(No Model.)

E. R. MORRIS.

EASEL.

No. 384,171. Patented June 5, 1888.

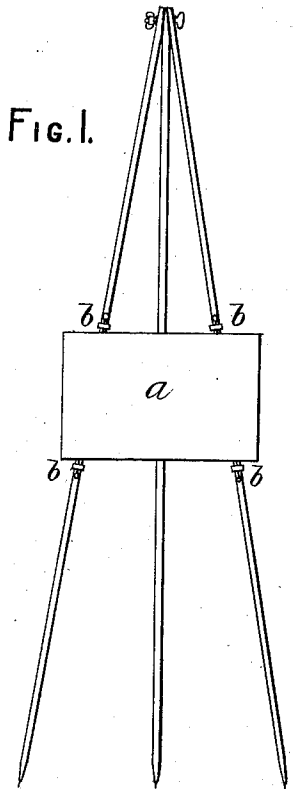

Fig. 1.

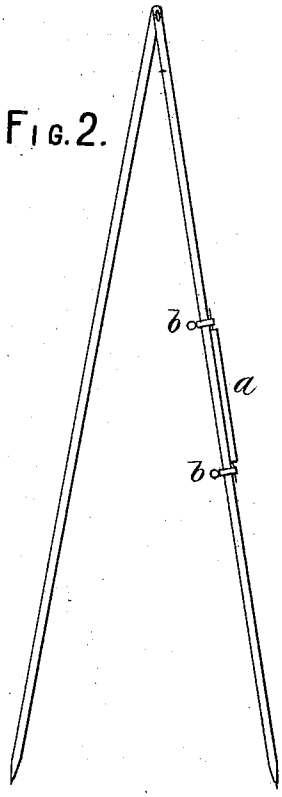

Fig. 2.

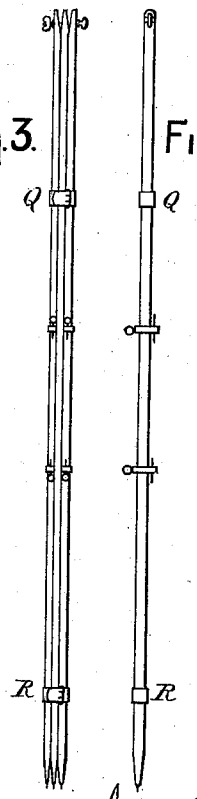

Fig. 3.

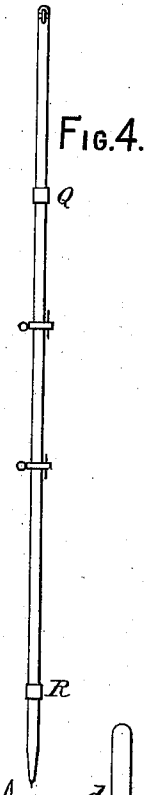

Fig. 4.

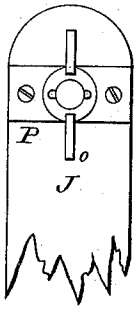

Fig. 5.

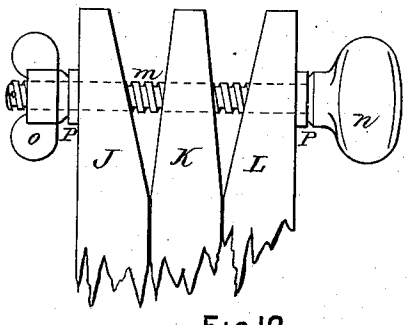

Fig. 6.

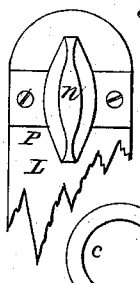

Fig 7

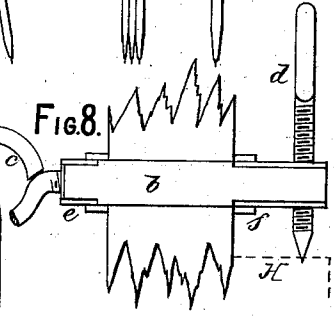

Fig. 8.

