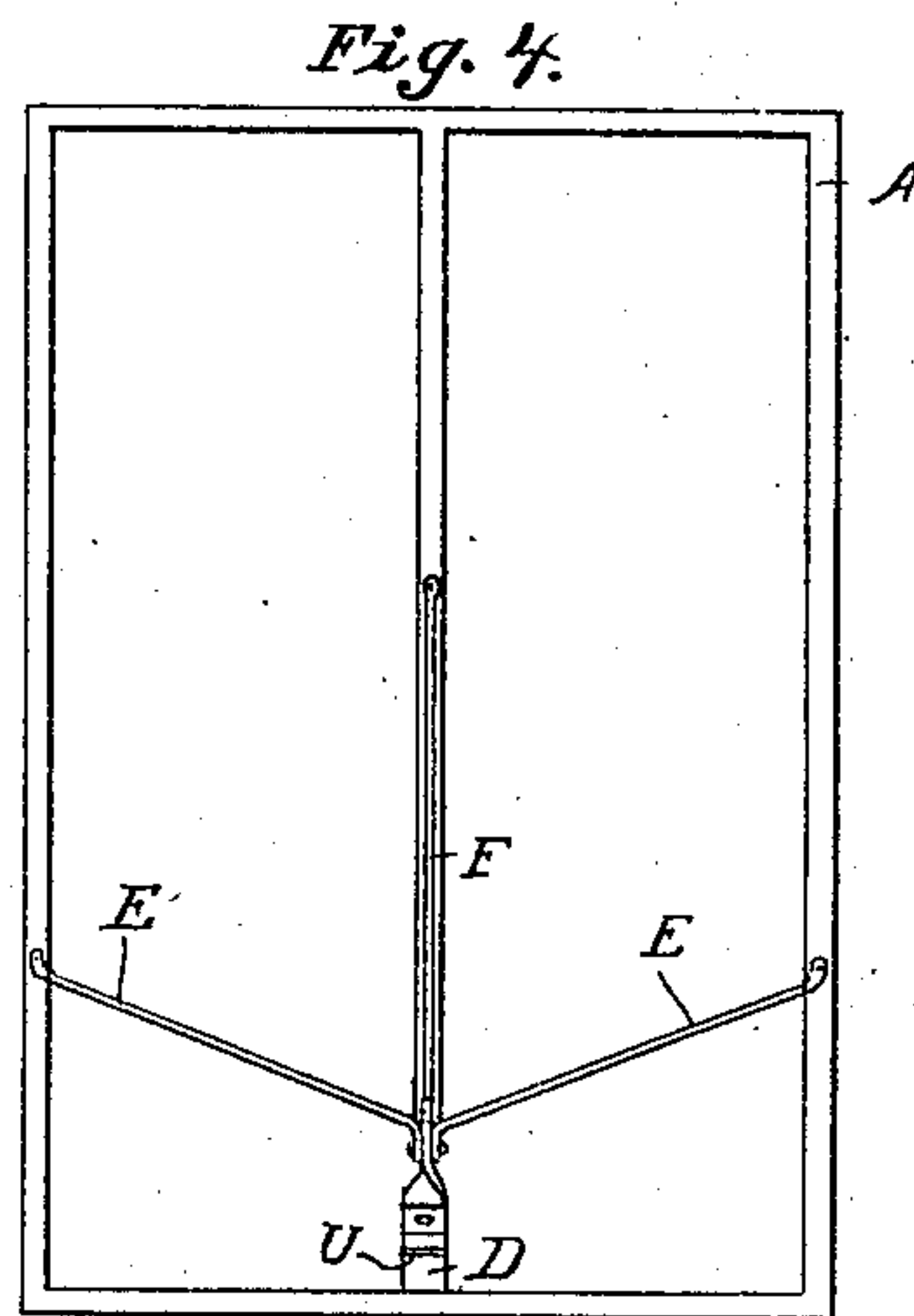
