

R. CAMPBELL.
 RULE ATTACHMENT.
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1,061,045.

Patented May 6, 1913.

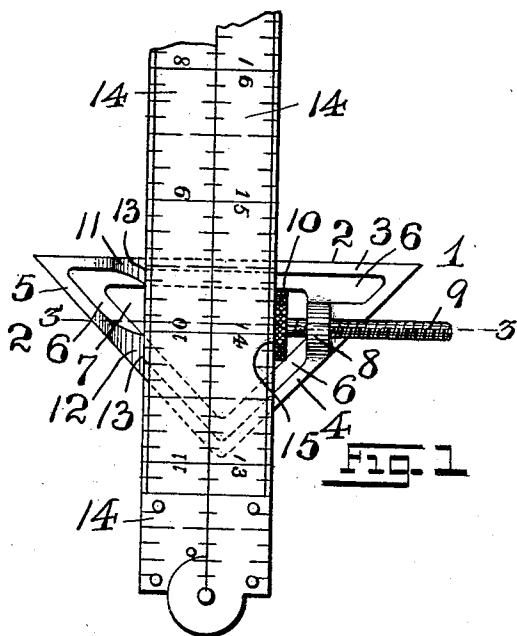


Fig. 1

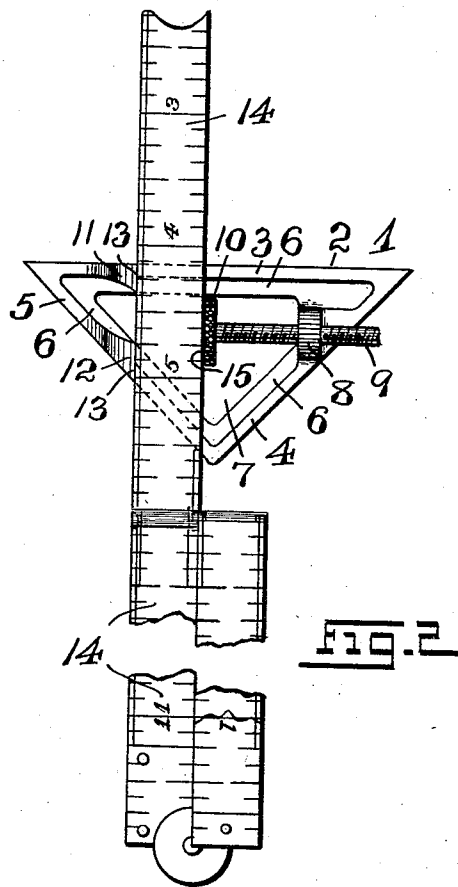


Fig. 2

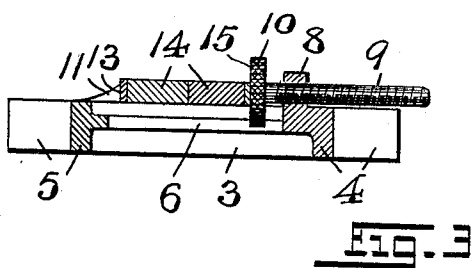


Fig. 3

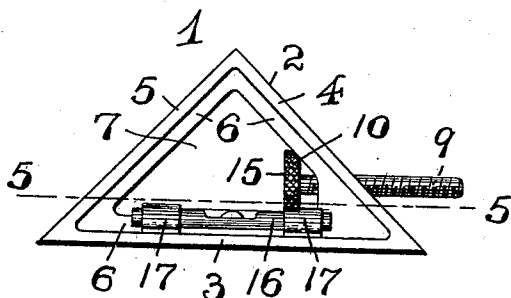


Fig. 4

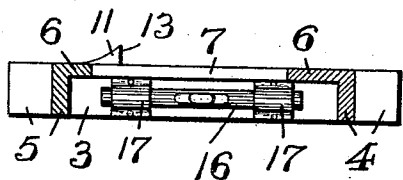


Fig. 5

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UNITED STATES PATENT OFFICE.

ROBERT CAMPBELL, OF ELIZABETH, NEW JERSEY.

RULE ATTACHMENT.

1,061,045.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT CAMPBELL, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Rule Attachments; 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 characters of reference marked thereon, which form a part of this specification.

The present invention has reference, generally, to improvements in that class of tools which are adapted to be used in the form of an attachment to a measuring rule or scale whereby the same may be used as a square, miter, marking-gage, depth-gage, and the like; and, the invention has for its principal object to provide a novel and simply constructed contrivance which is small and compact, so that it can be easily carried in the pocket or tool-chest, and which is capable of a quick and easy adjustment to any form of measuring rule, scale, or to the usual straight-edge; so as to adapt the same for use as a marking-gage, a depth-gage, a T-square, a try-square, a miter, and to many other similar uses.

The invention has for its further object to provide an appliance of the character hereinafter more fully set forth which is easily adjustable to various widths of measuring rules or scales, and is as easily secured to a single arm as well as to a pair of folded arms of the usual folding rule; and, furthermore, to provide a device which has a much firmer grip, and will not mark or indent the wood when used with wooden rules.

