(Model.)

D. FEY.

Device for Raising and Lowering Awnings.

No. 237,847.

Patented Feb. 15, 1881.

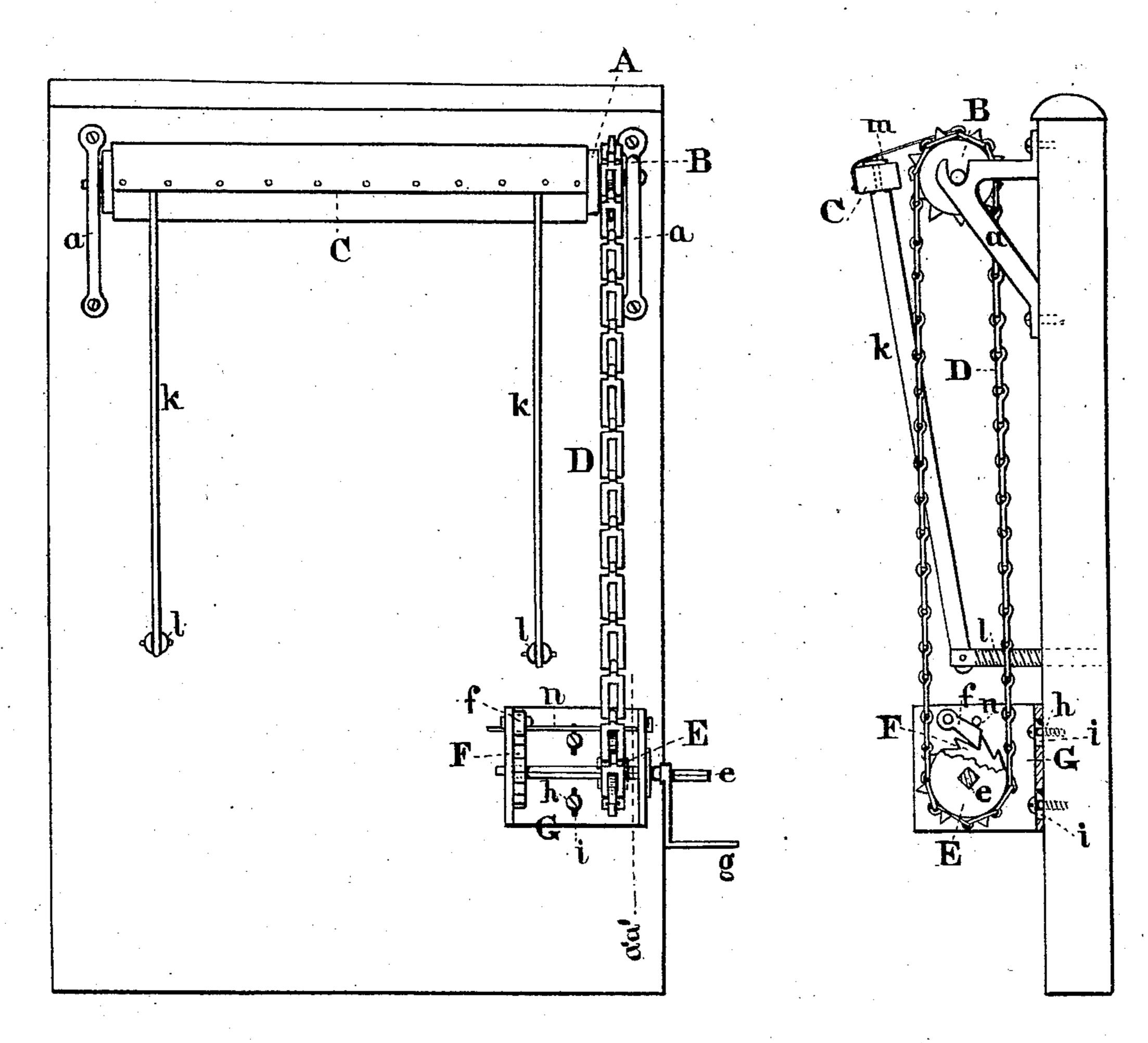


Fig. 1.

Fig. 2.

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## United States Patent Office.

DAVID FEY, OF PEORIA, ILLINOIS.

