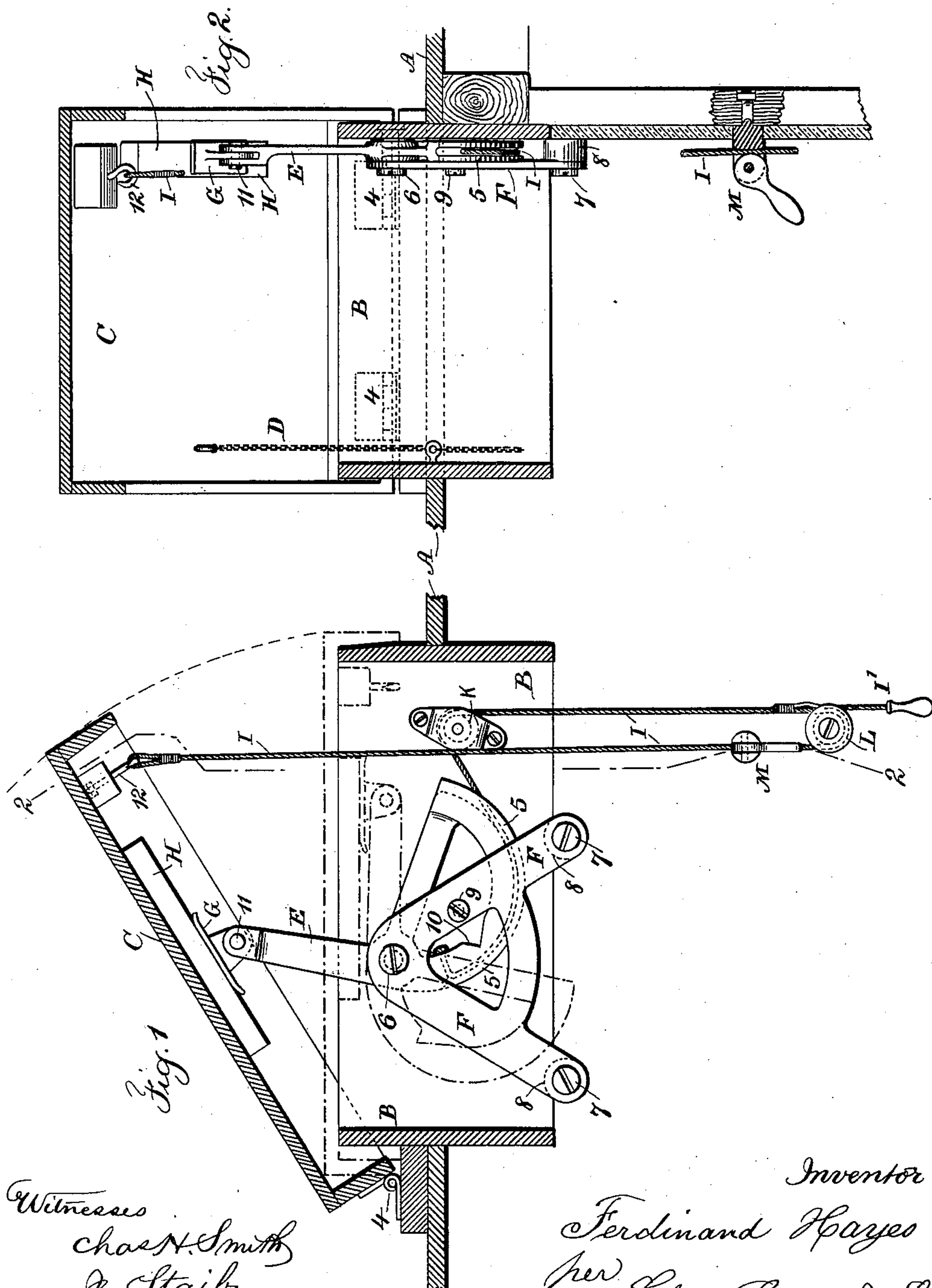


(No Model.)

F. HAYES.  
SCUTTLE OR SKYLIGHT OPERATOR.

No. 606,057.

Patented June 21, 1898.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FERDINAND HAYES, OF NEW YORK, N. Y.

## SCUTTLE OR SKYLIGHT OPERATOR.

SPECIFICATION forming part of Letters Patent No. 606,057, dated June 21, 1898.

Application filed February 12, 1898. Serial No. 670,065. (No model.)

*To all whom it may concern:*

Be it known that I, FERDINAND HAYES, a citizen of the United States, residing at New York, (borough of Brooklyn,) in the State of New York, have invented an Improvement in Scuttle or Skylight Operators, of which the following is a specification.

Scuttles upon buildings, especially dwellings, are frequently fitted so that they can be raised and propped up for ventilation; but it is generally inconvenient to climb a ladder and prop up the scuttle, and in addition to this the scuttle is liable to be blown over by the wind or be raised sufficiently from outside for a person to pass into the house.

