

(No Model.)

H. VAYRE.  
AWNING.

No. 483,950.

Patented Oct. 4, 1892.

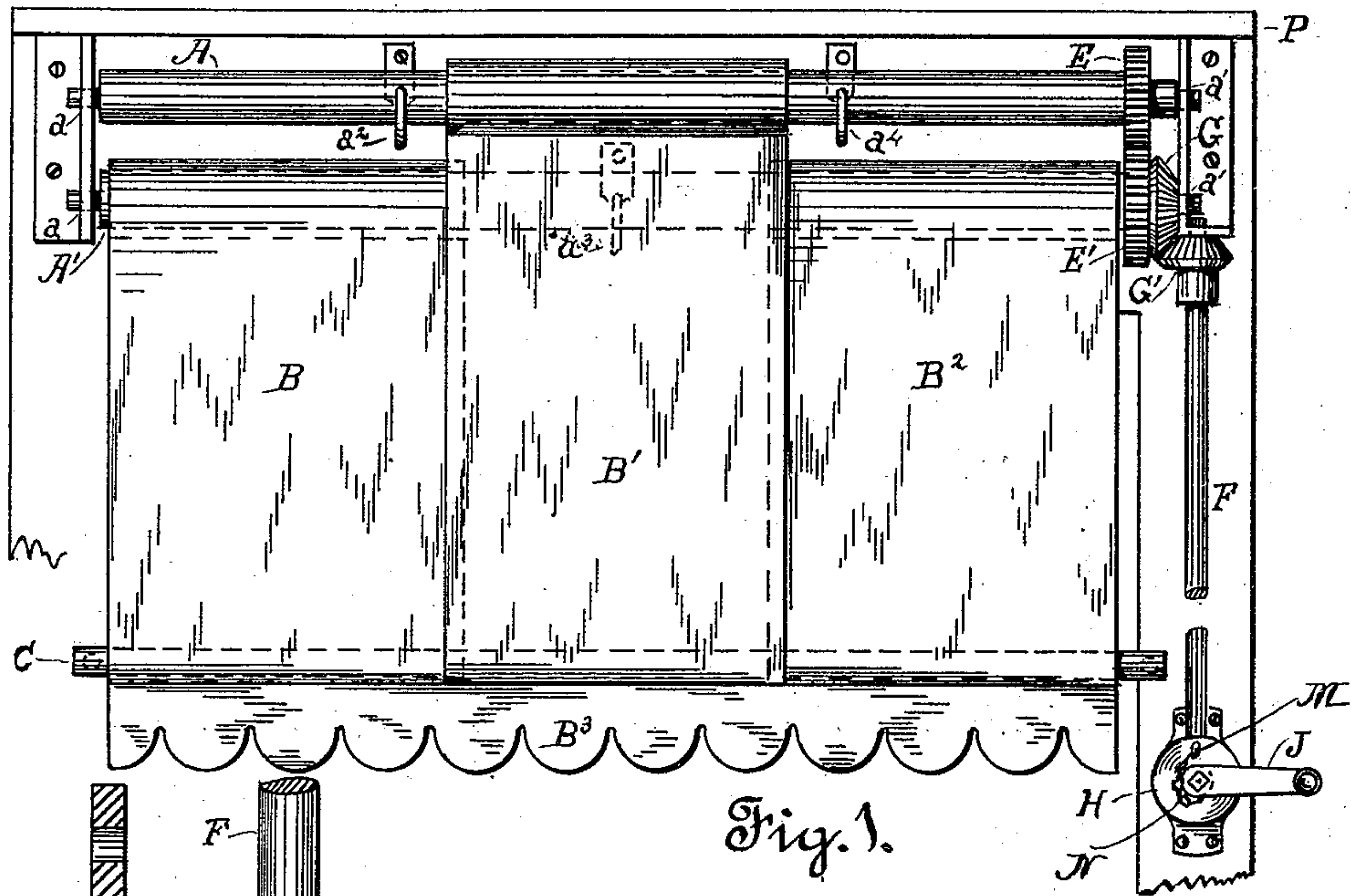


Fig. 1.