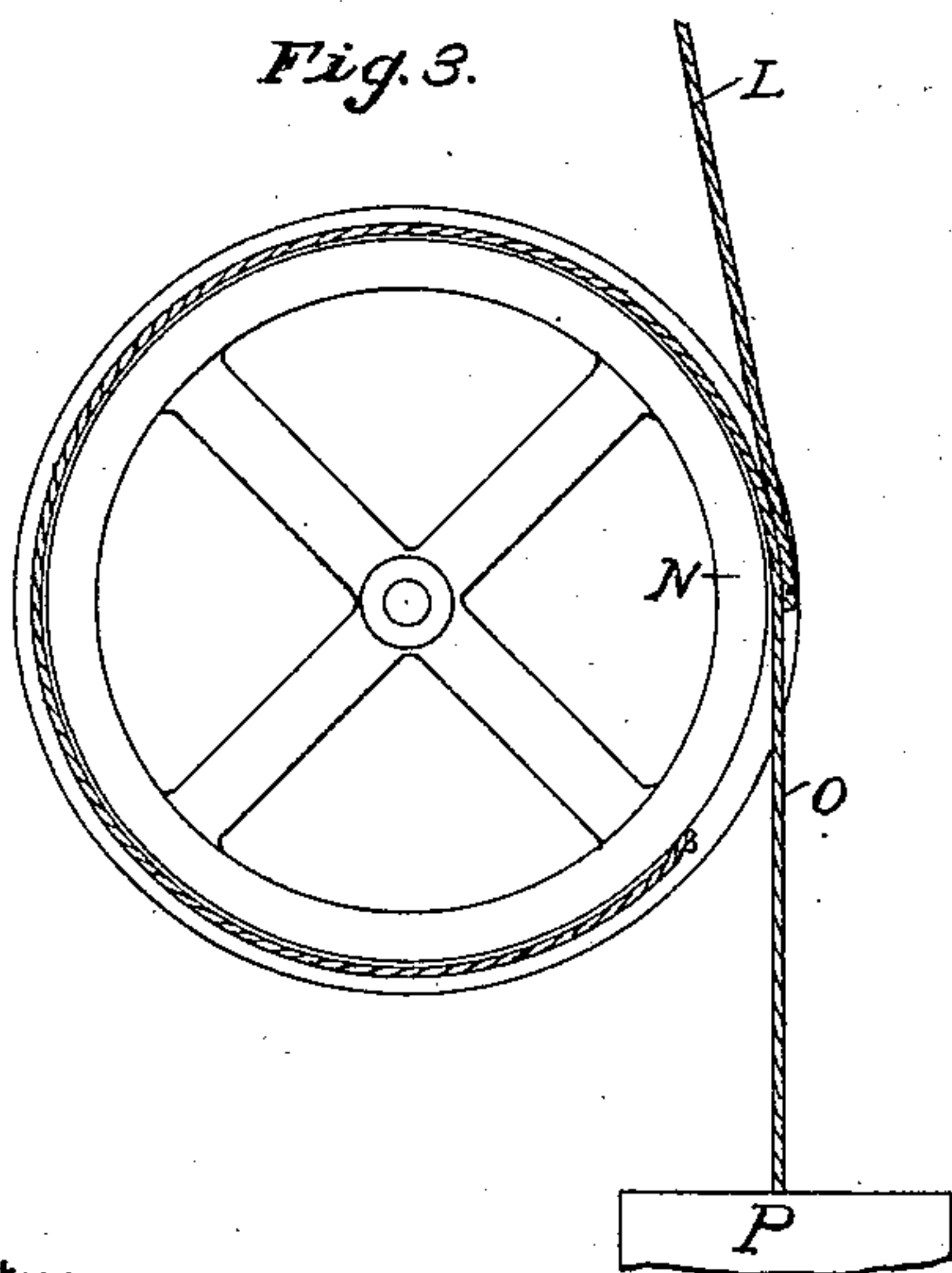
