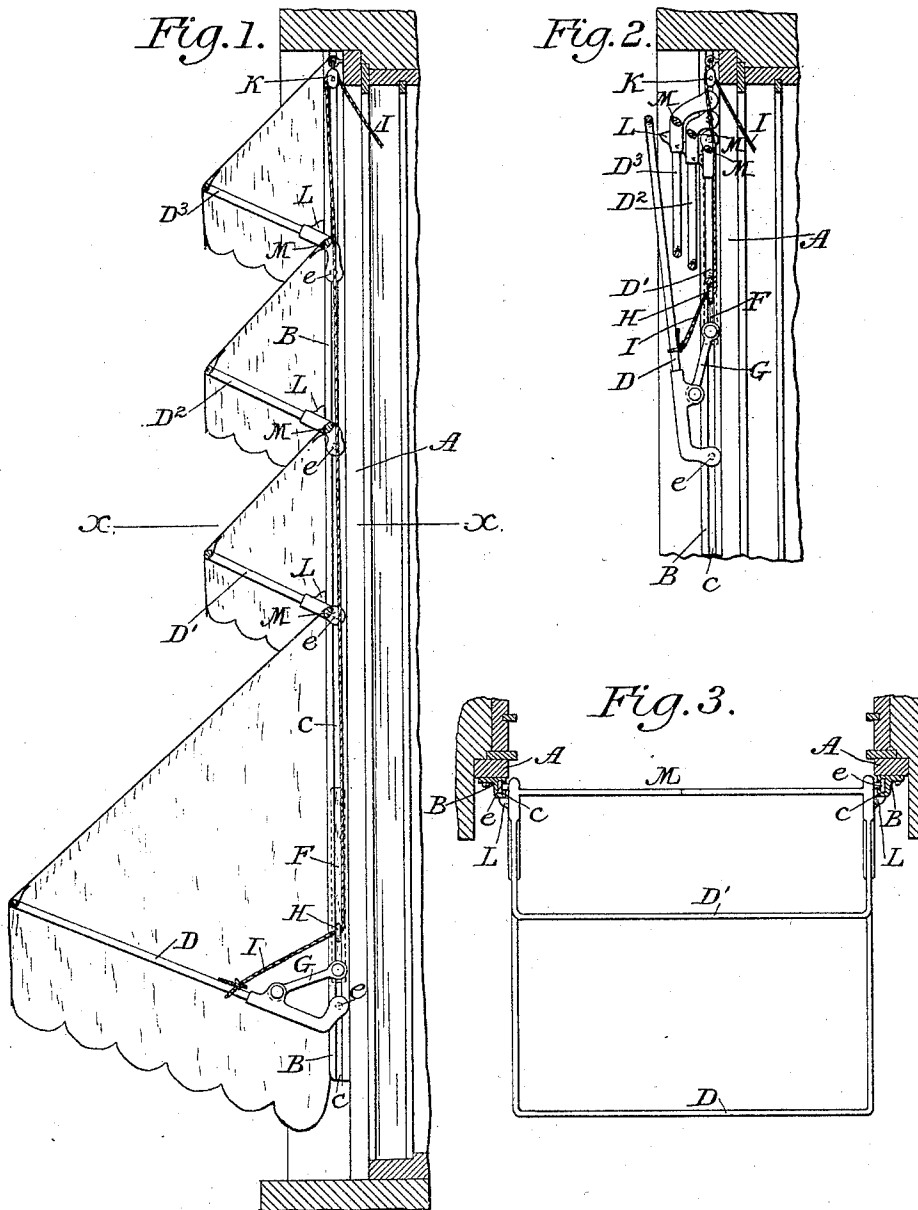


(No Model.)

W. C. DREDGE.
AWNING.

No. 467,345.

Patented Jan. 19, 1892.



Attest:
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UNITED STATES PATENT OFFICE.

WILLIAM C. DREDGE, OF NEW YORK, N. Y.

AWNING.

