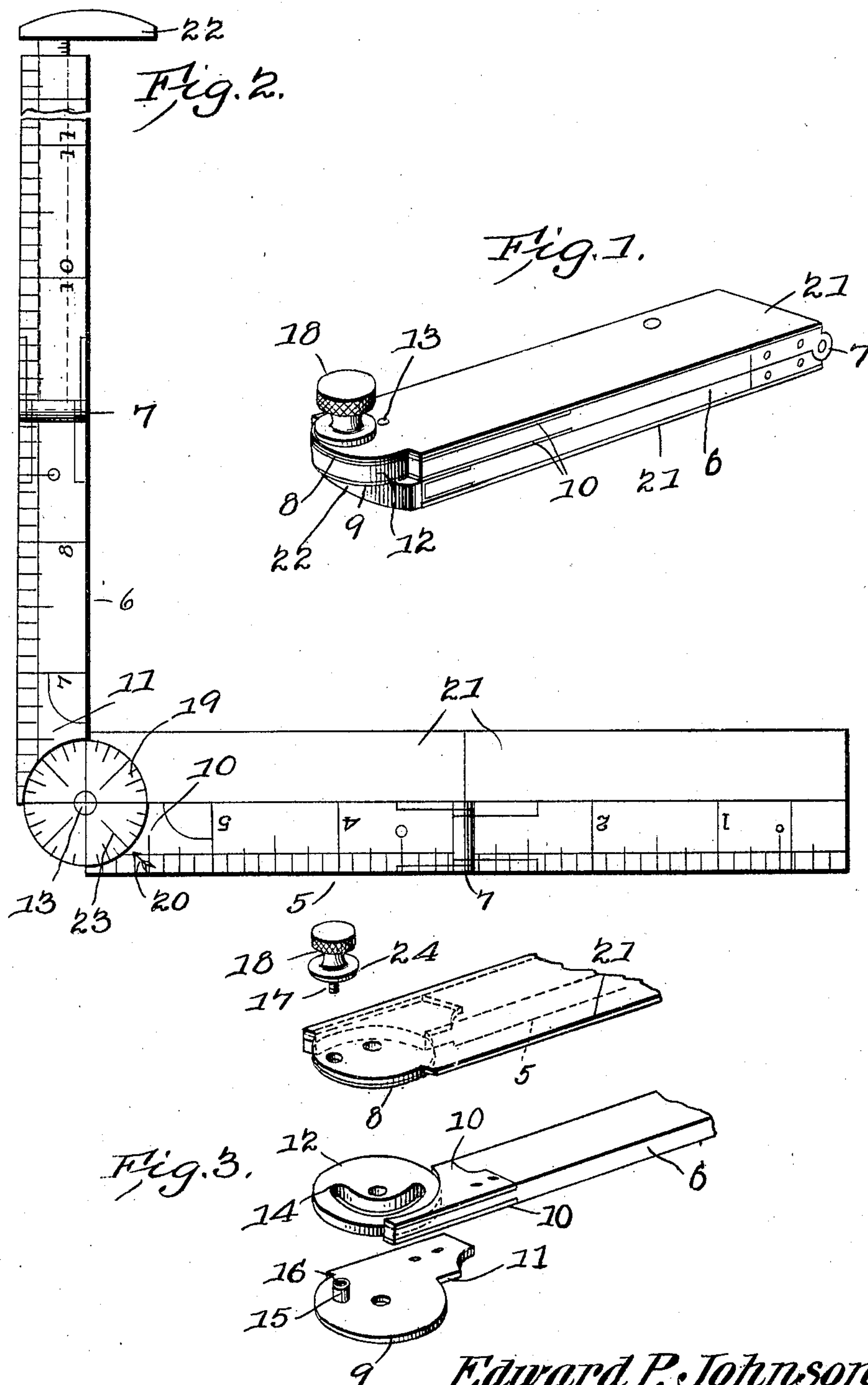


No. 832,483.

PATENTED OCT. 2, 1906.

E. P. JOHNSON.
COMBINATION RULE.
APPLICATION FILED FEB. 12, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD PETER JOHNSON, OF GRAND FORKS, NORTH DAKOTA.

COMBINATION-RULE.

No. 832,483.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed February 12, 1906. Serial No. 300,731.

To all whom it may concern:

Be it known that I, EDWARD PETER JOHNSON, a citizen of the United States, residing at Grand Forks, in the county of Grand Forks and State of North Dakota, have invented a new and useful Combination-Rule, of which the following is a specification.

This invention relates to combination-rules, and has for its object to provide a folding rule capable of being used in the ordinary manner for making lineal measurements and which may also be used as a bevel or square for ascertaining the angle or inclination of different objects.

