

(Model.)

C. BUBE.
Folding Rule Joint.

No. 239,437.

Patented March 29, 1881.

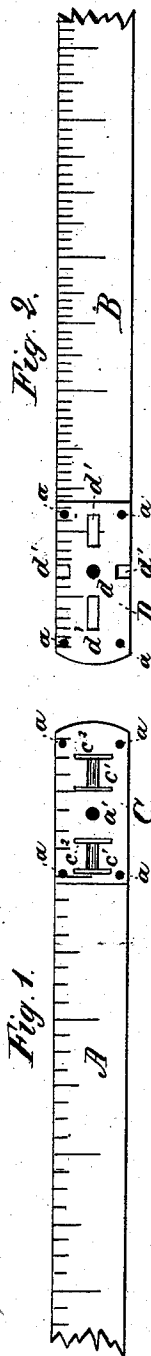


Fig. 9.

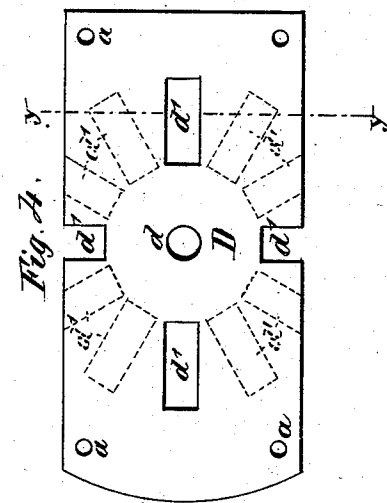


Fig. 3.

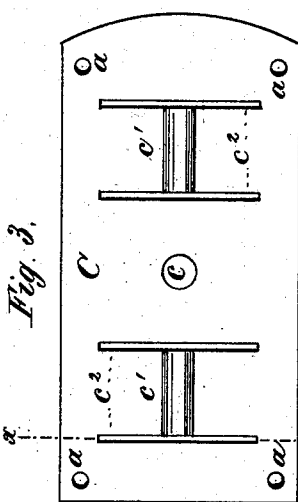


Fig. 8. Fig. 7.

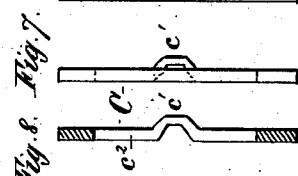
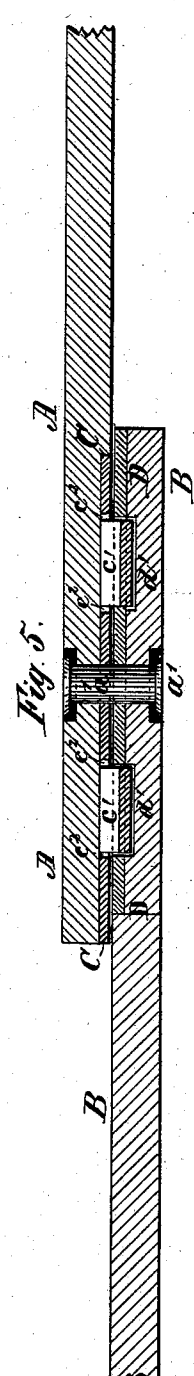


Fig. 6.



Fig. 5.



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FOLDING-RULE JOINT.

SPECIFICATION forming part of Letters Patent No. 239,437, dated March 29, 1881.

Application filed December 13, 1880. (Model.)

To all whom it may concern:

Be it known that I, CONRAD BUBE, a subject of the King of Prussia, residing at Hanover, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Rules; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of measuring-rules which are composed of two or more sections pivoted together and adapted to be folded one over the other; and it consists, principally, in means for locking the rule-sections together, either when extended or when folded.

In the accompanying sheet of drawings, Figures 1 and 2 represent, by a face view, two sections of so much of a measuring-rule as is necessary to illustrate the invention. Figs. 3 and 4 are plan views of the metallic plates attached to the rule-sections. Fig. 5 is a longitudinal section of a portion of two rule-sections, illustrating my invention. Figs. 6 and 7 are side and end elevations, respectively, of the metallic plate shown in Fig. 3; and Figs. 8 and 9 are sections on lines *x x y y* of Figs. 3 and 4, respectively.

In the above drawings, A and B, Figs. 1, 2, and 5, represent part of two sections of a foot-rule or other measuring-rule. The section A is provided at one end with a countersunk or partially countersunk face-plate, C, of any suitable sheet metal, and riveted thereto in any usual manner by means of pins *a*, said plate being provided with a pivot-hole, *c*, corresponding with a like hole formed in the rule-section. This plate C is further provided with elastic projecting locking-faces *c'*, and to impart to these locking projections a greater elasticity I form slots *c''* on opposite sides thereof, as plainly shown in Figs. 1, 3, 5, and 8. The rule-section B is provided at its end with a face-plate, D, having a pivot-hole, *d*, corresponding with a like hole formed in said section, and with the pivot-hole *c* in section A, by means of which and the pivot-pin *a'* the two sections are pivoted together, as shown in Fig. 5. The plate D is also provided with radial openings or recesses or slots *d'*, corresponding in location with the spring-projections *c'* when the

two sections A B of the rule are folded together or extended in the same horizontal plane, or when the said sections are unfolded and set at right angles to each other. By means of these projecting locking-springs, and the recesses and slots, the two sections of a measuring-rule are firmly locked together, either when closed or extended in the same plane or at right angles to each other; and it will be readily seen that the said sections may be locked at any desired angle by forming suitably-located radial openings—as, for instance, at an angle of thirty degrees or an angle of sixty degrees, as shown by dotted lines in Fig. 4—so that the rule may be employed as a square or bevel having an angle of any desired degree. Another important advantage in the use of these spring-projections is the facility with which the rule can be extended or folded and locked in the desired position, dispensing with the usual fastening or locking pins.

In practice the plates C D are stamped out of thin sheet metal, and but a very slight recess, if any, is required, within which the locking-projections are depressed to afford room for the sections to pass over each other when they are to be extended or folded, while the thickness of the metallic plate will be found sufficient to form a recess or slot, *d'*, for the spring to enter when the two sections are locked together in the desired position; and to better illustrate the invention I have drawn these parts on an enlarged scale, as shown by Figs. 3 to 9.

Of course it will be understood that Figs. 1 and 2 are plan views of two adjacent faces of the rule—that is to say, that when united upon the pivot-pin *a'* the plate C will lie on the plate D.

Having now described my invention, what I claim is—

In a folding-rule joint, the combination of the section A, provided with a bearing-plate, C, having catches *c'* and transverse slots *c''*, the rule-section B, its bearing-plate D, provided with radial recesses *d* and the pivot-pin *a'*, all arranged and operating substantially as shown and described.

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

CONRAD BUBE.

Witnesses:

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