(No Model.)

A. K. CROSS.

EASEL.

No. 364,991. Patented June 14, 1887.

Fig. 1

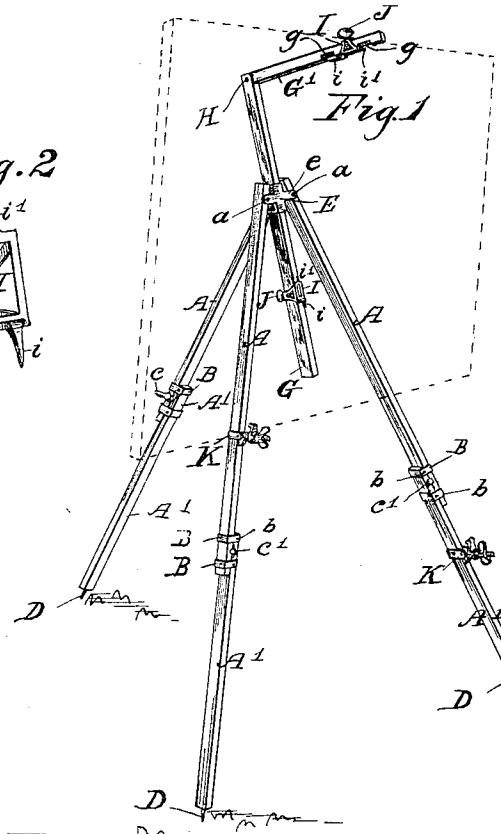


Fig. 2

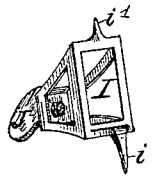


Fig. 3

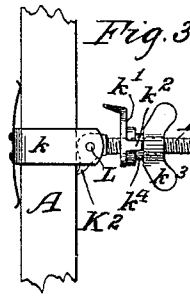


Fig. 4

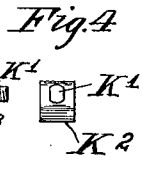


Fig. 5

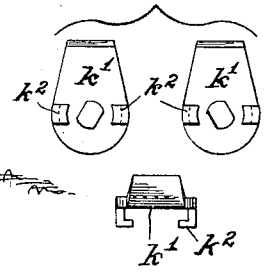


Fig. 6

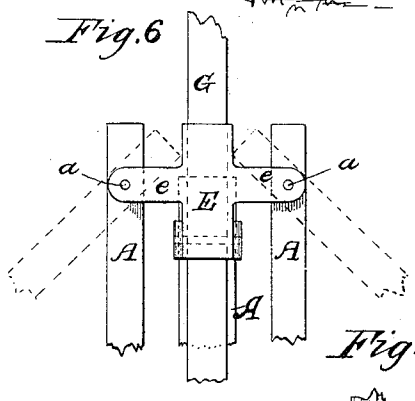


Fig. 7

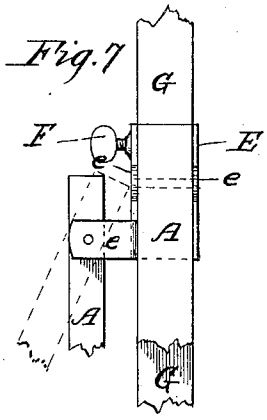
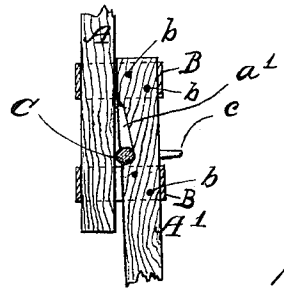


Fig. 8



Witnesses.

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UNITED STATES PATENT OFFICE.

ANSON K. CROSS, OF BOSTON, MASSACHUSETTS.

EASEL.

SPECIFICATION forming part of Letters Patent No. 364,991, dated June 14, 1887.

Application filed October 4, 1886. Serial No. 215,237. (No model.)

To all whom it may concern:

Be it known that I, ANSON K. CROSS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Easels, of which the following is a specification.

This invention has for its object simplicity and rigidity of construction, by means of which all requirements of an easel are attained—*i. e.*, it will hold securely a canvas or drawing-board vertical or at any desired angle toward or away from the artist, or at any desired height from the ground, and it can be readily closed not to exceed in length an ordinary walking-stick, thus making it handy for transportation.

The invention consists in the combination of three adjustable legs, a suitable metal connection near their top, to which they are hinged, said metal connection accommodating a vertical sliding bar, which may be secured at any desired height, and suitable canvas-fastening devices both for the vertical sliding bar and the adjustable legs, all of which will be more clearly explained in the following specification, and be fully illustrated in the accompanying drawings, forming part thereof, of which—

Figure 1 is a perspective view of my improved easel, showing in dotted lines a drawing-board as when supported at an angle thereon. Fig. 2 is an enlarged perspective view in detail of one of the canvas-fastening devices adapted for use upon the vertical sliding bar. Fig. 3 shows a section of the legs of the easel in side elevation, carrying one of the improved adjustable canvas-supports. Fig. 4 is an end view of that portion of the same which carries the flattened screw-stud. Fig. 5 shows the clamping device, which slides upon said screw stud, illustrated in three views—two elevations and a plan. Fig. 6 is a sectional front elevation showing the metal connection enlarged. Fig. 7 is a sectional elevation of same, also enlarged. Fig. 8 is an enlarged sectional view showing both parts of one of the adjustable legs and its means of adjustment.

