

(No Model.)

T. H. BATES.

COMBINED SCALE MEASURE AND SPIRIT LEVEL.

No. 373,715.

Patented Nov. 22, 1887.

Fig. 1.

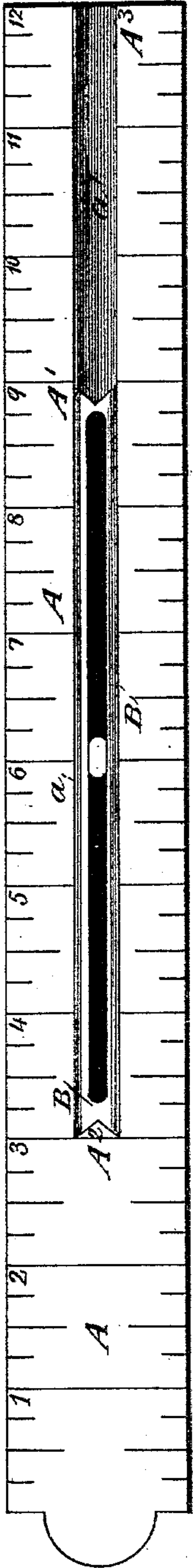


Fig. 2.



Fig. 3.



Fig. 4.



Witnesses.  
A. Ruppert,  
A.C. Rawlins.

Inventor.  
Thomas H. Bates,  
Per  
Thomas P. Simpson  
att'y

# UNITED STATES PATENT OFFICE.

THOMAS H. BATES, OF PASADENA, CALIFORNIA.

## COMBINED SCALE-MEASURE AND SPIRIT-LEVEL.

SPECIFICATION forming part of Letters Patent No. 373,715, dated November 22, 1887.

Application filed August 22, 1887. Serial No. 247,534. (No model.)

### *To all whom it may concern:*

Be it known that I, THOMAS H. BATES, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Rules or Scale-Measures; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to combine a rule or scale-measure with a spirit-level in such a manner that, when the latter is not in use, it is entirely out of the way, so as not to interfere with the use of the rule for any purpose, and so that the spirit-level may be kept in the pocket ready for use whenever needed and without danger of being broken.

In the drawings, Figure 1 is a plan view of a pocket-rule with my improved construction, and containing a spirit-level; Fig. 2, a median longitudinal section; Fig. 3, a detail view of the sliding cover which protects and conceals the spirit-level, and Fig. 4 a cross section.

In the drawings, A represents the rule or scale-measure, which is provided with the groove *a*, extending from the end A' to the

point A<sup>2</sup>. In this groove is arranged a spirit-level, B, and over this slides a cover, C, which enters at A<sup>3</sup> at one end of the rule, and is flush with the working-face of the rule, being held in the undercut or dovetailed side grooves, *a'*. Thus, when not wanted for use it is entirely out of the way and well protected. This beveled groove may be cut out of any one side or section of a rule to admit of the insertion of a small spirit-tube, which is cemented in place at each end. The cover C has a tongue, *c*, on each side to hold it firmly in the grooves *a'*, and a thumb-notch, *c'*, by which it may be withdrawn.

The spirit-level is so often needed, and it is so convenient to have one about the person, that my invention is believed to be a great desideratum.

What I claim as new, and desire to protect by Letters Patent, is—

A rule or scale-measure grooved to receive a spirit-level and provided with a sliding cover flush with the face of rule, substantially as shown and described.

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

THOS. H. BATES.

Witnesses:

W. J. STEWART,  
GEO. HERRMANN.