

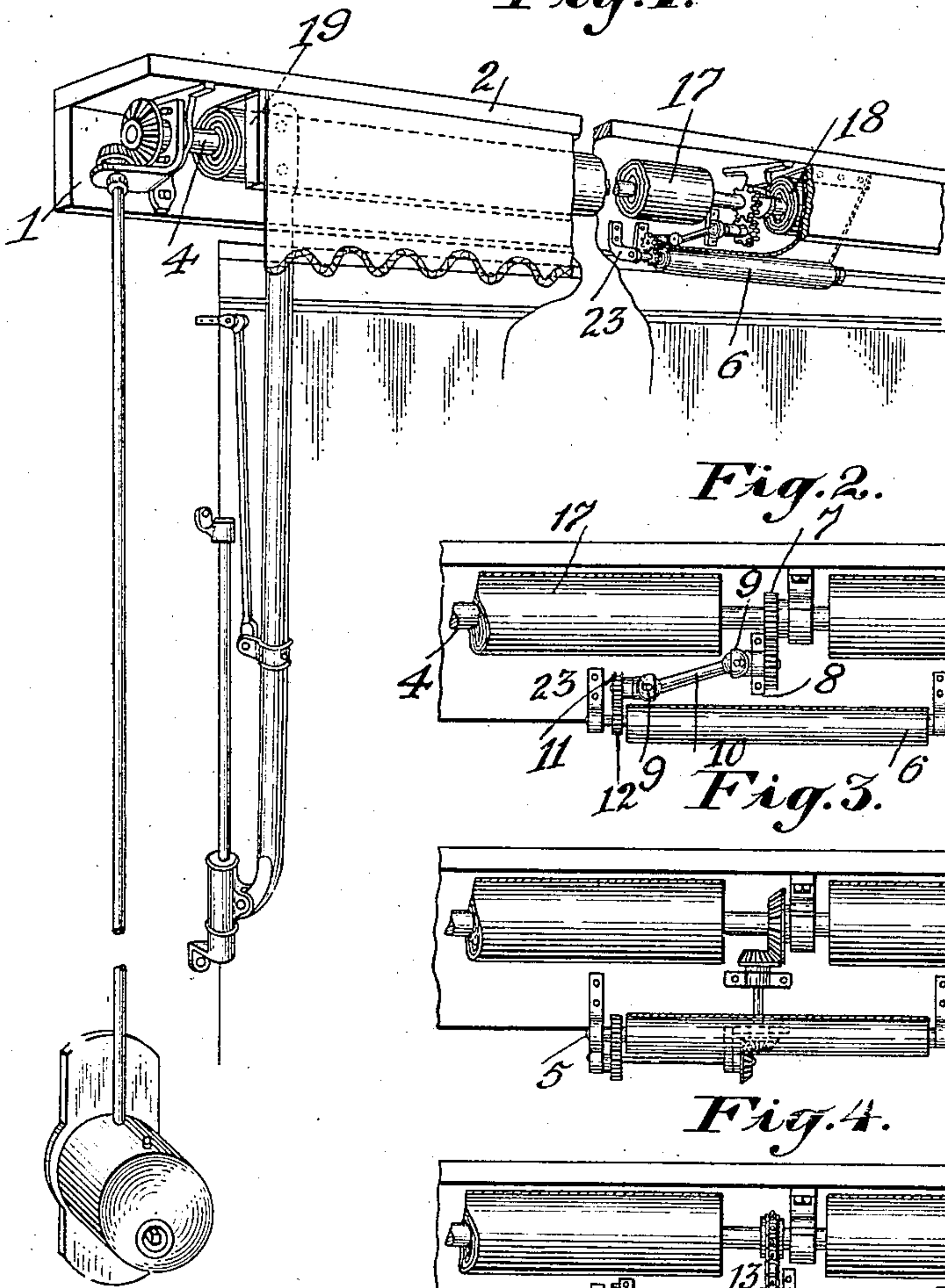
No. 868,146.

PATENTED OCT. 15, 1907.

