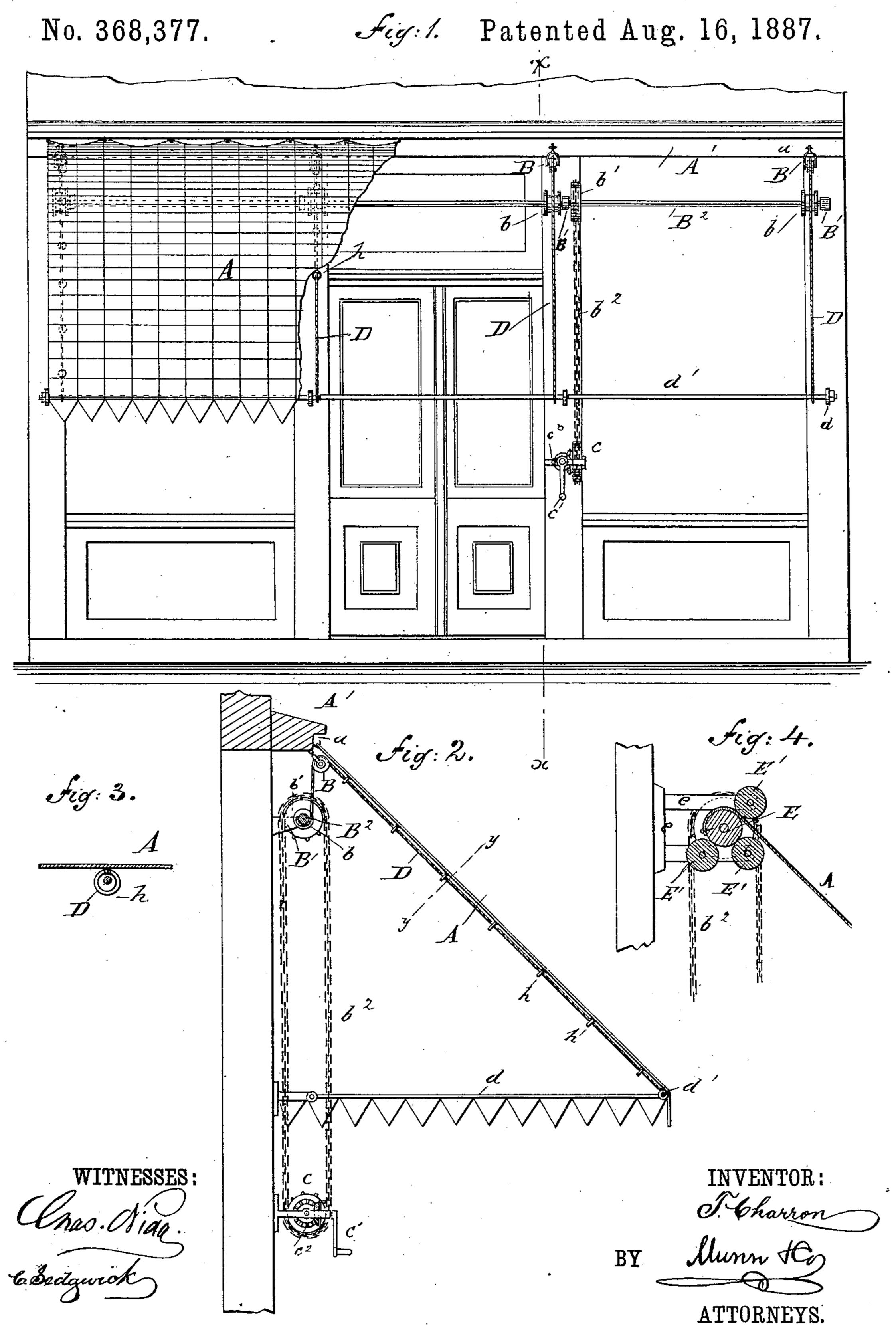
## T. CHARRON.

## DEVICE FOR OPERATING AWNINGS.



## United States Patent Office.

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## DEVICE FOR OPERATING AWNINGS.

SPECIFICATION forming part of Letters Patent No. 368,377, dated August 16, 1887.

Application filed June 14, 1887. Serial No. 241,298. (No model.)

To all whom it may concern:

Be it known that I, THEOPHILE CHARRON, of Kankakee, in the county of Kankakee and State of Illinois, have invented a new and Improved Device for Operating Awnings, of which the following is a full, clear, and exact description.

