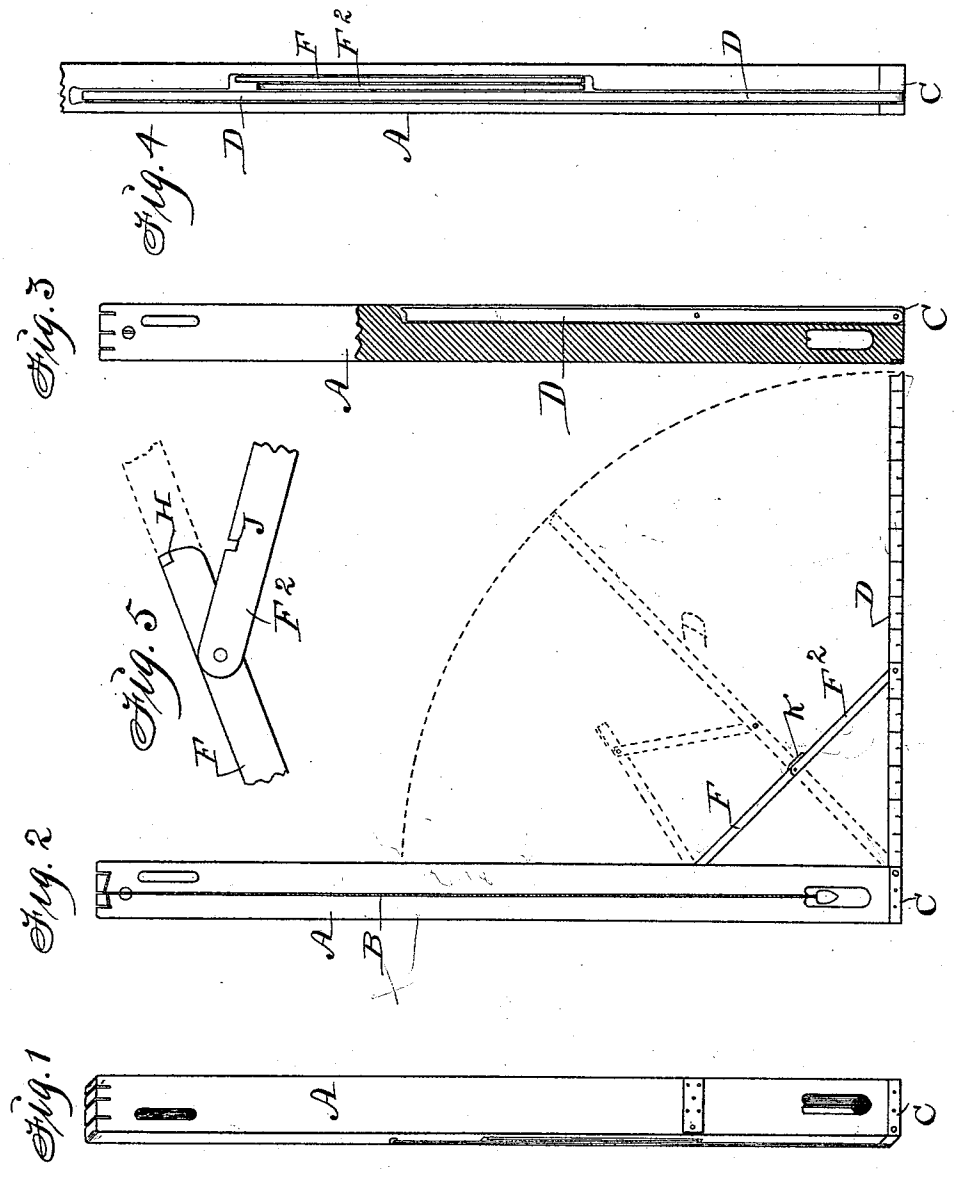
(No Model.)

A. V. NORDENSON.

COMBINED PLUMB LEVEL AND FOLDING SQUARE.

No. 459,446. Patented Sept. 15, 1891.



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UNITED STATES PATENT OFFICE.

ANTON V. NORDENSON, OF DES MOINES, IOWA.

COMBINED PLUMB-LEVEL AND FOLDING SQUARE.

SPECIFICATION forming part of Letters Patent No. 459,446, dated September 15, 1891.

Application filed March 10, 1891. Serial No. 384,500. (No model.)

To all whom it may concern:

Be it known that I, ANTON V. NORDENSON, a citizen of the United States of America, and a resident of Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Plumb-Level and Folding Square Combined, of which the following is a specification.

The object of my invention is to provide improved means for determining a level or square by means of a plumb-line; and it consists in the combination, with a plumb-rule, of a straight-edged blade pivotally connected to the plumb-rule and means for retaining said blade parallel with or at right angles to said plumb-rule, as desired.

Referring to the accompanying drawings, Figure 1 is a perspective view of the complete device, showing the same closed. Fig. 2 is a side view of the device, showing the same open. The dotted lines indicate the position assumed by the several parts when in a state intermediate between open and closed. Fig. 3 is a side view of the device closed, a portion of the plumb-rule being broken away to reveal the pocket in which the blade and braces rest. Fig. 4 is an enlarged detail edge view of the device closed. Fig. 5 is a detail side view of the hinge-joint in the brace which connects the blade to the plumb-rule.

A represents a plumb-rule, and B the plumb-line, secured thereto in a common way.

C represents a metal cap placed on and secured to the lower end of the plumb-rule.

D represents a blade, preferably made of metal and straight-edged, which is pivoted by one end in the cap C. The outer or upper end of this blade is beveled or concaved, as shown in Fig. 4, in order that it may be more readily removed from the pocket or groove which is formed in the edge of the plumb-rule.

F F^2 represent sections of a folding brace. The section F is pivoted by one end to the plumb-rule at a point approximately central between the ends of the groove or pocket, and the section F^2 is pivoted to the blade D near its center. The two sections of the brace are pivoted together near their meeting ends, the section F overlapping the other section and being provided with a lug H, projecting from the plane thereof and adapted to engage, when the device is open, with a notch J in the edge of the section F^2, as clearly illustrated in Fig. 5; or the section F may have a lug K formed on its upper edge and projecting past the side thereof to engage the upper edge of the section F^2 when the device is open, as shown in Fig. 2.

From the foregoing description of the construction and functions of the several parts the operation thereof will be obvious to any one skilled in the art to which my invention relates.

I claim as my invention—

1. The combination, with a plumb-rule, of a blade pivoted to said plumb-rule and provided with means for automatically bringing the blade into a right-angled position relative to the plumb-rule and holding the same, as and for the purposes set forth.

2. The combination, with a plumb-rule and a blade pivoted thereto, of a jointed brace pivotally connected to and connecting the blade and plumb-rule, as set forth.

3. A plumb-level and folding square combined, comprising a plumb-rule having a groove or pocket in one edge and a plumb-line and bob secured on one side, a blade pivoted by one end to the lower end of the plumb-rule, and a hinged or jointed brace connected to and connecting the blade and plumb-rule, as set forth.

4. The combination, with a plumb-rule and a blade pivoted on one end thereof, of a brace comprising two sections, the outer ends of which are pivoted to the plumb-rule and blade, respectively, and the inner or meeting ends being pivoted together and provided with means for restricting lateral movement thereof, as and for the purposes set forth.

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