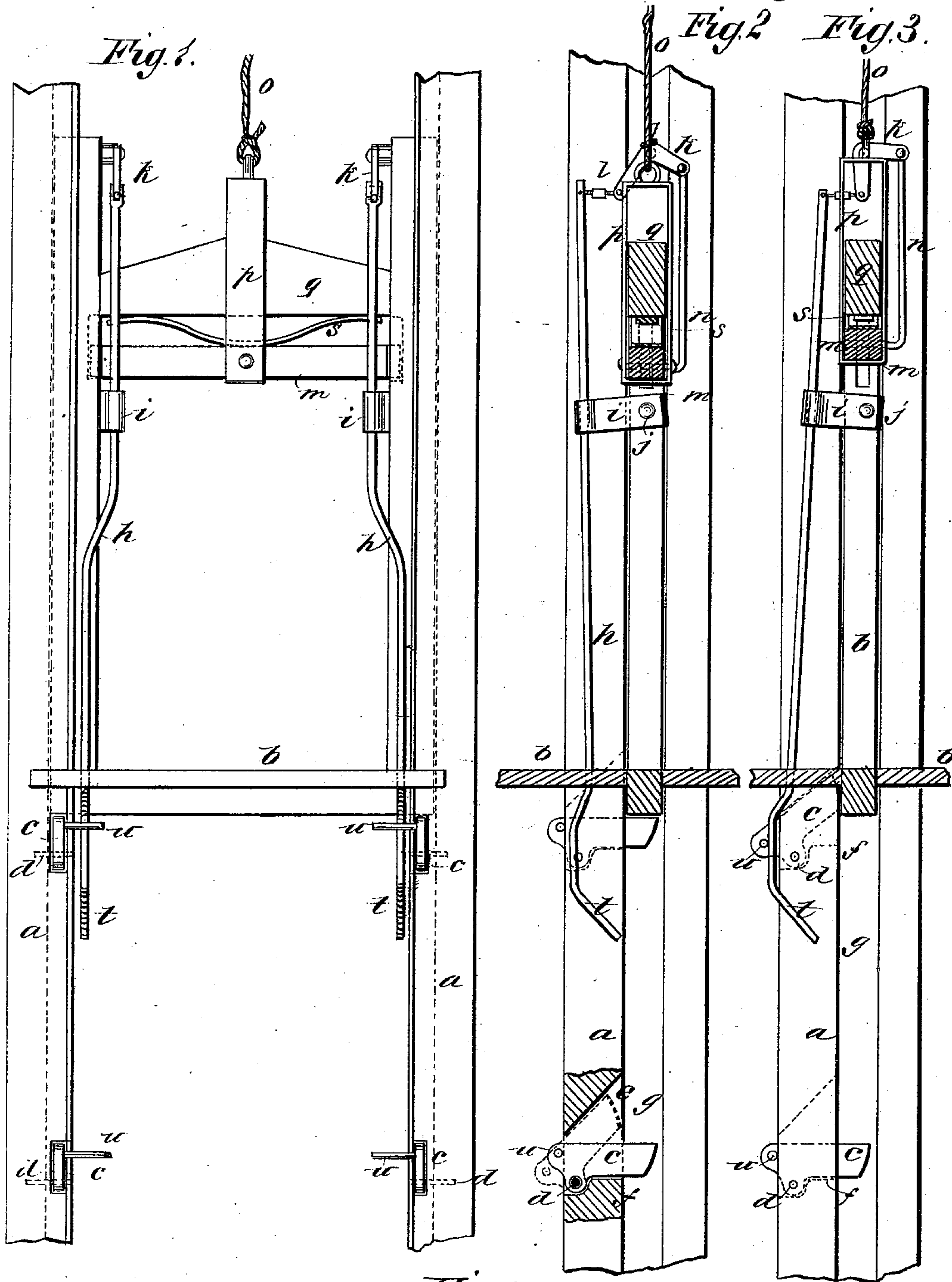


(No Model.)

E. L. PARKER & S. PETERSON.
ELEVATOR.

No. 282,763.

Patented Aug. 7, 1883.



WITNESSES:

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BY

UNITED STATES PATENT OFFICE.

