

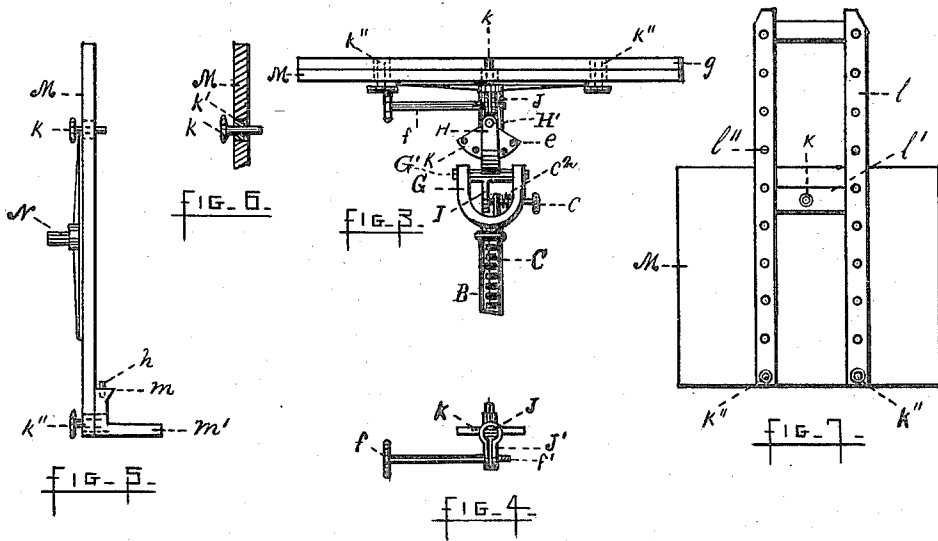
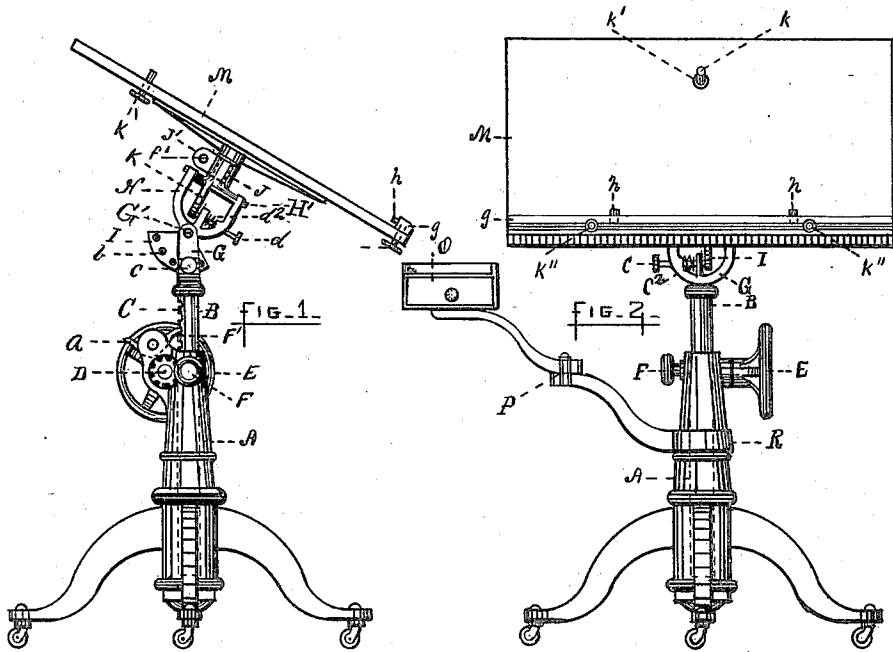
(No Model.)

R. E. KIDDER & R. W. LONG.

DRAWING TABLE.

No. 363,339.

Patented May 17, 1887.



Witnesses.

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# UNITED STATES PATENT OFFICE.

