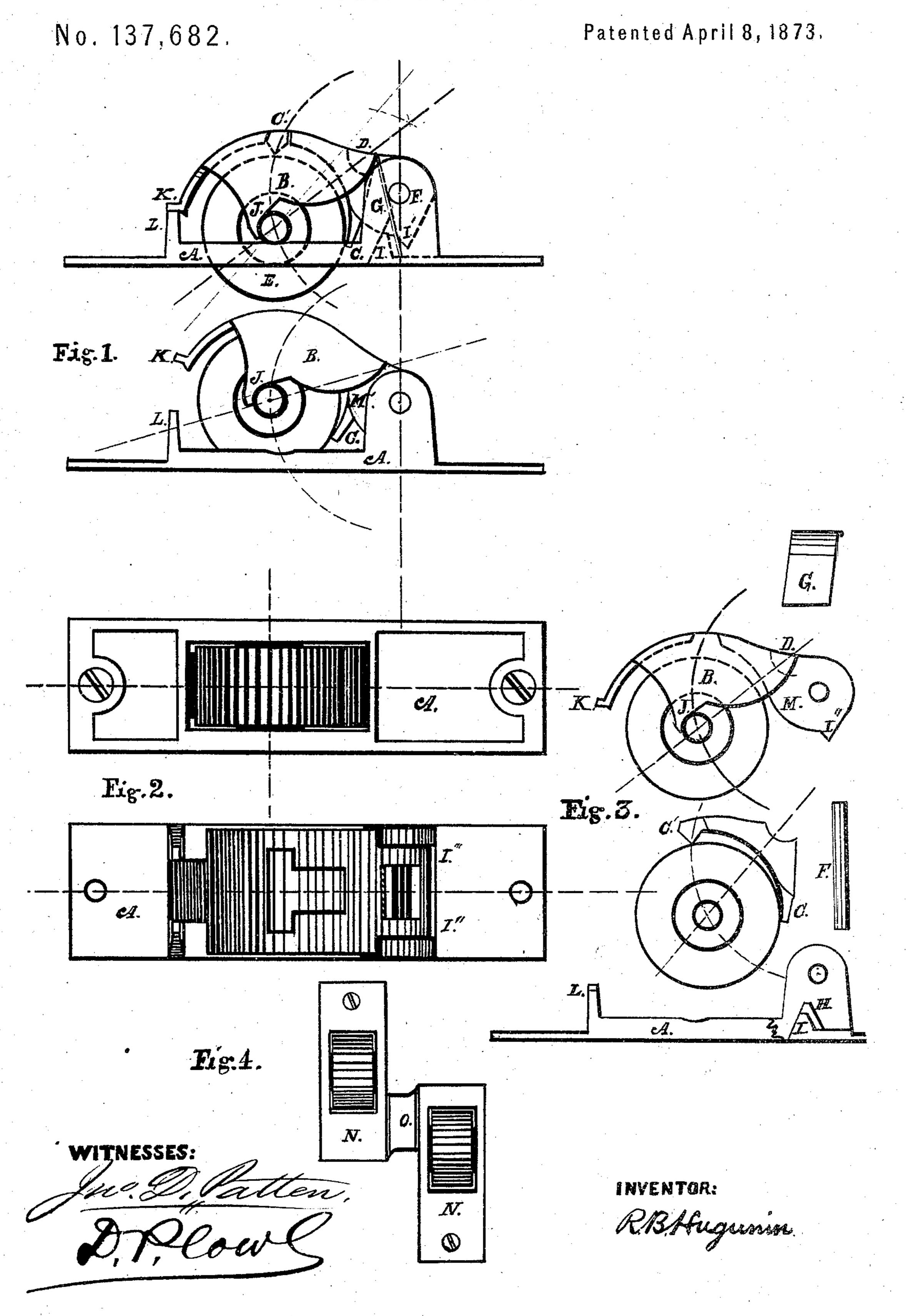
R. B. HUGUNIN.
Sash-Holders.



