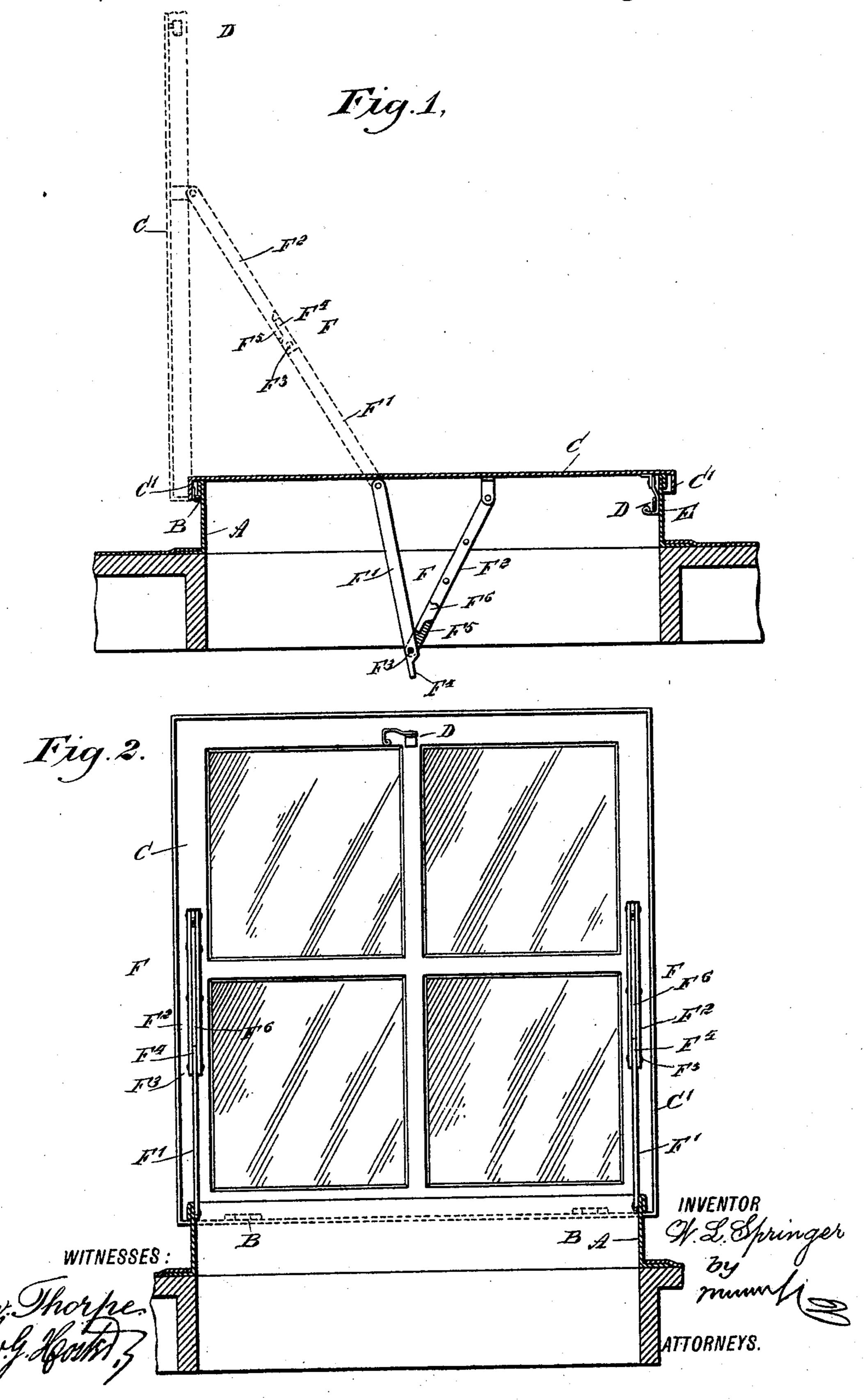
W. L. SPRINGER. SCUTTLE COVER.

No. 589,314.

Patented Aug. 31, 1897.



## United States Patent Office.

## WILLIAM L. SPRINGER, OF CHICAGO, ILLINOIS.

## SCUTTLE-COVER.

SPECIFICATION forming part of Letters Patent No. 589,314, dated August 31, 1897.

Application filed December 16, 1896. Serial No. 615,919. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. SPRINGER, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved 5 Scuttle-Cover, of which the following is a

full, clear, and exact description.

