(No Model.)

# G. W. SNYDER.

## COMBINED RULE AND TRY SQUARE.

No. 567,869. Patented Sept. 15, 1896.

Fig. 2.

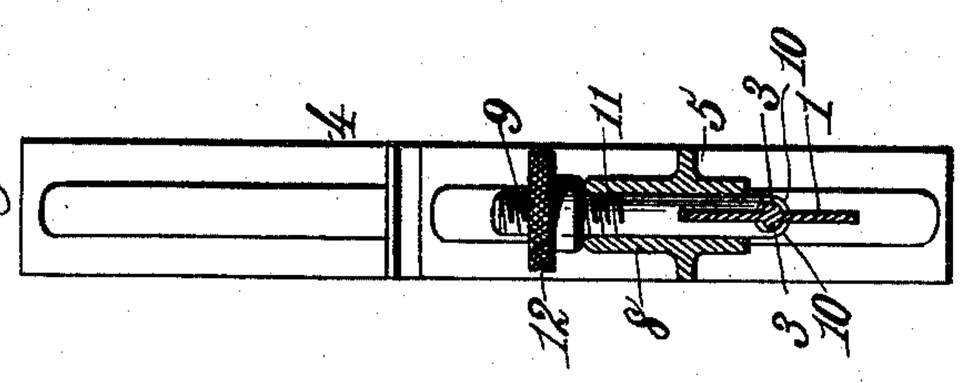



Fig. 5.

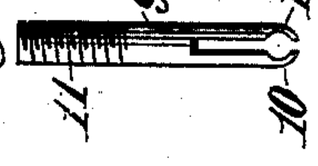



Fig. 1.

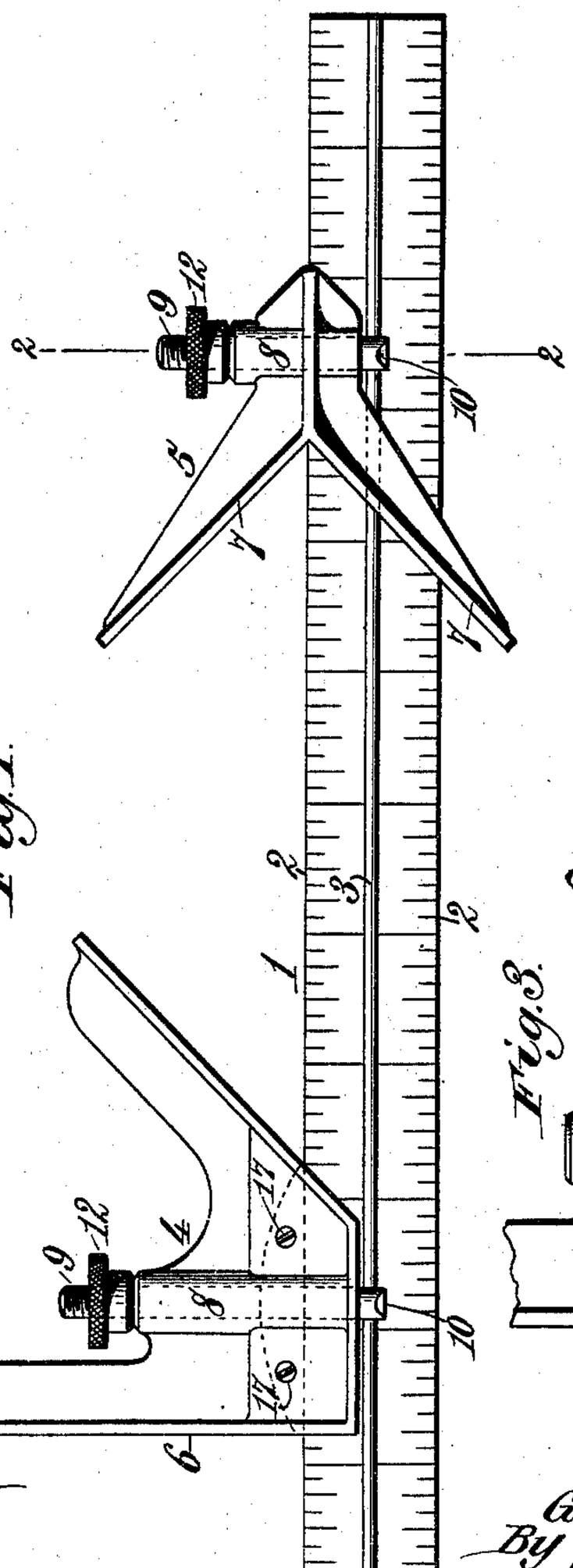



Fig. 4.

