

(No Model.)

C. J. LUNDSTROM.
DRAWING INSTRUMENT FOR SCROLLS.

No. 467,580.

Patented Jan. 26, 1892.

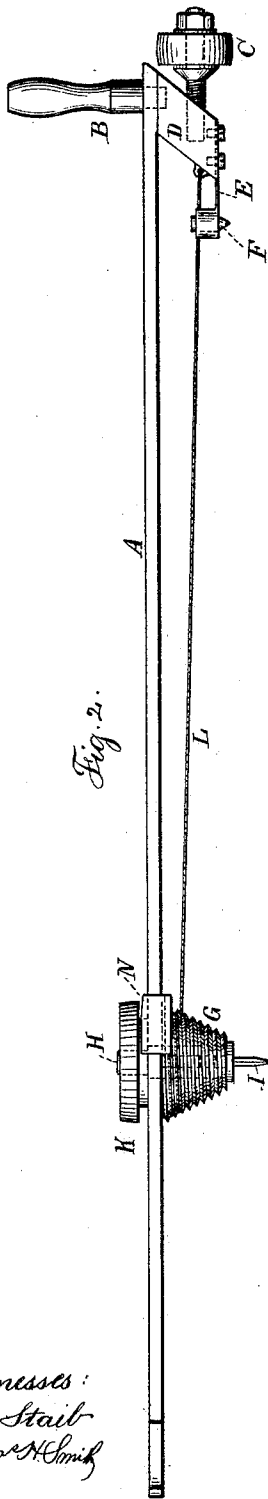


Fig. 2.

Fig. 1.

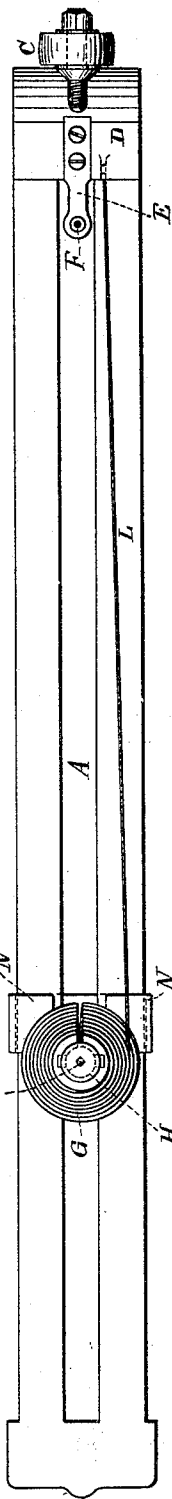


Fig. 5.

Fig. 4.

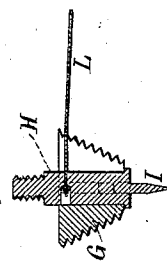


Fig. 3.



Witnesses:
J. Stait
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Inventor:
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UNITED STATES PATENT OFFICE.

CARL JOHAN LUNDSTROM, OF LITTLE FALLS, NEW YORK.

DRAWING-INSTRUMENT FOR SCROLLS.

SPECIFICATION forming part of Letters Patent No. 467,580, dated January 26, 1892.

Application filed November 28, 1890. Serial No. 372,856. (No model.)

To all whom it may concern:

Be it known that I, CARL JOHAN LUNDSTROM, a subject of the King of Sweden, residing in Little Falls, in the county of Herkimer and State of New York, have invented an Improvement in Drawing-Instruments for Scrolls, of which the following is a specification.

The object of this invention is to provide for describing a curved line at a gradual inclination toward the central point for forming a regular convolution or scroll, and the instrument is adapted to the projection of a uniform inclination or a gradual varying inclination of such convoluted line; and the invention consists in the combination of devices hereinafter set forth.

In the drawings, Figure 1 is an inverted plan view of the drawing-instrument. Fig. 2 is a side view of the same. Fig. 3 is a detached sectional view of the winding-barrel; and Figs. 4 and 5 are modifications of such winding-barrel.

The main beam of the instrument is preferably of metal and slotted longitudinally, as shown at A, and at one end thereof is a handle B, by which such beam can be grasped and rotated about the center from which the curvature is described, and there is preferably a roller C, resting upon the paper and lessening the friction as the instrument is rotated, and there is a downwardly-projecting flange D for supporting the axis of said roller C and also for receiving a spring E and socket through which passes the pencil or pen F.

The winding-barrel G is received upon the central axis H, the lower end of which is formed as a triangular or prismatic point I, which is adapted to be thrust into the paper or other material upon which the scroll or volute is to be described, and such prismatic point prevents the axis rotating during the drawing operation and holds the winding-barrel stationary, and the beam A is revolved around the upper part of axis H above the barrel G and beneath the frictional washer or nut K, and there is a cord L, attached at one end to the flange D and at the other end to the central axis H, and the winding-barrel G is slotted, so that the cord can pass through the slot in the barrel to the point of attachment upon the axis, and this barrel is notched

and there is a cross-key upon the central axis for connecting the axis and the barrel and for allowing such barrel to be removed for the insertion of a different size or shape of barrel. When this barrel is cylindrical, as seen in Figs. 4 and 5, the cord L will be wound an equal distance each rotation of the main beam around the stationary axis and barrel, and the spiral or volute line described by the pencil or pen G upon the paper will be a regular inclination, so that the convolutions will be the same distances apart, and by changing the barrel and by putting on a larger or a smaller barrel the distances apart of the convoluted lines will be varied, the distances apart corresponding to the periphery of the barrel. If the barrel is conoidal, as shown in Fig. 1, a spiral or volute line described by the pencil as the main beam is rotated will vary according to the position upon such barrel of the cord at the time the instrument is revolved around such barrel. If the cord is near the larger end of the barrel, the distance between one convoluted line and the next will be greater than it will be when the cord is near the smaller end of the barrel, and in this manner volutes can be described with any desired distances between one convolution and the next, and according to the direction of rotation so the distances between the convolutions will be varied, so that such convolutions will be closer together toward the center of the figure described and the reverse, and by providing different shapes and sizes of conical barrels and cylindrical barrels volutes and scrolls of any desired character may be described with accuracy.

I prefer to employ a slide-gage M upon the main beam A, with concave edges adjacent to the edge of the barrel G and the edge of the clamping-nut K, in order that a bearing may be had of these parts against such sliding gage during the movement of the parts, and the edge of this gage is a convenient means for measuring with accuracy the extent of movement of the parts in describing the volute or scroll, there being divisions upon the main beam A in inches, centimeters, or other standard measurements.

I claim as my invention—

1. The combination, with the main beam, of a stationary axis, a removable slotted barrel

around such axis, a holder for a pen or pencil, and a cord extending from the same through the slot of the barrel and acting to draw the pen or pencil inwardly as the cord is wound on the barrel by the rotation of the beam, substantially as specified.

2. The stationary axis and a removable slotted barrel around the same, in combination with a holder for a pen or pencil and a cord extending from the holder through the slot of the barrel and acting to draw the pen or pencil inwardly as the cord is wound on the barrel, substantially as set forth.

3. The combination, with the main beam and a pencil or pen, of a central axis, a movable winding-barrel slotted on one side, and a cord extending from the main beam to the axis

and passing through the slot, substantially as set forth.

4. The combination, with the main beam slotted longitudinally and the pencil or pen, of a central axis passing through the slot, a penetrating-point to the same, a conical winding-barrel slotted on one side, and a cord attached to the main beam and to the axis and passing through the slot of the barrel, substantially as set forth.

Signed by me this 20th day of November, 1890.

CARL JOHAN LUNDSTROM.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.