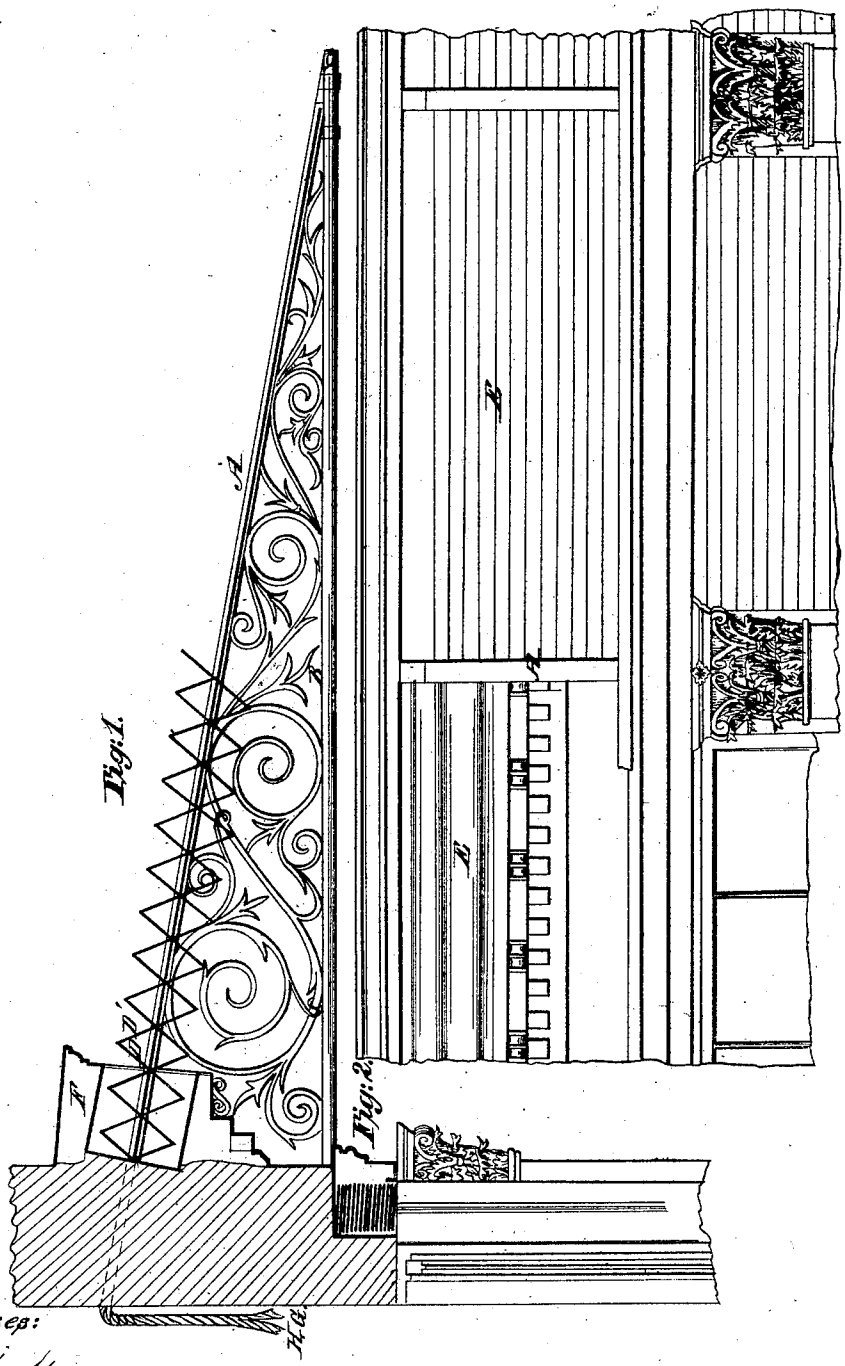
No. 82,032. PATENTED SEPT. 8, 1868.

N. POULSON.

AWNING.

2 SHEETS—SHEET 1.



Witnesses:

Octavius Knight

W. H. Brereton.

Inventor:

Nils. Poulson.

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2 SHEETS—SHEET 2.

Fig: 5.

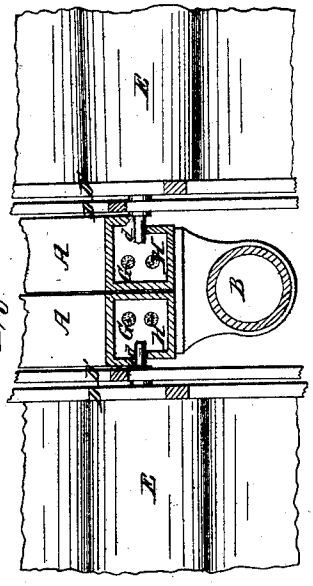


Fig: 4.