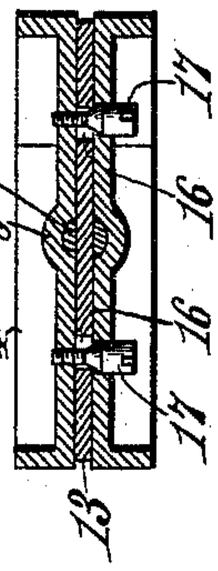
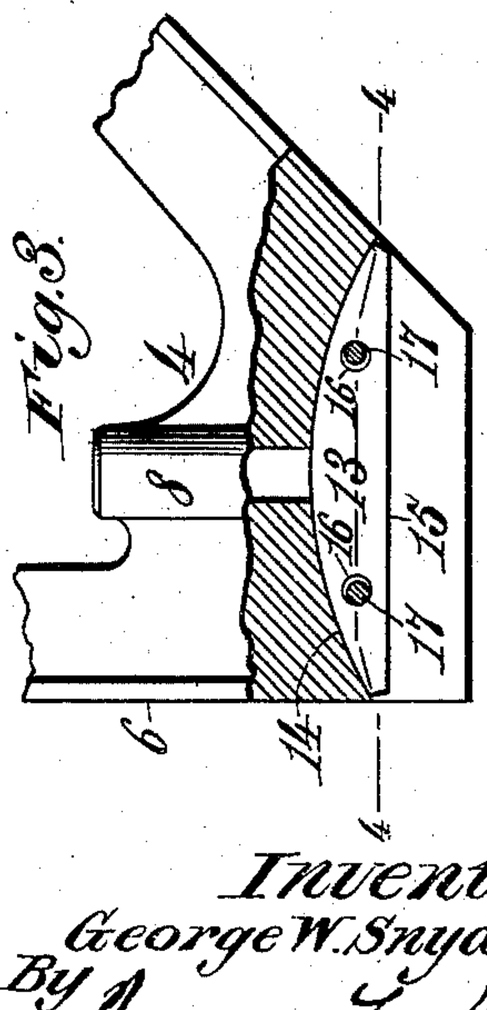



Fig. 3.




Witnesses.
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Thos. A. Grant

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# UNITED STATES PATENT OFFICE.

GEORGE W. SNYDER, OF GRAND RAPIDS, MICHIGAN.

## COMBINED RULE AND TRY-SQUARE.

SPECIFICATION forming part of Letters Patent No. 567,869, dated September 15, 1896.

Application filed January 18, 1896. Serial No. 576,011. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. SNYDER, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in a Combined Rule and Try-Square, of which the following is a specification.

This invention relates to a combined rule and try-square, and has for its object to provide means for stiffening or strengthening the rule, whereby the latter may be made of thin tempered steel, reducing both the weight and cost of the rule, and to combine with such a rule a gage-stock having improved means for securing it rigidly on the rule, and also provided with means for adjusting the gage-stock relative to the rule to determine the angle between the two.

To these ends my invention consists in the features and in the arrangement or construction of parts hereinafter described, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a side elevation of my improved instrument. Fig. 2 is a vertical cross-section on the line 2 2 of Fig. 1. Fig. 3 is a detail sectional view illustrating the adjusting-plate. Fig. 4 is a horizontal section on the line 4 4 of Fig. 3, and Fig. 5 is a detail view of the clamping-bolt.

Referring to the drawings, the numeral 1 indicates the rule, consisting of a thin, flat blade of tempered steel having straight parallel edges 2, graduated upon both sides, and provided upon its opposite sides with longitudinal ribs 3. The ribs 3 are formed integral with the blade 1, one or more being arranged upon each side of the blade as the length and breadth of the latter may require to strengthen the same.

