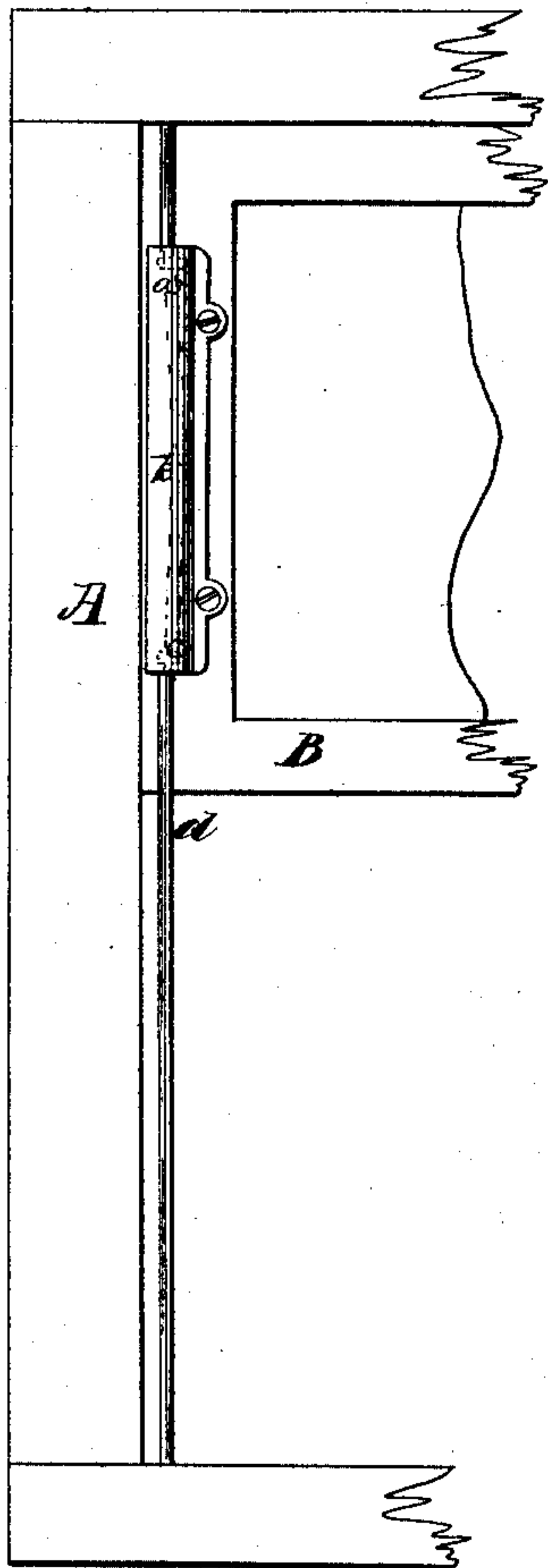


*A. Roehrig,*  
*Sash Holder.*

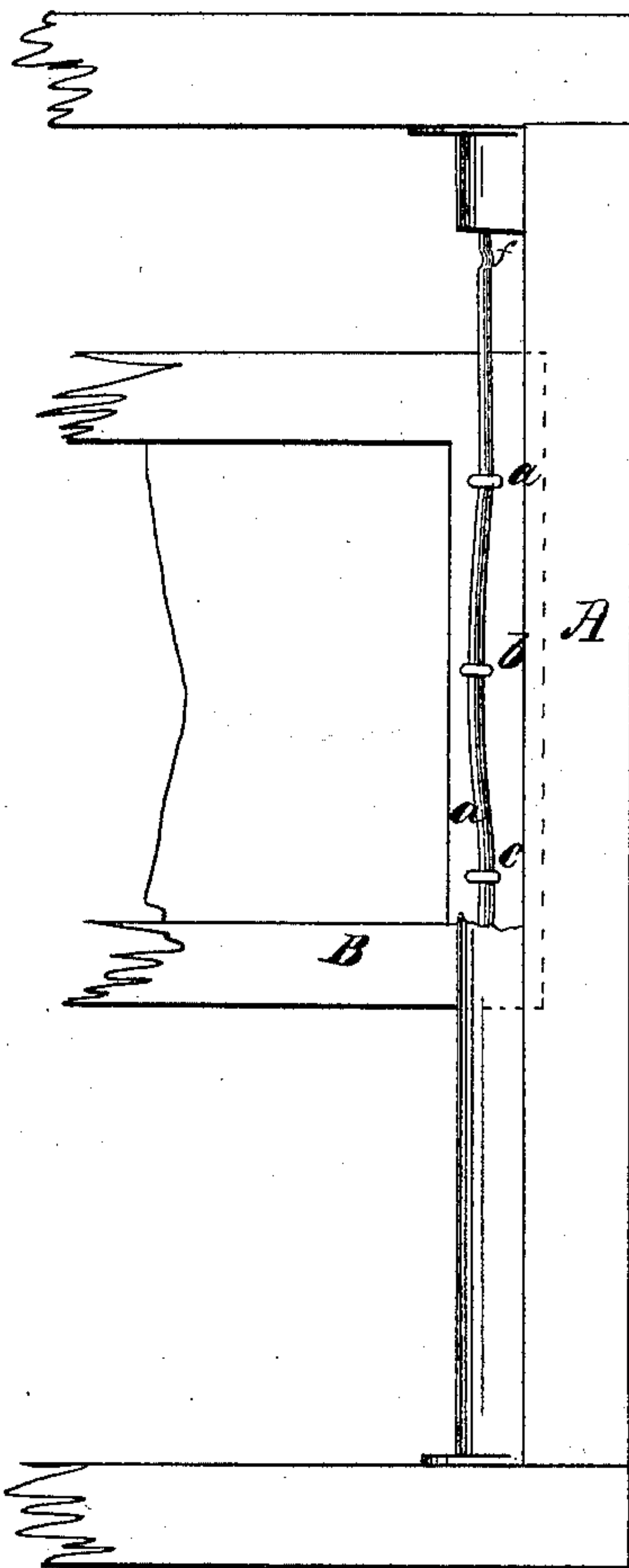
*N<sup>o</sup> 55,538.*

*Patented June 12, 1866.*

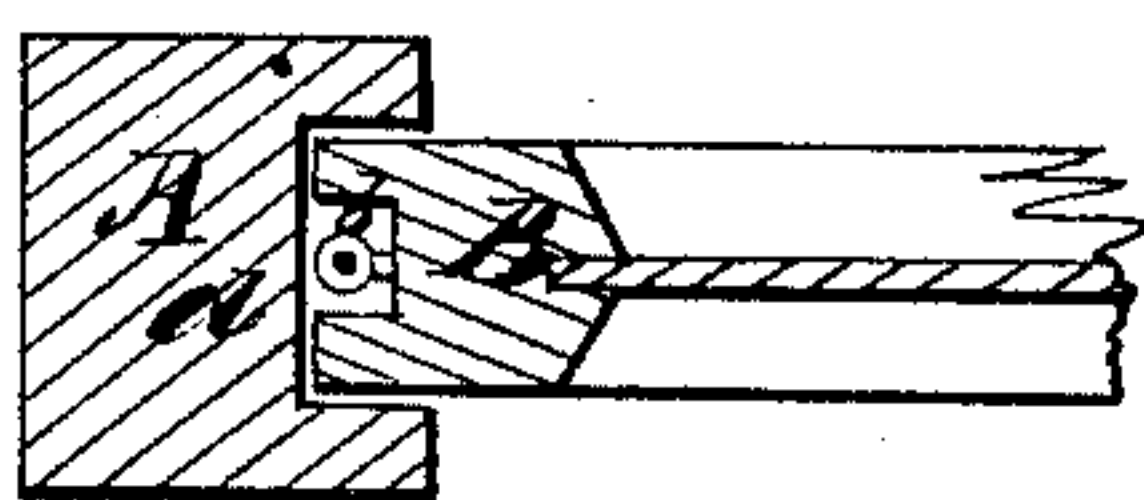
*Fig: 1.*



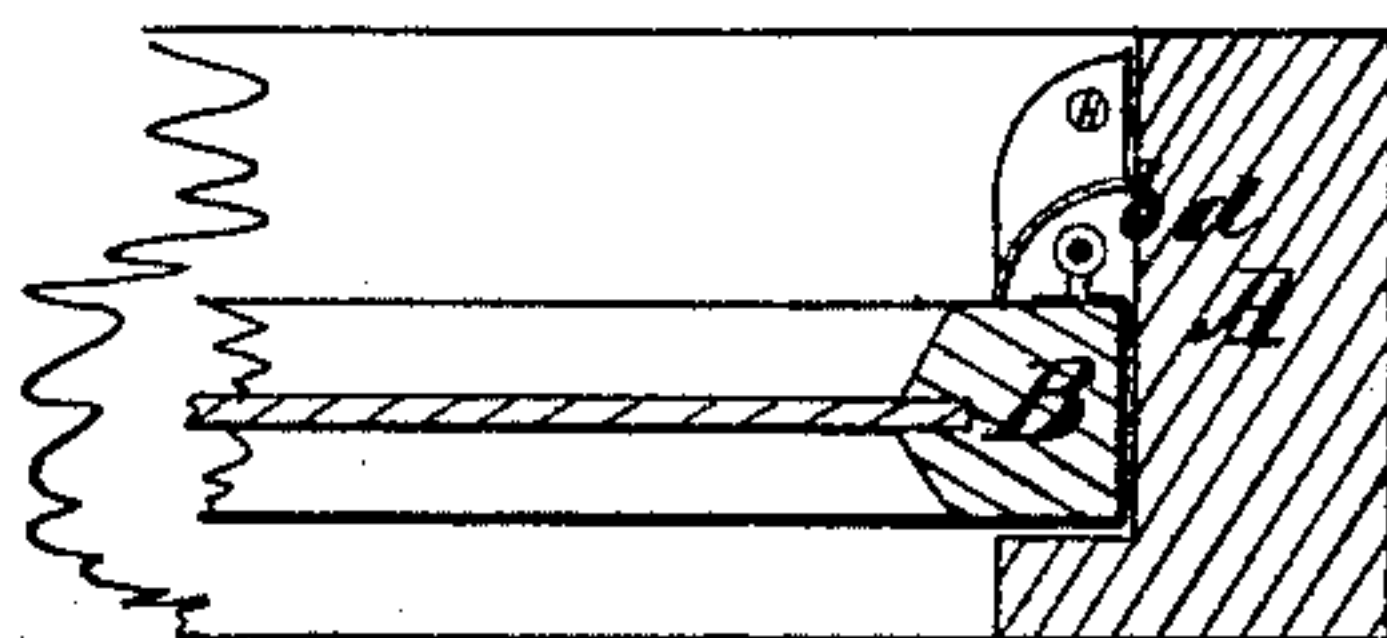
*Fig: 2.*



*Fig: 3.*



*Fig: 4.*



*Witnesses:*

*J. P. P. Livingston*  
*Wm. Brown*

*Inventor:*

*Augustus Roehrig*  
*Per Munn & Co*  
*Attorneys*

# UNITED STATES PATENT OFFICE.

AUGUSTUS ROEHRIG, OF WILLIAMSBURG, NEW YORK.

## IMPROVEMENT IN HANGING WINDOW-SASHES.

Specification forming part of Letters Patent No. 55,538, dated June 12, 1866.

*To all whom it may concern:*

Be it known that I, AUGUSTUS ROEHRIG, of Williamsburg, in the county of Kings and State of New York, have invented a new and useful Improvement in Hanging Window-Sashes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a front elevation of a sash hung according to my invention. Fig. 2 is a similar view of a modification of the same. Figs. 3 and 4 are horizontal sections of the same.

Similar letters of reference indicate like parts.

