

(No Model.)

J. E. BETTS.
BEAM COMPASS.

No. 486,553.

Patented Nov. 22, 1892.

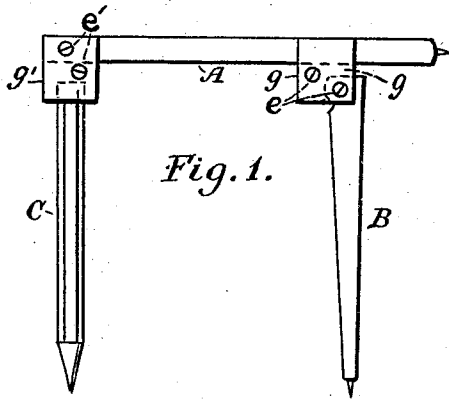


Fig. 1.

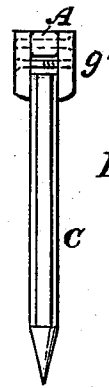


Fig. 2.

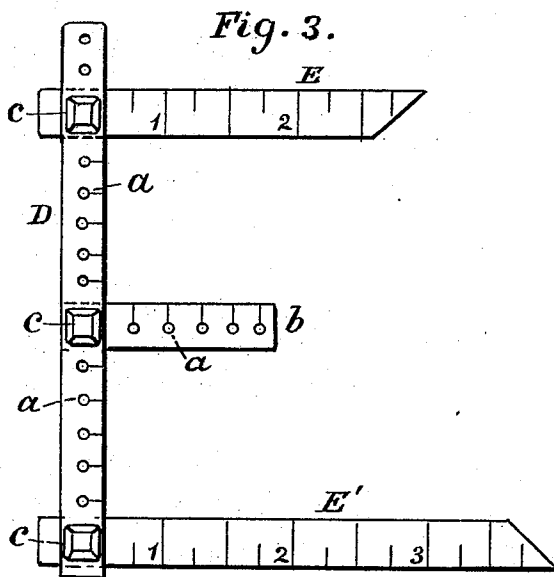


Fig. 3.

Witnesses :
H. A. Daniels
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UNITED STATES PATENT OFFICE.

JAMES EDWIN BETTS, OF WILMINGTON, OHIO.

BEAM-COMPASS.

SPECIFICATION forming part of Letters Patent No. 486,553, dated November 22, 1892.

Application filed March 7, 1891. Serial No. 384,067. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWIN BETTS, a citizen of the United States, residing at Wilmington, in the county of Clinton and State of Ohio, have invented certain new and useful Improvements in Rules and Compasses; and I do hereby declare the following to be a full, clear, and an exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to beam-compasses; and it consists in an improved construction intended more especially for use in forming letters and figures having curved lines, as hereinafter set forth.

In the accompanying drawings, Figure 1 represents a side view of a compass having my improvements. Fig. 2 is an edge view of the same. Fig. 3 represents a rule adapted for use in connection with the compass in forming letters, &c.

My compass is formed of a stem A, a pointed leg B, and a removable pencil C. The leg B is secured to the stem A by the clamping-jaws g, which are secured by two screws e, one of which is passed through the leg, so that it has a hinge connection with the jaws, and the latter by means of the two screws may be made to grasp the said stem sufficiently tight to hold the leg in position and yet allow it to be moved to change its position.

The pencil C is secured to the stem A by the clamping-jaws g', which are connected by two screws e', one of which is passed through the stem, giving the jaws a pivotal connection therewith, while the other screw serves to make the jaws grasp the pencil sufficiently tight, and by loosening the last-mentioned screw the pencil may be removed and a stick of crayon may be substituted. The compass being thus constructed, the leg B may be adjusted on the stem A toward or from the pencil and the points of the leg and pencil may be turned toward or from each other, as desired. In using the compass the jaws should be tightened enough to hold the parts in position, but to allow the desired adjustments of the pointed leg and the pencil to be made.

The compass described is a convenient article for the purpose stated and is cheap in manufacture, being constructed of either wood or metal. It is especially adapted for use in connection with a rule—such as is shown in Fig. 3—in marking out letters of the alphabet, the said rule consisting of a main part D, two arms E E', and an intermediate short arm b, said arms being adjustably secured to the rule D by means of screws and thumb-nuts c.

The several parts of the rule are spaced by marks of measurement representing inches or fractions thereof, and the rule D has a line of perforations a for the adjustment of the arms at different points, each thumb-nut being tightened sufficiently to retain an arm in position, but to allow it to be set at any inclination in relation to the rule D. The extremities of the arms E E' are beveled for use in forming the minor parts of letters. Curved lines and also shaded lines may be readily drawn by means of the compass and rule.

I claim—

1. In a compass, the combination, with a stem, of two pairs of clamping-jaws, a pencil grasped by one pair of said jaws, which are pivotally connected with said stem, said pencil being removably secured by said jaws, and a pointed leg pivotally connected with the other pair of jaws, which grasp said stem and are adjustable thereon, substantially as set forth and described.

2. In a compass, a stem A, in combination with a pair of clamping-jaws g, secured by screws e, a pointed leg B, pivotally connected with jaws g, a pair of clamping-jaws g', secured and pivotally connected with said stem by screws e', and a pencil removably secured in jaws g', substantially as and for the purposes described.

In testimony whereof I have affixed my signature in presence of two witnesses.

JAMES EDWIN BETTS.

Witnesses:

DAN STOUT,
W. GREER.