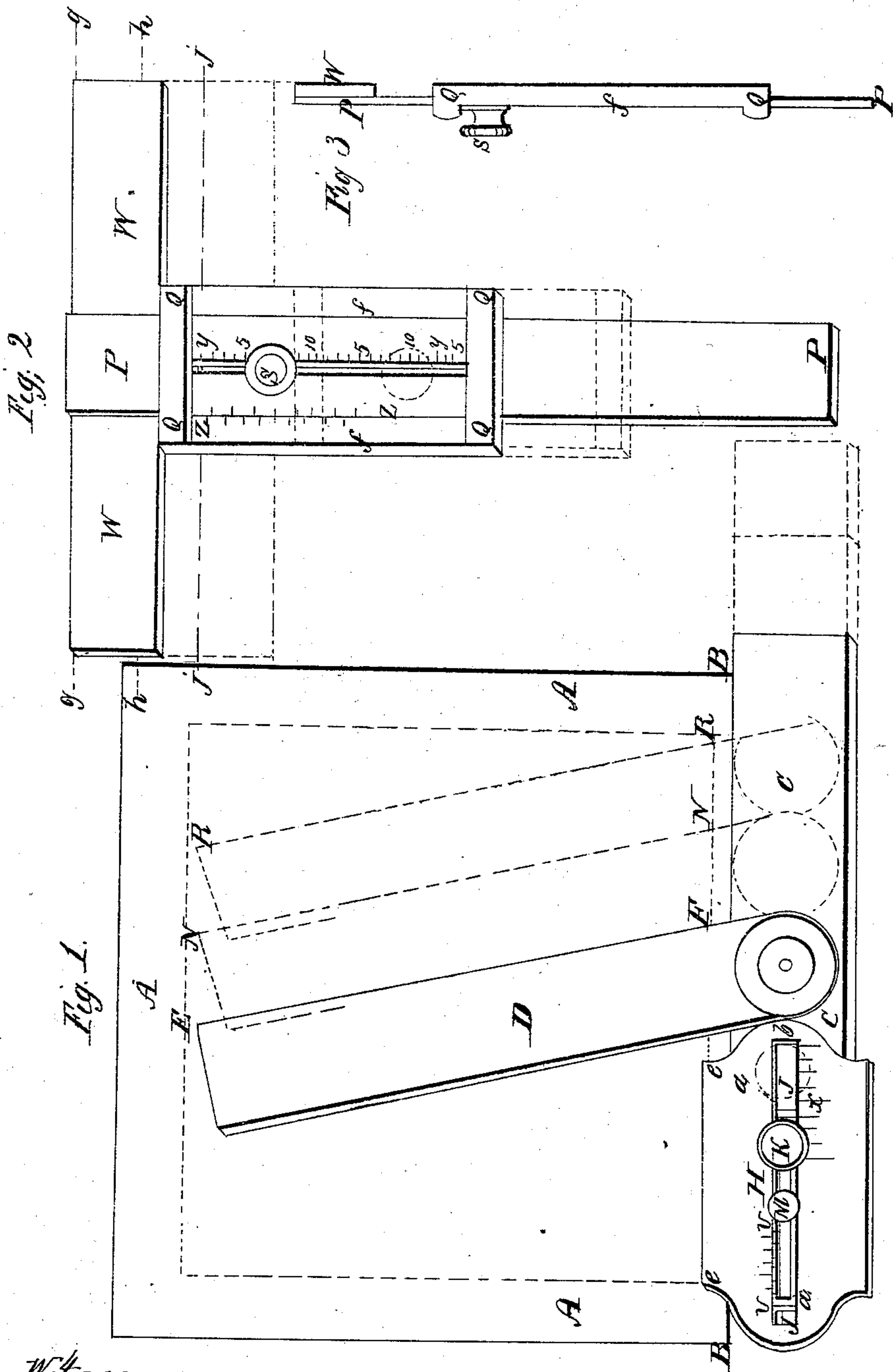


D. J. PRATT.
Parallel Ruler.

No. 80,500.

Patented July 28, 1868.



Witnesses;
Otho Varick De Witt
Sudley W. de Witt

Inventor,
Daniel J. Pratt

United States Patent Office.

DANIEL J. PRATT, OF ALBANY, ASSIGNOR TO HIMSELF AND OLIVER AREY, OF BROCKPORT,
AND OLIVER AREY, ASSIGNOR TO MICHAEL P. CAVORT, OF ALBANY, NEW YORK.

