

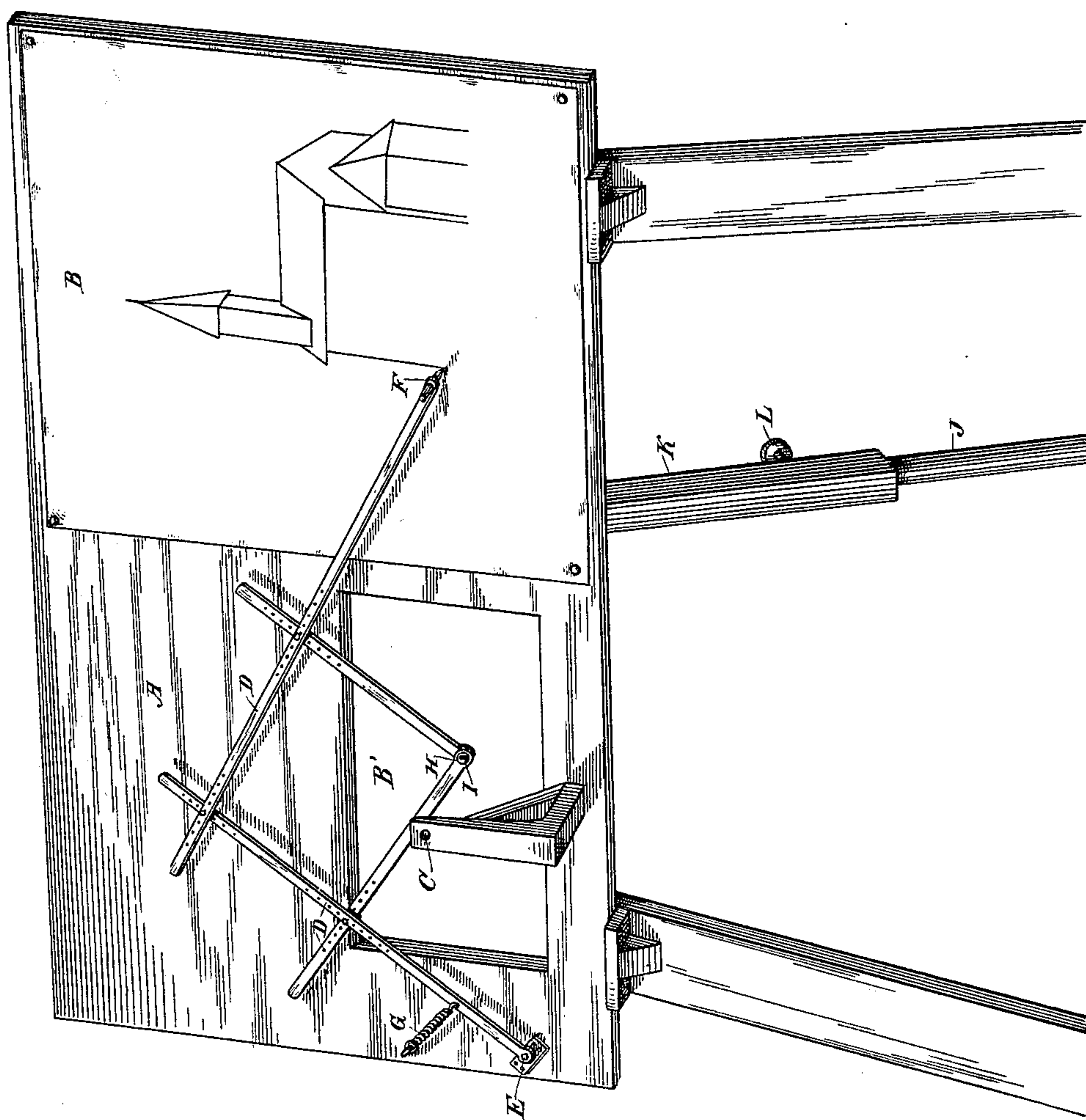
(No Model.)

J. PULSIFER.

ARTIST'S MECHANICAL SKETCHING APPARATUS.

No. 386,931.

Patented July 31, 1888.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

JOSEPH PULSIFER, OF WILLIAMS, CALIFORNIA.