SPECIFICATION forming part of Letters Patent No. 467,345, dated January 19, 1892.

Application filed March 17, 1891. Serial No. 385,378. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. DREDGE, of the city, county, and State of New York, have invented certain new and useful Improvements in Sectional Awnings for Windows and Doors; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to sectional awnings for windows, &c., and has for its object to simplify the means for supporting and for opening and closing the awnings.

It consists in the combination, substantially as hereinafter described and claimed, with a series of frames swinging upon pivots sliding in vertical ways attached to the window-case, of lifting-bars sliding in the ways in which the several frames move and interposed between the inner ends of the lower frame and that next above it, links connecting the lower ends of said lifting-bars with the lower frame to cause it to swing upward as the bars are lifted, and operating-cords attached to said lifting-bars and carried over pulleys at the top of the window.

In the accompanying drawings, Figure 1 is a vertical central transverse section of a window fitted with my improved sectional awning, the awning being opened out; Fig. 2, a similar section through the upper part of the window, showing the awning-frames folded up or closed; and Fig. 3, a horizontal transverse section in line *xx* of Fig. 1, illustrating the guideways in which the frames are pivoted and slide.

Similar letters indicate like parts in each of the figures.

A represents the casing of a window to be protected by an awning.

B B are longitudinal strips or plates of wood, or preferably of metal, fitted and secured upon the outer face of each side of the window-casing, as shown in Fig. 3. These facing-strips are formed each with a longitudinal inwardly-enlarged recess *c* therein, extending the length thereof upon its inner lateral face, or side face which is next to the window-opening.

D D' D², &c., are the awning-frames, each

consisting of a metallic rod, preferably bent in a rectangular form to extend out from and span the window-opening, but which may be bent in a semicircular or curved form to adapt it to the same end. The ends of each of the frames thus simply constructed are fitted with lateral outwardly-projecting pins or studs *ee*, having enlarged heads adapted to fit loosely within the enlarged portion of the longitudinal recess in the proximate facing-strips. Each frame is attached to the facing-strips by slipping the studs *ee* on its two ends into the longitudinal recesses *cc* in the strips, the heads of the studs being passed into the enlarged portion of the recesses at either end of the strips. The ends of the frames are thus left free to slide longitudinally up and down the window-casing in the recesses or ways in the strips, and also to swing freely upon the stud-pins *ee*, by which they are connected to the strips.

A rod or bar F (see dotted lines, Figs. 1 and 2) is inserted to slide freely in the longitudinal recess or way formed in each facing-strip B between the pivotal studs of the lowermost of the series of awning-frames and that next above it. The lower end of each sliding bar F is coupled by a pivoted link G with the adjacent frame D at a point removed to a greater or less distance from the fulcrum or pivot of the frame, so that as the bar F moves upward it will operate to swing the frame D upward and inward against the window-frame, as shown in Fig. 2 of the drawings, and will also lift and carry the frame up with it. Each sliding lifting-bar F is also fitted with a lateral eye H, through which an operating-cord I is led and attached to the side arm of the frame beyond the end of the link G, pivoted thereto, the opposite end of the cord being led over a pulley K, rigged at the top of the window-casing, and thence within reach of a person standing inside the window, so that by pulling upon the cord the sliding lifting-bar will be drawn upward, and the lower frame, being lifted with it, will be simultaneously swung upward and inward to fold in against the upper portion of the window-sash, as shown in Fig. 2. The lifting-bars F F are so proportioned in length as that, before the lower frame D has swung fully in or been so far lifted as to come in contact with the