On the rule 1 are adjustably secured gage-stocks 4 and 5, the gage-stock 4 having one edge 6 arranged at a right angle to the rule 1 and its opposite edge at an angle of forty-five degrees thereto, while the gage-stock 5 is provided with two oppositely-projecting arms 7, each disposed at an angle of forty-five degrees to the rule 1. The gage-stocks 4 and 5 are slotted to straddle the rule 1 and are each provided with a hollow boss 8, in which is fitted a clamping-bolt 9, that is forked or bifurcated at its lower end and provided with hooked extremities 10, adapted to engage the ribs 3 of the rule, and at its upper end is screw-threaded, as at 11, and is provided with a set-nut 12, that seats against the end of the boss 8, and by means of which the clamping-bolt may be caused to grasp the ribs 3 firmly and hold the gage-stock rigidly in place on the rule 1.

In order that the gage-stock 4 may be accurately set at a true right angle to the rule 1, I arrange in its lower slotted portion a segmental plate 13, the upper edge of which is formed on the arc of a circle and abuts against a correspondingly-shaped seat 14 on the gage-stock 4, and on its under side is formed with a straight-edge 15, that rests upon the edge of the rule 1. The plate 13 is provided with two circular apertures 16, through which pass tapered screws 17, that are tapped through threaded apertures formed in the lower portion of the gage-stock 4 and registering with the apertures 16 in the plate 13. By screwing one of the screws 17 in and the other screw out it will be evident that the plate 13 will be oscillated upon its arc-shaped seat, thus altering the angle between the edge of the gage-stock and the edge of the rule, and in this manner the gage-stock may be accurately adjusted on the rule.

The manner of using instruments of this character is so well understood as to render any description thereof unnecessary.

By forming the longitudinal ribs 3 on the rule the latter is greatly strengthened, rendering it possible to make the rule very thin and light, and by providing the novel means described for adjusting the gage-stock relative to the rule very accurate work in constructing the gage-stock and rule is not necessary, as the gage-stock may very readily and accurately be set at the angle desired.

Throughout the foregoing description I have used the word "rule" as applied to the blade 1, but the said blade may be simply a straight-edge, the graduations being omitted, and I wish it to be understood that by the term "rule" I also include a straight-edge.

Having described my invention, what I claim is—

1. The combination of a rule having formed integral therewith a longitudinal rib, with a

gage-stock movable on the rule, and a forked clamping-screw mounted in the gage-stock and slidably engaging said longitudinal rib, substantially as described.

2. The combination of a rule having longitudinal ribs formed integral therewith on its opposite sides, with a gage-stock movable on the rule, and a clamping-screw carried by the gage-stock and having a bifurcated inner end, the two arms or members of which bifurcation embrace the rule and slidably engage said longitudinal ribs, substantially as described.

3. The combination with a rule having longitudinal ribs formed on its opposite sides, of a slotted gage-stock straddling the rule and provided with a hollow boss, a forked clamping-screw arranged in said boss and having hooked ends engaging the ribs on the rule, and a nut engaging the threaded end of the clamping-bolt, substantially as described.

4. The combination with a rule, of a slotted gage-stock straddling the rule, means for clamping the gage-stock on the rule, a segmental adjusting-plate arranged in a correspondingly-shaped recess in the gage-stock and having a straight-edge engaging the edge of the rule, and means for adjusting said plate on its seat, substantially as described and for the purpose specified.

5. The combination with a rule, of a slotted gage-stock straddling the rule, means for clamping the gage-stock on the rule, a segmental adjusting-plate arranged in a correspondingly-shaped recess in the gage-stock and having a straight-edge engaging one edge of the rule, apertures formed in the adjusting-plate, threaded apertures formed in the gage-stock and registering with the apertures in the adjusting-plate, and tapered screws tapped in the threaded apertures of the gage-stock and passing through the apertures in the adjusting-plate to oscillate the latter on its seat and adjust the angle between the gage-stock and rule, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE W. SNYDER.

Witnesses:

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