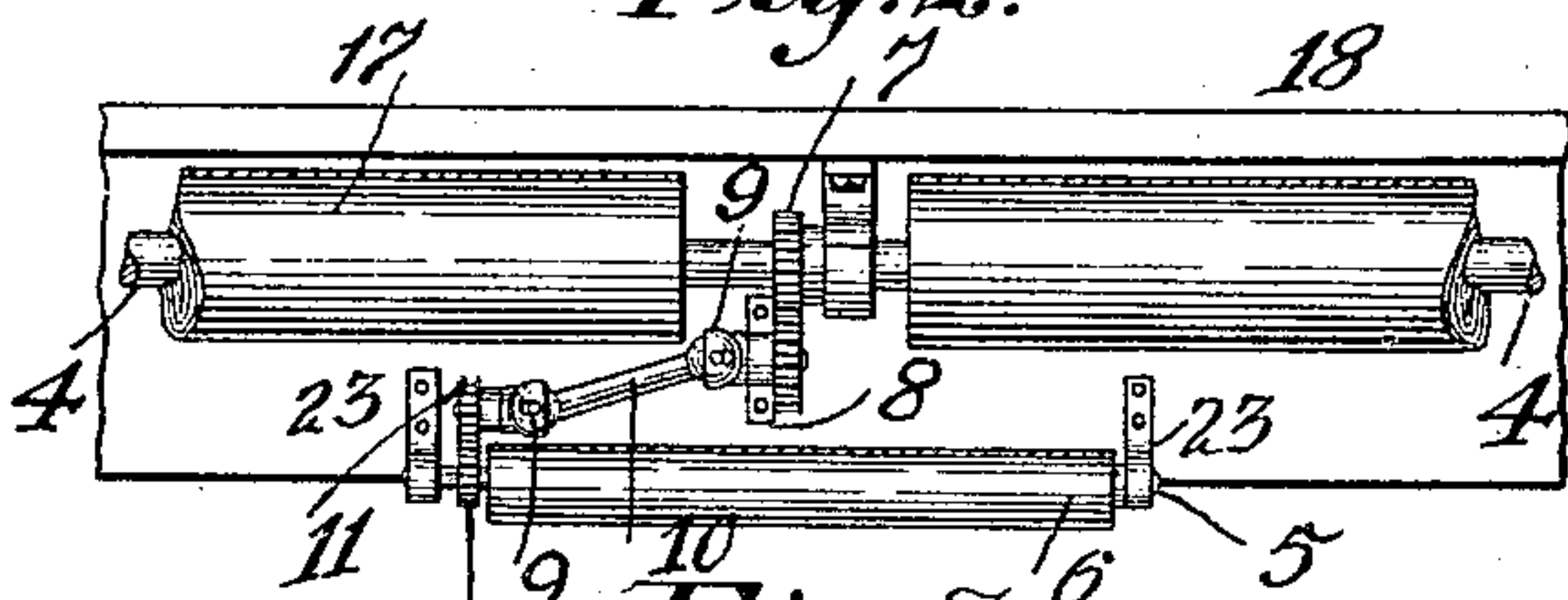
F. THOMS.  
AWNING.

APPLICATION FILED JAN. 29, 1907.

