

(No Model.)

2 Sheets—Sheet 1.

W. WINKLESS.

FRICTION CLUTCH FOR ELEVATORS.

No. 285,866.

Patented Oct. 2, 1883.

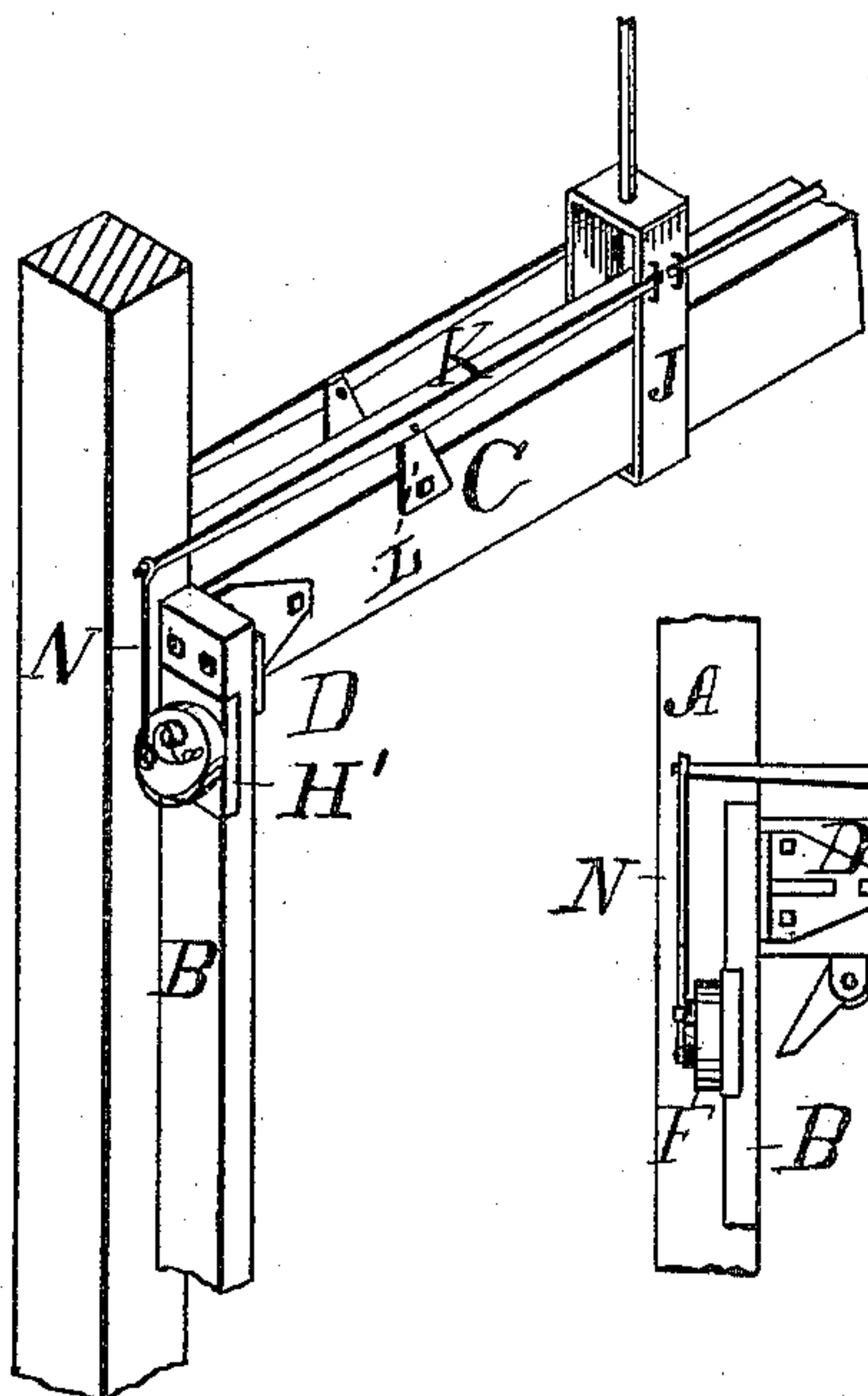


Fig. 1.