My invention relates to a device for operating awnings, and has for its object to provide a means whereby an awning may be readily raised and lowered, and wherein the said awning, when raised, will be expeditiously and neatly folded up against the building.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a front elevation of an awning having the device applied, the awning-cloth being partially broken away; and Fig. 2 is a transverse vertical section through line x x of Fig. 1. Fig. 3 is a section through the cloth and hoist-rope, taken on line y y, Fig. 2; and Fig. 4 is a transverse vertical section through friction-rollers used in connection with the device when the cloth is attached to the roller.

In carrying out the invention the upper longitudinal edge of the front awning-cloth, A, is detachably attached to the building, or preferably to a strip of wood or metal, A', secured to the building above that portion adapted to be covered by the awning, as shown in Figs. 1 and 2, the strip A' being provided with a longitudinal recess, a, at the lower front edge, into which recess the awning is adapted to fold, whereby it is protected from the weather by the upper projecting portion of said strip.

To the lower front longitudinal edge of the supporting-strip A' a series of pulleys, B, are attached at suitable distances apart, and below said strip and pulleys a series of brackets, B', are secured to the building in horizontal alignment with each other, adapted to constitute bearing for a shaft or rod, B<sup>2</sup>.

Upon the rod B<sup>2</sup>, immediately below each

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pulley, a grooved wheel or drum, b, is fastened, and at a convenient point upon the rod  $B^2$  a sprocket-wheel, b', is keyed, adapted to carry an endless chain,  $b^2$ , which chain also passes over a vertically-aligned sprocket-wheel, c, 55 journaled in any approved form of bracket attached to the building below the awning within convenient reach of the operator, the aforesaid sprocket-wheel c being rotated by means of the crank c' and intervening bevelear  $c^2$ , as shown in Fig. 2. Any form of retaining device may be employed, preferably a ratchet wheel and pawl, as indicated at  $c^3$  in Fig. 1.

The side and front horizontal bars, dd', of 65 the frame are pivoted to each other and to the building in the ordinary manner, the front bar, d', being substantially parallel with the rod  $B^2$ .

The awning-cloth, having been attached at one end to the bars d d, is held in connection 70 with the recessed portion of the strip A', through the medium of hooks or other equivalent fastening device. Ropes D are now secured to each grooved wheel or drum b and passed over the pulleys B, and also through a 75 series of aligning-rings, h, secured transversely to the under side of the front awning cloth in any approved manner, the lower end of each rope being thereupon securely fastened to the horizontal bar d', as shown in Figs. 1 and 2.

The awning cloth is attached to a round bar, E, as shown in Fig. 4, to be rolled thereon. At various intervals longitudinally the roller, above and below the same, one or more sets of friction-rollers, E', are journaled in brackets e, 85 which rollers, by substantially engaging the said round bar, serve to prevent the awning-cloth from wrinkling when being wound up.

In operation, when the crank c' is turned, the sprocket-wheel c, through the medium of the 90 chain  $b^2$  and upper sprocket-wheel, b', revolves the rod  $B^2$ , and as the said rod revolves the ropes D are wound thereby upon the grooved wheels or drums b and the awning carried upward in a folded position next the building.

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

1. In a device for operating awnings, the combination, with the revoluble rod B<sup>2</sup>, pro- 100

vided with a series of grooved wheels, b, and a sprocket-wheel, b', of the side and front frame-bars, dd', the awning cloth A, attached at one longitudinal edge to said bars and adapted for attachment at the opposite edge to a building, and provided with a series of attached rings, h, upon the inner face, the ropes D, pulleys B, and means for revolving the rod B<sup>2</sup>, substantially as herein shown and described.

2. In a device for operating awnings, the combination, with the revoluble rod B<sup>2</sup>, provided with a series of grooved wheels, b, and a sprocket-wheel, b', the recessed strip A', and pulleys B, attached to said strip, of the frame-

bars d d', the awning-cloth A, attached to said 15 bars and strip and provided with a series of rings, h, upon the inner face, the ropes D, attached to said grooved wheels and to the bar d', and adapted to pass over said pulleys, and means for revolving said rod  $B^2$ , substan-2c tially as herein shown and described.

THEOPHILE × CHARRON.

Witnesses:

L. RIPLEY, E. E. DAY.