## ARTIST'S MECHANICAL SKETCHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 386,931, dated July 31, 1888.

Application filed August 26, 1887. Serial No. 247,979. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH PULSIFER, of Williams, Colusa county, State of California, have invented an Improvement in Artists' Mechanical Sketching Devices; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to what I term an "artists' mechanical sketching device;" and it consists of a frame-work supported upon an adjustable tripod or stand, having one end prepared for the reception of a paper or sketching-surface which is attached thereto, and an opening made through the other end with an eye-piece, through which the subject to be sketched may be viewed, and, in connection therewith, of a pantograph or frame-work having one end pivoted to the frame and the other end adapted to carry a pencil or marking-point, which will be moved over the paper in making the sketch, while one of the angles has a sight-opening, which, being moved in line with the eye-piece, enables the outlines and shades of the objects looked at to be accurately conveyed to the canvas or paper.

Referring to the accompanying drawing for a more complete explanation of my invention, the figure is a view of my device.

A is a board or other suitable frame or table for the support of the drawing paper or surface B, which is suitably fixed upon the board at one end. The opposite end of the board may be cut away, or it may be formed, as shown in the drawing, with an opening, B', through which the observer will have a view of the landscape or other subject which is to be drawn.

To the lower portion of the board or frame, and just beneath the opening B', is securely attached an angular frame having an eye-hole, as shown at C, through which the observer will look. D is a jointed frame or pantograph having the end E securely pivoted to the side of the board or frame, so that the end F, which carries the pencil, may be moved about freely over the surface B, in the manner usual to this class of devices.

In order to counterbalance the extended end F, I employ a spring, G, of sufficient tension, one end of which is attached to the board or frame and the other to the hinged arm of the

pantograph. A weight might be substituted, if desired.

Through one of the angles of the frame D is made a sight-hole, H, which may have an ivory or other suitable point, I, fixed in it, as shown. This device is supported by means of a tripod, which is either attached directly to the rear portion of the frame or to a table upon which the frame may be supported. One or more legs of the tripod may be made adjustable by means of a single sliding leg, J, which enters a corresponding hole in the upper portion, K, of the leg, and may be secured therein by a set or holding screw, as shown at L, so that this leg may be lengthened or shortened to suit circumstances and get the apparatus in the proper position for the work to be done.

The operation of the apparatus will then be as follows: The tripod having been set up and adjusted and the frame supported upon it in the proper position, (which will preferably be at a slight angle from the perpendicular, like an artist's easel,) sight is taken through the openings C and H, and as the point I is moved over the outline or details to be copied the pencil F will be moved by the hand of the operator over the surface B, thus transferring an exact picture upon the paper. It will be manifest that this device may be used for landscapes, for figure or other drawing, and it may also be used for putting in details of shading and other matter, so as to make a perfect picture.

For convenience in transportation the tripod-legs K may be jointed, so as to be folded up, and the drawing board or table may also be made with hinges in the center, so that it may be folded up with the legs when not in use, and thus be easily transported.

By means of the pantograph the sketch may be accurately enlarged or diminished, and, if desired, a telescopic eye-piece may be employed to make the object clearer.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A mechanical sketching device consisting of the frame or table upon one end of which the paper or surface to receive the sketch is secured, while the other is provided with an eye-piece supported in front of an



opening therein, in combination with a jointed frame or pantograph, one end of which is pivoted to the frame or table and the other provided with a pencil or marking point, while the intermediate joint has a hole or sight, substantially as herein described.

2. The frame or table upon one end of which the paper or drawing surface is attached and upon the other end a pantograph or jointed frame, pivoted so that the free end carrying a pencil approaches the paper-surface, a hole and sight-piece made through the intermediate joint of the frame, in combination with a fixed or stationary sight-opening, through which and the sight in the jointed frame the object to be drawn is observed, and by which it is transferred to the paper by following the outline or details by the two sight-openings while the pencil is moved over the paper, substantially as herein described.

3. The frame or table supporting the drawing-surface at one end, having the other end perforated, with a fixed sight-piece in the front of the opening, in combination with a jointed frame or pantograph having a pencil or drawing-point attached to the end which moves over the paper, while the other end is pivoted to the opposite end of the frame or support, and has a spiral or other spring, G, connected with it, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

JOSEPH PULSIFER.

Witnesses:

GEO. H. STRONG,  
S. H. NOURSE.