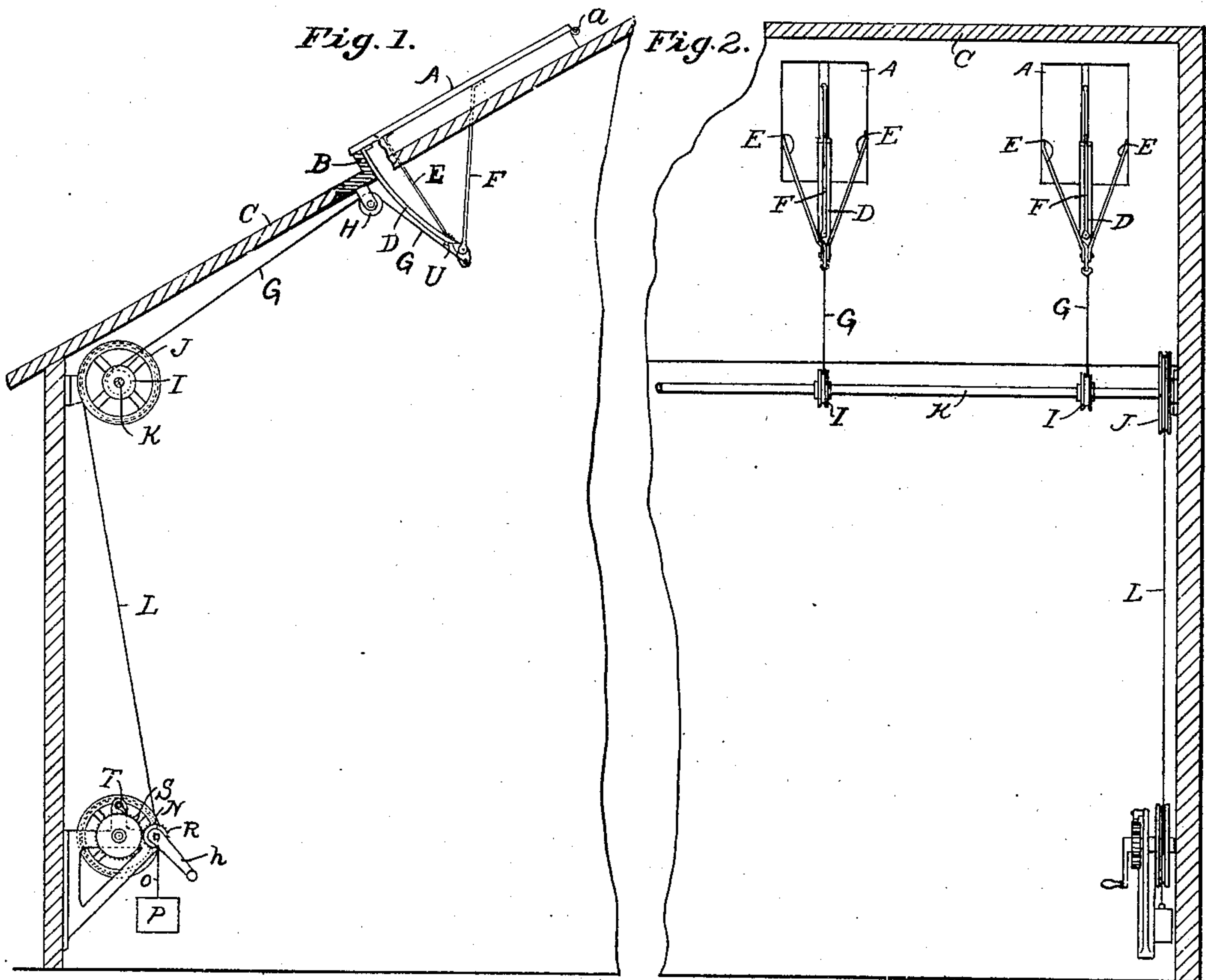