This invention consists in the arrangement of a sinuous wire secured in the window-frame, in combination with three or more staples placed in a zigzag line and secured in the window-sash in such a manner that by the friction of the staples on the sinuous wire the sash is retained in any position in which it may be brought, and balance-weights or other devices for sustaining the window-sash can be dispensed with.

A represents a window-frame, in which the sash B is made to slide up and down. In this sash are fastened three or more staples, *a b c*, which are placed in a zigzag line, and which catch over a wire, *d*, that is fastened in the frame A, extending from top to bottom of the same and parallel to its sides. The length of this wire exceeds somewhat the distance between the points of the frame bearing against its ends, so that the same is compelled to curve and rendered capable to accommodate itself to the zigzag position of the staples *a b c* through which it passes.

The wire *d* may be situated either on the outside of the sash, as shown in Figs. 1, 2, and 4 of the drawings, or it may be placed in a groove in the edge of the sash, as shown in Fig. 3. When the wire is placed on the outside of the sash it may be protected by a metal case secured to the frame A, and extending from top to bottom of the same, as shown in Figs. 1, 2, and 4; or a projecting-case may be applied to the sash to cover the staples and prevent snow and ice from lodging on the same, as shown in Fig. 1. If the wire is placed in a groove in the edge of the sash, as shown in Fig. 3, the protecting-case is not required.

By the friction of the staples on the wire the sash is sustained in any position in which it may be brought, and, furthermore, by the elasticity of the wire, the sash is firmly held in position and prevented from rattling.

In order to retain the upper sash firmly in position when the same is pushed clear up, the wire may be provided with a recess, *f*, as shown in Fig. 1. This recess receives the upper staple, *a*, and retains the same, and with it the sash.

This method of hanging or balancing window-sash is very cheap, it is applicable to sliding-sashes of any description, and it is durable and not liable to get out of order.

What I claim as new, and desire to secure by Letters Patent, is—

The arrangement of a sinuous wire, *d*, in the frame A, in combination with three or more staples, *a b c*, fastened in a zigzag line in the sash B, substantially as and for the purpose described.

AUGUSTUS ROEHRIG.

Witnesses:

M. M. LIVINGSTON,  
ALEX. F. ROBERTS.