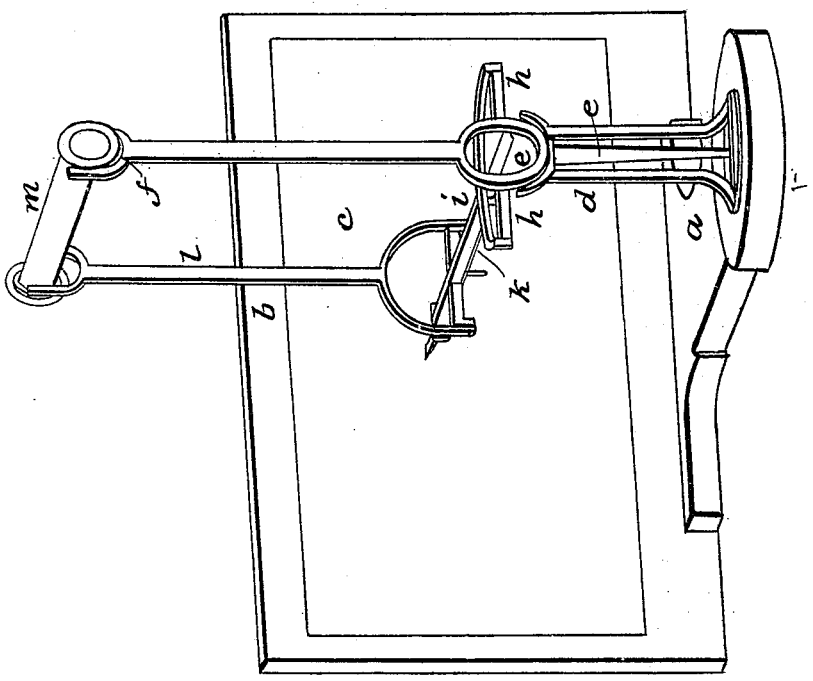
A. JUDD.

Pentagraph.

No. 7,564. Patented Aug. 13, 1850.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALLEN JUDD, OF CHICOPEE, MASSACHUSETTS.

PENTAGRAPH.

Specification of Letters Patent No. 7,564, dated August 13, 1850.

To all whom it may concern:

Be it known that I, ALLEN JUDD, of Chicopee, in the county of Hampden and State of Massachusetts, have invented a certain new and useful Instrument for Delineating Objects in Perspective and Otherwise, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawing, which forms a part thereof in which a perspective view is represented drawn by the instrument.

The nature of my invention consists in connecting a pencil with an eye-tube, or telescope, so that they shall move in all directions parallel with each other, by means of which any object, over the outline of which the telescope is directed, will be traced on a paper placed before the pencil.

The construction is as follows. At one end of a base piece (*a*) there is a drawing board (*b*,) fixed in an upright position, as clearly shown in the drawing, to which the paper (*c*) on which the required delineation is to be made is affixed; at the opposite end of the base (*a*,) there is a metal upright (*d*,) which sustains a vertical spindle (*e*,) parallel with the plane of the drawing board before named, and in such bearings as to readily revolve; just above the top of the upright (*d*,) the spindle is formed into a ring (*e'*,) from the top of which the spindle is continued to any proper height, and terminates in a semi-ring or fork (*f*,) in the same plane as the ring (*e'*,) below; on each side of the ring (*e'*,) are two studs (*h*, *h*,) projecting radially from the exterior circle of the ring at right angles to the spindle, the ends of which form journals for the forked end of a horizontal lever (*i*,) that extends forward nearly to the paper, and has its end turned down, with a hole through it to receive the pencil (*k*). This lever is placed just enough above the line of its fulcrum to have the pencil pass directly through the middle of the ring (*e*), Near the front end of the lever (*i*,) there is a short cross, that forms the axis of the lower end of a forked connecting rod (*l*,) that stands in a perpendicular position parallel with the spindle (*e*); the upper end of this connecting rod is also forked, and to this and the fork on the upper end of the spindle, the eye tube, or telescope (*m*,) is fastened exactly parallel with the pencil. The pencil when put in place, is pressed forward by a spring or the hand against the paper, so that when the telescope is directed toward any object beyond the drawing board, the pencil will assume a similar direction, resting against the board or paper thereon.

With an apparatus thus arranged, any object can be accurately delineated, and their perspective proportions exactly maintained at any distance from the operator; the machine is simple in its construction and easily adjusted.

Having thus fully described my invention, what I claim therein as new, and for which I desire to secure Letters Patent, is—

The instrument constructed and arranged as above set forth, consisting of a pencil, moving parallel with the eye tube, with which it is connected, as herein described, and marking on a vertical plane, or a plane, parallel with their axis of horizontal motion, such objects as the sight through the eye tube passes over.

ALLEN JUDD.

Witnesses:

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