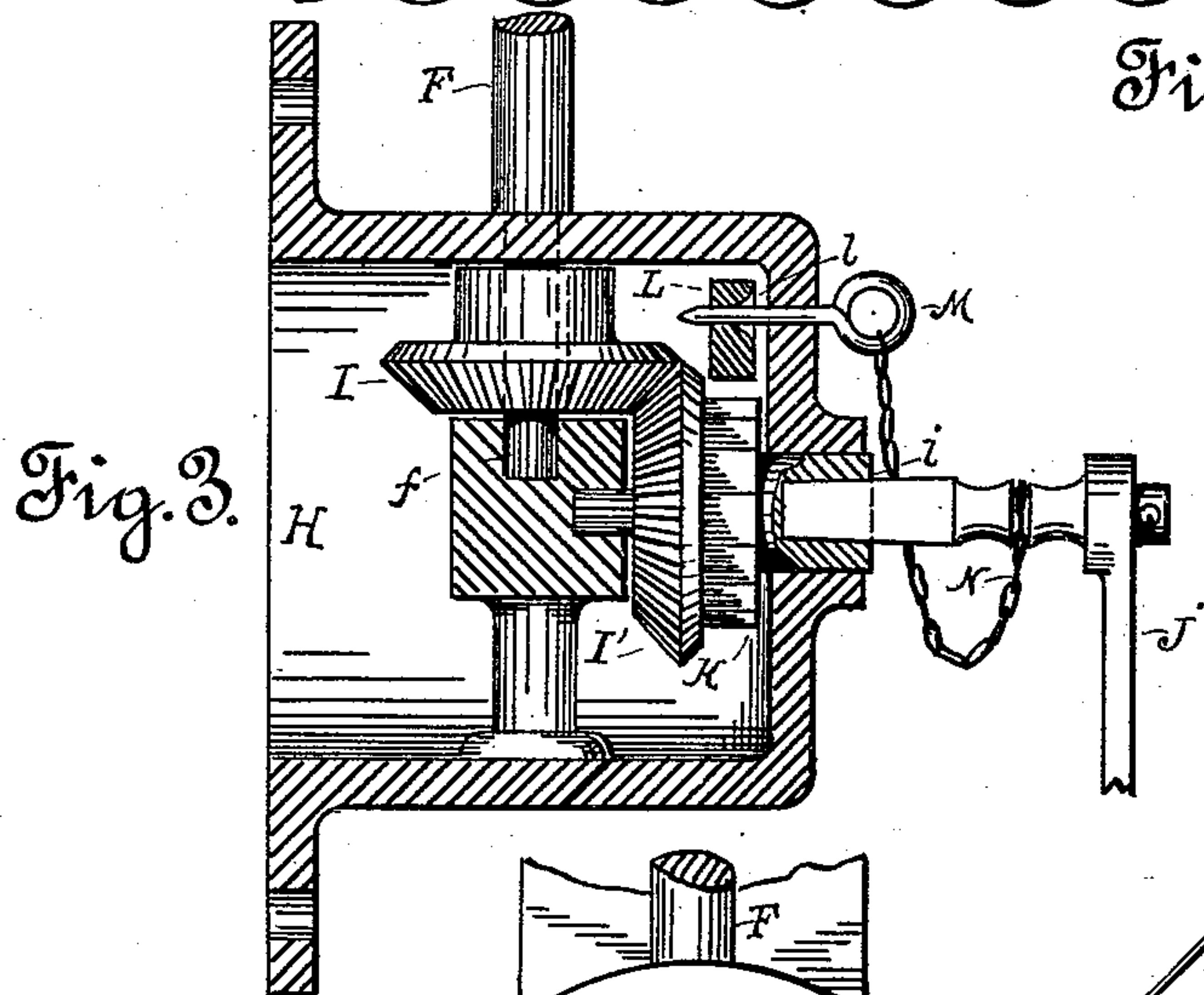


Fig. 3.

