

(No Model.)

W. PINTARD.

SAFETY APPLIANCE FOR ELEVATORS.

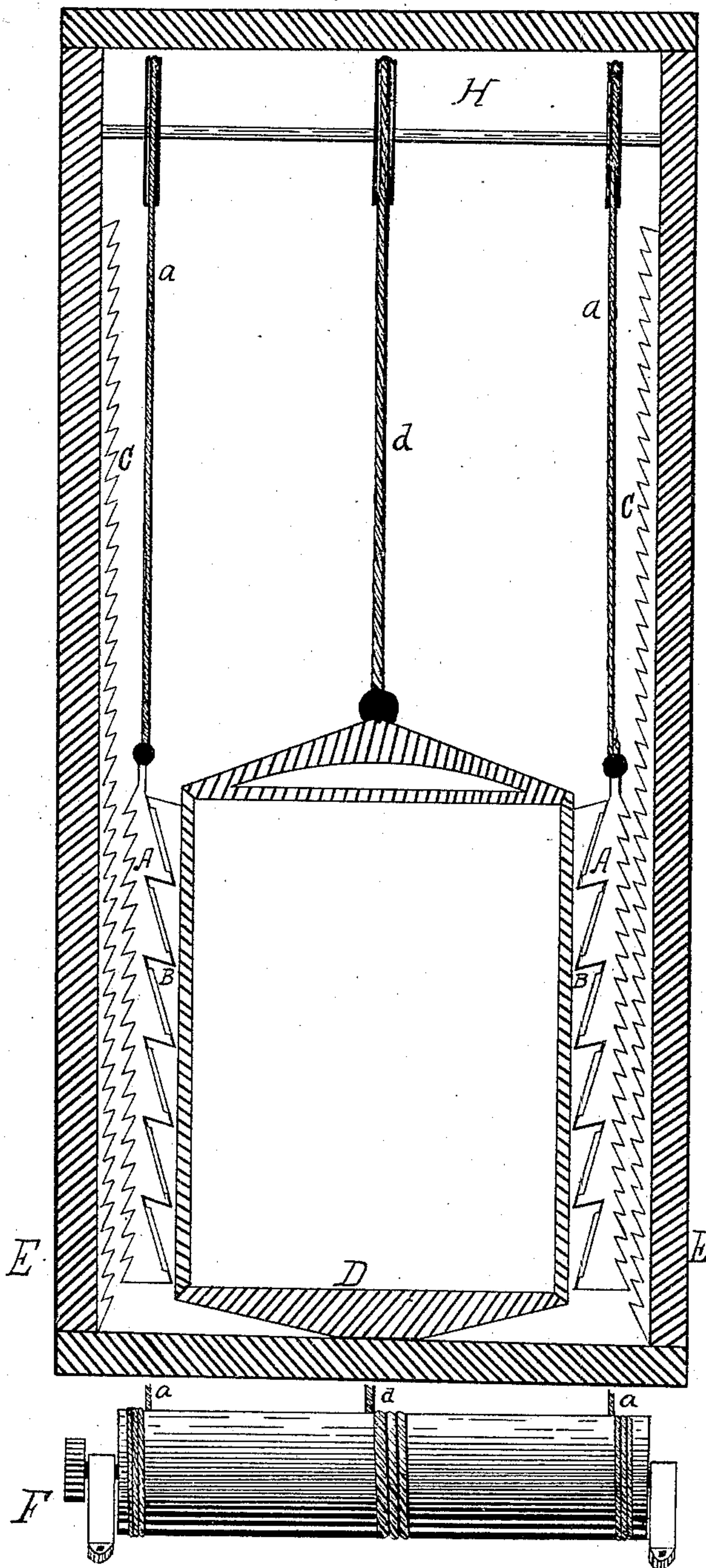
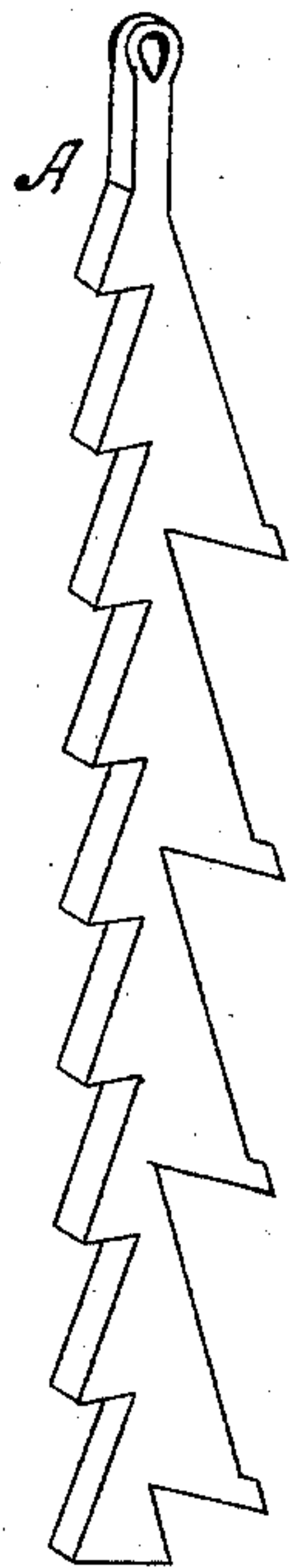
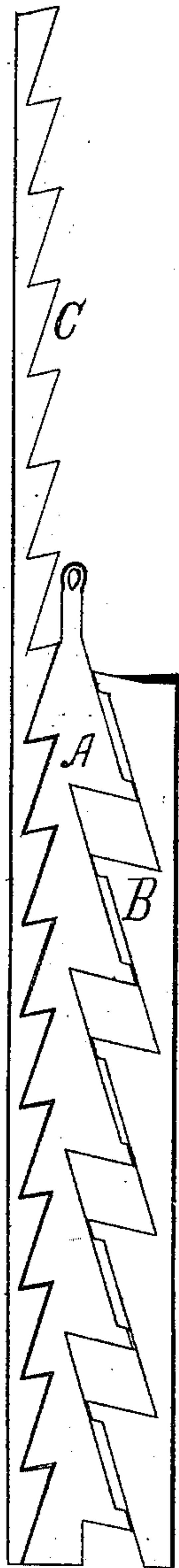
No. 286,064.

