

(No Model.)

W. L. EVELAND.

PLUMB LEVEL.

No. 274,089.

Patented Mar. 13, 1883.

Fig. 1.

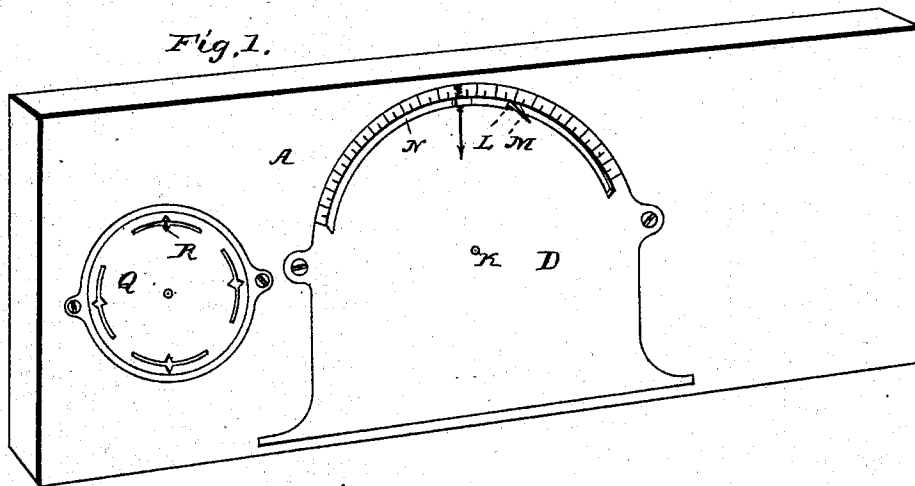


Fig. 2.

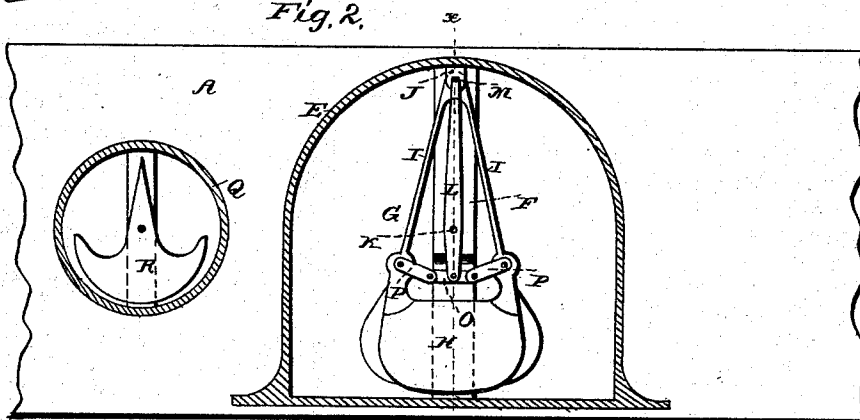
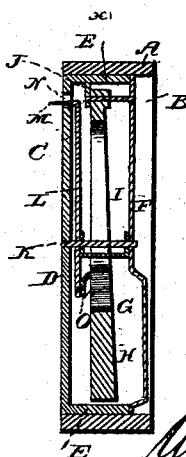


Fig. 3.



WITNESSES:

*Ad. L. Dieterich.*  
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INVENTOR.

*William L. Eveland,*  
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# UNITED STATES PATENT OFFICE.

WILLIAM L. EVELAND, OF PORT STANLEY, ONTARIO, ASSIGNOR OF ONE-HALF TO JOHN EUSTES, OF FINGAL, CANADA.

## PLUMB-LEVEL.

SPECIFICATION forming part of Letters Patent No. 274,089, dated March 13, 1883.

Application filed October 28, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM LOWRANCE EVELAND, of Port Stanley, in the county of Elgin, Province of Ontario, and Dominion of Canada, have invented certain new and useful Improvements in Plumb-Levels; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it ap-  
10 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view. Fig. 2 is a  
15 front view, with part of the casing removed to expose the working parts; and Fig. 3 is a vertical cross-section on the line *xx*, Fig. 2.

Corresponding parts in the several figures are denoted by like letters of reference.

20 This invention relates to plumb-levels which indicate the exact angle of inclination; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed  
25 out in the claims.

In the drawings hereto annexed, A represents the frame or stock, in an opening or recess of which, B, is sunk a casing, C, consisting of a suitably-shaped plate, D, having a  
30 circumferential flange, E, to which is fastened a cross-bar, F.

G is a pendulum, consisting of a weight, H, the sides of which have upward-projecting  
35 arms I, joined at their upper ends, and mounted upon a hanger, J, in the upper end of casing C, in such a manner as to swing freely in said casing. Centrally in said casing is a transverse pin, K, connecting plate D with cross-bar F, and upon said pin is pivoted a  
40 hand or pointer, L, the upper end of which has a finger, M, projecting through a segmental slot, N, in the front plate, D. The sides of said slot are graduated to indicate the angle

of inclination. To the lower end of the hand L is pivoted a cross-piece, O, the ends of which 45 are connected by pivoted rods P with the side of the weight H, near the edges of the latter. By this construction it will be seen that when the level is but slightly tilted the motion imparted to the indicator-hand by the pendulum 50 is multiplied, so as to be easily and correctly read upon the face-plate or dial. By constructing the pendulum, as described, with two arms it will in no wise interfere with the operation of the indicator-hand.

55 As the delicacy of this instrument necessarily limits its scope to angles not exceeding a few degrees of inclination, I prefer to embody in the same stock a casing, Q, containing a pendulum-pointer, R, by which greater 60 angles may be read off with ease and approximate correctness.

I claim and desire to secure by Letters Patent—

1. The combination, with the stock A, of the 65 casing C, having segmental graduated slot N, the pendulum G, the hand or pointer L, and mechanism for conveying and multiplying motion from said pendulum to said pointer, as set forth.

70 2. The combination of the casing C, having hanger J and cross-bar F, pendulum G, having arms I, joined at their upper ends and mounted in said hanger J, pin K, hand or pointer L, having pivoted cross-piece O, and 75 the pivoted rods P, connecting the ends of said cross-piece O with the pendulum-weight, as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in 80 presence of two witnesses.

WILLIAM LOWRANCE EVELAND.

Witnesses:

ANDREW GRANT,  
THOMAS BALMER BUNTING.