W. H. THOMPSON & E. P. MORGAN.

ELEVATOR.

No. 15,201. Patented June 24, 1856.

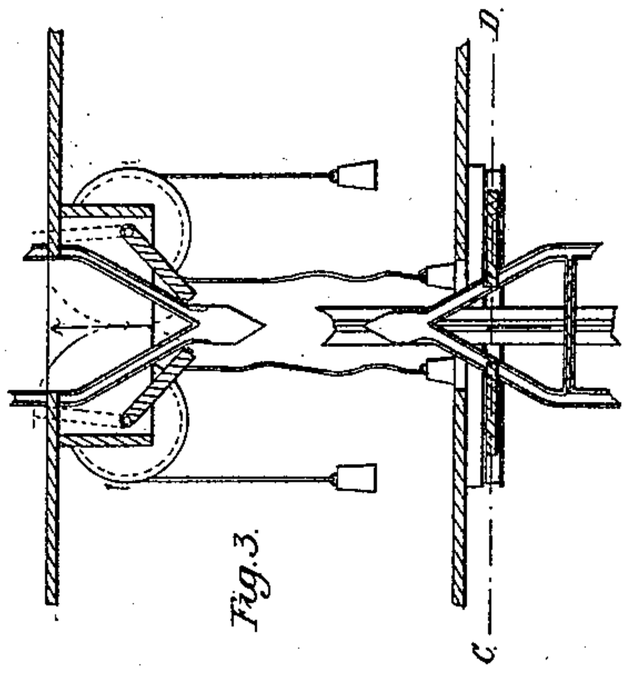

Fig. 3.

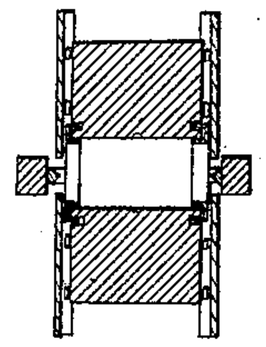

Fig. 4.

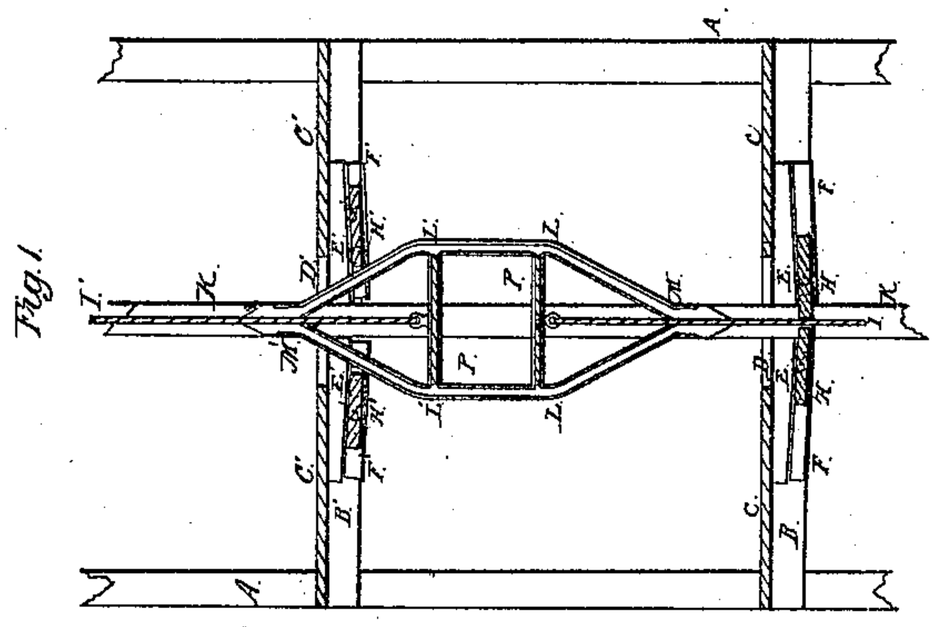

Fig. 1.

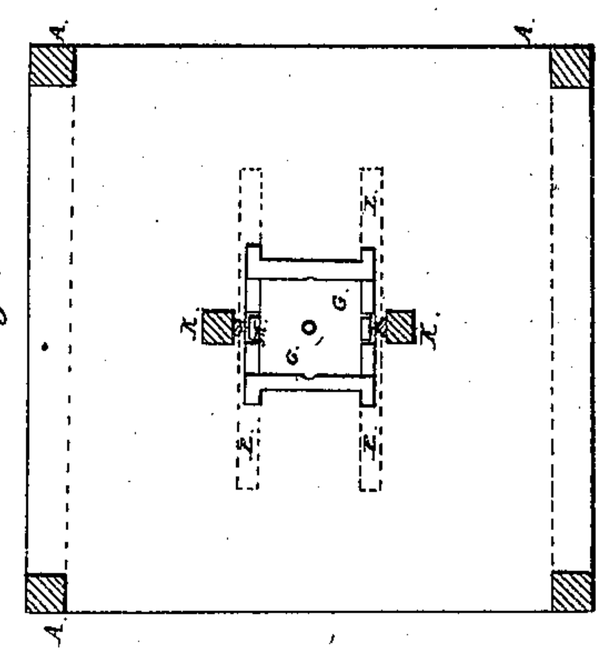

Fig. 2.