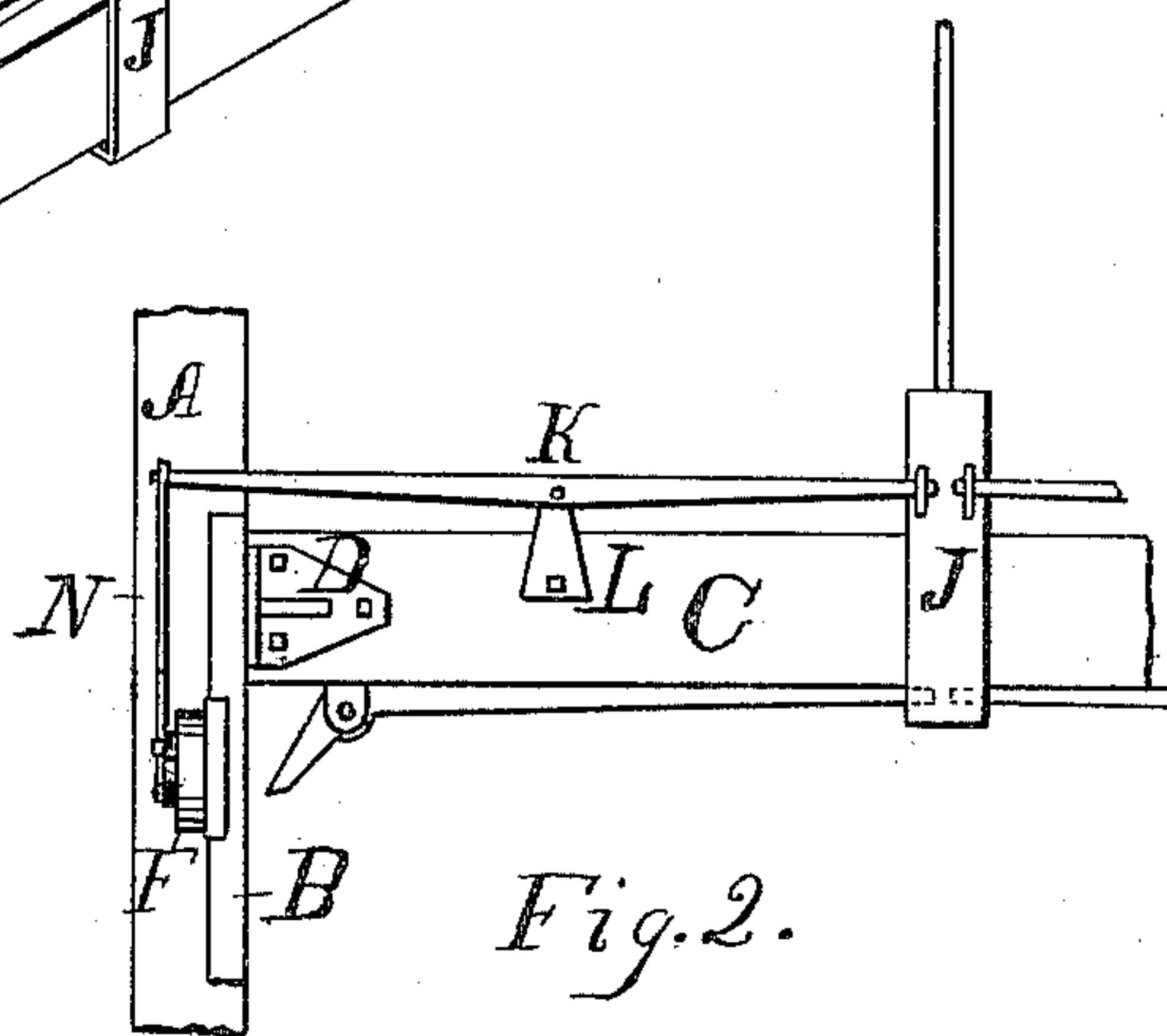


Fig. 2.

