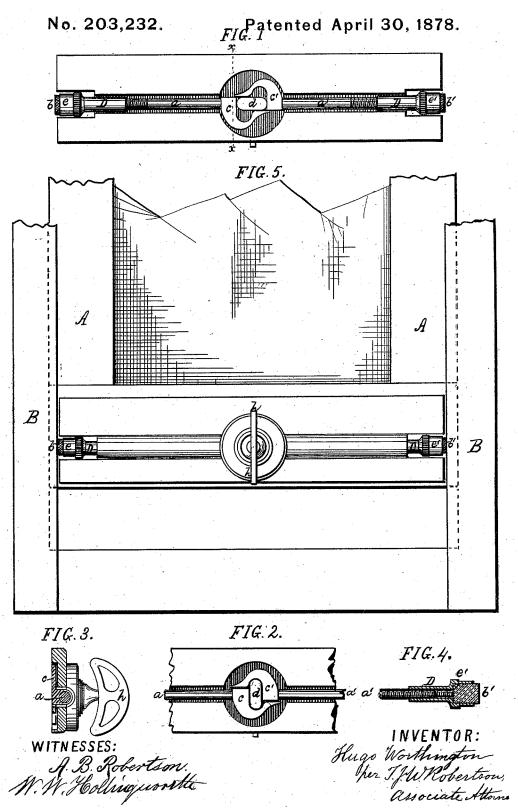
H. WORTHINGTON. Sash-Holder.



UNITED STATES PATENT OFFICE.

HUGO WORTHINGTON, OF LIVERPOOL, GREAT BRITAIN.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. 203,232, dated April 30, 1878; application filed January 5, 1878; patented in England, January 15, 1877.

To all whom it may concern:

Be it known that I, HUGO WORTHINGTON, of Liverpool, in the county of Lancaster, in that part of the United Kingdom of Great Britain and Ireland called England, have invented a certain new and useful Improved Window-Fastening; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a rear view of a window-fastening constructed according to my improvement, detached from the sash, and with the bolts in the locked position. Fig. 2 is a portion of Fig. 1, showing the bolts unlocked. Fig. 3 is a section through the line x x, Fig. 1. Fig. 4 is a longitudinal section at D, Fig. 1. Fig. 5 is a front elevation, showing my invention applications.

plied to a window.

Similar letters of reference where they occur in the several figures denote like parts in the

drawings.

My invention relates to that class of sashholders in which sliding rods or bolts are protruded beyond the sides of the sashes, so as to hold the same at any desired position, either by friction against the sides of the frame or by passing into apertures made therein for that purpose.

It consists in a peculiar construction and combination of parts, which will be hereinafter fully described in the specification, and

then pointed out in the claim.

The locking device consists of bolts a a', which are mounted in or on the top of the sliding window A. The outside ends or tips of the bolts a a' are mounted with india-rubber buffers b b', and the inside ends of the bolts a a' are provided with hooks or gabs c c'. The bolts a a' are worked by the duplex cam d operating the hooks or gabs c c'. The india-rub-

ber tips b b' are inserted into bosses e e', which are adjusted on the bolts a a' by means of screw-sockets DD, so as to regulate the length, and thereby the pressure on the window-frame B. The duplex cam d is worked by the handle h, which also serves for raising and lowering the window

ing the window. It will be evident from the above description that the window A can be raised by the handle h, and that upon turning the handle h the bolts $a\,a'$ are thrown out, as shown at Figs. I and 5, so that the india-rubber tips $b\,b'$ bear against the window-frame B, and thus the window A is held in position. To release or lower the window, the handle h is again turned, and the bolts $a\,a'$ are drawn in, as shown at Fig. 2, and the window A is free to be lowered or raised. By turning the handle as far as possible in either direction the bolts are securely locked when protruded, and firmly held when retracted.

Although I have shown two bolts, yet it is obvious that in many positions a single bolt will be sufficient.

I am aware that it is not new to operate a bolt by means of a locking-cam, and therefore do not claim this, broadly; but

What I claim as new is—

The combination of the bolts a a', provided with the curved arms c c', constructed as described, with the cam d, by means of which the bolts are both operated and rigidly held in a thrown position.

In witness whereof I, the said Hugo Worth-Ington, have hereunto set my hand and seal

this 13th day of December, 1877.

HUGO WORTHINGTON. [L. s.]

Witnesses:

FREDERICK JOHN CHEESBROUGH, JOHN HAMILTON REDMOND, Both of 15 Water St., Liverpool, England.