The invention relates to skylights and ventilators for roofs of dwelling-houses and other buildings; and its object is to provide a new ro and improved scuttle-cover which is simple and durable in construction and arranged to permit of easily opening it to its full extent to form a ready passage for persons desiring access to the roof from within the building.

The invention consists principally of a cover hinged on the skylight-casing and stays for connecting the cover with the casing, each stay being formed with two links pivotally connected with each other and with 20 the cover and the casing, the links being arranged to fold when the cover is closed and to hold the cover in an approximately vertical position when the links are extended.

The invention also consists of certain parts 25 and details and combinations of the same, as will be fully described hereinafter and then

pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, 30 in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional side elevation of the improvement with the cover in a closed position; and Fig. 2 is a transverse section of the 35 same, showing the cover in a raised position.

The skylight or scuttle is provided with a suitable box or casing A, attached to the roof of a building and connected at one side by hinges B with one of the depending flanges 40 C' of a cover C, adapted to fit over the upper end of the casing A, so as to close the same, as indicated in Fig. 1.

On the free end of the cover C, and on the under side thereof, is arranged a spring-catch 45 D, adapted to engage a lug E on the inside of the casing A, so as to securely lock the cover C to the casing to prevent unauthorized persons from opening the cover C when standing on the roof, thereby preventing access to the 50 building by way of the skylight.

When it is desired to open the cover C from the inside of the building, the operator can

readily disconnect the spring-catch D from the lug E to permit of swinging the cover C into an open position. The cover C and the 55 casing A are connected with each other at their sides by stays F, each formed of two links F' and F<sup>2</sup>, pivotally connected with the side of the casing A and the link F<sup>2</sup> with the cover C. The links F' and F<sup>2</sup> are of such 60 length that when the cover C is swung open it can only move into an approximately vertical position, as indicated in dotted lines in

Fig. 1 and in full lines in Fig. 2.

The pivotal connection of the link F' with 65 the casing A is a short distance from the middle thereof toward the hinges B, and the pivotal connection of the link F<sup>2</sup> with the cover C is a corresponding distance from the middle of the cover to the free end thereof, as 70 will be readily seen by reference to Fig. 1. Thus when the cover C is closed the two links F' and F<sup>2</sup> readily fold into a V-shaped position. The link F' is formed beyond the pivot F<sup>3</sup> with a tongue F<sup>4</sup>, adapted to rest 75 against a correspondingly-shaped tongue F5, formed on the end of a bar F<sup>6</sup>, secured by rivets or other means between the two bars forming the link F<sup>2</sup>. The link F<sup>2</sup> on each stay being formed of two duplicate bars rigidly So secured to each other and forming a space between them serve to render the connection between each pair of links that of an absolutely perfect knuckle, because the links F' are fitted between the respective links  $F^2$  85 and can have no movement sidewise owing to their confinement by the bars composing the links F<sup>2</sup>. This arrangement relieves the pivot between the two links of strain which would otherwise be placed thereon owing to 90 the twisting of the links.

When the stay F is extended and the cover C is in an open position, then the two links F' and F<sup>2</sup> are in alinement, with the tongue F<sup>4</sup> resting on the tongue F<sup>5</sup>, so as to lock the 95 links in an open position to prevent acci-

dental closing of the cover C.

Now it is evident that when it is desired to close the cover C upon the casing A the operator simply presses one of the links F' 100 or F<sup>2</sup> outwardly, so as to open the joint of the two links and cause a closing or downward swinging of the cover C.

It is evident that by the arrangement de-

scribed the cover C lifts into a vertical position when opened and forms a clear passage for persons desiring to pass upon the roof. It will further be seen that the device is very simple and durable in construction, is not liable to get out of order, and can be cheaply manufactured.

Having thus fully described my invention, I claim as new and desire to secure by Letters 10 Patent—

A stay formed of two links one of which has a tongue formed at one end and the second of which is formed of two bars rigidly secured to each other and receiving between two end portions thereof the end of the first link, which end has the tongue, a pivot-pin passing through the bars and through the

first link and pivotally connecting the two links, and a bar secured between the two bars which form the said second link and having 20 a tongue formed therein, and adapted to be engaged by the tongue on the first link so that as the two links swing the tongues will engage each other to limit the movement of the links, the bars forming the second link 25 serving to hold the first link from twisting on the pivot-pin whereby to relieve said pivot-pin of strain thereon, substantially as described.

## WILLIAM L. SPRINGER.

Witnesses:

ALBERT A. FOERSTER, LONEY VON DE LECT.