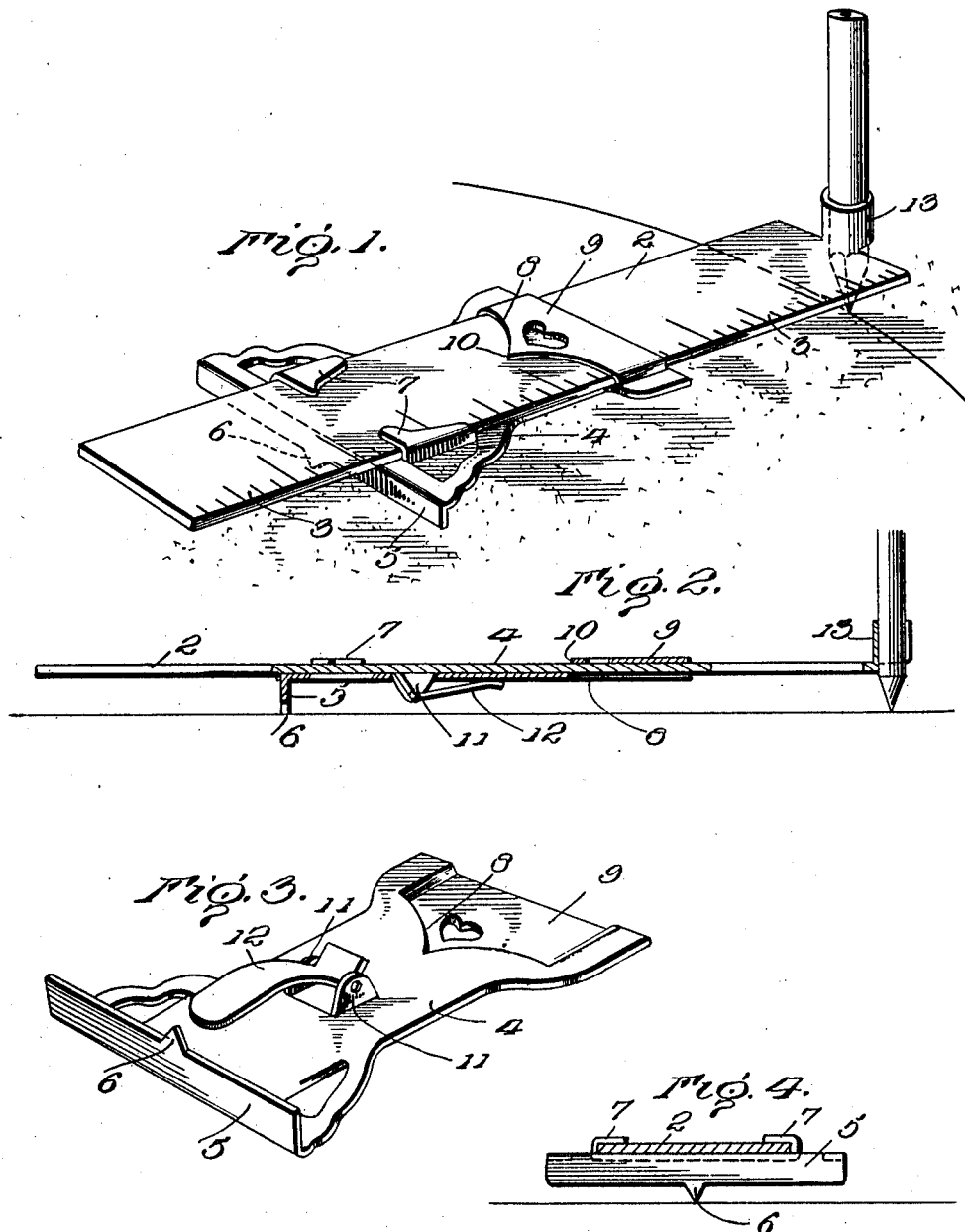


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COMBINATION T-SQUARE, SCRATCH GAGE, AND COMPASS.
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Patented Sept. 20, 1910.



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UNITED STATES PATENT OFFICE.

FRANK J. O'NEIL, OF NEW BRITAIN, CONNECTICUT.

COMBINATION T-SQUARE, SCRATCH-GAGE, AND COMPASS.

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To all whom it may concern:

Be it known that I, FRANK J. O'NEIL, citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Combination T-Squares, Scratch-Gages, and Compasses, of which the following is a specification.

My invention relates to carpenters' tools, and the object thereof is to provide a cheap, durable and efficient device capable of being used as a combination T square, scratch gage and compass, the same being extremely simple in construction and capable of being easily adjusted.