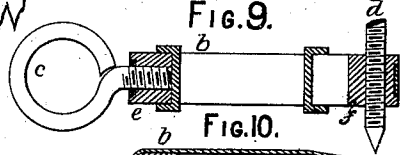

Fig. 9.

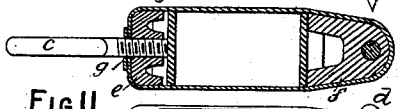

Fig. 10.

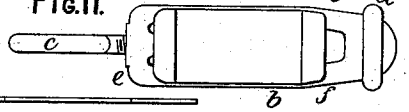

Fig. 11.

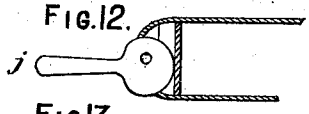

Fig. 12.

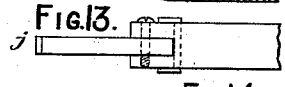

Fig. 13.

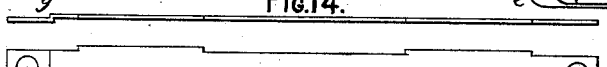

Fig. 14.

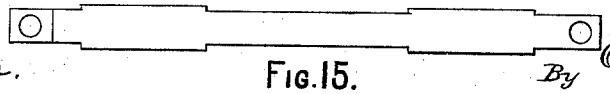

Fig. 15.

Witnesses:
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Samuel Kuber.

Inventor:
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By
W. C. Dunn.
Attorney.

UNITED STATES PATENT OFFICE.

EDWARD RUSSELL MORRIS, OF SAN FRANCISCO, CALIFORNIA.

EASEL.

SPECIFICATION forming part of Letters Patent No. 384,171, dated June 5, 1888.

Application filed April 28, 1885. Renewed December 14, 1887. Serial No. 257,908. (No model.)

To all whom it may concern:

Be it known that I, EDWARD RUSSELL MORRIS, a subject of the Queen of Great Britain, residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Easel, of which the following is a specification.

My invention relates to the improved construction of portable easels for the use of artists, art students, and others, and especially adapted for sketching and outdoor work.

My invention consists, chiefly, in means for utilizing the stretched canvas-frame, panel, board, or mill-board to be drawn upon or painted, as a component part of the easel itself, forming a rigid tie and connecting the two front legs thereof, and in means for imparting rigidity to the easel by a head-joint of improved construction peculiarly adapted for the purpose.

The avantages of an easel constructed in accordance with my invention are simplicity, cheapness, and portability, combined with remarkable lightness and rigidity, a six-foot easel complete, as shown in the accompanying drawings, weighing only two pounds one and one-half ounce, (of which the brass slides weigh five and one-half ounces, and the body of the easel one and three-fourths pound,) and being so rigid as to permit of its being lifted from the ground by the extremity of either of the legs without appreciably affecting the relative positions of either of them. The canvas-frame, panel, or board is quickly and firmly attached to the easel, and my invention dispenses with the fixing of screws into the back of the said frame, panel, or board, and also with any attachment which may obscure any portion whatever of the face of the canvas or project in front of the plane of the canvas-frame, either in the form of fasteners to hold it down, or tray, ledge, or other usual means for supporting it. The easel presents a minimum surface for the lodgment of dust in dispensing with a tray or ledge, the use of which I find objectionable in a studio, on account of the facilities thereby offered for the collection of dust.

I will now describe my invention, reference being had to the accompanying drawings.

Figures 1, 2, 3, and 4 are front and side elevations of the easel, open and closed, on a scale of one inch to the foot, showing the general arrangement and position of the parts, which are drawn full size, Figs. 5 to 15.

The means for fixing the canvas-frame, panel, or board *a*, Figs. 1 and 2, to the easel consist of four metal clamps or slides, *b*, and are shown in detail in Figs. 8, 9, 10, and 11, through which pass the front legs, and to which they are secured in any desired position by means of screws *c*. Through the slides at right angles work the clamping-screws *d*, terminating in sharp conical points, which, screwed down upon the opposite edges of the canvas-frame, fix it securely to the front legs, which it ties together, thereby stiffening them and contributing to the rigidity of the easel. To manufacture these slides cheaply in a light form, I stamp two recessed blocks or bosses of brass, *e* and *f*, around which I bend a strip of sheet-brass, cut in a press to the configuration shown in Figs. 14 and 15, so that the said strip locks into the recesses about *e* and *f*, and being set up in the press at *g*, that end of the strip overlaps the other, and the whole is readily secured to the blocks with small rivets, pins, or solder.

