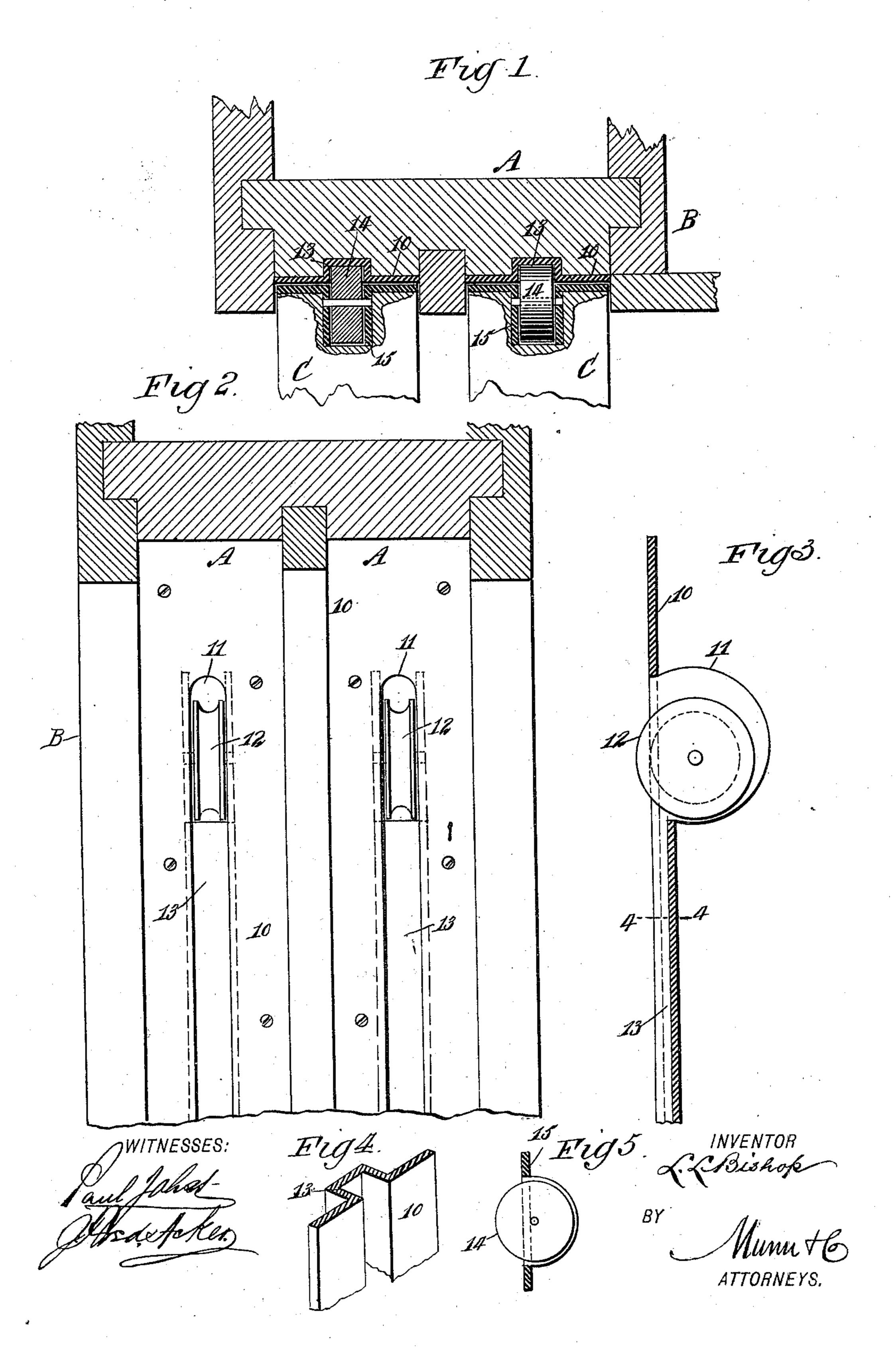
L. L. BISHOP.
GUIDE FOR SASHES, PARTITIONS, &c.

No. 561,478.

Patented June 2, 1896.



