No. 788,267. PATENTED APR. 25, 1905.

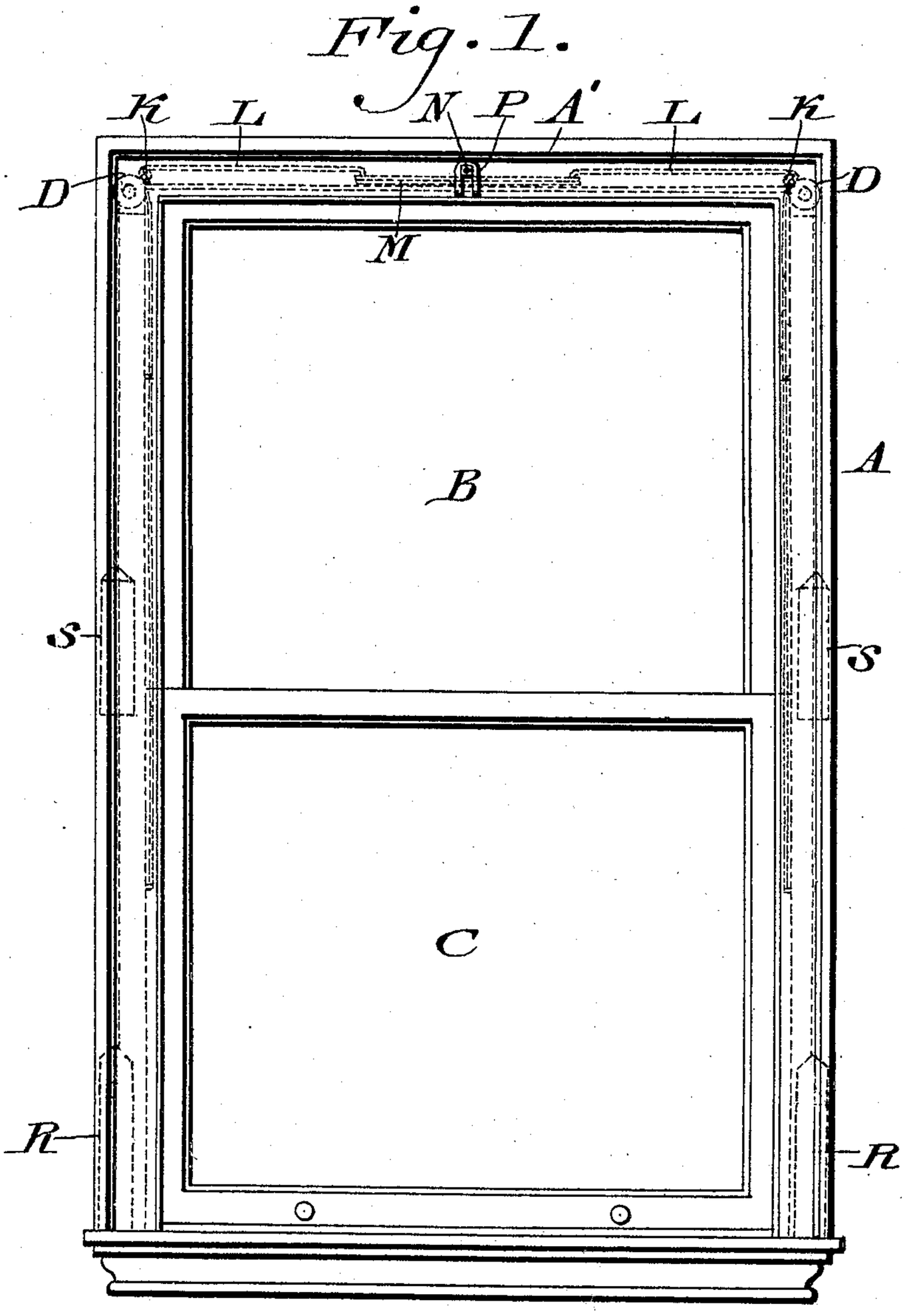
A. KONSALIK.

FIREPROOF WINDOW.

