

(No Model.)

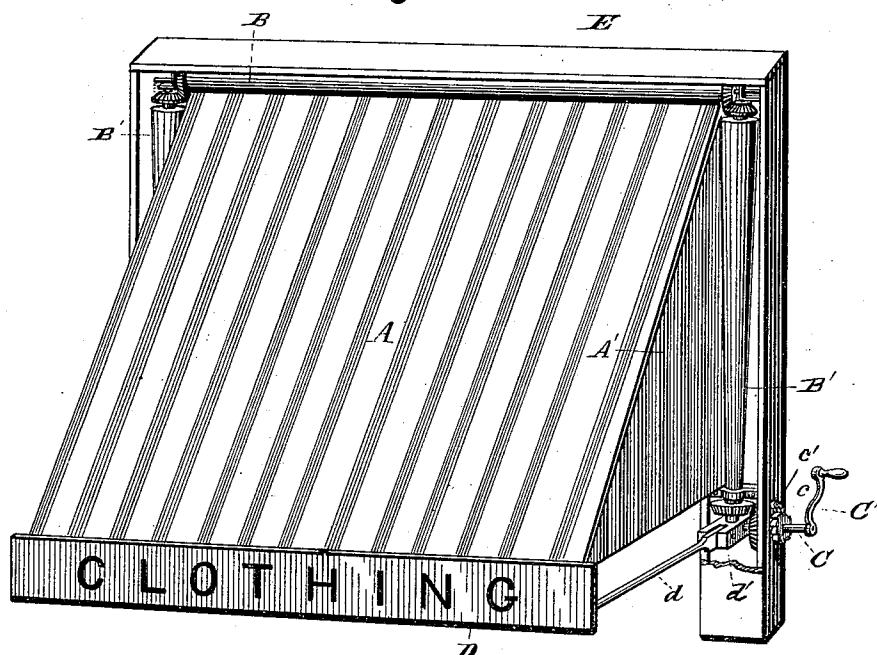
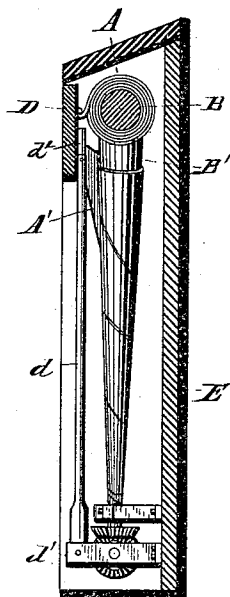
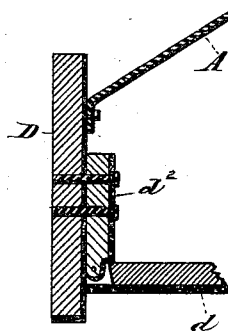
L. FOX.

AWNING.

No. 300,962.

Patented June 24, 1884.

Fig. 1.



Louis Fox INVENTOR
By Leggett & Leggett ATTORNEYS

UNITED STATES PATENT OFFICE.

LOUIS FOX, OF CLEVELAND, OHIO.

AWNING.

SPECIFICATION forming part of Letters Patent No. 300,962, dated June 24, 1884.

Application filed October 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, LOUIS FOX, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful
5 Improvements in Awnings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

10 My invention relates to awnings, and more especially to the mechanism for actuating the same; and it consists in certain features of construction and in combination of parts, hereinafter described, and pointed out in the claims.

15 In the drawings, Figure 1 is a view in perspective of an awning and attachments embodying my invention. Fig. 2 is a side elevation, partly in section. Fig. 3 is a vertical section in detail.

