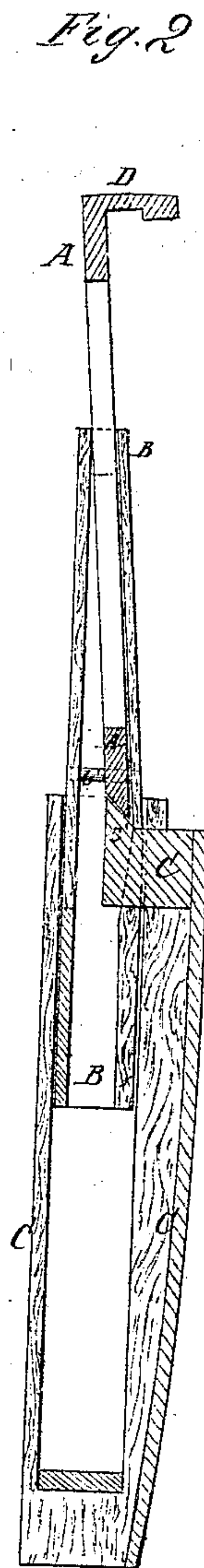
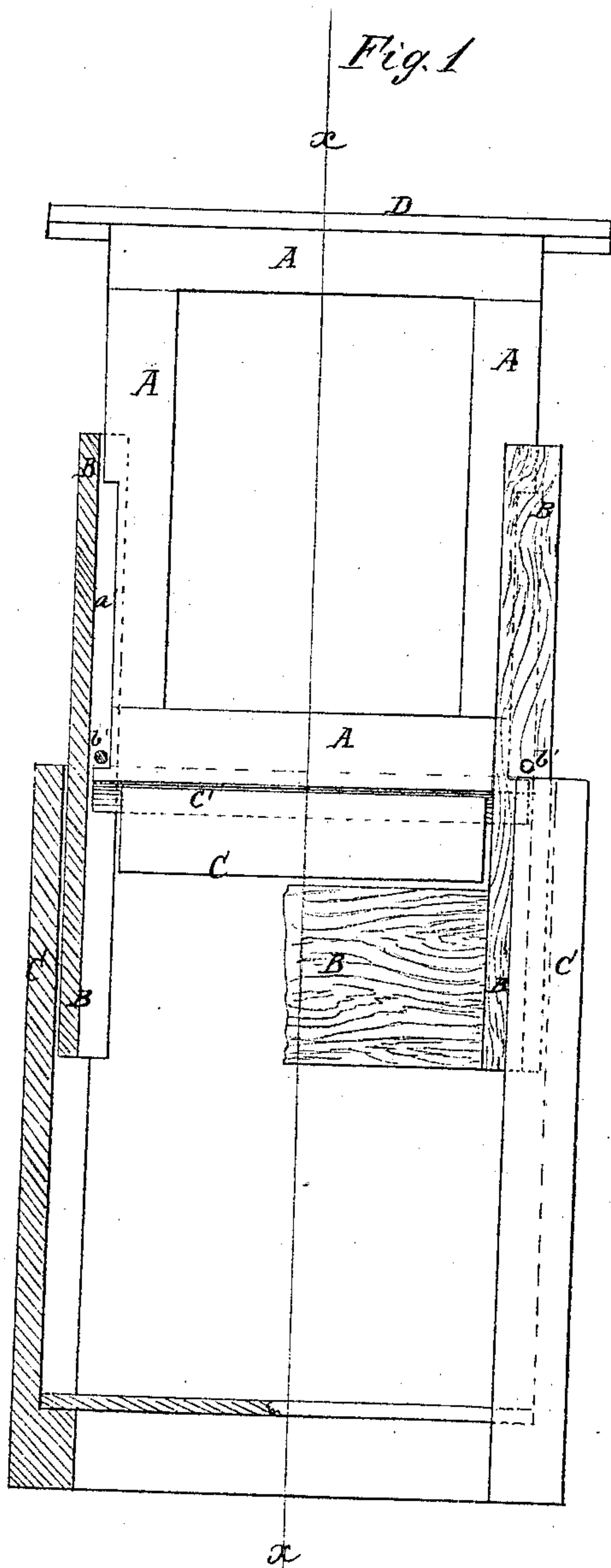


J. C. HAM.

Support for the Sashes of Carriage-Doors and Windows.