APPLICATION FILED SEPT. 26, 1904.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

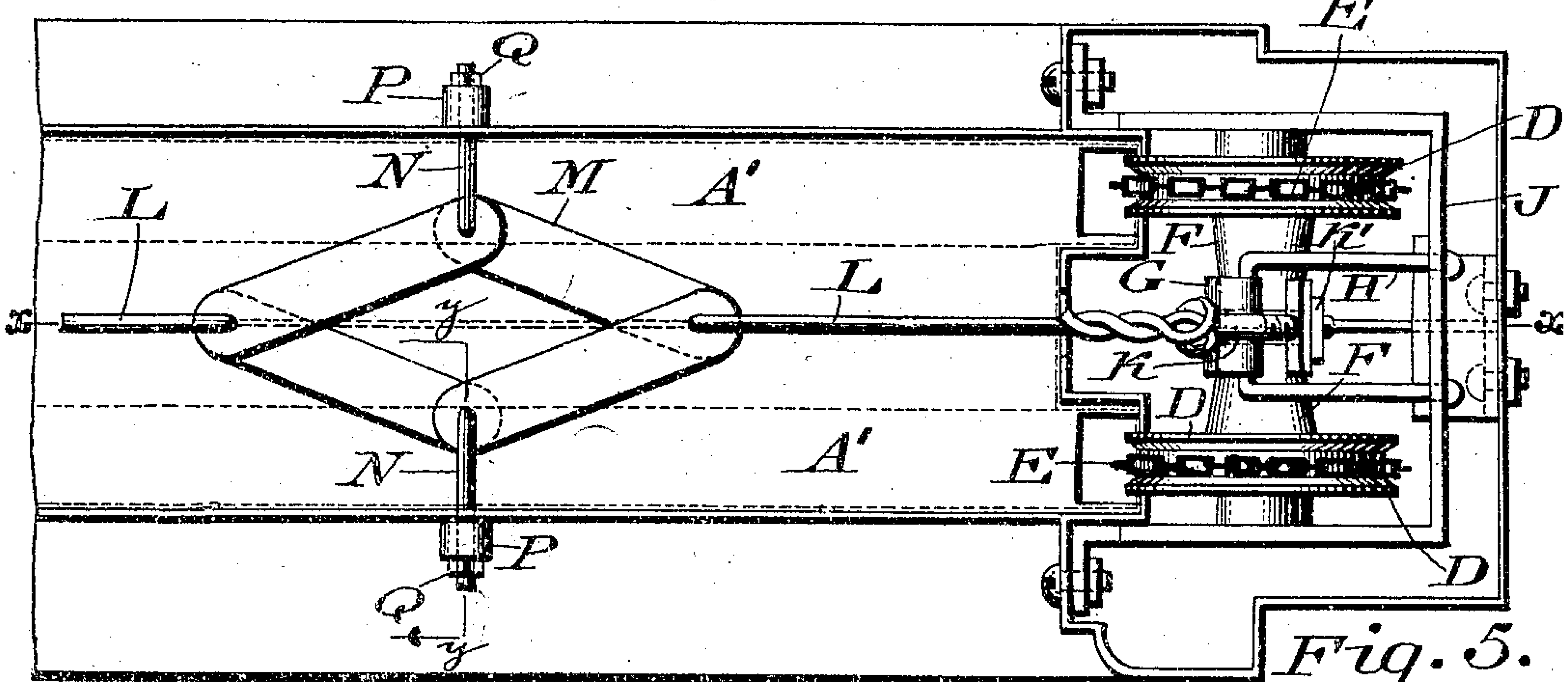


Fig. 4.

