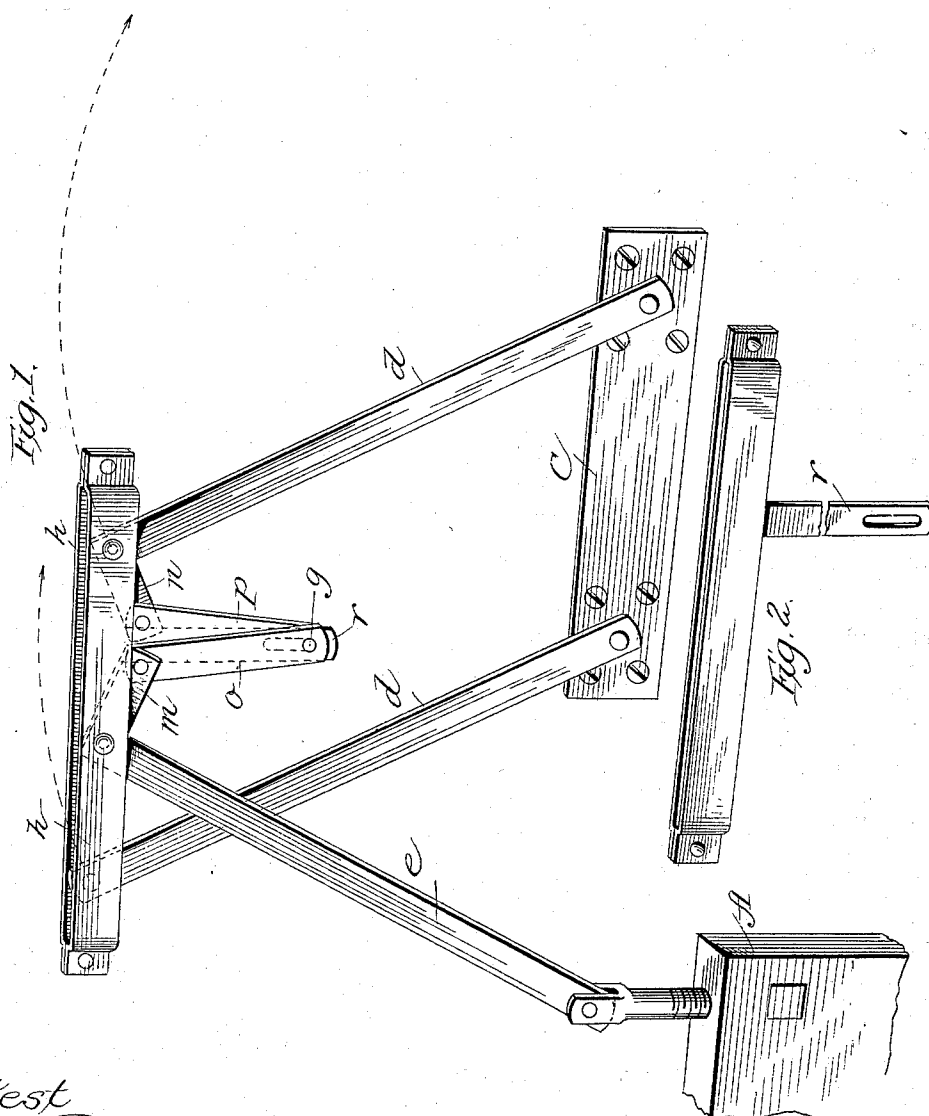


(No Model.)

W. J. LANE.
SUPPORT FOR MOVING BODIES.

No. 477,557.

Patented June 21, 1892.



Attest
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F. L. Middleton

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UNITED STATES PATENT OFFICE.

WILLIAM J. LANE, OF POUGHKEEPSIE, NEW YORK.

SUPPORT FOR MOVING BODIES.

SPECIFICATION forming part of Letters Patent No. 477,557, dated June 21, 1892.

Application filed November 23, 1891. Serial No. 412,817. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. LANE, a citizen of the United States of America, residing at Poughkeepsie, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Supports for Moving Bodies, of which the following is a specification.

My invention herein described is designed to support a moving body, such as a sliding door, in which an easy rectilinear movement is required. The said invention consists in the special construction of the connection between the parts, all as hereinafter set forth.

It is illustrated in the accompanying drawings, in which—

Figure 1 shows the device in perspective with a part of the moving object which it supports in proper connection. Fig. 2 shows a detail of construction, the part being detached.

In the drawings, A represents a part of the door. It is connected to an arm *e* by means of a stud fixed in the door and pivoted to the lower end of said arm. This arm is suspended from a flexible and substantially parallel frame, which is mounted by pivots on a base, as C. This frame has a pair of bars *d d* of equal length, and connected at their upper ends by a pivoted connection which permits the frame to be swayed to right or left from the form of a right-angled to an oblique-angled parallelogram, the sides of which are straight lines drawn through the pivotal points of each bar. The most convenient form of the upper connection is that of a double strap *h*, made up of bars connected at their ends with a space between, as shown. To this connection is pivoted the upper end of the arm *e* in line with the pivots of the bars *d*, the arm having the same length between its upper and lower pivots as the bars. The arm *e* has at its upper end an offset *m* at right angles, and on one of the bars *d* is a similar offset *n*. These extend toward each

other, and they are connected by two links *o* and *p*, which are pivoted to the ends of the offsets and extend downward, the lower ends being connected by a pivot *g*. The extended end of this pivot enters a slot in a vertical arm *r*, fixed to the connection at right angles therewith. This pin-and-slot arrangement holds the pivot of the connecting-links in vertical line and prevents lateral movement, which would derange the parts. The offsets being reversed, inclination of the frame in one direction throws the arm in the same direction, this being in the plane of movement of the supported body, with reversed inclination at the same angle as that of the frame. This maintains the lower pivotal point on the same straight line and by means of the connection to the door or other support carries it on the same level by simply swinging motion of the suspending parts. The flexible frame, with the same or greater number of arms, may be extended or duplicated, as the extent of the thing supported may require.

I do not broadly herein claim the flexible frame arranged to support in a horizontal plane a moving body, as that is the subject-matter of an application filed by me in the United States Patent Office on the 21st day of November, 1891, Serial No. 412,626.

I claim as my invention—

A frame capable of yielding in the direction of the movement of the body which it supports, one of the bars of which has an offset, in combination with an arm pivoted on the frame and also provided with a similar offset, links connecting the said offsets, and a device for holding the links against lateral movement, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. LANE.

Witnesses:

F. W. DAVIS,
E. M. MEEKS.