No. 733,916. PATENTED JULY 14, 1903.

J. J. PLUCKER.

FIRE SHIELD.

APPLICATION FILED NOV. 29, 1901.

NO MODEL.

Fig. 1.

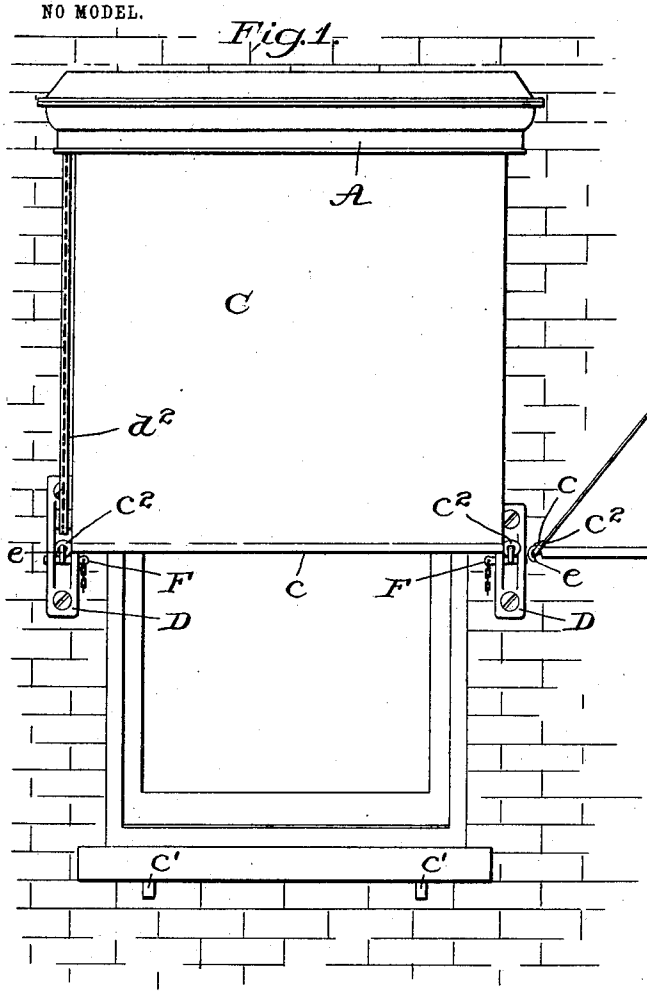


Fig. 2.

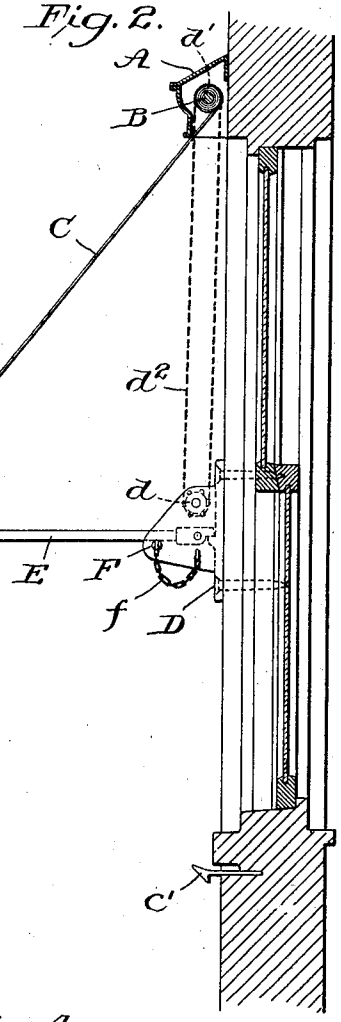


Fig. 3.

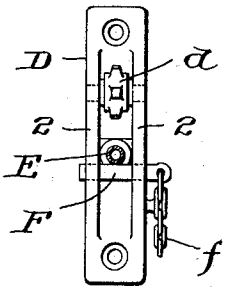
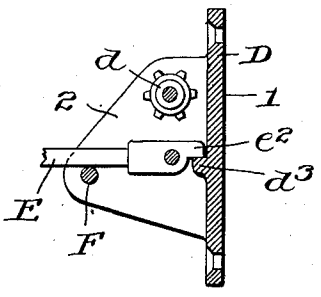


Fig. 4.

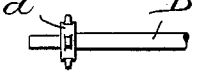


WITNESSES:

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Fig. 5.



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UNITED STATES PATENT OFFICE.

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FIRE-SHIELD.

SPECIFICATION forming part of Letters Patent No. 733,916, dated July 14, 1903.

