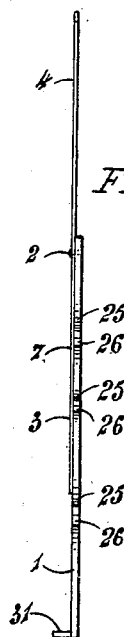
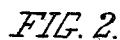
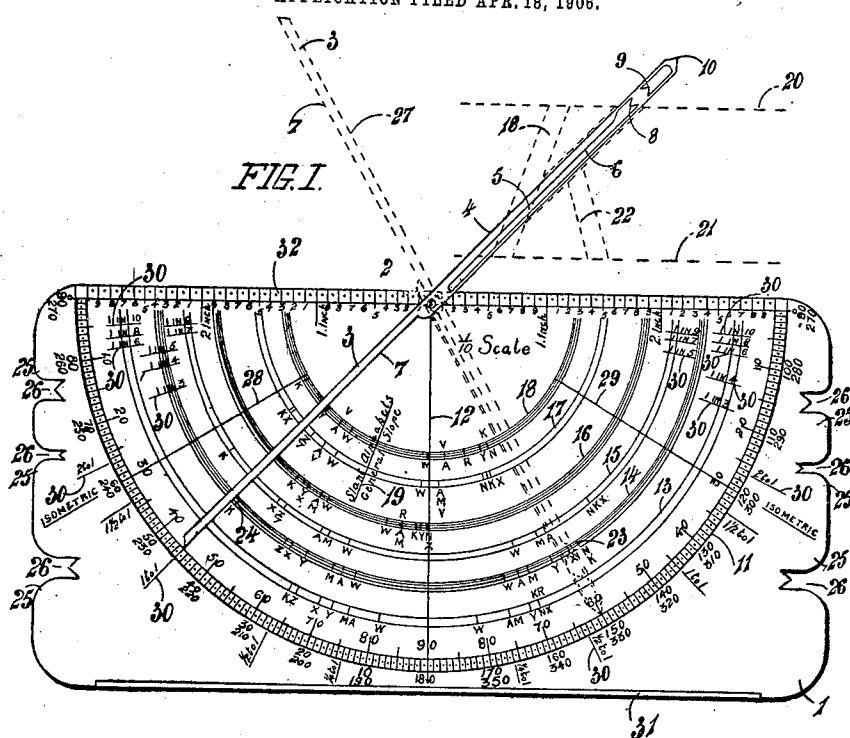


No. 890,257.

PATENTED JUNE 9, 1908.

W. O. BEERE.
DRAWING INSTRUMENT.
APPLICATION FILED APR. 18, 1906.



Witnesses:

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Sydney H. Higg.

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UNITED STATES PATENT OFFICE.

WYNFORD ORMSBY BEERE, OF WELLINGTON, NEW ZEALAND.

DRAWING INSTRUMENT.

No. 890,257.

Specification of Letters Patent.

Patented June 9, 1908.

Application filed April 18, 1906. Serial No. 312,437.

To all whom it may concern:

Be it known that I, WYNFORD ORMSBY BEERE, a subject of His Majesty the King of Great Britain and Ireland, residing at Wellington, in the Colony of New Zealand, have invented certain new and useful Improvements in Instruments for Drawing Numerals and Letters of the Alphabet, of which the following is a specification.

This invention provides an improved instrument whereby lines may be readily drawn by an inexperienced draftsman at any desired angles and curves set out for the delineation of numerals and letters of the alphabet.

The instrument consists of a plate of metal, celluloid vulcanite or similar material, near the upper edge of which is pivoted a combined index finger and ruler.

A semicircle inscribed upon the plate is divided into degrees. Other semicircles inscribed upon the plate are divided as required to form letters of the alphabet having various characteristics. Thus a vertical block letter or numeral, or a block letter or numeral sloping to the right or left, may be formed, and the instrument is provided with means whereby a letter may be made with a thick downstroke and fine upstroke.

The bottom edge of the plate is turned up or thickened to form a bearing surface for resting upon a T square or straight edge.

The ruler has a slot throughout nearly the whole of its length for the purpose of drawing parallel lines closely approaching together.

Divisions are marked upon one edge of the plate for use in setting off letters so that they shall be equal in width. Thus after the first letter of a word is drawn, its width is noted and the other letters are made the same width.