The dotted lines at H, Fig. 8, indicate the position of a canvas-frame.

Other equivalents may be substituted in place of the screws. Figs. 12 and 13 show a cam, *j*, substituted for the screw *c*.

I find a greater degree of friction desirable than is compatible with the free working of a head-joint, which, moreover, has always a tendency to wear loose, and that the stability of an easel is considerably increased by tightening up the head-joint when the legs are in position. I therefore construct the head-joint with means for readily tightening it with the finger and thumb.

Fig. 6 is a front elevation, and Figs. 5 and 7 side elevations, of the head-joint.

The upper ends of the three legs J K L, constructed of pine, walnut, or other wood, are beveled, as shown at Fig. 6, the bevel-faces extending below the screw *m*, which works loosely through holes in the legs, and is provided with a suitable head, *n*, and nut *o*, which bear upon metal plates *p*, screwed on the outer sides

of the legs J L. The tightening up of the head-joint tends to open out the front legs until their ends are about three feet apart, when the faces of the bevels come close together. This tendency is resisted by the canvas-frame, panel, or board that ties the said legs, and a rigidity that is very advantageous is imparted to the easel. I secure the legs together when folded, Figs. 3 and 4, by two leather straps, Q R, fixed on the back leg of the easel.

Not only canvas-frames and boards, but other substances, as mill-boards and French panels, are firmly held by the pointed screws *d*.

To use the easel, I open out the legs to a convenient position, fix the lower slides at a suitable height, place thereon the canvas-frame, panel, or board, upon which I lower the upper slides and fix them in that position. I then tighten up the screws *d*, and lastly the head-joint.

To protect the painted canvas from a sudden shower, or in the studio from dust, I loosen the head-joint and throw the back leg over in front of the easel, thereby inverting the face of the canvas.

A freshly-painted canvas may be safely carried on the easel over the shoulder by fixing it between the clamps of the easel when closed, as shown at Figs. 3 and 4.

I do not limit the use of clamps as means of fastening the canvas frame, panel, or board to the easel to the construction of easel herein shown and described, as they may be used with easels of any other form or construction, to which they can be applied advantageously, and I claim them when used with such easels. Furthermore, I do not confine myself to the use of sliding clamps, as other means of connecting the clamps with the legs of the easel may be adopted without departing from the principle of my invention.

I claim as my invention—

1. In an easel, the combination, with the legs, which are connected together pivotally and at the head-joint only, of clamps placed on said legs and which support the canvas-frame, panel, or board and connect the same with the legs, substantially as specified.

2. The combination, with the legs of an easel, which are connected together pivotally and at the head-joint only, of adjustable clamps placed on said legs and which support the canvas-frame, panel, or board and connect the same with the legs, substantially as specified.

3. The combination, in an easel, of supporting-legs connected together at the head-joint only, and clamps applied to the front legs of the easel, against which the canvas-frame, panel, or board is placed and fastened to the said legs by means of the said clamps, substantially as specified.

4. In combination with the legs of an easel, an adjustable pivot passed directly through the legs transversely and forming a head-joint which can be tightened or loosened at will, substantially as specified.

5. The combination, in an easel, of legs having the upper ends beveled, the bevel-faces extending below the pivot, as described, and the adjustable screw-pivot forming a head-joint which can be readily tightened, substantially as specified.

6. In an easel, the slides carrying the clamping-screws and provided with suitable devices for being made fast to the legs, substantially as specified.

7. In combination with the legs and canvas-frame, panel, or board, the adjustable slides provided with clamping-screws *d*, substantially as specified.

8. In an easel, the combination of the legs J K L, the adjustable head-joint, the adjustable clamping-slides, and the canvas-frame, panel, or board, substantially as specified.

March 20, 1885.

EDWARD RUSSELL MORRIS.

Witnesses:
J. MARQUIS,
W. B. MCCLELLAN.