The object of the present invention is to raise the scuttle or skylight from the floor below, to hold the same in an elevated position, and to prevent the scuttle being raised from the roof either by the wind or by any person seeking to enter the building through the scuttle.

In carrying out this invention I make use of a lever with a segmental sheave, to which is connected one end of a rope or chain that passes over a pulley, so that by drawing upon such rope or chain the scuttle can be elevated more or less by the action of the lever, and a triangular support is employed for the pivot of the lever and for a stop that arrests the movement of the lever, and these parts are made so that they can be applied at either side of the scuttle-coaming, and a cord or chain connected on the under side of the scuttle passes down to a clamp, by which the scuttle can be kept or held down at any point to which it may be raised.

In the drawings, Figure 1 is a section through the scuttle and coaming, and Fig. 2 is a cross-section near the line 2 2.

A portion of the roof is illustrated at A and the coaming or scuttle-way at B, and C illustrates a scuttle hinged at 4, so as to be raised or lowered, and the chain D is usually provided to prevent the scuttle passing beyond a vertical position. These parts are simply illustrative of a scuttle or skylight of any desired character.

The lever E is made with a sheave-segment 5, and a pivot 6 at the junction of the sheave-segment and lever is advantageously made by a screw passing into the coaming or scut-

tle-way, and this is supported by the frame F, which is advantageously triangular and connected by screws 7, passing through washers or blocks 8, and this frame F is preferably made similar on its two surfaces, so that the frame and lever can be applied at either side of the coaming or scuttle-way, and the screw-stop 9 passes through the frame and serves to arrest the movement of the lever and sheave-segment in opening the scuttle, such sheave-segment coming in contact with the screw-stop at the notch 10.

The shoe-piece G is connected at 11 to the upper end of the lever E, and this shoe-piece slides against a slat or strip H, that is connected to the under side of the scuttle C and occupies the position shown by dotted lines in Fig. 1 when the scuttle is closed and slides into the position shown by full lines as the scuttle is opened.

I find it advantageous to employ the sliding shoe upon the slat or strip, as there is sufficient friction between the parts to lessen the risk of the scuttle closing too rapidly when being lowered, as hereinafter described.

The cord or chain I is fastened at one end to the sheave-segment, preferably by being passed through a hole, and such cord or chain is in the groove of the sheave-segment and passes over a pulley K and descends around the pulley L and passes up and is connected at the upper end to the scuttle, advantageously by a loop passing over the hook 12 upon the under side of the scuttle, and this cord or chain I passes through the clamp M, preferably formed of two side pieces and a pivoted lever having an eccentric and clamping end, as seen in Fig. 2, for pressing upon and holding the cord or chain when the lever is turned in either one direction or the other; but such cord or chain can pass through the clamp freely when the handle or lever of the clamp is horizontal.

The cord or chain I can be taken hold of by hand, or a branch cord and handle I' can be made use of for drawing down the cord and swinging the lever and sheave-segment from the position shown by dotted lines in opening the scuttle or skylight to any desired extent, and by clamping the cord or chain at M the scuttle is held so that it cannot be raised, and by properly proportioning the parts, as illus-



trated in the drawings, the cord or chain will remain substantially tight in any position to which the scuttle may be raised or lowered. Hence the scuttle is held open by the lever  
5 and sheave-segment and tightly secured by the cord or chain between the clamp and the hook.

When it is necessary to open the scuttle, the cord or chain is to be separated from the  
10 hook 12, and the scuttle can be opened in the ordinary manner.

I claim as my invention—

1. The scuttle or skylight opener composed of a lever and sheave-segment, a frame and  
15 pivot for supporting the lever and sheave-segment, and a cord or chain passing from the sheave-segment and over a pulley by which the parts are moved and the scuttle raised, the end of the lever acting upon such scut-  
20 tle, substantially as set forth.

2. The combination in a scuttle or skylight opener, of a triangular frame adapted to being connected at either side of the scuttle-way or coaming, a lever and sheave-segment, a  
25 pivot for the same passing through the tri-

angular frame, a stop upon the frame for limiting the movement of the lever, a cord or chain connected at one end to the sheave-segment, and a pulley over which such cord or chain passes for raising the scuttle, substan- 30  
tially as set forth.

3. The combination in a scuttle or skylight opener, of a triangular frame adapted to being connected at either side of the scuttle-way or coaming, a lever and sheave-segment, a 35  
pivot for the same passing through the triangular frame, a stop upon the frame for limiting the movement of the lever, a cord or chain connected at one end to the sheave-segment, a pulley over which such cord or chain 40  
passes for raising the scuttle, a connection upon the scuttle for the other end of the cord or chain, and a clamp for holding the same, substantially as set forth.

Signed by me this 11th day of February, 45  
1898.

FERDINAND HAYES.

Witnesses:

GEO. T. PINCKNEY,  
HAROLD SERRELL.