## UNITED STATES PATENT OFFICE.

LEONARD L. BISHOP, OF MONTCLAIR, NEW JERSEY.

## GUIDE FOR SASHES, PARTITIONS, &c.

SPECIFICATION forming part of Letters Patent No. 561,478, dated June 2, 1896.

Application filed August 10, 1895. Serial No. 558,884. (No model.)

To all whom it may concern:

Be it known that I, LEONARD L. BISHOP, of Montclair, in the county of Essex and State of New Jersey, have invented a new and Im-5 proved Guide for Sashes, Partitions, &c., of which the following is a full, clear, and exact description.

My invention relates to guides or devices for doors, sashes, partitions, &c.; and it has for its object to provide a means which will enable wide heavy sashes, doors, partitions, or any object requiring to be raised between guides and balanced by weights or otherwise to be raised easily and noiselessly, and to pre-15 vent the sash, when the device is used thereon, from catching or sticking and likewise from rattling from wind or other causes.

The invention consists in the novel construction and combination of the several 20 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 characters of reference in-25 dicate corresponding parts in all the figures.

Figure 1 is a horizontal section through the hanging stile of a window-frame and a partial horizontal section through sashes held to travel on the said stile. Fig. 2 is a vertical 30 section through the top of a window-frame, showing one of the hanging stiles in front elevation. Fig. 3 is a longitudinal section through a portion of one of the tracks adapted for attachment to the hanging stile of a win-35 dow-frame. Fig. 4 is a transverse section through the said track on the line 4 4 of Fig. 3, and Fig. 5 is a section through the housing of one of the guide-rollers used in connection

with the window-sash. In carrying out the invention, in each sashgroove of the hanging stile A of the windowframe B, to which the invention is shown as applied, a plate 10 is secured by means of screws or otherwise, and this plate near its 45 upper end is preferably provided with an interiorly-extending pocket or housing 11, in which the usual sash-cord pulley 12 is journaled. Below the housing of the sash-cord pulley, as shown particularly in Fig. 4, the 50 plate is provided with a groove 13, extending longitudinally thereof, and that portion of

the plate in which the groove is produced is

properly seated in the aforesaid sash-stile. The groove is preferably rectangular in crosssection and is centrally located.

The sash C is provided with any desired number of friction rollers or wheels 14, and these wheels or rollers are preferably placed within a suitable housing 15, the wheels extending beyond the front face of the housing. 60 The wheels or rollers in the sash are preferably made of rubber or a combination of material and are fitted to the groove or track 13 in such a manner as to substantially fill the said track, and thereby absolutely prevent 65 the sash from coming in contact with the wood of the sash or the metal plate 10, thereby preventing all rattling and serving to maintain the sash firmly in position.

Under such a construction any door, par- 70 tition, or sash to which the improvement may be applied may be raised and lowered conveniently, expeditiously, and noiselessly, and at the same time there will be no rattling or other motion than the motion necessary for 75 the raising and lowering of the device.

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

1. As a new article of manufacture, a plate 80 for supporting a sash-cord pulley provided near its upper end with an inwardly-extending housing for the sash-cord pulley, the portion of the plate above the housing being flat and the portion below the said housing being 85 of much greater length than the upper portion and provided with a longitudinal groove which when the plate is applied forms a guideway for a roller on a sash, substantially as described.

2. The combination with a window-stile, of plates for supporting the sash-cord pulleys secured in the sash-groove thereof, said plates being provided with housings for the pulleys and having their portions below the housings 95 extended and each provided with a longitudinal groove forming a guideway, and a sash or the like provided with rollers fitting and traveling in the grooves of the said plates, substantially as described.

3. The combination, with the hanging stile of a window-frame and a plate secured to the said stile at each side of its parting-strip, the said plate being provided with a hood, and a

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sash-pulley within said hood, and a longitudinal sunken track extending from the hood substantially to the bottom of the plate, of sashes held to travel in engagement with the frame-stile, and friction-rollers journaled in the said sashes and extending beyond the side edges thereof, the said rollers being made

to conform to the shape of the tracks in the frame-stile, being adapted to travel therein, as and for the purpose specified.

LEONÂRD L. BISHOP.

Witnesses:
EMIL THULIN,
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