

J. J. ROBINSON.
Stair-Builders' Rule.

No. 160,471.

Patented March 2, 1875.

Fig. 1

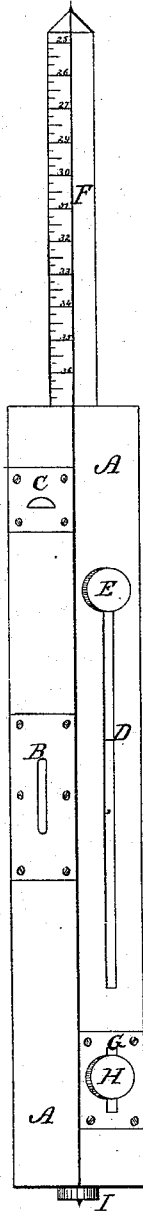
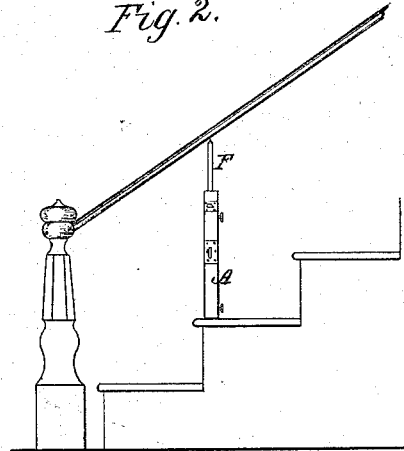


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN STAIR-BUILDERS' RULES.

Specification forming part of Letters Patent No. **160,471**, dated March 2, 1875; application filed December 17, 1874.

To all whom it may concern:

Be it known that I, JOHN J. ROBINSON, of Orange Court-House, in the county of Orange and State of Virginia, have invented a new and Improved Stair-Builders' Rule; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a vertical elevation of the rule presenting its edge, and showing two sides of the same. Fig. 2 shows the application of the rule to stair-building.

The object of my invention is to provide a rule for stair-building; and it consists in the peculiar construction of a device, by the use of which I am enabled rapidly and accurately to construct and fit the balusters to the hand-rails uniformly, and in proper position.

In the drawing, A represents a square rule having at the middle the longitudinal spirit-level B, and at one end the transverse spirit-level C. D is a slot upon one of the adjacent sides, which is preferably lined with metal to prevent wear, and which extends the greater portion of the length of the rule. In said slot moves the binding-screw E, which is attached to a graduated extension-rule, F, which slides inside rule A, and is provided upon its end with a pricking-point. G is a second slot on the same side of the rule, in which slides a second binding-screw, H, which is in a like manner attached to an incased adjustable base-stud, I, that moves in rule A, as does the extension-rule, and is similarly provided with a pricking-point.

In the operation of stair-building the useful application of the above-described rule is as

follows: The chief object of its construction is to secure the length of the baluster from the step to the hand-rail in a perpendicular line, and to accomplish this the prick of the stud is allowed to project a short distance from the bottom of the rule A, in which position it is held rigidly by the thumb-screw H. The rule A is then placed upon the stair-step, with the prick upon the spot where the baluster is to go, and the exact perpendicular position of the said rule is observed by means of the spirit-level C. As soon as this is secured the extension-rule F is elevated by means of the binding-screw E until the prick strikes the hand-rail, marking the place to be bored for the baluster. The binding-screw is then tightened, the stud loosened, and the rule withdrawn.

By means of the above-described method the position of the socket in the hand-rail is determined, and also the length of the baluster from shoulder to shoulder.

The instrument may be used also for other purposes, as leveling and plumbing, &c., the spirit-level B adapting the same to ordinary leveling purposes, and the spirit-level C to plumbing.

Having thus described my invention, what I claim as new is—

The improved stair-builder's rule consisting of the case A, spirit-levels B and C, extension-rule F, and adjustable stud I, provided with a prick, all combined and arranged substantially as shown and described.

JOHN JONES ROBINSON.

Witnesses:

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