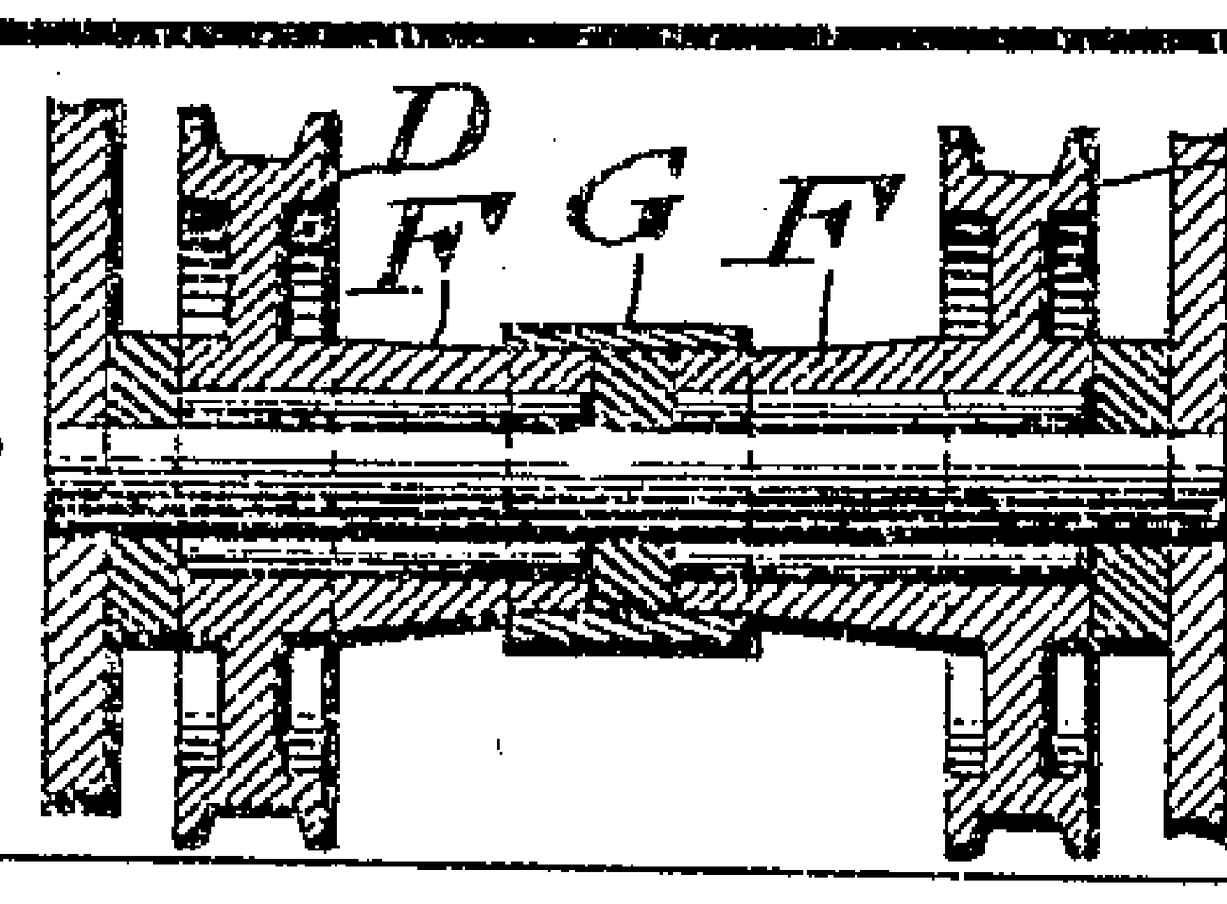


Fig. 5.