A further object of the invention is to provide a rule having a straight-edge secured thereto and forming a casing or housing for the rule when the latter is folded.

A still further object is to generally improve the class of devices so as to add to their utility and durability as well as to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, it being understood that various changes in form, proportions, and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a combination-rule constructed in accordance with my invention, showing the same folded. Fig. 2 is a side elevation showing the rule open and used as a square. Fig. 3 is a perspective view of the several parts comprising the hinge detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The rule consists of the legs 5 and 6, each leg being preferably formed in two sections pivoted at 7 and adapted to fold together in the usual manner. The leg 5 is provided with a pair of circular plates 8 and 9, spaced apart to form a socket and each provided with a shank or extension 10 for attachment to the adjacent end of said leg, as shown. Secured to one end of the leg 6 are the spaced shanks or extensions 11 of a plate 12, the latter being mounted for pivotal movement in the socket by means of a pin, rivet, or similar fastening device 13. The plate 12 is formed with a

segmental slot or groove 14, adapted to receive a boss or lug 15, secured to or formed integral with the plate 9 and provided with a threaded opening 16 for engagement with the correspondingly-threaded shank 17 of a clamping-screw 18.

The plate 9 is provided with a series of graduations 19, indicating degrees and fractions thereof and adapted to register with a suitable index 20 on the shank of the plate 12 for indicating the angle or inclination of different objects.

Riveted or otherwise rigidly secured to one longitudinal side of each of the sections forming the leg 5 is a plate or straight-edge 21, the free edge of which extends laterally beyond said leg and is disposed substantially tangential to the plates 8 and 9, so as to form a perfect angle at the juncture of the pivoted legs when the latter are in open or extended position. By having the sectional plate or straight-edge secured to the leg 5 in the manner described said straight-edge may be positioned against one side of a board or other object and the rule used as a square, or the leg 6 swung laterally on the pivotal pin 13 to indicate the slant or inclination of said object. The leg 6 is preferably provided with a graduated gage 22 for indicating the thickness of an object and is adapted to rest upon the free edge of the sectional plate 21 when said leg is closed or folded, as shown. Attention is called to the fact that when the pivoted legs 5 and 6 are folded the sectional plate or straight-edge forms a housing or casing for the rule, thereby serving to protect the same and prevent the rule from warping.

In operation when it is desired to use the device as a square the arm 6 is swung laterally until said arm is at right angles to the straight-edge and the graduation 23 registers with the index 20, after which the clamping-screw 18 is rotated, which causes the collar 24 to bear against the adjacent surface of the sectional plate, and thereby lock the legs in adjusted position. In determining the angle or inclination of an object the leg 5 is swung laterally until the graduation indicating the desired degree registers with the index, after which the clamping-screw is adjusted in the manner before stated. It will thus be seen that there is provided an exceedingly simple and inexpensive device admirably adapted for the attainment of the ends in view.

Having thus described the invention, what is claimed is—

1. A folding rule comprising a pair of pivoted members each consisting of pivotally-
5 united sections, and a straight-edge secured to each section of one member and extending laterally beyond the adjacent longitudinal edge of said member a distance equal to the width of the opposite member to form a hous-
10 ing for the rule when the latter is folded.

2. A folding rule comprising a pair of pivoted members each consisting of pivotally-
united sections, and a straight-edge secured to each section of one member and forming a
15 housing for the rule when the latter is folded.

3. A folding rule, comprising a pair of pivoted members one of which is provided with spaced plates, a slotted plate secured to the ad-
20 jacent member and fitting between the spaced plates, a lug carried by one of the spaced plates and seated in the slot of the adjacent plate, a clamping-screw engaging the lug for locking the pivoted members in engagement with each other and a straight-edge secured
25 to one member and forming a housing for both sides of the rule when the latter is folded.

4. A folding rule comprising a pair of pivoted members one of which is provided with spaced graduated plates, a slotted plate se-

cured to the adjacent member and fitting be- 30
tween the spaced plates, an index carried by the slotted plate and adapted to register with the graduations, a lug secured to one of the spaced plates and seated in the slot of the adjacent plate, a clamping-screw engaging 35
the lug for locking the pivoted members in engagement with each other and a straight-edge extending laterally from the adjacent longitudinal edge of one member and form-
40 ing a housing for both sides of the rule when the latter is folded.

5. A folding rule comprising a pair of pivoted members each consisting of pivotally-
united sections, a straight-edge secured to each section of one member and having its 45
free edge extended laterally beyond the inner longitudinal edge of said member a distance equal to the width of the opposite member, and means for clamping said members into
50 engagement with each other.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EDWARD PETER JOHNSON.

Witnesses:

AUCHON ECHERN,
T. T. RISTEIGEN.