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Fig. 1.

Fig. 2.

Fig. 3.



Witnesses:
J. A. Curtis
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UNITED STATES PATENT OFFICE.

WILLIAM PINTARD, OF RED BANK, NEW JERSEY, ASSIGNOR OF ONE-HALF
TO DANIEL H. APPELEGATE, OF SAME PLACE.

SAFETY APPLIANCE FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 286,064, dated October 2, 1883.

Application filed August 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM PINTARD, a citizen of the United States, residing at Red Bank, in the county of Monmouth and State of New Jersey, have invented a new and useful Safety Appliance for Passenger and Freight Elevators, of which the following is a specification.

My invention relates to improvements in safety appliances for elevators, in which a combined ratch and wedge bar operates to arrest the fall of the car when detached from its cable by being forced by the gravity of the car into an auxiliary ratch-bar secured to the elevator-well; and the object of my improvement is to provide an appliance or device that will successfully check the fall of the car in case of the breaking of the cable, or of any accident happening that would otherwise cause the car to be precipitated. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan transverse view of an elevator and well with the said appliance attached. Fig. 2 represents the combined ratch and wedge bar; and Fig. 3, a plan view of the ratch and wedge bar and auxiliary ratch and wedge bars, and showing the position of the same when the car is checked in its fall.

Similar letters refer to similar parts throughout the several views.

The auxiliary wedge-bar B, adapted to one side of the bar A, is attached securely to the car D. The auxiliary ratch C, adapted to the other side of the bar A, is secured to the side of the elevator-well E. The bar A is adapted to work independently of the ratch and wedge bar attached to the well and car, its action being controlled by a cable, *a*, or its equivalent, connected with the drum or hoisting apparatus F.

The main features of the practical working of this device are as follows: The car D has attached thereto the wedge-bar B, adapted to the wedges on the one side of the bar A. This bar A rests by its own weight into the wedge-bar B, attached to the car, and is carried up and down with the car, and when the car is working properly the ratch on the other side of the bar A just clears the ratch C attached to the side of the well. The

bar A is attached to a rope or cable, *a*, which passes over a wheel or gearing, H, at the top of the well, which works independently of the other wheels, and thus to the main drum or gearing F, which actuates the elevator.

It will be readily seen that if from any cause whatever the elevator-car should be detached or be freed from the drum by the parting of the cable *d*, or otherwise, so as to allow it to fall, the accelerated motion thus given to the car, which cannot be imparted to the bar A, will cause the wedges attached to the car to force the bar A outward sufficiently to catch on the ratch C, attached to the well, thus stopping a further downward movement of said bar A. The bar A having been checked, the wedge-bar B on the side of the car acts upon the bar A like a double wedge, so that it is only possible for the car to fall a few inches, thus arresting the further descent of the car. The relative position of the parts of the device when the car is thus stopped by it is shown in Fig. 3. The normal position of the parts is shown in Fig. 1.

To guard against the slipping of the wedges past each other in case of the possible spreading of the well, the wedges are notched, as shown, which provides a rest for the car in such case.

The bar A can be prevented from slipping from side to side by pins or their equivalent.

The position of the device as shown in Fig. 1 in its relation to the car and well is not important. It is thus shown for the sake of better illustration. It may be placed laterally between the car and well, or, in fact, in any perpendicular position to suit each individual case, the device being adapted to be used on any elevator.

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

1. The combined ratch and wedge bar A, adapted to the wedge-bar B and ratch C, substantially as shown, for the purpose specified.

2. The combined ratch and wedge bar A, in combination with the auxiliary wedge-bar B and the ratch C, substantially as set forth.

WM. PINTARD,

Witnesses:

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