RICHARD E. KIDDER AND R. WEBSTER LONG, OF WORCESTER, MASSACHUSETTS; SAID LONG ASSIGNOR TO SAID KIDDER.

## DRAWING-TABLE.

SPECIFICATION forming part of Letters Patent No. 363,339, dated May 17, 1887.

Application filed October 27, 1883. Serial No. 110,229. (No model.)

*To all whom it may concern:*

Be it known that we, RICHARD E. KIDDER and R. WEBSTER LONG, citizens of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Drawing-Tables, which is fully set forth in the following specification and illustrated by the accompanying drawings, in which—

10 Figure 1 shows a side elevation of a drawing-table; Fig. 2, a front view of the same; Fig. 3, a detached view of the top and jointed sustaining-post; Fig. 4, the clamping-socket and binding-screw. Fig. 5 is a side view of the table-top; Fig. 6, a sectional view of a portion of the top, and Fig. 7 shows the top on a reduced scale and having attached an extension-frame, forming an easel.

15 Similar letters refer to similar parts in the several views.

Our invention relates to an adjustable table in which the top may be maintained in positions of varying height and at varying angles of inclination to the sustaining-post, and also be capable of rotation about a central axis at right angles to the plane of the top without changing the angle or direction of its inclination; and it consists in means for producing these several results, as hereinafter set forth, and also in providing means for attaching the drawing-board to the top.

20 A is a hollow pedestal, suitably supported by three or more divergent legs, and in whose chamber (shown by the broken lines in Figs. 1 and 2) the geared post B has a vertically-sliding motion actuated by the pinion D and hand-wheel E, journaled in bearings attached to the side of the pedestal A. The post B is held at the desired vertical height by means of the pawl F', pivoted to a projecting lug on the pedestal, and at such an angle as to permit the post to be freely raised, but to prevent its descent by engaging with the teeth of the rack C. When it is desired to raise the post B, the pawl F' will be lifted by the upward movement of the teeth, and when the post is to be lowered the pawl F' may be raised so as to clear the teeth by means of the projecting piece *a*. While the table is held 45 by the pawl F', its weight will be resisted by

the pivot on which the pawl turns, and the pressure of the pawl against the post B will hold it firmly against the opposite side of the interior chamber in the pedestal A. A screw and hand-wheel, F, may also be used to bind 55 the post B, if desired.

The post B is forked at G, carrying the axis G', upon which is mounted the fork H, carrying the axis H', which supports the clamping-socket J, having the ears J' and binding-screw 60 *f'*, operated by the spindle and hand-wheel *f*, in the well-known mode of construction commonly employed in similar devices.

The table-top M is screwed to a cross bar or plate, which has upon its under side a projecting spindle, N, which rests in the socket J and permits the top M to be rotated, except when 65 clamped by the binding-screw *f'*.

Attached to and swinging beneath the axes G' and H' are the sectors I and K, each with 70 a concentric row of holes, *b* and *c*, into which the sliding pins *c* and *d* enter, holding their respective sectors firmly and rigidly in that position which affords the desired inclination to the table-top M. We usually provide the 75 sliding pins *c* and *d* with springs *c'* and *d'*, so attached to the pins and reacting against the supporting frame-work that they will cause the pins to enter any hole in the sectors brought opposite them. The pins *c* are supported in one of the prongs of the fork G and a central arm or spur, *e*, placed midway in the fork G. Similarly, the sliding pin *d* is supported by the arm *d'* and one of the prongs of the fork H. We thus secure a bearing for 85 the pins at their ends and a sufficient space between the bearings to receive the actuating-springs *c'* and *d'*.

The axes G' and H' are placed at an angle to each other, preferably at right angles, thereby allowing the top M to be inclined in two vertical planes of rotation, which is frequently of great advantage when the table is used for the purpose of taking "blue prints," as it allows the top to be inclined so as to receive 95 the strongest light direct upon its surface. It is often desirable to rotate the top M, so as to bring different sides of the drawing next the draftsman. In order to accomplish this and not change the angle or direction of the 100

inclination of the top, we place the axis N of the rotation above the adjustable joint producing the inclination, thereby maintaining the axis of rotation at right angles to the top M.