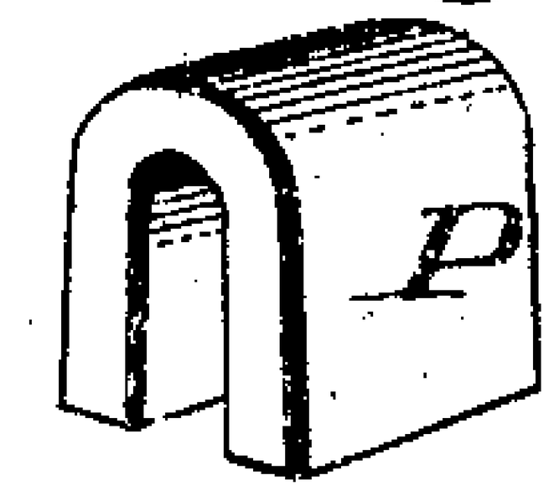
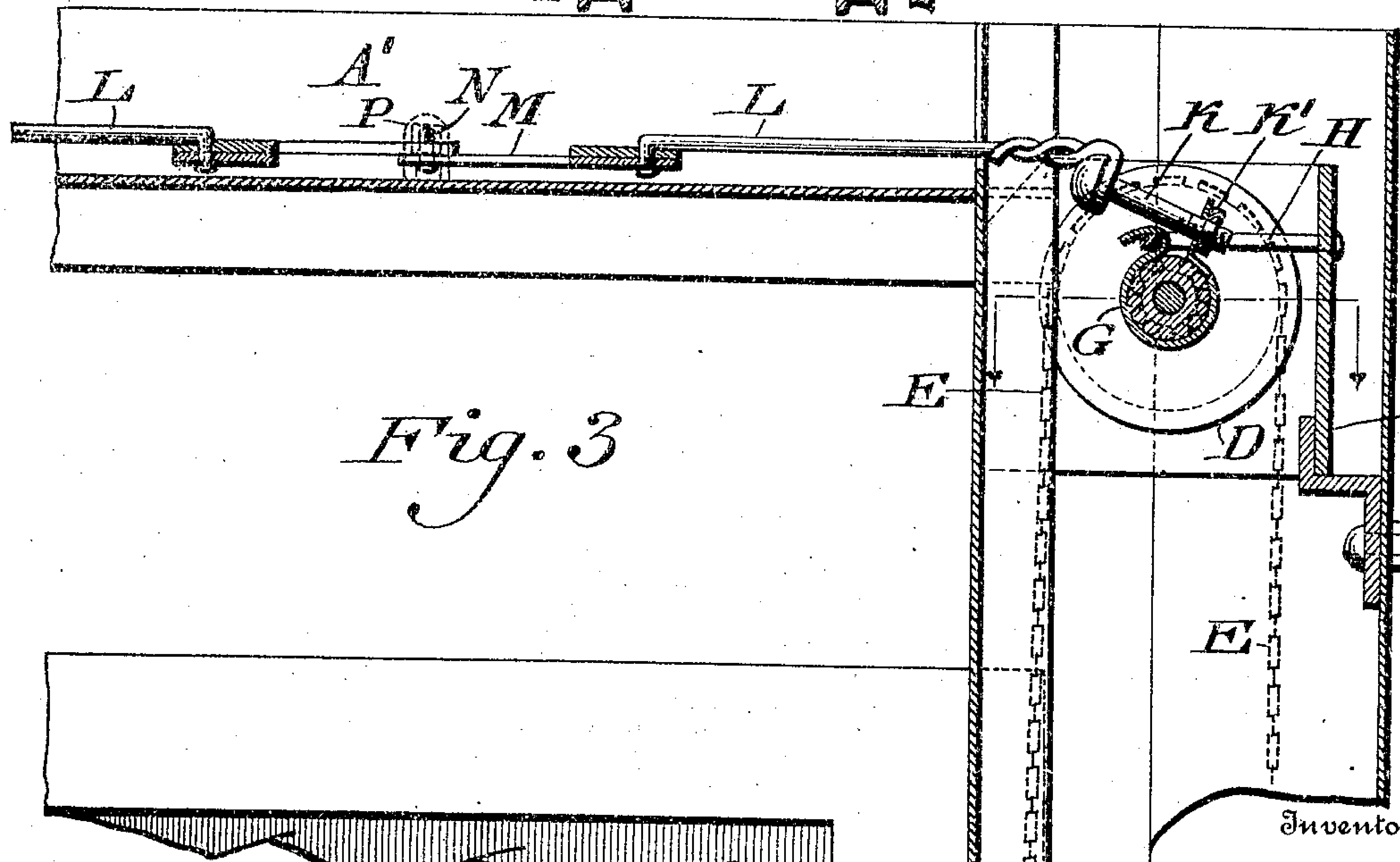