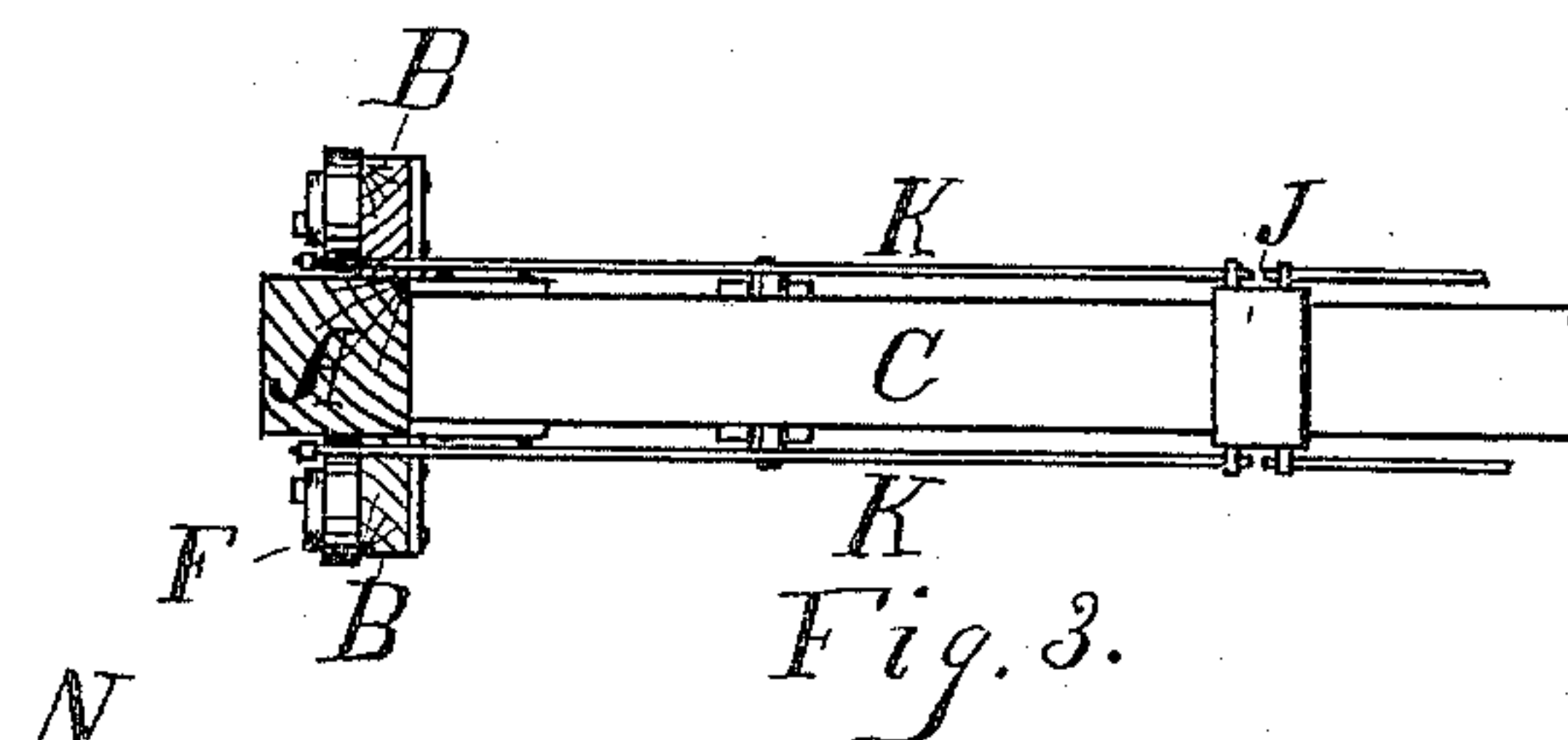


Fig. 3.