5 For some purposes for which the table may be used, the axis H', with its connected sector and supporting frame-work H, may be omitted and the top M attached directly to the axis G'.

At one edge of the top M we attach a projecting shelf, or, in lieu thereof, a narrow strip or ledge, *g*, at whose inner edge we attach the rubber blocks *h h*. Near the opposite edge of the top M is a pin, *k*, sliding through a hole in the top. The drawing-board may be held upon the top M by placing the lower end of the board against the rubber blocks *h h*, slightly compressing them, and pushing the pin *k* into a hole suitably placed in the drawing-board, the elasticity of the blocks *h h* pressing the drawing-board firmly against the pin *k*.

The ledge *g* or shelf *m* are fastened to the top M by the sliding pins *k' k'*, passing through the top M and entering holes in the shelf *m* or ledge *g*. This mode of fastening allows either shelf or ledge to be used, as desired; or, in case the top M is to be used as a table, the pins *k' k' k'* may be pushed down flush with the upper surface of the table. The drawing-board may also be attached to the top M by means of the pins *k' k' k'* entering holes in the board.

When it is desired to use the table as an artist's easel, the frame formed of the sides *l l*, either parallel or slightly inclined toward each other, and having a cross-piece, *l'*, is attached to the upper side of the top M by means of the pins *k' k' k'* entering corresponding holes in the frame in the manner already mentioned.

The sides *l l* are provided with a series of holes, *l'*, as is common in easels. The pins *k' k'* are inserted in holes in the top M, having a short piece of rubber tubing, leather, or other elastic material, as shown at *k* in Fig 6, surrounding the pin, the elasticity of the packing *k* affording sufficient friction to firmly hold the pins in place. Instead of the rubber blocks *h h*, spiral or other springs may be used for the purpose of pressing the drawing-board against the pin *k*.

50 We are aware that drawing-tables have been made with a sector attached to the table-top, with latching devices applied to said sector by which the inclination of the top is determined; also, that tables have been made with

a top capable of a rotary motion; and we are also aware that the tops of drawing-tables have heretofore been provided with a series of holes to receive pins. We claim none of these features, broadly; but

What we do claim as our invention, and desire to secure by Letters Patent, is--

1. The combination, in a drawing-table, of a supporting-pedestal, a sliding post in said pedestal, with means for securing the post at the desired vertical height, a fork formed at the upper end of the post, a spindle journaled in the prongs of the fork and having a sector with a series of concentric holes attached to said spindle, a central spur or arm placed midway between the prongs of the fork, a sliding pin held in the central arm or spur on one of the prongs of the fork, and a table-top attached to the rotating spindle, substantially as described.

2. The combination, in a drawing-table, of a supporting-pedestal, a sliding post sliding in said pedestal, with means for maintaining the post at the desired vertical height, a fork at the upper end of the post, a spindle journaled in said fork and having a sector with a series of concentric holes attached to said sector, a clamping-socket attached to said spindle, and a table-top with a spindle entering the clamping-socket, substantially as described.

3. In a drawing-table, the combination, with a top adapted to sustain a drawing board or easel, as described, of one or more pins sliding in said top, whereby they are made to project above the upper surface of the table, and an elastic bushing surrounding said pins, substantially as described.

4. In a drawing-table, the combination, with the table-top having a ledge at one edge, of a pin passing through the table-top and projecting above the upper surface, and elastic springs or cushions attached to the side of said ledge opposite said pin, as described, and for the purpose set forth.

5. In a drawing-table, the combination, with a table-top having a series of holes to receive dowel-pins, of an easel-frame having corresponding holes and sliding dowel-pins, substantially as described.

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