(No Model.)

J. F. BJURLUND.

SASH HOLDER.

No. 516,173. Patented Mar. 6, 1894.

Fig. 1.

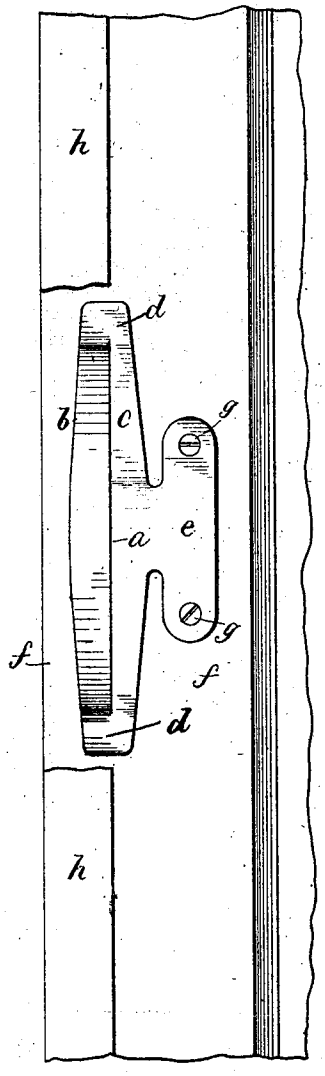


Fig. 2.

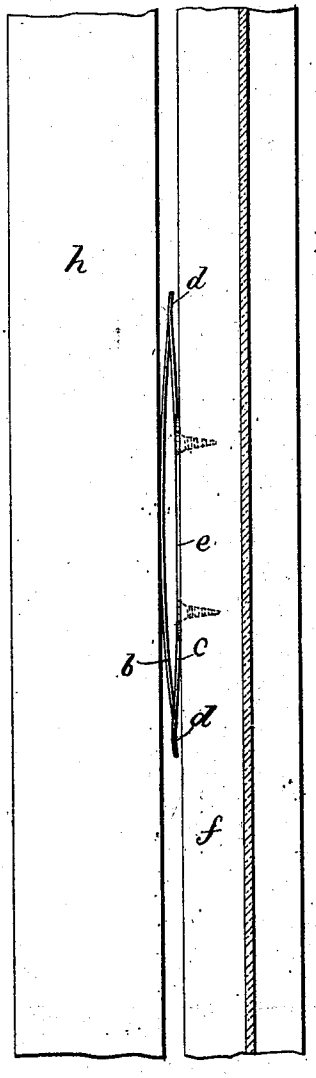
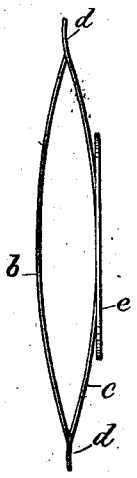


Fig. 3.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHAN F. BJURLUND, OF NEW YORK, N. Y.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 516,173, dated March 6, 1894.

Application filed February 13, 1893. Serial No. 462,035. (No model.)

To all whom it may concern:

Be it known that I, JOHAN F. BJURLUND, a subject of the King of Sweden and Norway, and a resident of New York city, in the county and State of New York, have invented certain new and useful Improvements in Sash-Springs, of which the following is a specification.

My invention consists of an elliptic spring whereof the two members are offset laterally or in different planes relatively to each other so that one may be inserted between the sash stile and the stop, while the other is seated on the stile outside of the stop and is fastened thereto, so as to form a simple, efficient and reliable spring that may be readily applied to any window for preventing rattling and for holding the sash when raised, if desired, all as hereinafter fully described reference being made to the accompanying drawings in which—

Figure 1, is a front elevation of part of a window with my improved sash spring applied, part of the sash stop being broken out. Fig. 2, is a vertical section through the glass pane and side view of the sash stile and stop with my improved spring in the position of use. Fig. 3, is a side view of the spring alone.

I take a thin flat metallic plate of spring metal, and make a slit *a*, along the middle portion nearly its whole length separating said plate for the most part into two members *b*, *c*, but leaving intact connections of suitable length at *d*, and to one of said members *c*, I provide a lateral foot plate *e*, for attaching to the stile *f*, of the sash, said foot plate being like the rest of the plate of which the spring is composed cut out of a blank plate of suitable width, and having one or more screw holes *g* for the fastening screws; and having thus prepared the plate I stamp, press or otherwise set the two members apart in the elliptic form as shown in Fig. 3, and then apply the spring with the member *b*, between the face of the sash stile *f*, and the sash stop *h*, as shown in Figs. 1 and 2 and fasten the spring on the front of the sash stile, as shown best in Fig. 1, thus making a very simple spring that may be applied without making any recesses or holes in the wood of either part and without any fitting whatever except fastening the foot plate with one or more screws, and it may also be applied where the slack space between the face of the sash stile is no more than the thickness of the plate of which the spring is made, the spring being compressed to the flat condition.

The spring may be cut out from the blank plate, slitted, punched for the screw holes, and the two members shaped and set all at one operation of a suitable pair of stamping dies.

I claim—

The improved sash spring consisting of a flat plate slitted along the middle portion and separated for the most part of its length into two members, but remaining integrally connected at the ends, one of said members having a foot plate, and the two members occupying different planes side by side and set in elliptical shape, whereby the spring may be applied with only one of its members between the sash and the sash stop substantially as described.

Signed at New York, in the county and State of New York, this 31st day of January, A. D. 1893.

JOHAN F. BJURLUND.

Witnesses:
W. J. MORGAN,
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