For a full understanding of the invention and the merits thereof, and to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a perspective view of my device; Fig. 2 is a longitudinal section thereof; Fig. 3 is a perspective view of the slide detached from the rule and looking toward the under side of the slide; Fig. 4 is a transverse section of the rule, the flanged end of the slide being shown in elevation.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

Referring to these drawings, 2 designates a rule, preferably of metal and of any desired length, having thereon the graduations 3.

4 designates a slide shiftable upon the rule, said slide consisting of a flat plate of metal, one end of which is expanded to a width wider than the width of the rule and formed with a downwardly turned flange 5, said flange at its middle being provided with the downwardly projecting pointed stud or pin 6. The widened or expanded portion of the slide is cut away on opposite sides to form tongues 7, these tongues being turned over the rule, as shown in Fig. 1, to engage opposite margins of the same to permit the rule to have an easy sliding movement relative to the slide. The opposite end of the slide is transversely slitted, as at 8, this slit being angular in form, and the portion 9, rearward from said slit and the adjacent extremity of the slide, being raised a dis-

tance equal to the thickness of the rule, to permit the rule to pass through the slit and beneath the portion 9, thereby forming a bridge passing across the rule and holding the rule and slide in engagement with each other. The sliding plate 4 is formed on its under side with the opposed downwardly projecting tongues 11 between which is pivoted the clamping lever 12, said lever being angular and its end projecting through the opening left in the plate 4 by the bending up of the tongues 11.

It will be obvious that when the clamping lever is turned flat against the back of the rule, as shown in Fig. 2, the rule and slide will be held in locked engagement with each other, while when the lever is turned outward, the rule will be unclamped and may be slid relatively to the slide 4. The extremity of the rule is oppositely slotted, and the wings formed thereby are turned upward and then bent around to form the split ring 13 which is adapted to receive a pencil or scratch awl.

The operation of my device is as follows: The downwardly turned flange 5 is intended to form an edge for a T square or sliding scratch gage. It will be obvious that this downwardly turned flange, extending as it does at right angles to the rule, permits the rule to be used in the same manner as a T square or a scratch gage. It will also be plain that by forcing the point 6 into the material operated on, and turning the rule in a circle with a scratch awl or pencil held in the socket 13, the device will act as a compass for the drawing of circles, and that by placing the flange 5 against the edge of a board, and placing the scratch awl or pencil in the socket, the device may be used as a scratch gage.

This tool is to be constructed from either sheet brass or steel, preferably nickel plated brass, as the latter is non-corrosive.

It will be seen that the device is made in only three parts, very simply constructed and easily put together, and that notwithstanding its simplicity, it is thoroughly effective in use.

Having thus described the invention, what I claim is:—

1. An implement of the character described, comprising a flat graduated rule having a socket formed at one end for the

reception of a point, a slide having opposed inwardly turned tongues grasping the edges of the rule, said slide being slotted transversely to permit the passage of the rule 5 therethrough, the metal of the slide on one side of the slot being elevated, opposed lugs upwardly turned upon the face of the slide, and a clamping lever pivoted between said lugs and having an angular end engaging 10 with the face of the rule to clamp the slide in position.

2. An implement of the character described, comprising a flat graduated rule having a socket formed at one end for the 15 reception of a marking point, a slide having opposed tongues adapted to engage the opposed margins of the rule and formed with a transverse slot through which the rule passes, the metal of the slide on one side 20 of the slot being elevated to permit the passage of the rule, said slide being also formed with opposed lugs struck up from the body of the slide, and a clamping lever pivoted between said lugs and having an angular 25 end engaging the rule when the lever is turned in one position, said slide being provided at one end with a flange projecting outwardly from the face of the slide and extending at right angles to the rule,

the flange at its middle being provided with 30 a projecting point.

3. An implement of the character described, comprising a flat graduated rule of metal, the extremity of the rule being slotted to form opposed wings, said wings being 35 bent to form a split socket for the reception of a marking point, a slide having at one end a projecting flange extending at right angles to the rule, said slide being formed at one end with opposed tongues 40 bent over and clasping the edges of the rule, the other end of the slide being provided with a slot through which the rule passes, the metal of the slide on one side 45 of said slot being elevated to permit the passage of the rule, said slide having opposed lugs struck out from its face, and a clamping lever pivoted between said lugs and having an angularly bent end adapted to engage the rule to hold the slide in ad- 50 justed position.

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

FRANK J. O'NEIL. [L. s.]

Witnesses:

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