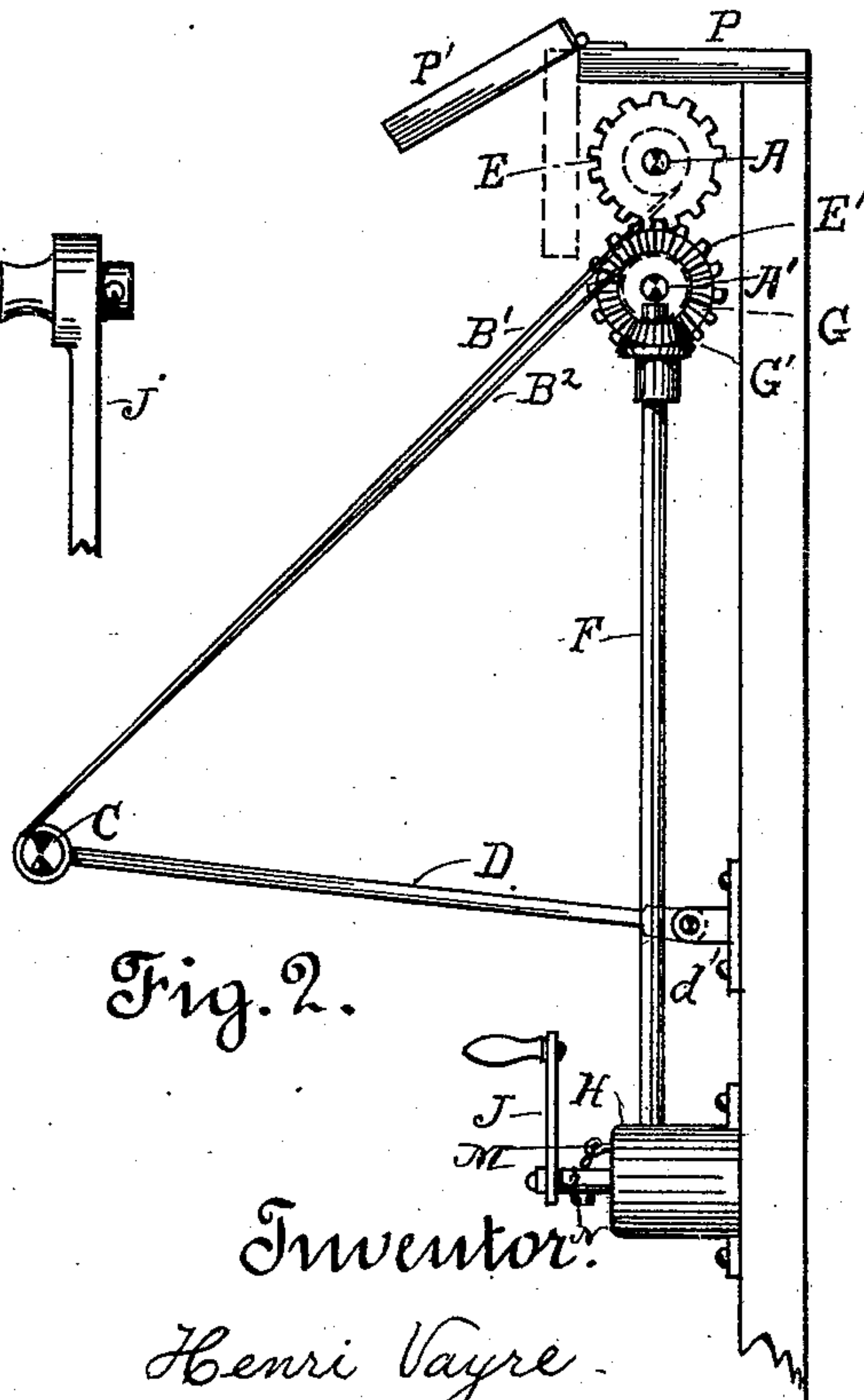


Fig. 2.

