P. D. GRAHAM.

COMBINED CALIPERS AND RULE.

No. 248,162. Patented Oct. 11, 1881. Fig. 3 INVENTOR: WITNESSES:

United States Patent Office.

PETER D. GRAHAM, OF BLACK HAWK, COLORADO.

COMBINED CALIPERS AND RULE.

SPECIFICATION forming part of Letters Patent No. 248,162, dated October 11, 1881.

Application filed March 25, 1881. (Model.)

To all whom it may concern:

Be it known that I, Peter D. Graham, of Black Hawk, in the county of Gilpin and State of Colorado, have invented a new and Improved Combined Calipers, Rule, and Beam Compass, of which the following is a full, clear, and exact description.

In the accompanying drawings, Figures 1 and 2 are, respectively, front and end elevations of my invention; and Fig. 3 is a plan view of the sliding foot.

Similar letters of reference indicate corresponding parts.

A represents the rule, which is graduated, as shown, and formed with the screw-threaded end a, upon which the arm B is adapted to be firmly screwed. The arm B is formed at one end with the hinge b for securing the oppositely-curved arms C C, which constitute the calipers, while the other end thereof is formed with the pointed extension b', which serves as one of the legs of a compass. This arm is also provided with the set-screw c, for the purposes hereinafter stated.

The arm B' is in all respects like the arm B, just described, save that it is adapted to slide upon the beam or rule A, and is provided with

a set-screw, c', upon the side thereof, as shown, for securing the arm at any desired point upon the beam or rule.

The sharpened extension of the arm B' and the sharpened extension of the arm B constitute the compass, which may be enlarged or made smaller, as desired, by moving the arm B' upon the rule, and the pointed extensions 35

may also be used as scratch-awls.

The foot D slides loosely upon the rule, and is adapted, in connection with the set-screw c, for holding the tool on the end of an anvil or other place for convenience in use.

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

In calipers, the arm B, having curved arms CChinged thereto at one end, and at the other 45 the set-screw c and pointed extension b', said arm B being internally threaded at the middle and attached to the end of rule A, as shown and described.

PETER D. GRAHAM.

Witnesses:

S. H. BRADLEY, JOHN H. FOSTER.