A. C. GOETHEL.
TRANSOM LIFTER.

APPLICATION FILED APR. 28, 1909.

938,475.

Patented Nov. 2, 1909.



Inventor

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Witnesses

Mary Hollings
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UNITED STATES PATENT OFFICE.

ALFRED C. GOETHEL, OF MILWAUKEE, WISCONSIN.

TRANSOM-LIFTER.

938,475.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed April 26, 1909. Serial No. 492,096.

To all whom it may concern:

Be it known that I, ALFRED C. GOETHEL, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Transom-Lifters, of which the following is a specification.

My invention relates to improvements in transom lifters.

10 The object of my invention is to provide a form of lifter which will be suited to all requirements and will not readily get out of repair or permit the transom to sway or be shaken to pieces by the wind.

15 In the following description, reference is had to the accompanying drawings in which,—

20 Figure 1 is a sectional view of a building to which my invention is applied showing the latter from the side. Fig. 2 is a front elevation, showing a portion of the building walls in section. Fig. 3 is a detail end view of the windlass drum. Fig. 4 is a view of the transom as seen from the under side.

25 Like parts are identified by the same reference characters throughout the several views.

30 The sky light transom frame A is hinged at a to a raised casing B on the roof C of a building, and at its lower front margin is provided with a depending curved lifting arm D which is rigidly secured to the transom frame and curves in the arc of a circle described from the hinged margin so that

35 it will occupy a position close to the bar B of the casing.
40 Diagonal braces E extend from near the lower end of the arm D to the side margins of the transom frame near the front margin, and another brace F extends centrally from the lower end of the arm D to an intermediate point on the frame, thus securely bracing the arm D. A lifting rope G is secured to the lower end of the arm D and

45 extends therefrom upwardly and over a pulley H secured to the roof of the building and then over and secured to a winding drum I. This drum has a pulley J connected therewith by the drum shaft K but

50 located at any suitable distance therefrom. A rope L on and connected with the pulley J, extends downwardly to a windlass N, which is provided with a counter balance rope and weight O and P respectively and

55 is actuated by a crank h, operating through

gears R and S. A locking pawl T holds the windlass in its various winding adjustments.

With the described construction the transom may be raised until a stop U on the arm D engages the front of the casing. The 60 transom will then be held in raised position with positive rigidity and it will not be affected by the wind. Referring to Fig. 2, it will be observed that a series of transoms may be simultaneously actuated from the 65 shaft K which may extend the length of the building and be provided with a drum I for each transom.

Having thus described my invention, what I claim as new and desire to secure by Let- 70 ters Patent is—

1. The combination with a transom frame and casing of a lifting arm depending from the front margin thereof, braces extending diagonally from the lower portion of the 75 lifting arm to the side margins of the transom frame near the front margin, another brace extending rearwardly and upwardly from the lower portion of said arm to the transom frame and toward its rear margin, 80 an actuating rope connected to the lower end of said arm, and a pulley receiving said rope and supported above the lower end of said arm, and in front of the transom frame. 85

2. The combination with a transom frame and casing of a lifting arm depending from the front margin thereof, braces extending diagonally from the lower portion of the 90 lifting arm to the side margins of the transom frame near the front margin, another brace extending rearwardly and upwardly from the lower portion of said arm to the transom frame and toward its rear margin, 95 an actuating rope connected to the lower end of said arm, and a pulley receiving said rope and supported above the lower end of said arm, and in front of the transom frame, together with a stop on the arm arranged to engage the casing when the transom is lifted. 100

3. The combination with a transom frame and casing of a lifting arm depending from the front margin thereof, braces extending diagonally from the lower portion of the 105 lifting arm to the side margins of the transom frame near the front margin, another brace extending rearwardly and upwardly from the lower portion of said arm to the transom frame and toward its rear margin, an actuating rope connected to the lower 110

end of said arm, and a pulley receiving said rope and supported above the lower end of said arm, and in front of the transom frame, together with a winding drum connected
5 with said rope, an actuating rope connected with said drum and a windlass for operating the actuating rope.

In testimony whereof I affix my signature in the presence of two witnesses.

ALFRED C. GOETHEL.

Witnesses:

F. A. OTTO,
MARY COLLINGE.