Fig. 3



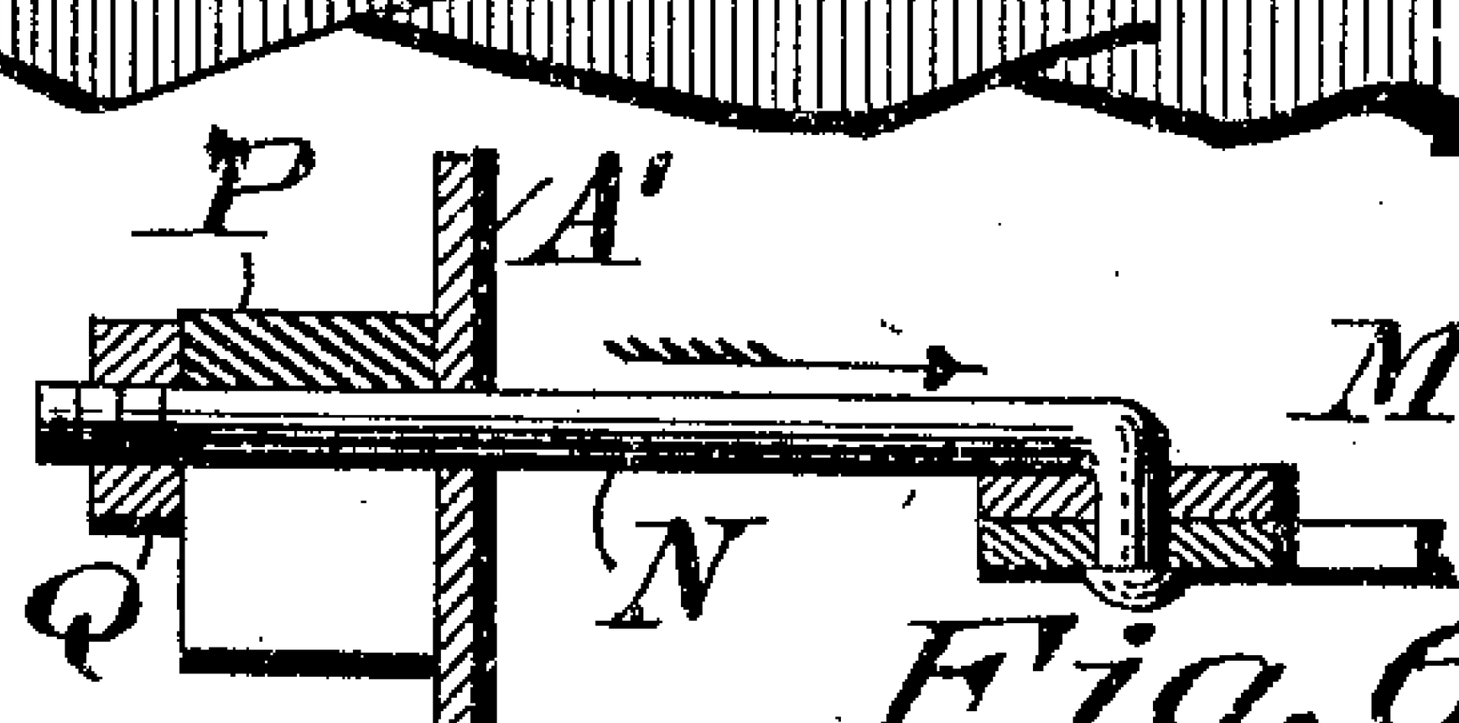


Fig. 6.

Witnesses

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No. 788,267. Patented April 25, 1905.

UNITED STATES PATENT OFFICE.

ARTHUR KONSALIK, OF PHILADELPHIA, PENNSYLVANIA.

FIREPROOF WINDOW.

SPECIFICATION forming part of Letters Patent No. 788,267, dated April 25, 1905.

Application filed September 26, 1904. Serial No. 225,889.

To all whom it may concern:

Be it known that I, ARTHUR KONSALIK, a subject of the Emperor of Germany, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Fireproof Window, of which the following is a specification.

My invention consists of a window having fireproof sashes which may be opened and closed as usual, but which when opened will in the event of fire be automatically closed. To this end I employ a brake on the sash-pulley, the same being primarily controlled by a device of fusible material and a suitable tension for said brake, said tension being reduced or destroyed in the event of fire due to the fusing or melting of said device employed, such action tending to release said brake and its control of the sash-pulleys.

Figure 1 is a front view of a fireproof window embodying my invention. Fig. 2 is a top or plan view of portion of the same on an enlarged scale. Fig. 3 is a vertical section on line *x x*, Fig. 2. Fig. 4 is a transverse section of the sash-pulleys and brake therefor. Fig. 5 is a perspective view of the fusible device employed. Fig. 6 is a transverse section on line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a window-frame, and B and C the window-sashes, the latter being made of fireproof material.