20 A represents an awning, which in Fig. 1 is shown distended and in Fig. 2 rolled up or closed around the roller B.

A' are the side pieces of the awning that are attached to and, when closed, are rolled around
25 the vertical conical rollers B'. These conical rollers are provided at their respective upper ends with bevel-gears that engage similar gears on the ends of the roller B, as shown, so that the three rollers move simultaneously and in
30 the proper direction for lowering or rolling up the awning and the side pieces. The rollers are inclosed in the housing E, which is provided with suitable boxes, in which the rollers are journaled. These housings may be perma-
35 nently attached to the building, or may be secured by hooks or other devices, rendering them easily detachable. One of the conical rollers B' is provided at the bottom with a bevel-gear engaging a similar gear on a hori-
40 zontal shaft, C, that is provided with a crank, C', and a ratchet-wheel, c, and a pawl, c'. The pawl engages the ratchet in the direction that holds the awning for unwinding, and the shaft C may extend in any direction desired. For
45 instance, it might extend back at right angles to the position shown, so as to be operated inside of the building. The outer edge of the awning is secured to the sign-board D, that is provided with the arms d, but one of which is
50 shown. These arms are pivoted in slots in the blocks d', but one of which is shown, so that

the arms can move only vertically. One of these blocks d' may also furnish a bearing for the inner end of the shaft C. The pins d'', that are attached to the sign-board, form, with the
55 rods d, joints that will only turn back at right angles to each other, so that when the rods d are horizontal the sign-board will be vertical. As the awning is rolled up, the top inner edge of the sign-board comes in contact at the ends
60 thereof with the housing on either side, and by this means the board is guided to the position shown in Fig. 2.

In operating the device the front point of the side pieces, A', as shown in Fig. 1, must,
65 when rolled up, be at the top of their respective vertical rollers, as shown in Fig. 2; also, as shown in Fig. 1, the lower line of these side pieces are respectively shorter than the length
70 of the awning A, and for this reason the vertical rollers B' are made conical, so that the small ends of the rollers will not take up the side pieces too fast. The side pieces, A', of the
awning are tacked or otherwise secured to the inverted conical rollers B', which latter are
75 turned simultaneously with the horizontal roller B. The outer ends of these side pieces can be attached directly to the part A of the awning, or to the board D, which latter depends from the part A of the awning. Thus it will
80 be seen that when the rollers are turned the upper ends of the conical rollers take up or wind faster than the lower portion thereof, and hence the lower ends of the side pieces, A', are caused to wind spirally around the conical rollers, and when the awning is in its closed ad-
85 justment the extreme outer ends of the side pieces, A', rest behind the board D. By this construction I am enabled to operate the awning without the necessity of engaging and dis-
90 engaging the side pieces from the main part of the awning. The shape of conical rollers for this purpose and their relative size as compared with the top roller will vary according to the relative lengths of the awning and side
95 pieces.

What I claim is--

1. The combination, with a horizontal roller and two vertical conical rollers situated under the opposite ends of the horizontal roller, of
100 the awning A, adapted to roll on the horizontal roller, the side pieces adapted to roll on the

conical rollers, and an end board, D, connecting the outer ends of the main and side awnings, substantially as set forth.

2. The combination, with a horizontal roller provided at opposite ends with bevel-pinions and two vertical conical rollers provided at their upper ends with bevel-pinions meshing with the pinions on the horizontal shaft, one of said conical rollers being provided at its lower end with a driving-pinion, of the awning A, side awnings, A', board or equivalent D, and side rods, d.

3. The combination, with the horizontal roller, two conical rollers, and the bearings or blocks d', of the awning A, side awnings, A', board or equivalent D, and rods pivotally secured at their inner ends to the blocks d', and

at their outer ends to the board D, substantially as set forth.

4. The combination, with the horizontal roller and the inverted conical side rollers, the said rollers being geared so as to revolve simultaneously, of the main awning A, side awnings, A', board D, and rods d, all of the above parts being combined as described.

In testimony whereof I sign this specification, in the presence of two witnesses, this 23d day of October, 1883.

LOUIS ^{his} + FOX.
mark.

Witnesses:

JNO. CROWELL,
CHAS. H. DORER.