frame D', next above it, the upper ends of the lifting-bars will in their upward movement strike against the stud-pins *ee* at the inner ends of said frame D', and, carrying them up with them in the ways, will thereby cause said next frame to swing inward by the up-
 5 lifting of its inner ends, and thus fold it in against the window-sash, inside of the outer end of the lower frame D, while the two will
 10 be carried together upward toward the top of the window. In like manner the inner ends of the frame D' will, upon striking in their upward movement the inner ends of the frame D² next above it, carry up said inner ends, so
 15 as to cause said next frame D² to fold inward as it is carried upward, and by this means each of the frames D' D², &c., above the first frame D, is made to fold in the frame next above it until they are all folded in at the
 20 upper end of the window, within the first lowermost frame D, as shown in Fig. 2. Each of the frames D' D², &c., above the lower frame D, is provided with a cross-bar M, (see Fig. 3,) connecting its inner ends, and to which the
 25 upper edge of the canvas or other covering material for the awning next beneath it is attached, the lower edges of the awning being secured in the customary manner to the frame below it, as shown in Fig. 1 of the
 30 drawings. Upon the upper side of the lateral arms of each of the frames D D' D², &c., a lug L is formed in position to strike, when the frame is swung out to its normal open position, against the casing of the window or
 35 door, or preferably against the facing-strips in which the guideways are formed. Each lug L co-operates with the pivot-pin or stud on the arm which carries it to form a frictional lock against the intermediate walls upon which they
 40 bear, said lock operating when the outer end of the frame is supported by the canvas of its awning at its proper level to prevent the inner end of the frame from dropping beyond its proper level. The sectional awning thus constructed
 45 is readily raised and lowered from within the window by means of the cords II, the lifting-bars, by reason of their long bearing in the vertical ways in which they slide, preventing any binding or sticking of the frames, so
 50 that their movements are made with freedom and ease and without strain upon the moving parts.

The several sections may be of different lengths or all of the same length; but I prefer to construct them with the lowermost section of such length as that it will, when the awning is closed, overlap and inclose the section above it, as shown in Fig. 2.

It is evident that the vertical ways in which
 60 the pivot pins or studs *ee* turn and slide may be formed directly in the casing of the window or door instead of in facing-strips affixed thereto, and that various devices may be employed for actuating the lifting-bars F F.

By constructing the awning in several superimposed sections light and ventilation is afforded, while an effectual shade is provided for the window or door.

I claim as my invention—

1. The combination, with vertical ways in
 70 or upon the casing of a window or doorway, of two or more awning-frames whose inner ends are fitted with pivot pins or studs sliding and turning in said vertical ways, bars interposed in said ways between the lowermost
 75 frame and that next above it to slide freely therein, links coupling said bars with the lateral arms of the lower frame, and cords extending from eyes or pulleys at the top of the casing through eyes on the sliding bars to a
 80 point of attachment to the lateral arms of the lower frame, substantially in the manner and for the purpose herein set forth.

2. The combination, with vertical ways formed in or upon the casing of a window or
 85 doorway and with an awning-frame whose inner ends are fitted with pivot pins or studs sliding and turning in said vertical ways, of stop-lugs, as L L, formed upon the upper side of the lateral arms of the frame to strike against
 90 the casing when the frame is swung outward to its open position and support the same, substantially in the manner and for the purpose herein set forth.

3. The combination, with vertical ways
 95 formed in or upon a window or door casing and with an awning-frame having pivot pins or studs at its inner ends turning and sliding in said vertical ways, of a covering fabric fastened at its upper end to a fixed support near
 100 to the casing and at its lower end to the awning-frame to limit the outward swing of the frame, and a stop on the upper side of the lateral bar of the frame adapted to strike against the casing at a short distance above
 105 the level of the pivot pin or stud on the bar when the frame has been opened out to its normal position, substantially in the manner and for the purpose herein set forth.

4. The combination, in a sectional awning,
 110 of an extended lower frame made to swing upward upon pivot pins or studs sliding in vertical ways in a window or door, shorter frames supported above it and made to swing downward upon similar pivot pins or studs,
 115 sliding bars fitted to move in the vertical ways between the lower frame and that next above it, links coupling said sliding bars with the lower frame, and means for moving the sliding bars in the ways, substantially in the
 120 manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM C. DREDGE.

Witnesses:

A. N. JESBERA,
 E. M. WATSON.