D designates the pulleys for the sash chains or cords E, the hubs F of which are encircled by the friction-brake G, the latter being formed of a strap of metal or other suitable material of circular form, so as to embrace said hubs, the brake thus being common to the hubs of the pulleys, the ends of said strap being separated, one end being connected by the stirrups H with the bracket J, which is connected with the side stile of the window-frame. Again, the end of the brake which occupies the thread of the bolt K is within the stirrup H, and the other end of said brake is below said bolt, by which provision the ends of the brake G may be brought closely together, and almost the entire length of said brake may encircle the hubs of the sash-pulleys, so as to obtain the greatest effect in controlling the latter, and consequently the sashes, respectively, in their raising and lowering motions. The other end of said strap has connected with it the bolt K, to whose head is attached the rod L, which in the present case extends over the lintel A′ of the window and has the end opposite the said bolt K connected with the series of levers M of the order of lazy-tongs, the side pivots of the latter having attached to them the rods N, portions of which outside of the window-frame carrying the yokes or saddles P, of fusible material, contacting with which are the nuts Q on the threaded ends of said rods, whereby owing to said nuts said levers may be opened and closed and so set as to adjustably hold the brake G on the hubs F, it being noticed that the similar rod L is attached to the other end of said levers M so as to extend to the other side of the window-frame, where sash-pulleys are provided with appurtenances similar to those shown on the right hand of Fig. 2. The yokes B are independent of said nuts Q, and may be readily slipped or fitted on the rods N intermediate of said nuts and the adjacent lintel or corresponding portion of the window-frame, it being evident that the nut may be of ordinary nature, and so require no special construction for the purpose intended. It will also be noticed that the end of brake opposite to that engaged by the nut K′ is of the form of a hook, which is fitted on the cross-bar of the stirrup H as a convenient and strong fastening for the brake with said stirrup, while the separated side arms of said stirrup form a space to receive threaded end of the bolt and said nut K′ thereon, thus rendering the parts compact while admitting of easy access to said nut for purposes of adjustment of the tension of the brake. On the bolt K is a nut K′ to assist in nicely adjusting the tension of the brake G. The weight R of the upper sash is of such degree that its tendency is to raise said sash, while the weight S of the lower sash is light so as to be overcome by the weight of said lower sash; but owing to the friction of said brake G the sashes may be raised and lowered as usual and will retain the position

to which they are set, whether open or closed or partly so.

It will be seen that if the sashes are open and fire occurs the yokes P fuse or melt, thus releasing the nuts Q and rods N, when the levers M close, thus relieving the rods L of draft and permitting the brake G to open. This releases the hubs of the pulleys D immediately, whereupon the weights S of the lower sash C is overcome by the weight of said sash, when the sash lowers to its full extent. As the weight R is superior to the weight of the upper sash the latter is immediately raised to its full extent, and thus both sashes will be closed, in which condition, owing to their fireproof nature, fire is prevented from entering an apartment through the sashes or window, the effect of which is evident.

Various changes may be made in the details of construction shown without departing from the general spirit of my invention, and I do not, therefore, desire to be limited in each case to the same.

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

1. In a window, a sash, a sash-pulley, a brake on the latter adapted to permit said sash to move under normal condition, a controller for said brake, a rod connected with said controller, a piece of fusible material supported on said rod and independent means for retaining said piece in position at the adjacent portion of the window-frame, said piece being intermediate of said means and an adjacent portion of the window-frame.

2. In a window, a sash, a sash-pulley, a brake on the latter adapted to permit said sash to move under normal condition, a holder for said brake, a rod connected with said holder, a nut on said rod, and a piece of fusible material rested on said rod intermediate of said nut and the adjacent portion of the window-frame.

3. In a fireproof window, a controlling device for a sash-pulley, a piece of fusible material, a support for said piece, the same being connected with a member of said device, and independent means on said support for retaining said piece thereon, said piece being interposed between said means and an adjacent portion of a window-frame.

4. In a window, a sash, sash-pulleys, a brake engaging with the hubs of said pulleys and common to both, a lever, a connection between said lever and said brake and a fusible device connected with said lever.

5. In a window, a sash, a plurality of sash-pulleys, a brake engaging said pulleys and common to both, a stirrup connected with one end of said brake, and a fixed member, a bolt adjustably connected with the other end of said brake, a fusible device and a connection between said device and said bolt.

6. In a window, a sash, a sash-pulley, a brake for said pulley, an end of said brake having a hook thereon, a stirrup having said hook fitted on the cross-bar thereof, said stirrup being connected with a fixed member, a movable bolt connected with the other end of said brake and an adjusting-nut on said bolt, one end of said brake with said nut being within said stirrup and the other end thereof adjacent to the same.

ARTHUR KONSALIK.

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