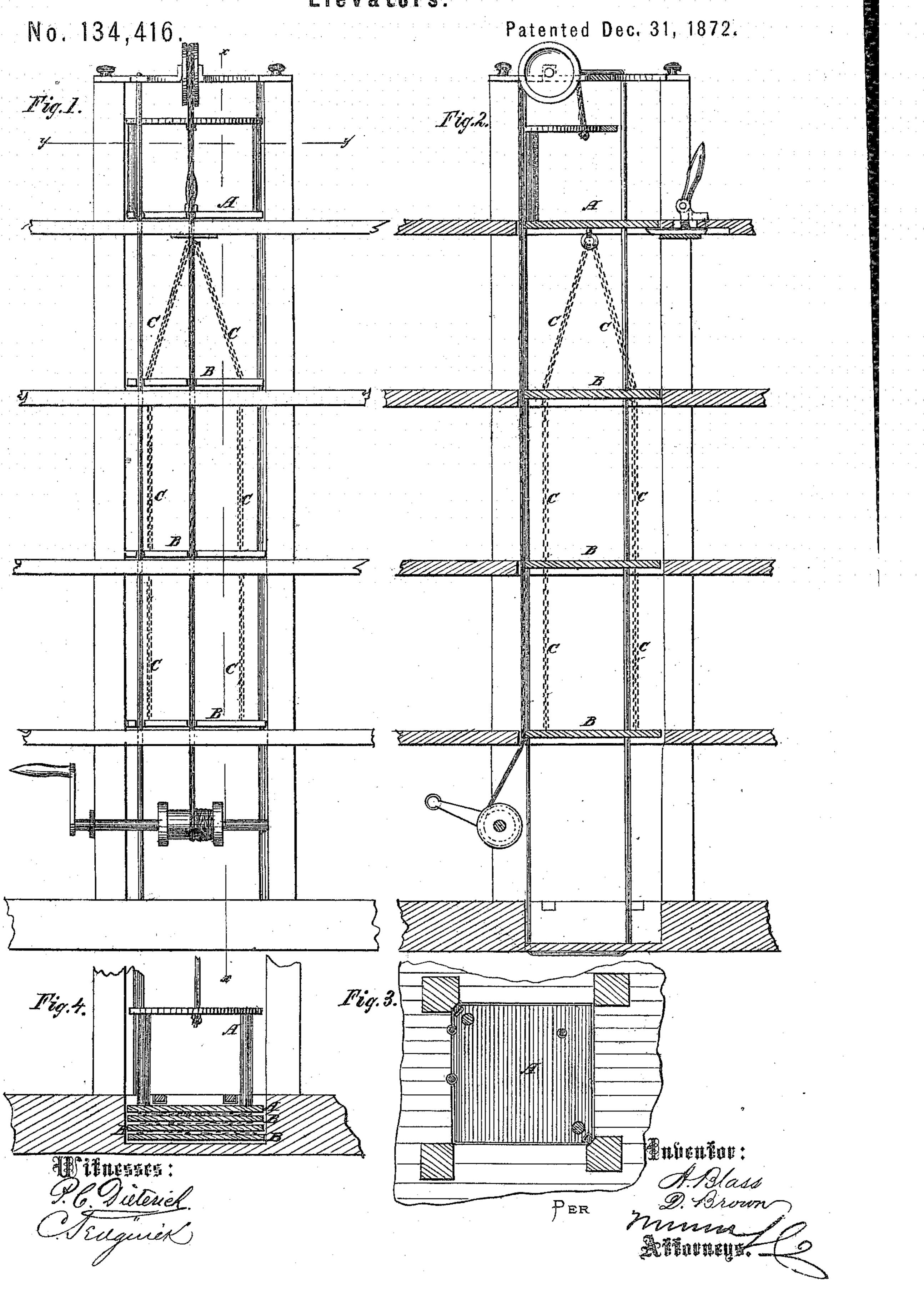
## A. BLASS & D. BROWN. Elevators.



## UNITED STATES PATENT OFFICE.

ANDREW BLASS AND DAVID BROWN, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN ELEVATORS.

Specification forming part of Letters Patent No. 134,416, dated December 31, 1872.

To all whom it may concern:

Be it known that we, Andrew Blass and David Brown, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Elevators, of which the following is a specification:

This invention relates to elevators in hotels, stores, warehouses, and other buildings whether used for elevating passengers, baggage, or merchandise, or other articles; and consists in one or more plates or shutters connected by chains or ropes with the bottom of the car or freight platform, so as to partition off and close the elevator "well" when the car or platform is raised, thus preventing danger to life from falling down the "well," and stopping the draft of air and closing the communication by which fire is apt to spread from one story to another, the construction and arrangement of parts being as hereinafter described.

In the accompanying drawing, Figure 1 is a side view of an elevator constructed according to our invention. Fig. 2 is a vertical section of Fig. 1 taken on the line x x. Fig. 3 is a horizontal section of Fig. 1 taken on the line y y. Fig. 4 is a sectional detail, showing the shutters folded together at the bottom of the elevator.

Similar letters of reference indicate corre-

sponding parts.

Our invention is not confined to any particular kind of elevator, as it is designed for all elevators now in use; consequently the construction of the frame-work, guides, and car, or burthen platform and safety devices may be as now used, or as may be hereafter used.

A represents the burthen platform or car, which is guided and elevated in the usual manner. B represents the shutters (one or more) supported from the car or platform A by the chains or ropes C, or by any other suitable means, and at such a distance from the

platform that when the latter is level with a floor of the building the shutters will correspond in position with one or more of the floors

below, as seen in Fig. 2.

When the car or platform A is down to the bottom of the "well" the shutters fold down together beneath the lower floor, as seen in Fig. 4. The shutters are made of metal or other suitable material, and are designed to tightly close the "well" at one or more of the different floors and stop the draft of air, so that fire could not easily be communicated from one floor to another.

As elevators have hitherto been constructed the "well" has been a source of great danger. Numerous accidents have occurred and many lives have been lost from people falling down that unobstructed passage-way, and in case of fire it becomes a channel by means of which the devouring element mounts unretarded from the basement to the attic. By closing this passage-way by means of shutters at the floors the draft of air is stopped and danger is avoided.

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

Patent—

1. In combination with the car or platform of an elevator, the shutters B, substantially as and for the purposes described.

2. An elevator so constructed that the car or burthen platform may pass upward with one or more shutters attached thereto, by which the "well" shall be closed at or near one or more of the floors of the building, substantially as described.

ANDREW BLASS. DAVID BROWN.

Witnesses:
T. B. Mosher,
ALEX. F. Roberts.