No. 114,436.

Patented May 2, 1871.



Witnesses.  
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# United States Patent Office.

JOHN C. HAM, OF NEW YORK, N. Y.

Letters Patent No. 114,436, dated May 2, 1871.

## IMPROVEMENT IN SUPPORTS FOR THE SASHES OF CARRIAGE-DOORS AND WINDOWS.

The Schedule referred to in these Letters Patent and making part of the same

*To all whom it may concern:*

Be it known that I, JOHN C. HAM, of New York city, in the county and State of New York, have invented a new and useful Improvement in Supports for the Sashes of Carriage-Doors and Windows; 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 drawing forming part of this specification.

Figure 1 is an inside view of a carriage-door, to which my improvement has been attached, partly in section, to show the construction.

Figure 2 is a detail vertical section of the same taken through the line *x x*, fig. 1.

My invention has for its object to furnish a simple and effective means for holding the sashes of the doors and windows of landaus, landaulets, and similar carriages raised, whether the door be open or shut, and which may be applied to cars and other carriages; and

It consists in a sliding frame, in which the sash is set, and which comes part of its length out of the door or carriage-body with said sash and supports it, said frame sliding into the door or body of the carriage out of sight when the window-sash is lowered.

A is the sash or glass-frame, which is set and works in grooves in the inner sides of the side bars of the frame B, which side bars, at their lower ends, are connected by a cross-bar or board so that said side bars may move together. The frame B is set in grooves in the door or body of the carriage in the same manner as sashes are ordinarily set in their frames.

To the two sides of the frame B are attached stops, *b'*, which enter long notches or slots, *a'*, in the side bars of the sash A, as shown in figs. 1 and 2.

By this construction, as the sash A is drawn up, when it has been raised a half (more or less) of its movement, the lower ends of the notches or slots *a'* strike against the stops *b'* of the frame B, and the frame A carries the supporting-frame B up with it through the rest of its movement.

As the sash A is raised to its full height the part of the grooves in the frame B, in which the bottom part of the frame A then is, is widened, so that the lower end of the frame A can be set over the flange *c'* of the top or cap of the door or body C in the usual manner.

The inner edge of the lower end of the sash A and the outer edge of the flange *C'* are beveled off, so that when the lower end of the sash A is set out the two bevels, acting upon each other, may force the lower end of the sash A outward and its upper end inward

against the side of the groove in the supports B, holding the sash firmly.

The side bars of the frame B may be made of metal and its bottom bar of wood, and said frame should be firmly put together to prevent racking.

The frame B may be provided with stops in the same manner as the frame A to prevent the said frame B from being raised entirely out of the grooves in which it works; or spurs or pins may be attached to the outer edges of the supports B to enter and work in grooves in the bottoms of the grooves in which the said supports work, which inner grooves have a turn at their upper ends, into which the said spurs or pins drop, binding the said supports in their grooves in the same manner as the bevels of the lower edge of the sash A and of the flange *c'* bind the said sash.

The sash A is raised and lowered by a sash-strap or string in the ordinary manner.

The top of the sash A is made with a cap or cornice, D, which, when the sash A and supports B are lowered, covers the aperture in which the said sash and supports work, said cap D being grooved in its lower side to fit upon the flange *c'* of the casing C, preventing rattling, making all firm, and forming a neat finish.

I am aware that sashes have been sustained by supports hinged to the top of the door, and folding down upon the said top of the door when the said sash is lowered, the sash working in said supports in the same manner as in an ordinary high door. This construction I do not claim; but

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

1. A sliding frame or support for supporting the raised sash of a carriage-door or window, as set forth.
2. The combination of the stops *b'* and long notches or slots *a'* with the sliding supporting-frame B and sash A, substantially as herein shown and described, and for the purpose set forth.
3. The beveled flange *c'* of the door-casing or body C of the carriage and the beveled lower edge of the sash A, in combination with each other and with the said casing C and sash A, substantially as herein shown and described, and for the purpose set forth.
4. The cap or cornice D, in combination with the top of the sash A to cover the apertures in which the sash A and sliding supports B work, substantially as herein shown and described.

The above specification of my invention signed by me this 17th day of February, 1871.

Witnesses:

JOHN C. HAM.

JAMES T. GRAHAM,  
GEO. W. MABEE.