## UNITED STATES PATENT OFFICE.

ROBERT B. HUGUNIN, OF NEW YORK, N. Y.

## IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. 137,682, dated April 8, 1873; application filed April 1, 1873.

To all whom it may concern:

Be it known that I, ROBERT B. HUGUNIN, of New York, county and State of New York, have invented certain Improvements in Sash-Supporters using rollers, of which the following is a specification:

Nature and Objects of the Invention.

The first part of my invention relates to the combination, with sash-holders using rollers, of self-adjusting friction-surfaces, attached to lever in such manner as to allow the free working of the roller without undue binding, as from unsoundness or wear of bearings. The holding or friction surfaces, by rocking slightly, are enabled to carry the weight of the sash to their bearing-pivot, near the spring, obtaining greater holding power and more perfect working of friction-surfaces to roller. The second part of my invention relates to projections, on lever and plate, of sash-holders and flat steel spring, the object being to obtain efficiency and exactness in drilling and manufacture, and an efficient spring, and to prevent the breaking of it by a too great opening of the lever.

Description of Accompanying Drawing.

Figure 1 is a side elevation embodying my inventions. Fig. 2 is a plan view of same. Fig. 3 is a detailed view of different working-parts. Fig. 4 is a double plate, one-half size, embodying my inventions.

## General Description.

A is the metal plate of the supporter, to which the working parts are attached. Bis a lever attached to plate A by means of a pin, and is operated by a spring, and has bearings for a roller and an opening for receiving the friction-surface piece and retaining it in a movable position; C and C', double-armed friction-lever, with a socket, suspended in its place in lever B, and having a limited longitudinal motion. This friction-lever may have either the socket or convex surface of the hinge. D, pivot on which the friction-surface lever rests and turns. While raising the sash the roller rests on its bearings in lever B, but when left to hold the sash the roller is immediately caught by the friction-lever and the weight carried to its pivot, whose close proximity to the spring gives the latter great ad-

vantage. E, semi-elastic roller; F, hingepin, for securing lever to the plate and acting as fulcrum for the steel spring; G, steel-plate spring, pressed under hinge-pin F and over a projection on plate A, and resting on seat on lever B, near pivot D. This spring needs no fastening to its place when used in combination with the pin and projection. H is the spring-holding projection on plate A. I I' and I" I", projections on the hinge-arms of lever B and plate A, to prevent the opening of the lever so far as to endanger the spring. J and J', bearings on the lever for the roller. These bearings are made on a line parallel to a line cutting the centers of the roller and frictionsurface lever between the two arms, where all are in position, as seen in Fig. 1 of drawing. K, projected or steadying end of lever B, with lip extending downward from under side. L, rest for end K, in projection on plate A. These projections and rests are important for holding the lever and plate during process of drilling them, together, through. M and M', bearings on lever B, resting on projections H' on plate A, giving to the lever its proper position, with rest at the other end, during the process of drilling for the hinge-pin. The curved bearings M and M' allow them to swing over I and I' when pinned or hinged together. N and N', two plates, cast as one, Fig. 4, my improvements attached; O, connecting-strip, Fig. 4, covered by center-stop. This is a good form of supporter for new work.

I claim as my inventions—

1. The self-adjusting friction-surfaces C and C', being on an independent piece, the upper end working in a socket in lever B, in combination with a roller, lever, and spring, all arranged substantially as and for the purposes specified.

2. The projections I and I'on plate A, and the projections I' and I'' and M and M' on lever B, combined as and for the purposes specified.

3. The lapping-end K on lever B, in combination with projection L on plate A, for the purposes specified.

4. The combination of spring G, pin F, and holding-projection H on plate A, as and for the purposes specified.

R. B. HUGUNIN.

Witnesses:

E. McB. TIMONEY, JNO. D. PATTEN,