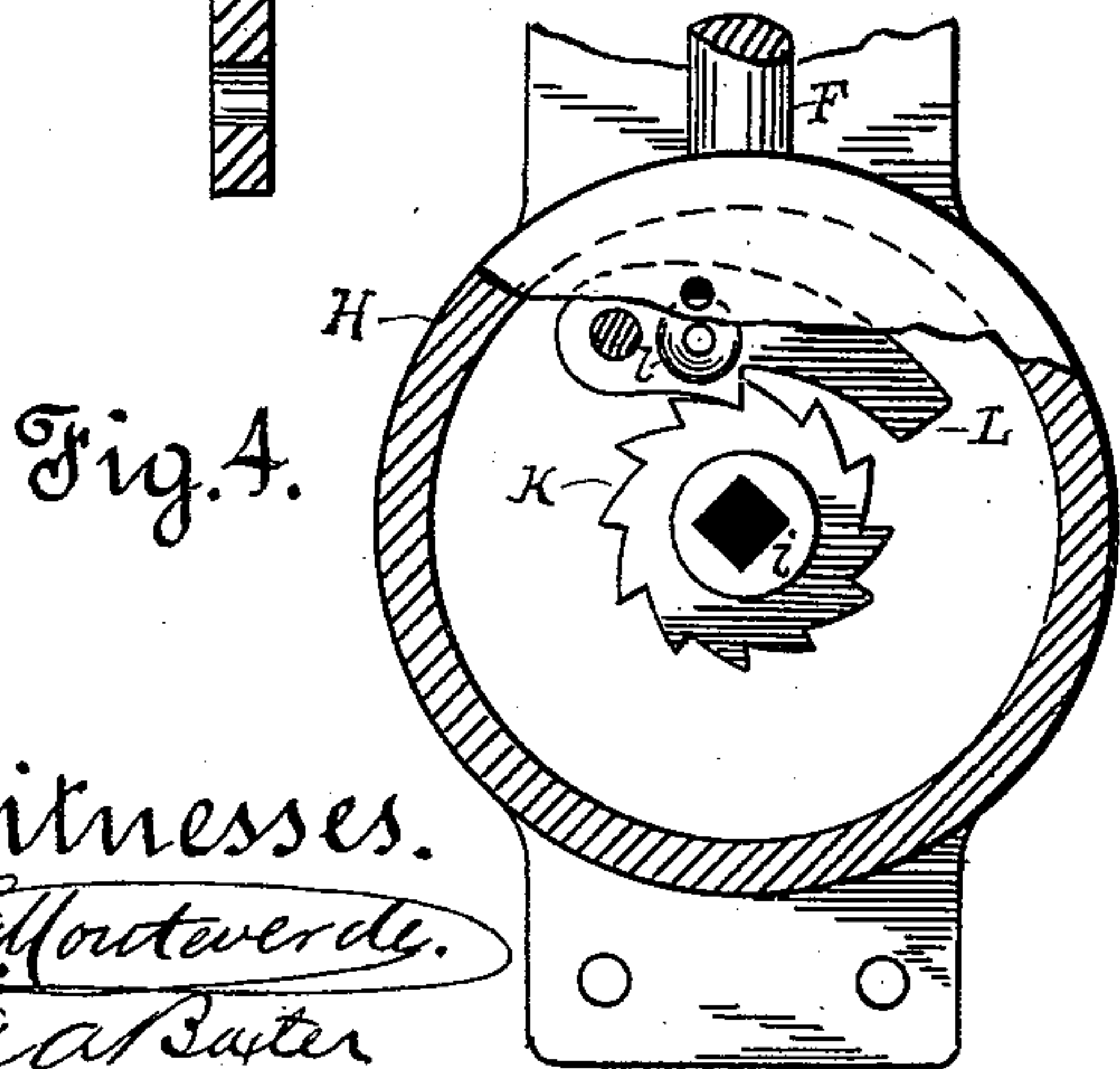


Fig. 4.

Witnesses.  
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# UNITED STATES PATENT OFFICE.

HENRI VAYRE, OF SAN FRANCISCO, CALIFORNIA.

## AWNING.

SPECIFICATION forming part of Letters Patent No. 483,950, dated October 4, 1892.

Application filed February 15, 1892. Serial No. 421,624. (No model.)

*To all whom it may concern:*

Be it known that I, HENRI VAYRE, of the city and county of San Francisco, State of California, have invented certain new and useful Improvements in Awnings; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates that class of movable coverings which are used to protect storefronts, shop-windows, and similar places from the sun or the weather.

The main object of this invention is to provide an awning which will appear neat and tidy both when furled and unfurled and keep in good shape regardless of width or length, being as tight in the center as at the edges and free from the flexures and twists so often to be found in awnings of ordinary make. A further object is to afford a better actuating mechanism than is now employed.