Letters Patent No. 80,500, dated July 28, 1868.

IMPROVED PARALLEL RULER.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, DANIEL J. PRATT, of the city of Albany, State of New York, have invented a new and useful Parallel Ruler; and I declare the following specification, with the drawings forming part thereof, to be a full and complete description of my invention, which has for its object the construction of rulers for drawing parallel lines, at equal distances from each other, promptly and exactly, without first marking by dividing-apparatus the distances to be ruled, for the guidance of the ruling-edge.

I construct my rulers of two kinds, one for drawing lines upon material fastened upon drawing-boards, the guiding-edge of a ruler being directed by and along the edge of the board in its progressive movement, and the other ruler for service upon a flat surface, its guiding-edge being free to move in any direction upon it; the former being for draughtsmen's work, the latter for ordinary desk-service to rule sheet-paper or books.

The first form is shown in Figure 1, where A represents a drawing-board, with paper attached; B, its directing-edge; C D, a T-ruler, D being its movable limb, and E F its guiding-edge. Upon arm C a sliding plate, H, is arranged to move parallel with the guiding-edge, directed by a rectangular bar, α , fitted within a slot, J, cut lengthwise within H, and extending nearly its length, the bar being so much shorter than the slot J, that when one end of it lies at one extremity of the slot, the space between its other end and the other extremity of the slot shall be equal to the greatest distance between any two lines to be drawn. The bar α has also within itself a slot extending nearly its own length, and screw, M, passing through it into C, and projecting over plate H, holds it down upon C, but permits both H and α to slide freely upon it, and screw K, passing through the slot in α , is intended to hold it down firmly upon C.

The method of using this ruler is thus: E F being the ruling-edge of D, and it being required to rule a series of lines parallel with it, at the distance F N, set the plate H so that its edge b shall (as shown) touch the edge of D; then set bar α so that the space in slot J, between the bar and the inner edge of the slot next b , shall be equal to F N, and secure the bar to C by screw K, the plate H being free to slide upon C. Now hold plate H by its projecting edge, $e e$, firmly upon the drawing-board A, and slide C to the right hand until the end of bar α touches the end of the slot at b , and then draw the line, which will be N N. Then, holding D firmly upon the board A, move plate H until it touches D. Then, again, hold the edge e upon the board, repeating the movement first described, and draw the line R R. By repeating these movements, a series of parallel lines can be drawn equidistant with the measure of F N. By reversing these movements, lines may be drawn in similar manner from right to left. A scale may be applied to H, as at x , to graduate the distance between the lines, or a Vernier scale, as suggested at $v v$.

The plate H, with its appendages, may be applied to either end of C, or, what is equivalent, the movable arm C may be reversed.

The second form of ruler is shown in Figure 2 in plan, and in Figure 3 in profile.

It consists of the ruler proper W, $g g$ being its ruling-edge. From its centre a flat limb, P, projects at right angles. This limb carries a frame, Q Q, fitted to slide closely along it, and of such length as to permit the gauging of the lines at the greatest distance needed to be ruled. The flat base of the frame beneath P has its under surface in plane with the under surface of W, so as to lie level with it upon the paper to be ruled.

Through the centre of P there is a slot extending the length of the frame. A gauge-screw (or bolt) passes through this slot, having its square head below P, a slot being made nearly the whole length of the base of the frame to admit the head, and to prevent the bolt from turning while being fastened to P by the milled nut t on the upper side of P.

The method of using the ruler is thus: A guide-line, $g g$, being drawn or selected, then the distance the lines are to be from each other being determined, say from g to h , the frame Q is brought up against W. The gauge-screw (or bolt) S is then adjusted so that the distance from the lower surface or flange of the milled nut t and the inner edge of the frame above it shall be equal to $g-h$, and screwed fast to P. Now, holding the ruler firmly upon the paper, move the frame until it touches the lower surface or flange of the milled nut t . Then,

holding the frame firmly down, move the ruler until it touches the frame. The line *h h* is then to be drawn. A repetition of this proceeding will give the next line *j j*, and so on until the requisite number of lines are drawn. A scale may be applied to *P*, as *y y*, to graduate the distance between the lines, or a Vernier scale, as shown at *z z*.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction of a parallel ruler, by attaching to one of the limbs of a T-square ruler, a gauge-plate for regulating the distances between the lines to be ruled, substantially in manner set forth in the specification.

DANIEL J. PRATT.

Witnesses:

DUDLEY W. DE WITT,
JAMES R. BOYNTON.