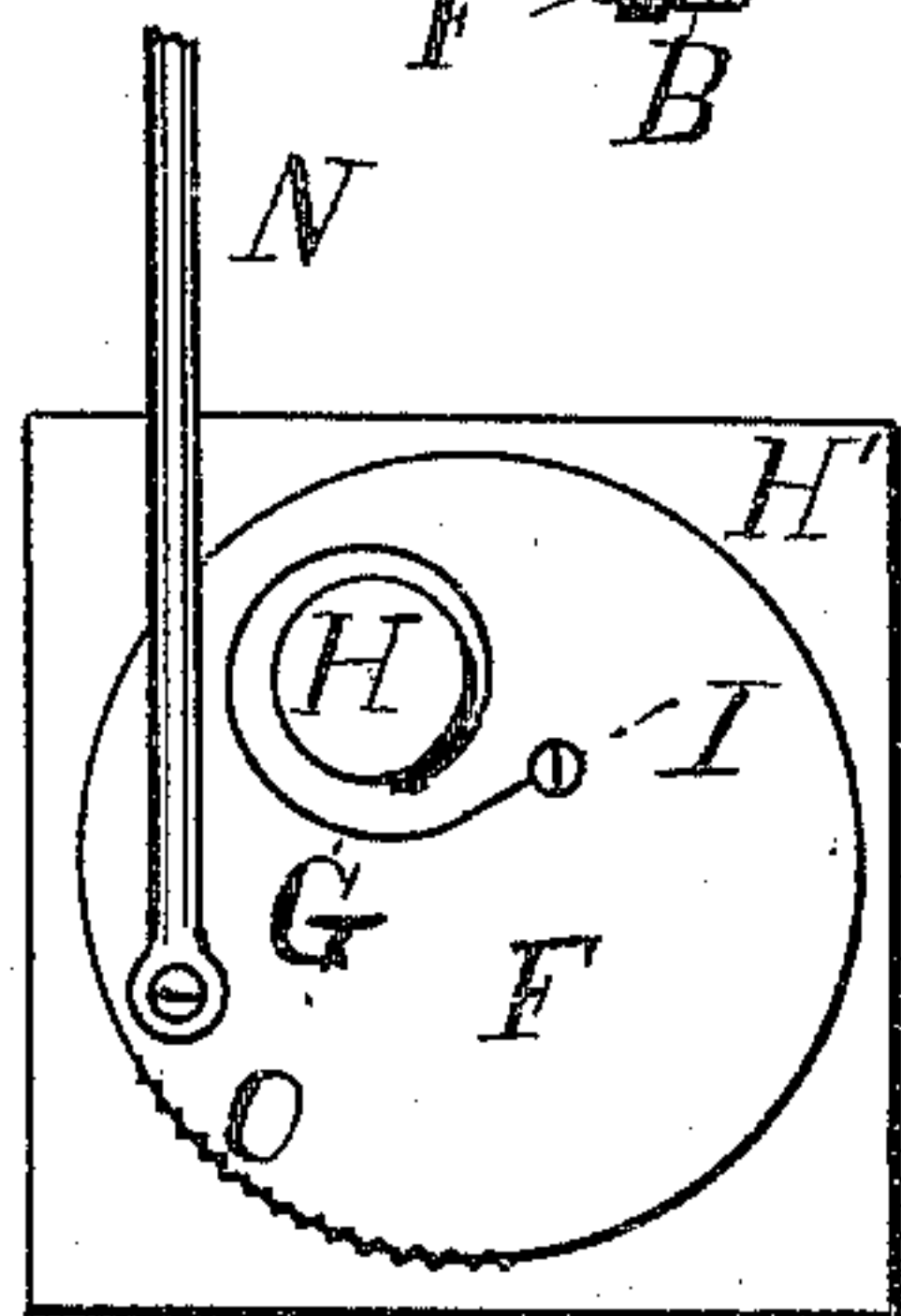


Fig. 4.

WITNESSES:

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Attorney.

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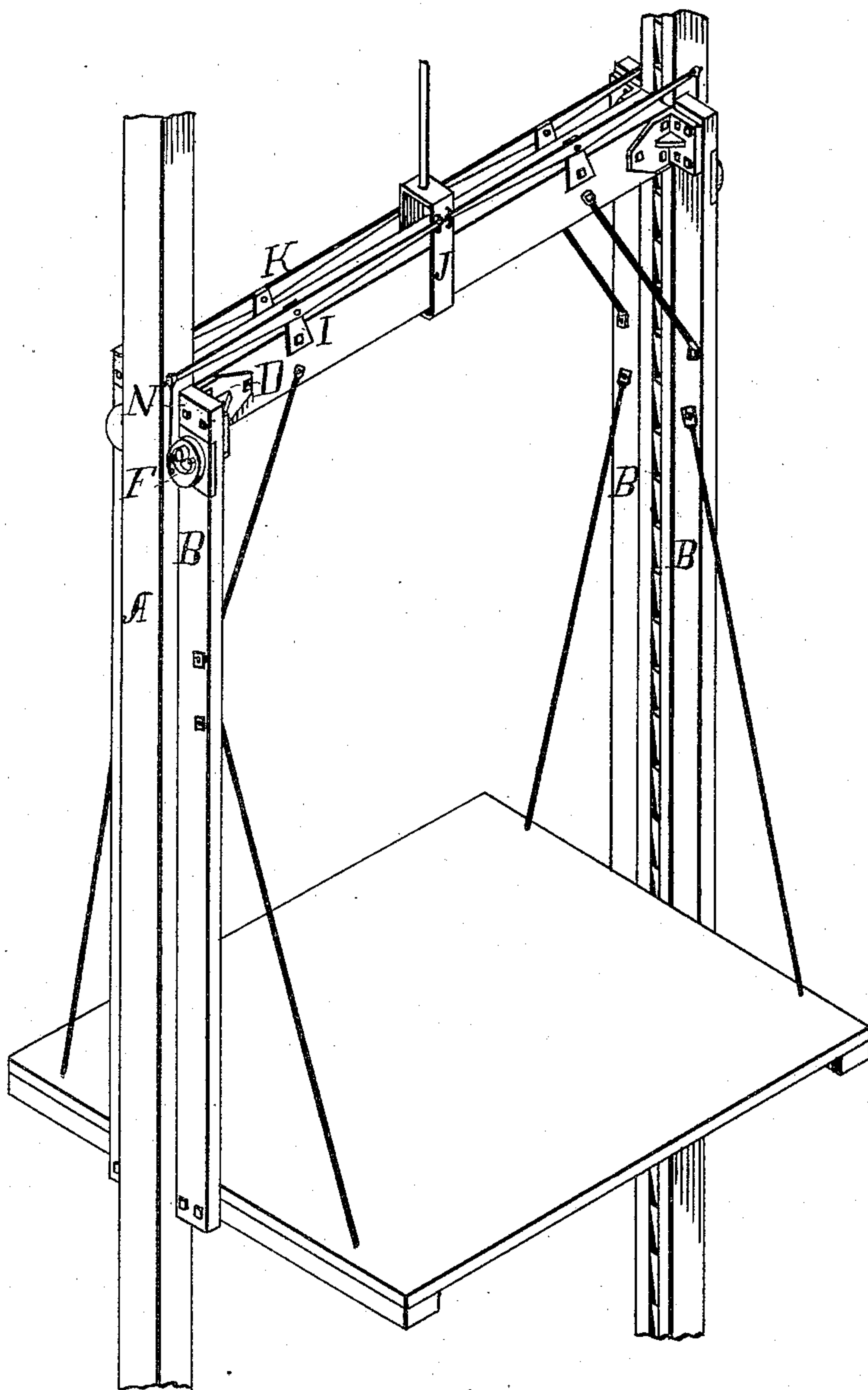