Similar reference-letters indicate corresponding parts.

The adjustable legs—two in the front and one in the rear—are each composed of the parts A A′, and rendered adjustable one upon the other by the metal bands B, two of which are secured about two inches (more or less) apart upon the legs A′, near their upper end, by screws or rivets *b*. In the inner surface of either of the parts A′, between the bands B, a groove or slot, *a′*, is formed, similar to that illustrated in Fig. 8, which is adapted to receive an oval pin, C, having an arm, *c*, at one end, by which it may be turned, and a washer, *c′*, at the other, to prevent its slipping longitudinally. This pin C serves as a cam, and when it is turned, as in Figs. 1 and 8, it prevents any movement of the parts A A′ one upon the other, by springing said parts A A′ slightly apart, the distance, however, being very much exaggerated in Fig. 8. Metal pins D are provided in the lower end of each of the parts A′, to prevent them from slipping when the easel is in use.

The parts A are each pivoted by means of rivets *a* to and between ears *e*, two of which extend from either side and two from the back of the casting or metal connection E, and are adapted to be spread therein, as shown by dotted lines in Figs. 6 and 7. A thumb-screw, F, threaded to the back of said metal connection E and far enough above the rear leg A to avoid contact with the same, may be turned therein so as to bear upon a metal gib, or directly upon the vertical sliding bar G, and thus retain it at any desired point within the casting E. In order that the upper part of a drawing board or canvas may be supported upon the easel when placed at a forward inclination or perpendicular, instead of taking the inclination of the easel, this vertical sliding bar may be formed in two parts, G G′, and jointed at H. The part G′ is notched or provided with rectangular grooves *g* for the reception of the upper edge of the drawing-board, and a sliding sleeve or fastening device, I, having a long and short prong, respectively, *i i′*, and provided with a thumb-screw, J, for setting the same at any desired point upon the easel, may be slid onto either the bar G or the extension G′, as occasion requires. When upon the former, it is preferable to have long prong *i* point downward, so as to slightly puncture the top of a drawing board or canvas when it is bearing against the front legs at the same inclination. When upon the latter, it is preferable to have the short prong *i′* bear against

the back of a drawing board or canvas, while the top of the latter enters one of the grooves *g*. The bottom of said drawing-board rests upon supports K, consisting of a metal yoke, *k*, which may be placed upon either of the parts A A′ of the forward legs, and supports a screw-stud, K′, provided with an eye at one end, a rivet, L, passing through said eye and the said yoke, a clamp, *k′*, adapted to move loosely upon said screw-stud, and a thumb-nut, k^3, threaded thereto. The said screw is flattened on opposite sides, as seen in Fig. 4, and the hole in the clamp-piece *k′* is accordingly formed oblong or flat on two opposite sides, said flat portions being so located as to permit of the clamp-piece remaining vertical (when in use) or nearly so, while the flattened sides of the screw may be at all times parallel with the sides of the leg upon which the yoke *k* is placed. On the front of this clamp-piece *k′* are projections k^2, which fit loosely into an annular groove, k^4, formed upon the nut k^3, thus permitting said nut to carry it either way upon said screw. The top of said clamp-piece is bent at nearly a right angle, and may be serrated or otherwise roughened upon its edge, so as to easily hold a drawing board or canvas when forced thereon by said nut without danger of marring the same.

The eye of the screw-stud K′ is provided at its under side with a stop, K^2, projecting at nearly a right angle therefrom, and this may be a little sharp, so as to readily stay wherever it bears against its leg A A′ by the weight of the canvas or drawing board. The drawings show one of these canvas supports upon the upper section and the other upon the lower section of either of the front legs of the easel. This is done simply to show their adaptability to either section of the legs. When in use, it is preferable to have both to support the canvas equal distances from the floor or ground, except when on an uneven surface. By placing a spring upon the back of the yoke *k*, as shown in Fig. 3, the support K is easily retained at any point upon the leg A when not in use as a support for the canvas.

Having described the invention, what I claim, and desire to secure by Letters Patent, is—

1. In an easel, the combination, with three adjustable legs and a device for retaining them as desired, of a suitable casting, to which the upper parts of said legs are hinged or pivoted, adapted to receive a vertical sliding bar, the said sliding bar and an adjustable canvas-fastening device applicable to said sliding bar and the front legs of said easel, all constructed and operating substantially as and in the manner set forth.

2. The combination, with the adjustable legs, of an oval pin passed between the adjacent surfaces of said legs and resting within a groove formed in that segment to which the retaining-bands are riveted, having at one end a collar or washer, as shown, and at the other a right-angled arm, whereby said pin may be turned and spread the two segments of said leg within said retaining-bands, substantially as and for the purpose set forth.

3. The combination, with an adjustable easel, of an adjustable support for the drawing board or canvas, having a clamp adapted to retain various thicknesses of board or canvas against said easel by means of a screw, and means whereby the said support shall be retained at the desired elevation upon said easel by a spring and the weight of said canvas, substantially as described.

4. The combination, with a vertical sliding bar, of a jointed extension having rectangular slots or grooves for receiving the upper edge of a drawing board or canvas, and an adjustable sleeve having prongs at either end, and a set-screw for retaining the same upon said bar, substantially as and for the purpose set forth.

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

ANSON K. CROSS.

Witnesses:
CHAS. HALL ADAMS,
M. C. COLLINS.