The drawing illustrates the invention:—

Figure 1 is a plan, and Fig. 2 a side elevation of the instrument. Fig. 3 shows a vertical block letter "A", and Fig. 4 a sloping block letter "K" as made by the instrument.

Referring to the drawing, the plate 1 has a pin 2 upon which is pivoted a combined index finger 3 and ruler 4 which has a slot 5 with its edge 6 in the same straight line as the edge 7 of the index finger. The points 8 and 9 upon the bridge piece and the pointed end 10 are also in the same straight line. A semicircle 11 inscribed upon the plate is divided into 180 degrees, 90 degrees upon each side of the vertical line 12 and commencing at zero at

each extremity of the semicircle. Other semicircles 13, 14, 15, 16, 17 and 18 have marks against which the index finger must be brought while a letter is set out by means of the ruler or vice versa. The semicircles 14, 16 and 18 are subdivided by lines throughout their length to distinguish them from the semicircles 13, 15 and 17 which are not subdivided.

Letters of different slopes may be delineated by using any of the semicircles 13, 14, 15, 16, 17, or 18.

In Fig. 1 a letter "K" of medium slope is shown by dotted lines, the limb 18 is made by placing the edge 7 of the index finger against the line 19 for the general slope of the letter, and drawing a line upon each outside edge of the ruler 4, until the lines 20 and 21 are reached the distance between the lines 20 and 21 having been predetermined as the height of the letter. The limb 22 is made by placing the index finger against the line 23 marked "K" on the same semicircle as the line 24. The subdividing of the semicircle prevents confusion with the neighboring semicircles. The final limb is made with the index finger against the line 24 marked "K" as shown on the drawing. Similarly if it is desired to delineate any other letter the index finger is placed against the mark cutting the semicircle radially and marked with the desired letter. If it is desired to give a greater slope say to the limb 22 and the final limb of a letter "K" the semicircle 15, 17 or 18 is used and the index finger employed against any of the radial line marked "K" upon such semicircles. On the other hand if it is desired to lessen the slope the semicircle 13 or 16 is used.

The curves of a letter B, D or the like are made by employing a rounded corner 25. A series of corners are provided to suit letters of different sizes, curves of short radius being formed at the entrance to the gaps 25 at the top of the instrument and curves of larger radius below the said gaps. Also corresponding curves are provided upon the other end of the instrument for the delineation of reverse curves. The first mentioned curves are used in setting out a letter "D" for example and the reverse curves in setting out a letter "C".

Different thicknesses of limbs are drawn by employing the part of the ruler upon each side of its slot 5, or by drawing lines by aid of each side of the slot, or by aid of one outside

edge of the ruler and one edge of the slot, or by aid of both sides of the index finger when in the position shown by dotted lines 27, in which position the point 10 indicates upon the semicircle 14, the point 9 upon the semicircle 13, and point 8 upon semicircle 14.

The edge 31 of the plate is made parallel to the upper edge of the plate and is turned up at a right angle for use against a straight edge or T-square.

The scale 32 is available for gaging the width of letters.

What I do claim and desire to secure by Letters Patent of the United States is:—

1. The combination in an instrument for drawing numerals and letters of the alphabet of a plate marked with semicircles struck from a center near the upper edge of the plate and with radial lines across the semicircles and with a scale along the upper edge thereof, an index finger integral with a slotted ruler having a pointed end and pivoted to the plate at the center of the semicircles, one edge of the slot being in the same straight line as one edge of the index finger, a bridge piece across the slot having indicating points within the slot, all the said points being in the same straight line as the said edges, a

series of rounded corners arranged in pairs at the entrance of and between gaps provided at each end of the plate and a turned up edge at the bottom of the plate substantially as set forth.

2. The combination in an instrument for drawing numerals and letters of the alphabet of a plate marked with semicircles struck from a center near the upper edge of the plate and with radial lines across the semicircles and with a scale along the upper edge thereof, an index finger integral with a slotted ruler having a pointed end and pivoted to the plate at the center of the semicircles, one edge of the slot being in the same straight line as one edge of the index finger, a bridge piece across the slot having indicating points within the slot all the said points being in the same straight line as the said edges, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

WYNFORD ORMSBY BEERE.

Witnesses:

ERNEST SMITH BALDWIN,
HENRIETTA RAYWARD.