Inventors:

Wm H Thompson

Ewetus P. Morgan

UNITED STATES PATENT OFFICE.

WM. H. THOMPSON AND EUSTIS P. MORGAN, OF BIDDEFORD, MAINE.

SAFETY-HATCH FOR WAREHOUSES.

Specification of Letters Patent No. 15,201, dated June 24, 1856.

To all whom it may concern:

Be it known that we, WILLIAM H. THOMPSON and EUSTIS P. MORGAN, of Biddeford, in the county of York and State of Maine, have invented an Improvement in Elevators; and we do hereby declare that the following is a full and exact description therof, reference being had to the accompanying drawings and to the letters and figures marked upon the same.

Figure I, is side view of the elevator. Fig. II, is a plan or top view of the same.

The elevators now in use for raising and lowering articles from one floor or story of a mill or warehouse to another are of various kinds, but in general the elevator consists of a vertical box or tube extending from the lower to the upper floors, having a part of one side of the box cut away, at or near the level of each floor, thus forming an opening through which the articles to be transported may be placed upon the platform or removed from it. The platform or car hangs from a rope or chain and is caused to rise and fall by a wheel and axle, or other suitable mechanism. Our invention has no reference to the construction of the hoisting apparatus, but relates to the traps in the floors and to certain parts that are attached to the traversing platform or car.

The objection to the elevators now in use is, that the open tube or box affords free passage for air from the lower to the upper rooms, thus, in many cases rendering it difficult to heat the lower rooms, while those that are higher are uncomfortably warm; in case a fire occurs in the lower rooms, the draft of air through the elevator causes the fire to spread rapidly and gives unobstructed passage for the flames to each floor or story that is above the one where the fire commences; the rates of insurance, in many instances, depend upon the number, position and size of the openings through the floor.

Our invention is designed to remedy these and other difficulties attending the use of the elevators heretofore constructed, and to effect this the openings or traps are closed by sliding or hinged doors which are made to open by the action of the traversing platform which has suitable arms or guides attached to it; this takes place at the time the platform or car passes through each floor of the building, and the doors close as soon as the car has passed; thus the floor is open at the right instant, and is closed at all other times.

The movable doors or traps may be made in various ways, according to the situation and size of the openings; the mode of construction that we prefer is shown in the drawings, numbered 1 and 2.

The traversing car or platform of the elevator is represented at M L L′ M′; it is of suitable size to contain the load to be carried, which is placed at P; one end of the rope or chain I, I′, for hoisting and lowering is fastened at or near the top of the car, at M′, and the other end at the bottom M. The rope I I′ is drawn up or down by suitable machinery, thus giving motion to the car. Near the top and bottom of the car, and forming a part of the same there are curved arms or guides L M—L′ M′, which are angular, pointed, or so formed that their ends M M′ may enter between the sliding doors G G′ and thrust them apart, moving them to such a distance as will allow the free passage of the car with its load. The two sliding doors G, G′, at each opening D, through the floors C, have small wheels or trucks H, attached to them at the ends, or so placed that they may traverse upon the railway F, F, which is a few inches below the floor C; the outer ends of the parallel rails are two or three inches higher than they are at the inner or central part of the elevator, in order that the doors may close by gravity as soon as the car has passed through the opening D in the floor C.

We consider the plan above described as the cheapest and most simple, but various modes of hanging the doors may be adopted; two of which are shown in Figs. III and IV. Another advantage attending the use of our elevator is, that accidents are prevented by it; the doors being closed, no person can fall through, from one story to another.

Having herein fully described the nature and principles of our invention, what we

claim and desire to secure by Letters Patent is—

An elevator having arms or guides attached to the traveling car or platform either above or below it, together with the sliding or hinged movable doors, which remain closed when the elevator is not in use, and are opened by the action of the car or suitable attachments to the same, as it passes upward or downward through the several stories of the building.

WILLIAM H. THOMPSON. [L. S.]
EUSTIS P. MORGAN. [L. S.]

In presence of—
CHAS. S. PATTEN,
GEO. H. KNOWLTON.