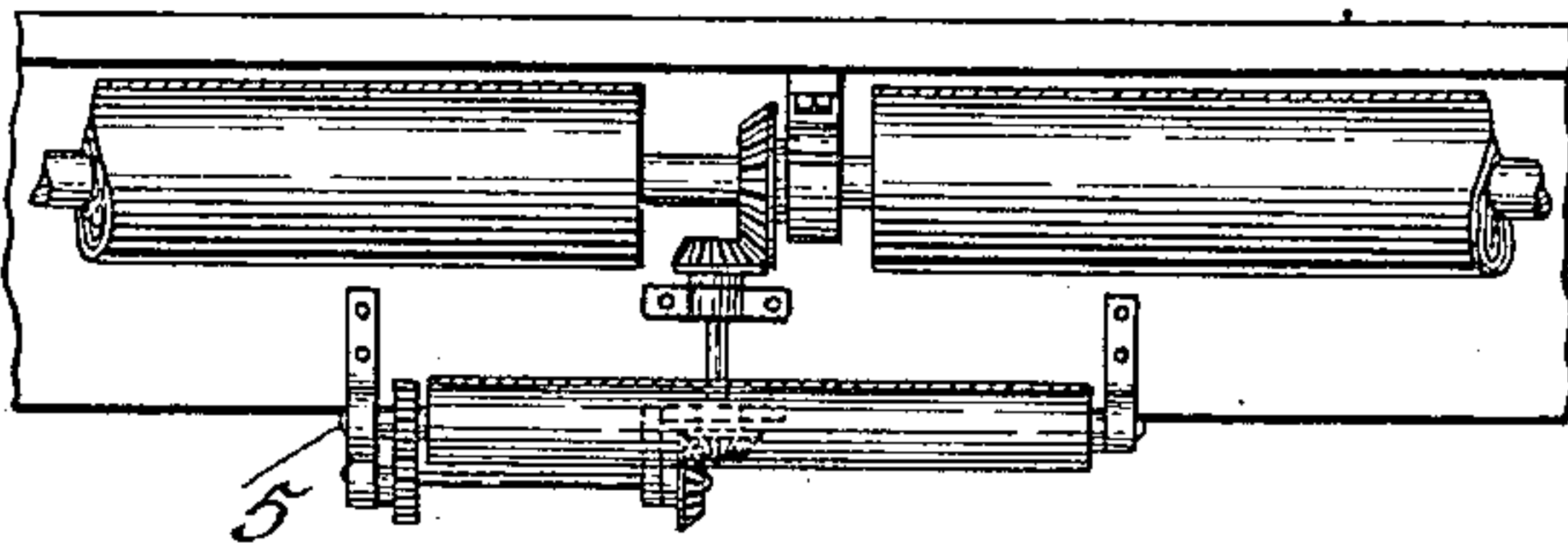
*Fig. 1.*



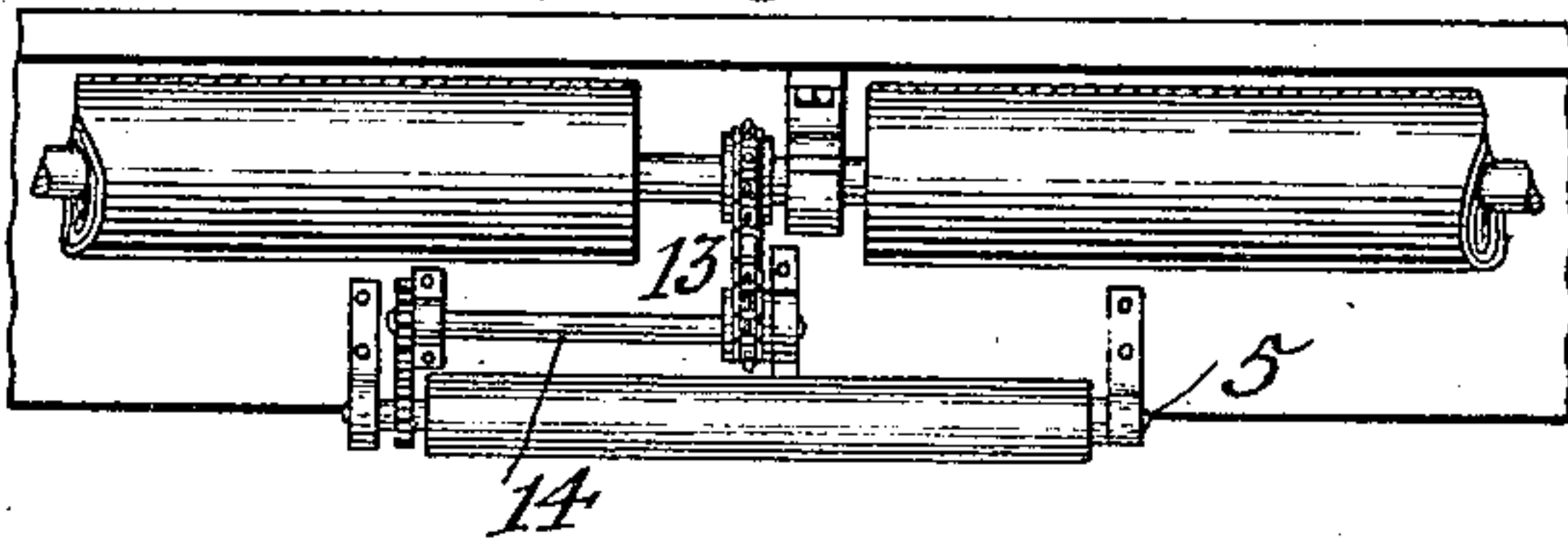
*Fig. 2.*



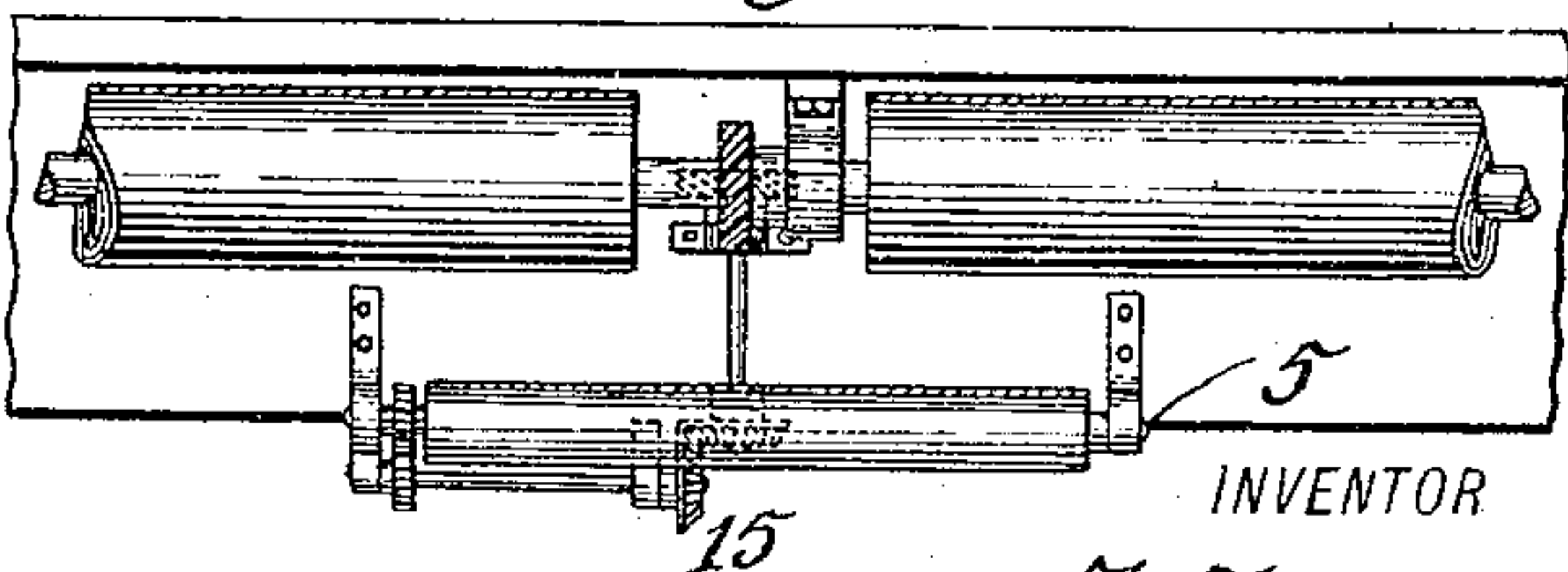
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRIEDERICH THOMS, OF SAN FRANCISCO, CALIFORNIA.

## AWNING.

No. 868,146.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed January 29, 1907. Serial No. 354,783.

*To all whom it may concern:*

Be it known that I, FRIEDERICH THOMS, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have

5 invented certain new and useful Improvements in Awnings, of which the following is a specification.

My invention relates to awnings, and more particularly to an improvement upon a certain feature of construction described in Letters Patent No. 789,639 granted to me May 9, 1905. Such feature is the strip underlying and closing the space between two separate sections of awning, the latter being wound upon and unwound from a continuous awning shaft, and having their free edges secured to a continuous awning board

10 which extends along the whole length, and is provided with proper supporting devices which permit it to be raised and lowered.

My present invention relates only to the underlying and independent awning strip shown in said patent. The arrangement for operating said strip has been found defective under some circumstances its spring roller being entirely independent of the awning shaft and depending for its efficiency upon the integrity of the spring. Thus in a storm when the wind acts strongly

20 beneath the awning and upon the awning strip, it is difficult to cause the said awning and the said strip to move easily and freely to their proper position, and this is particularly true where the spring has become rusted and uncertain in its action by reason of a considerable exposure to the weather. The defect therefore, of the construction shown in said patent is the fact that the movement of the covering strips, which should follow the awning as the latter is raised and lowered, may be impeded and obstructed by the causes above

25 suggested.