Fig. 5.

WITNESSES:

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INVENTOR :

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UNITED STATES PATENT OFFICE.

WILLIAM WINKLESS, OF NEWPORT, KENTUCKY.

FRICITION-CLUTCH FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 285,866, dated October 2, 1883.

Application filed February 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, WM. WINKLESS, of Newport, in the county of Campbell and State of Kentucky, have invented a new and useful Improvement in Friction-Clutches for Elevators, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of my automatic safety elevator-clutch. Fig. 2 is a side view of same; Fig. 3, a horizontal sectional view; Fig. 4, an enlarged face view of the clutch; and Fig. 5 is a perspective view of an elevator with my improved automatic safety-clutch.

The object of my invention is to provide a safety-clutch for elevators, so arranged that when the suspension-rope is severed or breaks the clutch will immediately check the elevator-platform and hold it firmly to the elevator, all of which will now be described in detail.

In the accompanying drawings, A represents the elevator-well, which may or may not be provided with the usual rack or bar, A', on the face thereof. The design is to apply my improvement to elevators having safety devices, or to those not provided with any safety-catch.

C is the upper cross-beam of the elevator, made in the usual manner, having at each end the angle-iron castings D, by means of which the upper ends of the guides B B are secured to the beam C by bolts, to prevent the guides B B from spreading. The eccentric F is secured in position and works on the pivot H against the plate H', and has on its face the coil-spring G, secured to the pivot H and to the screw I. The edge of the eccentric is provided with corrugations or teeth O. The guide on the opposite side of the elevator-well is also equipped with a similar clutch, and both these clutches work in a vertical plane, with the well A between, as shown. On the side of the beam C is the lever K, fastened to the side of the stirrup by means of a staple, and having for its fulcrum

the bracket L, secured to the beam C, thence extending to a point perpendicular with the face of the disk F, and terminating in a link. From this, and extending to the disk and fastened to its place by a bolt or screw, is the link N. The eccentric F, with the pivot H, is so placed that the corrugations O, by the action of the lever K on the eccentric, will move forward toward and bind against the elevator.

The plate H' is not an essential element in the invention.

The pivot H may be a continuation of the bolt holding the angle-iron D.

The operation and advantages of my invention will be readily understood. In case of the breaking of the suspension-rope, or of any part of the machinery, the strain on the stirrup J being removed, the weight of the stirrup acts on the lever K and link N with the combined action of the coil-spring G, causing the eccentric F to turn on the pivot H toward and bind against the elevator-well.

I am aware that it is not broadly new to use eccentric clutches for the general purpose above described.

What I claim as new is—

1. An eccentric clutch operated by means of a lever directly from the supporting stirrup of the elevator, so as to bind against one or more sides of the elevator-well.

2. The elevator-frame C B, having the rotating clutches F on opposite sides of the elevator-well provided with springs G, and the levers K operating directly from the supporting stirrup J, in combination with the elevator-well, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 20th day of January, 1883, in the presence of witnesses.

WILLIAM WINKLESS.

Witnesses:

J. S. ZERBE,
C. D. ZERBE.