## DEVICE FOR RAISING AND LOWERING AWNINGS.

SPECIFICATION forming part of Letters Patent No. 237,847, dated February 15, 1881. Application filed June 14, 1880. (Model.)

To all whom it may concern:

Be it known that I, DAVID FEY, of the city of Peoria, in the county of Peoria, in the State of Illinois, have invented an Improvement in 5 Devices for Raising and Lowering Awnings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which to like letters of reference refer to like parts, and in which—

Figure 1 represents a front elevation; Fig. 2, a side elevation, with partial section on line a' a', Fig. 1, through box G.

My improvements consist of an apparatus to be used in connection with an endless chain passing over toothed wheels, one being located at the end of the awning-roller, which usually rests in brackets, and another being lower 20 down, so as to be operated by hand. I prosaid box is located the lower toothed wheel on a shaft having bearings in the sides of the box 25 and adapted to receive a crank or wrench. On the shaft of said wheel is a ratchet-wheel with a pawl to prevent a reverse movement, and said ratchet-wheel may be locked by means of a rod passed through apertures in the box-30 casing and directly over the pawl, as hereinafter set forth and described.

In the drawings, which represent one of the forms in which I construct this awning, A is the ordinary awning-roller, on which the can-35 vas is wound, the axles of which run in the journals a a, attached to the house, that journal next to the winding apparatus being open on its top, in order the more readily to remove and replace said roller when desired; B, a 40 spur or spiked wheel of about the same diameter as said roller, and attached to the end of the latter, the spurs being of such a form as to be engageable in the links of a flat chain, D; C, the front or descending bar of the can-45 vas, supported by the usual rods k k, which are respectively pivoted to one of the supports l l projecting from the house-front. The upper end of each of these rods I pass through the bar C, the latter resting on shoulders on the 50 former, and secure the extremity of the re-

spective rods k above said shoulders on the upper surface of said bar C by means of a nut, m.

D is a flat endless chain passing around the spur-wheels B and E, the latter wheel, E, be- 55 ing exactly like the former, B, in construction, and is mounted on a horizontal axle,  $e_{\bullet}$ together with a ratchet-wheel, F, said axle having bearings or journals in a box, G, which is adjustably attached to the house-front by 60 means of screws or bolts h h in the vertical slots i i in the back of the box, by means of which to tighten the chain. The axle e is fitted with a crank, g, and the ratchet-wheel F is provided with a pawl, f, to prevent the re- 65 coil of the wheel E during the hoisting or lowering of the awning. Said pawl is preferably locked by means of a horizontal bolt or rod. n, which slides horizontally through holes in the cheeks of the box G, just above the 70 vide a box or casing, which may be adjustably | pawl f, in which position it can be locked or secured to the building or structure. Within | secured by means of an eye or loop, formed in the end of said bolt or rod n, by passing the catch of a padlock through said loop and a hole made for that purpose in one of the cheeks 75 of the box.

The operation of this invention is as follows: The awning is rolled or unrolled by means of a winch on the end of the axle e of the chainwheel E, connected by the chain D with the 80 chain-wheel B on the end of the awning-roller A, recoil being prevented by means of the pawl f and the ratchet F. The box G, which incloses the operating-wheel and ratchet, is adjustable higher or lower upon the house-front, to suit 85 the working tension of the endless chain, by means of vertical slots i in the back of said box, through which bolts or screw-rods pass into the house-front, &c., behind.

One of the brackets a for the journals of the 90 roller is made with an open journal or bearing for the advantage of the ready insertion or removal of the axle of the roller in case of necessity.

What I claim as my invention is— 1. In a device for raising and lowering awnings, the pawl f and cross-rod n, in combination with the ratchet-wheel F, chain-wheel E, box G, and chain D, substantially as shown and described.

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2. The combination of the adjustable box G, chain-wheel E upon the axle e, ratchet-wheel F, pawl f, lock-rod n, endless chain D, and chain-wheel B on awning-roller A, adapted to rest in brackets a, substantially as and for the purposes set forth.

In testimony that I claim the foregoing awn-

2. The combination of the adjustable box G, ing-worker I have hereunto set my hand this rain-wheel E upon the axle e, ratchet-wheel 25th day of May, A. D. 1880.

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DAVID FEY.

Witnesses:

J. M. Morse,

H. W. WELLS.