My improved awning comprises two rollers or shafts geared together and each carrying alternate strips of cloth winding in opposite directions. The lower edge of the cloth is secured in the usual way to a cross-bar, which is borne and swung up and down on the end of pivoted braces. The strips are rolled and unrolled by means of bevel-gears connected with the lower roller and revolved by a vertical rod, the lower end of which rests in a box and is turned by miter-wheels actuated by a crank from the outside. A ratchet-wheel and pawl, also inclosed in the box, are used in connection with these gears. The pawl is disengaged from the teeth of the ratchet-wheel with the aid of a pin pushed through an aperture in the face of the box. The whole awning when furled stands under boards, taking the place of the ordinary boxing and used for advertising purposes.

Referring to the drawings, Figure 1 is a front view of the whole awning with portions broken away. Fig. 2 is an end elevation of the same. Fig. 3 is an enlarged side elevation, partly in section, of the lower part of the actuating mechanism; and Fig. 4 is a face view of some of the parts shown in Fig. 3.

Similar parts are indicated by similar letters of reference in the four views.

A A' represent two rollers or shafts the ends of which are journaled in bearings  $a a'$ . Other bearings  $a^2 a^3 a^4$  are also provided at regular intervals, so that the rollers may be extended any suitable length and find a proper support. To A A' are fastened strips of canvas, cotton, or other cloth B B' B<sup>2</sup>, arranged in two series, one lapping over the other, but each winding upon a different roller. As many of these strips may be used as may be found convenient.

C is a cross-bar, to which the lower ends of the strips B B' B<sup>2</sup> are attached. From it also depends a band of scalloped cloth B<sup>3</sup> or some such ornamental appendage. This bar, and with it the cloth strips, is held out from the building to which the awning is applied and brought up to it by means of braces D, which are pivoted in the usual manner to lugs  $d$ , affixed to the building.

The rollers A A', previously described, are preferably superposed and connected by gears E E', so that they will move simultaneously in opposite directions, thereby winding or unwinding the cloth strips also in opposite ways. The furling and unfurling are effected by a rod F, connected by bevel-gears G G' to the lower roller A' and reaching down a convenient distance. The rod F is stepped at  $f$  in a suitably-shaped box H and rotated through the medium of miter-wheels I I', actuated by a crank J, fitting in a socket  $i$  on the axis of  $i'$ . On this axis also, between the wheel I' and the inner front wall of the box H, is a ratchet-wheel K, the teeth of which are normally engaged with a pawl L, designed to check its backward movement after the crank is withdrawn and the awning raised. L is disengaged from the teeth of the ratchet-wheel, for the purpose of unfurling the awning, by means of a pin M, attached to the crank by a chain N and which is inserted through a suitable aperture in the face of the box into a flaring hole  $l$  in the pawl.

P P' are boards set at right angles one to the other and under which the whole awning lies when rolled up. These boards, which may be hinged as shown at Fig. 2, afford it as good protection as the ordinary boxing, with the additional advantage that the depending board P' always remaining up in place even when



the awning is unrolled may be used for a sign or advertising. They are also preferable, for the reason that the cloth will dry quicker, if wet when rolled, because of not being boxed up.

5 It will be observed that the manufacture of awnings becomes easier when following the above-described construction. Smaller pieces of cloth may be utilized, and there is no sewing of parts together. Besides, there are no  
10 breaks on account of the shaft-bearings, which naturally find their place either beneath or by the sides of the cloth strips, and therefore no interstices through which the sun's rays or the rain may pass. The awning is thus  
15 rendered more effective and it is usually stronger, since a sufficient number of bearings is always allowable. One awning, moreover, may be made to cover as much surface as several of the old type and yet be operated  
20 from a single point. To these advantages must be added the inappreciable one of having an equal strain on every part of the awning, owing to the even stretching of its component strips, which do not give in places as  
25 large pieces do. The awning consequently retains its shape. It will be found, also, that by constructing the operating mechanism in

the way indicated it is more compact, better protected, and there are no parts unduly projecting out.

Having described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of the frame, the parallel shafts mounted in said frame and extending the entire length thereof, intermeshing pinions on the ends of said shafts, means for rotating the lower shaft, and strips of cloth winding alternately on said shafts and having their edges overlapping.

2. The combination of parallel shafts provided with intermeshing pinions at their ends, strips of cloth having overlapping edges and winding alternately on said shafts, a vertical driving-shaft gearing between said shaft and the lower parallel shaft, and mechanism for rotating the said driving-shaft.

In testimony whereof I affix my signature in presence of two witnesses.

H. VAYRE.

Witnesses:

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R. R. STRAIN.