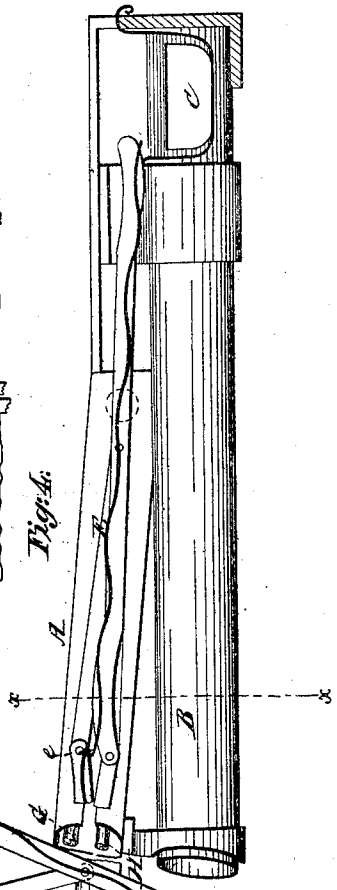
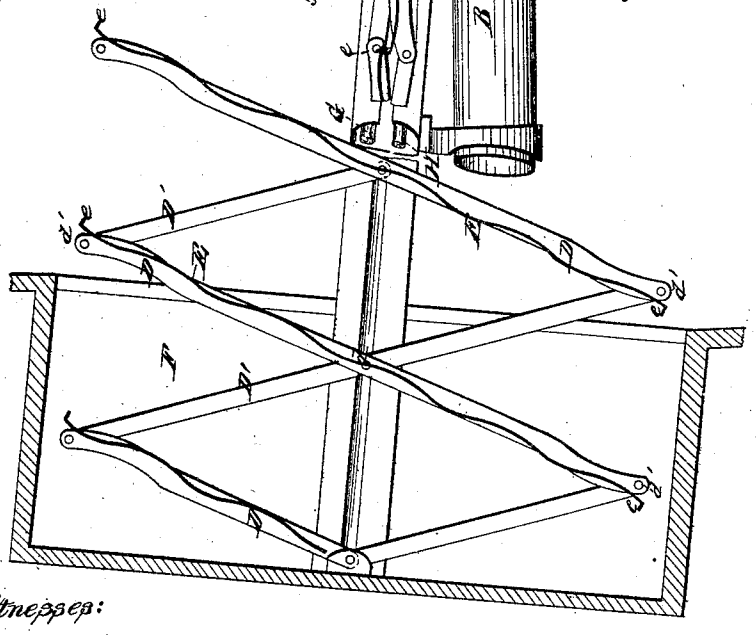


Fig: 3.



Witnesses:

Octavius Knight

W. H. Brereton.

Inventor:

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United States Patent Office.

NIELS POULSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 82,032, *dated September* 8, 1868.

IMPROVED AWNING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, NIELS POULSON, of the city and county of Washington, and District of Columbia, have invented a certain new and useful Improvement in Awnings; and I do hereby declare that the following is a sufficiently full, clear, and exact description thereof, to enable one skilled in the art to which my said invention appertains to make and carry it into effect, reference being had to the accompanying drawings which are made a part of this specification.

My invention consists in constructing awnings of plates of metal or other material, attached to hinged bars in the manner hereinafter described, so that they may fold compactly together when not in use, and when in use will present a continuous surface, proof against sun and rain.

The invention further consists in devices for the combined purposes of supporting the awning and conducting water therefrom; and also in devices for folding and extending the awning.

In the drawings—

Figure 1 represents a side elevation, partly in section, representing the awning partially extended.

Figure 2 is a front view of a portion of a building with my awning applied.

Figure 3 is a sectional elevation, on a larger scale, of the upper portion of the awning, showing it partially extended.

Figure 4 is a sectional elevation of the lower portion, showing the awning completely extended.

Figure 5 represents a transverse section at *x x*, fig. 4, showing in elevation the bars and plates hereinafter referred to.

Similar letters of reference indicate corresponding parts in the several views.

The stationary framework of my awning may consist of metallic beams, A, inclined downward from the building at a sufficient angle, and made hollow for the reception of the elevating and lowering-devices hereinafter described, and metallic tubes, B, attached to the beams A at their outer ends, and inclined slightly downward toward the building for the purpose of conducting from a gutter, C, adapted to receive water from the awning proper in time of rain.

To adapt my metallic awning to be spread or folded together at will, I employ bars, D D′, hinged together in pairs by pins, *d*, and connected at their ends by pivots, *d′*, so as to cause them to move together. To the inner bar, D, I attach plates, E E, which, when the awning is extended, form a continuous surface to afford shelter from sun or rain, and when drawn up will fit together compactly within a hollow cornice or receptacle, F, provided for that purpose above the windows which the awning may be employed to shade. The plates E may be corrugated or not, as preferred. The edges of the plates are bent in opposite directions, so that when the awning is extended, the lower edge of each plate will project downward over the upturned upper edge of the plate next below it, as clearly shown at *e* in fig. 4.

The pins *d*, at the intersections of the bars D D′, project horizontally, and work in slots, *a*, in the inner faces of the beams A, and the lower one of the series is attached to cords, F G, of which the first is employed to draw the awning up, and the other, (passing around a pulley at the lower end of the beam,) to draw it down.

Fig. 5 shows the edges of two adjacent awnings with their respective beams and cords. The space between the edges of two awnings may be covered by plates projecting from their edges, or by separate sliding plates, or with canvas, or other flexible material.

This awning may be conveniently used for the reception of painted signs, to show both in its extended and folded positions.

For roofing purposes my invention will be of great value in many classes of buildings, its folding capacity affording great facility for ventilation.

For conservatories the plates E will be made of glass, and for other buildings or purposes may be of metal, wood, glass, cloth, or other material.

Having thus described my invention, the following is what I claim as new, and desire to secure by Letters Patent:

1. The folding bars D D′, working upon inclined supports, A, and carrying plates or sheets, E, attached to the inner bars D, substantially as and for the purposes specified.

2. The tubes B, employed in combination with the awning D E and trough C, both as a means of support and for conducting water, as explained.

NIELS POULSON.

Witnesses:

W. H. BRERETON,

J. E. M. BOWEN.