The object of the present invention is to do away with any independent means for operating or for releasing the covering strips, and instead, to connect them to the awning shaft itself, so that they will be positively operated from that shaft in both directions, although they have the usual independent mounting.

30 An embodiment of my invention is shown in the accompanying drawings, in which:

Figure 1 is a perspective view of a closed awning, broken away to some extent to show the relation between two adjacent awning sections, and the underlying covering strip. Fig. 2 is an elevation showing the ends of two awning sections in proximity, the underlying strip, and one form of position connection between the awning shaft and the shaft upon which the said strip is wound. Figs. 3, 4, and 5 are similar views showing modified but equivalent connections between the awning shaft and the shaft of the covering strip.

Since the construction, means of support and means of operation of the awning itself form no part of the present invention and are fully set forth in the patent

referred to, I have considered it necessary only to indicate the essential parts pertaining thereto, using for convenience and where possible identifying numerals used in said patent. Thus I have shown boards 1 and 2 having suitable brackets in which is journaled the awning shaft 4, which carries, and upon which is wound, and from which is unwound any number of separate awning sections 17 and 18. The free edges of these sections are secured to the awning board 19, which may be provided with the same arrangement of connected supports and braces as are shown in the patent. The awning shaft may be and is, preferably driven in the manner shown in the patent, but for the purposes of the present invention, the actual manner of revolving the awning shaft and of supporting the awning board are immaterial.

Beneath a point where any two awning sections as 17 and 18 come into proximity upon the awning shaft, and upon the board 1 of the supporting structure are brackets 23 in which is journaled a shaft 5 upon which is wound the underlying covering strip 6. The free edge of this strip is secured to the awning board 19. Instead of being retracted by a spring, as in the patent referred to, the shaft 5 is so geared to the awning shaft, as to make it a part of the whole system of winding and unwinding, and therefore to compel it, through such positive connection, to wind or to unwind under the direct control of the awning shaft itself. This positive connection is made by gearing the shaft 5 to the awning shaft and such gearing can be of different kinds, all adapted to accomplish the same purpose of having the main awning shaft control the shaft of the underlying covering strip. Thus in Figs. 1 and 2, the awning shaft between the approaching ends of the awning section, has a spur pinion 7 which engages with a similar pinion, in a bracket 8 upon the support 1. By means of universal joints shown at 9, a connecting rod 10 is connected to two spur gears 11 and 12, the gear 12 being upon the shaft 5.

In Fig. 3 I have shown the application of bevel gears from the awning shaft to the shaft 5, a simple arrangement of transmitting from bevel gears to spur gears being also shown.

In Fig. 4 I have shown a sprocket chain 13 extending from the main shaft to a countershaft 14, the latter having spur gearing for driving the shaft 5.

In Fig. 5 I have shown an example of spiral gearing, one spiral toothed wheel being upon the main shaft and the other (in dotted lines) below it. In this case, bevel gearing 15 on suitable shafts transmit to spur gearing which directly drives the shaft 5.

In all these cases some suitable gearing of which I have shown examples may be used for making a positive connection between the awning shaft and the shaft of the underlying and covering strip. The

disadvantages of the spring roller are entirely obviated and I am able to use the sectional awning with its intermediate underlying covering strips, without fear of accident of any kind preventing the proper working of  
5 such strip.

What I claim is:

1. In an awning, a main shaft extending the whole length of the structure, main awning sections thereon having their adjacent edges in proximity, a relatively short  
10 shaft near any two of such adjacent edges, a covering strip, short relatively to the awning sections, and adapted to be wound upon said short shaft, and gearing between the awning shaft and each short shaft.

2. In an awning, an awning shaft, a plurality of awning sections thereon having adjacent edges in proximity, a relatively short shaft, gearing on the awning shaft, between  
15 the approximate edges of the awning sections and connected to said short shaft, and a covering-strip, narrow relatively to the awning sections and adapted to be wound upon said short shaft.

In testimony whereof I affixed my signature in presence of two witnesses, this 17th day of January 1907. 20

FRIEDERICH THOMS.

Witnesses:

F. M. BARTEL,  
M. R. SEELY.