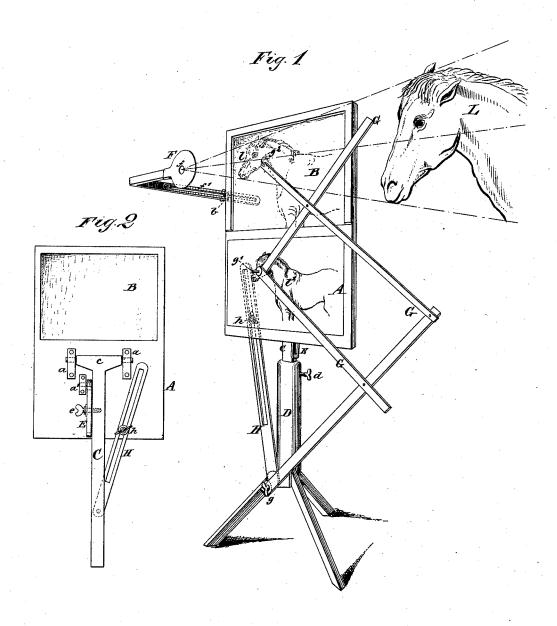
## G. ROSQUIST. Perspective-Drawing Apparatus.

No. 216,460.

Patented June 10, 1879.

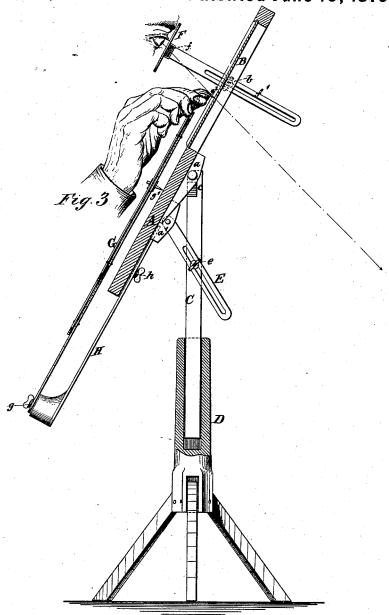


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## UNITED STATES PATENT OFFICE.

GEORGE ROSQUIST, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN PERSPECTIVE-DRAWING APPARATUS.

Specification forming part of Letters Patent No. 216,460, dated June 10, 1879; application filed November 14, 1878.

To all whom it may concern:

Be it known that I, George Rosquist, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Perspective-Drawing Apparatus, of which the

following is a specification.

The purpose of my invention is to provide a simple and convenient drawing apparatus, whereby any object, whether curviform or rectilinear, may be rapidly portrayed in true perspective of any desired proportional size

without the necessity of measuring.

The invention consists in a drawing apparatus formed of the combination, with a perforated adjustable sight-piece, a transparent tracing-surface, and a drawing-surface, of a pantograph arranged to present its tracingpoint upon the tracing-surface, for use as the aim-piece between the sighter and the object, to trace the latter, while the drawing-point reproduces the fac-simile visible on the drawing-surface; in the combination of a drawingboard and transparent tracing-board, adjustable as to inclination, with a sight-piece, and with a pantograph adjustably connected to the board; and in a transparent tracing board having an adjustable sight-piece for use in combination with a sketching-point, as will be hereinafter described.

In the accompanying drawings, Figure 1, Sheet 1, represents a perspective view of my drawing apparatus or perspectograph in position for sketching. Fig. 2, Sheet 1, is a rear view of the adjustable drawing and training boards detached from the tripod. Fig. 3, Sheet 2, is a side elevation of the said draw-

ing apparatus, partly in section.

Similar letters of reference indicate corre-

A is the drawing-board, and B the tracingboard. These are attached together, as seen in the drawings, so that their working surfaces lie in the same plane, and are hinged by lugs a to the pivoted yoke c of a standard, C, which latter may be fitted in a socket of a screwclamp attachable to a table, or in a socketed tripod, D, for adjusting the elevation of the board, which is secured in the adjusted position by the set-screw d.

held in a horizontal, vertical, or any inclined position by means of the slotted arm E (pivoted at one end to the lug a' on the back of the board A) and the set-screw e, inserted through the slot of the arm E in a threaded socket of the standard C, to retain the board in position by clamping the arm E against the standard C.

F is the sight-piece, having a small sighthole, f, through it, and attached to an angular slotted arm, f', by which and a set-screw, b, threaded in the edge or frame of one of the boards A B, the sight-piece may be adjusted and held in the desired position relative to

the board and the object.

G is the pantograph. This is pivoted at gto the board A, or to the lower end of a slotted arm, H, attached by a set-screw, h, to the said board A, to adjust the position of the pivoting-point g. The drawing-point or pencil-point  $g^1$  of the pantograph G is arranged as shown in the drawings, so that it will describe upon the board A the fac-simile of the figure described by the tracing-point  $g^2$ , which latter is arranged between the sight-piece and the object so that it may be moved by the hand, as shown in Figs. 1 and 3, in line with the line of vision for tracing the object upon the glass or transparent board B.

For a practiced hand the glass plate B may be dispensed with, as the drawing-point  $g^{l}$ , in contact with the drawing-surface A, keeps the tracing-point  $g^2$  in the same plane as the said surface A so long as no undue pressure is

brought to bear upon the point  $g^2$ .

The operation of the instrument is plainly shown in Fig. 1, the outline of the figure L being traced by the point  $g^2$  in the angle of vision upon the tracing-board B, as indicated by the dotted lines l, while the drawing-point  $g^{l}$  reproduces the figure L visible upon the drawing-board A, as shown at l', in the scale to which the pantograph has been adjusted. In the same manner the lights and shades of the object may be correctly located on the drawings.

It is evident that by transposing the positions of the boards A and B relative to the points  $g^1$   $g^2$ , and applying the tracing-point at The drawing-board may be adjusted and  $|\tilde{g}|$  and the pencil at  $\tilde{g}^2$ , the fac-simile may be reproduced on the drawing-board A larger than the tracing l.

The sketch being made, the board is adjusted in the horizontal position to facilitate the drawing of the lines in ink or colors.

For the pantograph any style may be used in which the drawing-point imitates correctly the figure described by the tracing-point.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent---

1. A drawing apparatus formed of the combination, with an adjustable sight-piece, F, perforated at f, a transparent tracing-surface, B, and a drawing-surface, A, of a pantograph, G, arranged to present its tracing-point  $g^2$  upon the tracing-surface B, for use as the aimpiece between the sighter and the object, to

trace the latter, while the drawing-point  $g^1$  reproduces the fac-simile visible upon the drawing-surface A, substantially as set forth.

2. The combination of the drawing-board A and transparent tracing-board B, adjustable as to inclination, with the sight-piece F and with the pantograph G, adjustably connected to the board A, substantially as set forth.

3. The transparent tracing board B, provided with the adjustable sight F, to facilitate the sketching of objects on the said board B by a pencil or other point,  $g^2$ , substantially as set forth.

GEORGE ROSQUIST.

Witnesses:

H. RYDQUIST,

C. SEDGWICK.