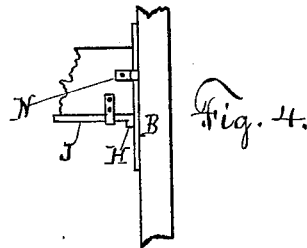
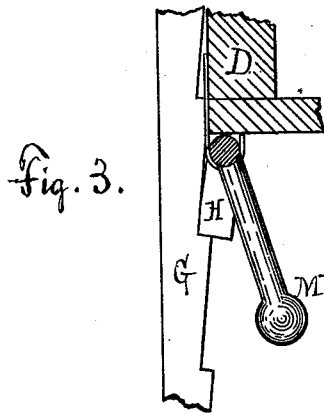
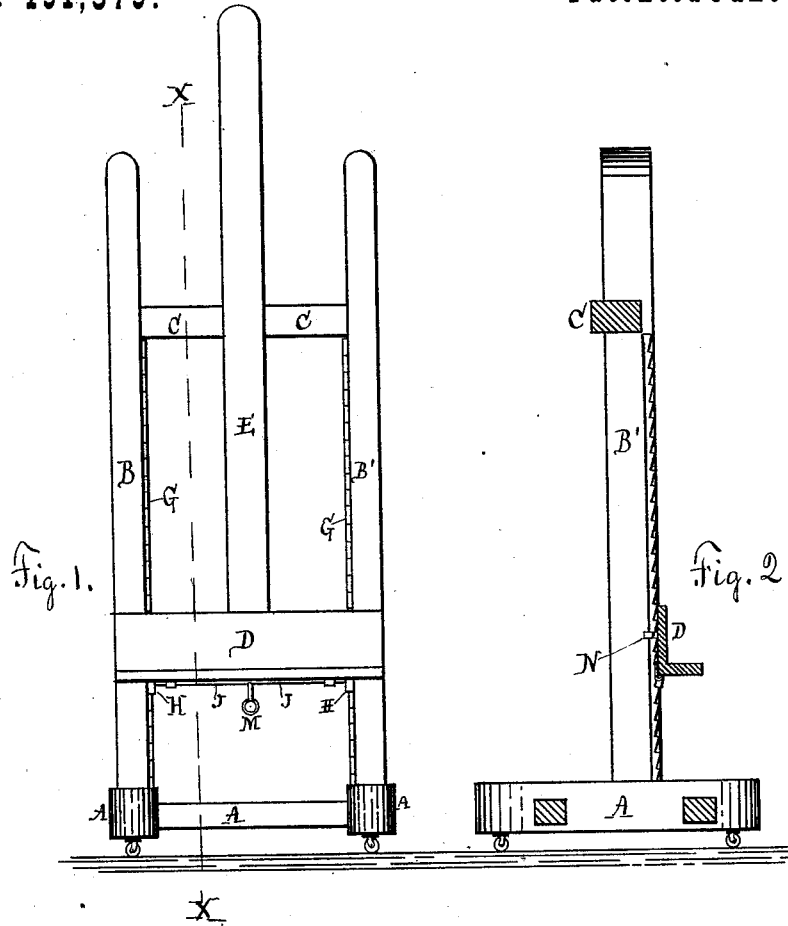


F. S. FROST.

EASEL.

No. 191,579.

Patented June 5, 1877.



Witnesses.
J. E. Knox
Jed. G. Owen

Inventor.
Francis S. Frost.
per Chas. F. Sleeper
his atty.

UNITED STATES PATENT OFFICE

FRANCIS S. FROST, OF ARLINGTON, MASSACHUSETTS.

IMPROVEMENT IN EASELS.

Specification forming part of Letters Patent No. **191,579**, dated June 5, 1877; application filed January 23, 1877.

To all whom it may concern:

Be it known that I, FRANCIS S. FROST, of Arlington, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Easels, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 shows a front elevation of my easel. Fig. 2 is a section through the line *x x*, and the other figures show details.

The object of my invention is to improve on the easels now used by the addition of a novel device, by which the canvas can be easily and quickly raised and lowered, and which device will keep the canvas steady at any height to which it may be raised or lowered.

My invention is intended particularly for easels made with a frame having parallel sides, and is equally adapted for use in upright or sloping easels; but, for convenience of illustration, I have shown it as attached to an upright easel, in which A represents the base, B B' the posts, and C the cross-bar. D is the shelf on which the bottom of the canvas rests, and E is a rest for the back of the canvas, attached to the shelf, and made to slide in a dovetail in the cross-bar C.

As at present constructed, most easels are adjusted by means of a set-screw in the center of the shelf, with guide-pins on either side; but this construction makes the shelf liable to wobble, and it is not held in its place by an unyielding support.

My invention obviates this difficulty. The shelf is held in such a way that it cannot wobble, and, in whatever position it may be placed, it will support all the weight which could be placed upon it without a chance for a slip,

and at the same time it can be moved up or down with great facility.

To accomplish this result I place upon the posts B B' ratchets G G, made to engage with pawls H H on the end of a rod, J. This rod J is journaled onto the shelf K, and has in front a weighted handle, M, to throw the pawls into the ratchets. A clutch, N, holds the shelf to the posts.

To raise the shelf it is only necessary to lift it, and the pawls will enter the ratchets, and hold it wherever it may be left. To lower the shelf, a pressure on the handle M disengages the pawls, and it will drop by its own weight the required distance, when, by releasing the handle, the pawls will again engage, thus giving absolute stability to the shelf, it being firmly supported on each side.

Instead of the weighted handle, a spring might be employed to hold the pawls to the ratchets; but I prefer the weight, as it is more simple.

My invention can also be applied to easels which are not framed, but which have a single post, by placing the ratchets on the outer side of the posts.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The ratchets G G, affixed to the posts B B', in combination with the rod J, weighted handle M, and clutches N, affixed to the shelf D, the rod J having pawls H H at its ends to engage with the ratchets G G, as described.

F. S. FROST.

Witnesses:

CHAS. F. SLEEPER,
WM. ZITTEL.