## R. D. THACKSTON. SELF CLOSING HATCHWAY

SELF CLOSING HATCHWAY. Patented Aug. 5, 1884. No. 303,193. Fig.Z. Fig.2. Richard D Thackston By Kunght Brog \_D

## UNITED STATES PATENT OFFICE.

RICHARD D. THACKSTON, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO HENRY I. COE, OF SAME PLACE.

## SELF-CLOSING HATCHWAY.

SPECIFICATION forming part of Letters Patent No. 303,193, dated August 5, 1884.

Application filed November 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, RICHARD D. THACK-STON, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Self-Closing Hatchways, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is an elevation, and Fig. 2 a horizontal section taken on line 22, Fig. 1.

My invention relates to a safety attachment or gate for self-closing hatchways; and it consists in a bar, which is pivoted by one end to 15 one of the uprights of the elevator-shaft, or to any other suitable object, in such a manner that it will be raised by the door each time the latter is opened, and fall again as the door closes to or about to a horizontal position, so . 20 as to extend across the opening to the cage, as shown by dotted lines, Fig. 1, and by full lines, Fig. 2.

Referring to the drawings, A represents the uprights of an elevator-shaft; B, a cage; and 25 C, a horizontal door, which opens upwardly. All of these parts may be of any ordinary construction.

D represents a bar or strip to form a gate, pivoted by one end to one of the uprights A 30 or other suitable object in such a manner that when it is down in its normal position it will be across the opening or entrance to the cage, thus preventing all danger of persons getting, unintentionally, upon the closed door or doors,

and being hurt as the door is opened by the ascending or descending eage. When the bar is down, its free end is engaged by a keeper or stop, I, secured to another one of the uprights A, or other suitable object. The bar is raised automatically by the opening door, the door being provided with a projection, J, to engage beneath the bar; or other suitable connecting means may be employed. As the door closes, the bar drops by gravity to its lower or normal position.

I claim as my invention—

1. The combination, with a hatchway-cage and a door to be opened vertically, of a bar hinged at one side of the opening and adapted to be raised by and with the door as the cage ascends and descends, for the purpose set forth.

2. The combination, with a hatchway, of a gate hinged at one side of the cage-opening, a door having a projection by which the gate is opened and supported, and a cage to open and close the door and gate.

3. The combination of uprights, cage, door, and pivoted bar, and the keeper or stop, the cage and door being provided with means, as described, whereby the latter is opened and a closed on the ascent and descent of the former, and the door being provided with a projecting arm to engage beneath the bar, all substantially as and for the purpose set forth.
RICHARD D. THACKSTON.

In presence of-SAML. KNIGHT, GEO. H. KNIGHT.