EDWIN L. PARKER AND SAMUEL PETERSON, OF QUEENSVILLE, INDIANA.

ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 282,763, dated August 7, 1883.

Application filed June 26, 1883. (No model.)

To all whom it may concern:

Be it known that we, EDWIN L. PARKER and SAMUEL PETERSON, both of Queensville, in the county of Jennings and State of Indiana, have invented a new and Improved Elevator, of which the following is a full, clear, and exact description.

Our invention consists of stops arranged at intervals along the ways in which the carriage slides, that lodge across said ways and prevent the descent of the carriage except when swung out of position in advance of the carriage by arms attached to the carriage, and kept in position for dislodging said stops by the rope which operates the carriage, but which are instantly shifted by the spring let free by the rope in case the rope breaks, so as not to affect said stops, which then remain in position and prevent the carriage from descending, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of an elevator with our improved safety-stop device applied to it. Fig. 2 is a section showing the action when the rope is broken. Fig. 3 is a sectional elevation, showing the action of the attachment when the elevator is working properly; and Fig. 4, a detail showing an adjustable connection of the arms with the spring device to facilitate the setting of the arms for working accurately.

At intervals of a foot or thereabout along the posts *a*, whereon the elevator-carriage *b* slides up and down, we propose to arrange stops *c*, consisting of short bars arranged on pivots *d* in recesses *e* of the posts, and resting on shoulders *f*, beyond which they project across the grooves *g*, in which the carriage slides, so that the carriage cannot pass down until said stops are swung up out of said grooves. For so swinging up the stops when the carriage is in operation, we connect the arms *h* to the carriage by the brackets *i*, fitted to turn on the pivots *j*, and we also connect said arms with the elbow-levers *k* by the swivel-jointed or extensible rods *l* or other suitable means, said elbow-levers being connected to

the bar *m* by rods *n*, which bar has the elevator-rope *o* attached to it by the yoke *p*, and is arranged under the cross-head *q* of the carriage to shift up and down a short distance, with a spring, *s*, between it and said bar, which, being compressed by the weight of the carriage, holds the elbow-levers *k* up, as in Fig. 3, drawing the upper ends of arms *h* inward and causing the lower ends to project outward, so that the inclines *t* at the lower ends of said arms, coming in contact with the pins *u* of the stops *c*, will swing said stops up out of the way of the carriage and allow it to descend; but if the rope *o* breaks the spring *s* will thrust bar *m* down, which will swing out the elbow-levers and throw arms *h* inward at the lower end, so that inclines *t* will pass pins *u* without raising the stops, which will then arrest the carriage and prevent it from falling. When the carriage ascends it swings the stop up out of the way.

It will be seen that this improvement affords absolute safety provided the stops are made strong enough and the parts are properly fitted to be actuated by the spring.

The apparatus is designed more especially for freight, coal, and other like elevators, but may be applied to any others.

We prefer to arrange the stops and operating devices for them on both sides of the carriage; but they may be placed on one side only in some cases, if desired.

We do not abandon or dedicate to the public any patentable feature set forth herein and not hereinafter claimed, but reserve the right to claim the same either in a reissue of any patent that may be granted upon this application or in other application for Letters Patent that we may make.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

1. The combination, with the elevator-carriage and the ways in which it slides, of stops *c*, arranged to fall and lodge under the carriage to arrest its descent, and arms *h* to swing said stops out of the way of the carriage, said arms being connected with the bar *m*, to which the working-rope *o* is attached, and being maintained thereby in the position for shifting the

stops, and said bar having a spring, *s*, that prevents said arm from shifting the stops when the rope breaks, substantially as described.

2. The stops *c*, pivoted in recesses *e* in the
5 elevator-ways *a*, to swing across the grooves *g*, in combination with the arms *h*, having inclines *t*, and being connected to bell-cranks *k*, which are connected to bar *m*, having the operating-rope *o* connected to it, and being pro-

vided with spring *s* and arranged to shift up and down on the elevator-carriage, substantially as described.

EDWIN L. PARKER.
SAMUEL PETERSON.

Witnesses:

LLOYD G. HUDSON,
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