Application filed November 29, 1901. Serial No. 84,022. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. PLUCKER, a citizen of the United States, residing in the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Shields, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to that class of fire-shields in which an exteriorly-arranged window-curtain of non-combustible material is employed, my object herein being to provide a novel and efficient construction and arrangement of curtain and of operating devices therefor whereby the curtain may be readily drawn down in front of the window for use as a fire-shield.

A further object of the invention is the provision of means whereby the curtain may be disposed at an angle to the window, so as to perform the function of a sunshade.

In the drawings, Figure 1 is an elevation of a portion of a building equipped with my invention. Fig. 2 is a vertical section thereof. Fig. 3 is a front view, enlarged, of one of the brackets or fixtures and adjuncts. Fig. 4 is a vertical section through Fig. 1. Fig. 5 is a detail of one end of the roller.

A represents a hood or casing arranged on the front of the building directly above the window to be protected. This hood or casing comprises in the present instance a top, a side, and two ends, the bottom being open, as shown. Journaled in the respective ends of the hood or casing is a roller B, on which is wound a curtain C, of non-combustible fabric. This curtain is of such width and length that it may be drawn down through the open bottom of the casing and in front of the entire window, so as to shield the latter. Along the lower edge of the curtain is a rod *c*, which when the curtain is drawn down is engaged with a catch or catches *c'* at or below the window-sill.

On the front of the building, adjacent the respective sides of the window, are two brackets D, which are identical in construction with each other, saving that one is provided with a small sprocket-wheel *d*. This wheel is geared with a similar wheel *d'* on the end of the roller by means of a chain d^2, so that by manipulation of the chain the curtain may be readily wound on or unwound from the roller, as desired. Each of the brackets preferably comprises a base 1, with two forwardly-projecting webs or lugs 2, between which is pivoted the inner end of a bar E. There are thus two swinging bars. The outer extremities of these bars are provided with hooks *e*, which are adapted to be detachably engaged with eyes c^2 on the respective ends of the curtain-rod *c* in a manner to permit the curtain to be swung outwardly at an angle to the window for use as a sunshade. The lugs of the brackets are perforated for the reception of transverse stop-pins F, which limit the downward movement of the respective bars to a horizontal position, as illustrated. These pins are conveniently connected with the brackets by means of chains *f* or the like. The inner ends of the bars are provided with lugs e^2, which coact with lugs d^3 on the respective brackets, and thus limit the upward movement of the swinging bars.

When the curtain is not in service, it is wound upon the roller, and thus confined within the hood or casing, and the bars are permitted to depend from their brackets. When, however, the curtain is used as a sunshade, it is connected with the hooked ends of these bars, and the bars are swung outwardly, as above described. In the event of a conflagration within the building (or in an adjoining or opposite building) when the curtain is in use as a sunshade the stop-pins are withdrawn and the bars, with the attached curtain, are then swung downwardly, so as to cover and protect the window.

I claim—

1. In a fire-shield, the hood or casing arranged exteriorly of and above a window, the roller in said hood or casing, the curtain on said roller, the swinging arms arranged exteriorly of the window, means for detachably securing the arms to the curtain, a rod along the lower edge of said curtain, and means

for detachably securing the rod below the window.

2. In a fire-shield, the hood or casing arranged exteriorly of and above a window, the roller in said hood or casing, the brackets adjacent the sides of the window, the bars pivoted to said brackets, means for detachably securing the bars to the curtain, and the stop-pins for said bars attachable to and detachable from said brackets.

3. In a fire-shield, the combination with the roller and means for supporting the same above a window, of a curtain of non-combustible material on said roller, bars pivoted exteriorly of the window, and means for detachably securing said bars to the lower edge of the curtain.

4. In a fire-shield, the combination with the roller and means for supporting the same above a window, of a curtain of non-combustible material on said roller, a rod secured along the lower edge of said curtain and provided with end eyes, and bars pivoted exteriorly and laterally of the window, and provided with hooks for engagement with said eyes.

5. In a fire-shield, the hood or casing arranged exteriorly of and above a window, the roller in said casing, the curtain on said roller, a sprocket-wheel on said roller, a bracket adjacent the side of said window, a sprocket-wheel in the bracket, a chain connecting the said wheels, a bar pivoted to said bracket, and means for detachably securing the bar to the curtain.

6. In a fire-shield, the combination with the roller and means for supporting the same above a window, of a curtain of non-combustible material on said roller, brackets adjacent the sides of the window, the bars pivoted to said brackets, means for detachably securing the bars to the curtain, and detachable stops for limiting the downward movement of said bars, said bars and brackets being also provided with coacting stops to limit the upward movement of the bars.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

JACOB J. PLUCKER.

Witnesses:
ANDREW V. GROUPE,
JOHN R. NOLAN.