The invention has for its further object to provide a rule or scale-attachment which is very simple in its construction, and which may also be used as a spirit-level, and as a plumb-square.

Other objects of this invention not at this time more particularly enumerated will be clearly understood from the following detailed description of the present invention.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a plan or top view of the tool and a portion of a measuring rule with

which the tool is used, showing the same secured in one of its adjusted positions to the double folded arms or sections of the rule; and Fig. 2 is a similar view of the tool and a portion of the measuring rule, but illustrating the tool attached to one of the single arms or sections of the rule, when the latter is to be used as a depth-gage. Fig. 3 is a horizontal sectional representation of the tool and the measuring rule, said section being taken on line 3—3 in said Fig. 1. Fig. 4 is a rear view of the tool or device embodying the principles of the present invention, showing the tool provided upon one of its inner sides with a spirit-level; and Fig. 5 is a transverse sectional representation of the same, said section being taken on line 5—5 in said Fig. 4.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the several figures of the drawings, the reference-character 1 indicates a complete tool or device representing one embodiment of the principles of the present invention, the same being made in the form of a right-angle triangle, substantially as shown. The said tool consists of a stock or body 2, the same being bounded by the three marginal edges or sides 3, 4 and 5, so as to provide a triangle which is formed between the sides 4 and 5, with a right angle, and between the respective sides 3 and 4, and 3 and 5 with angles of 45 degrees each. Extending inwardly from the respective sides 3, 4 and 5 is a flange 6, substantially as shown in the several figures of the drawings, the said flange being centrally disposed, as shown in Figs. 1, 2 and 3 of the drawings, or extending from the marginal edge-portion of said sides, as indicated in Figs. 4 and 5. For the sake of lightness and cheapness of construction the body or stock 2 may be provided with an opening 7, as illustrated. Extending upwardly from the said body or stock, at any suitable and desired point is an internally screw-threaded boss or hub 8 in which is adjustably arranged a screw-threaded retaining pin or rod 9, that end-portion of the pin or rod which is located above the opening 7 being provided with a head or fingerpiece, as 10, for the adjustment and manipulation of the said pin or rod, as will be clearly evident. A pair of

lugs or projections 11 and 12 extend upwardly from the face of the stock or body 2, each lug or projection being provided with a straight and vertically extending face 13.

The tool, as will be seen from an inspection of Figs. 1 and 2 of the drawings, may be used with the doubly folded, or with a single arm 14 of the ordinary measuring rule or scale, or with straight-edges or measuring rules of different widths, by placing the rule or straight-edge between the vertical faces 13 of the lugs or projections 11 and 12 and the flat face 15 of the adjustable retaining pin or rod 9, and by turning the said pin or rod in said internally screw-threaded boss or hub 8 bringing the flat face 15 of the fingerpiece or head 10 of said pinion rod 9 tightly against the edge of the measuring rule or straight-edge, whereby the latter is tightly and securely clamped against accidental displacement between said lugs or projections and the fingerpiece or head of the retaining pin or rod 9, as will be clearly evident. It will be clearly seen from an inspection of said Figs. 1 and 2, that when the tool or device has been secured in its position upon two of the folded arm-sections, or upon a single arm-section of the rule, the entire contrivance may be used as a marking-gage, as a depth-gage, as a T-square, as a try-square, or as a 45 degree miter. It will also be evident, that owing to the arrangement of the pin or rod 9, and its head or finger-piece, the device is readily adjustable to various widths of rules or scales, the head having a firmer grip upon the rule, than the usual form of cam-lever ordinarily employed, without any danger of the marring or indentation of the edge of the rule when the same is made of wood.

If desired, the stock or body 2 may be provided preferably upon any one of its inner faces with a spirit-level, as 16, which is suitably secured in position by means of fasten-

ing devices, as 17, in the manner indicated in Figs. 4 and 5 of the drawings.

The manner of using the tool or device for the purposes herein-above stated will be clearly understood from the foregoing description and from an inspection of the accompanying drawings and need not, therefore, be further described.

From the foregoing description of the present invention it will be evident that I have produced a device which can be quickly and easily attached to rules or straight-edges of various widths, for its various uses, and can be just as easily detached therefrom, and when detached from the rule or straight-edge, the device may be variously used as a square.

I claim:—

The herein described stock for use as a try square in connection with a rule or straight-edge, comprising a triangular body having an opening, flanges extending from the sides into said opening, an internally screw-threaded boss connected with one of the sides of said triangular-body, upwardly extending projections upon the other two sides of said body and opposite the said boss each projection being provided with a vertical face, and a screw-threaded pin adjustably arranged in said boss, said pin having a head serving as a fingerpiece to operate said pin and to force said head against one edge of the rule or straight-edge for forcing the opposite edge of the rule or straight-edge into retaining engagement with the vertical faces of said projections, substantially as and for the purposes set forth.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 20th day of January, 1911.

ROBERT CAMPBELL.

Witnesses:

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