

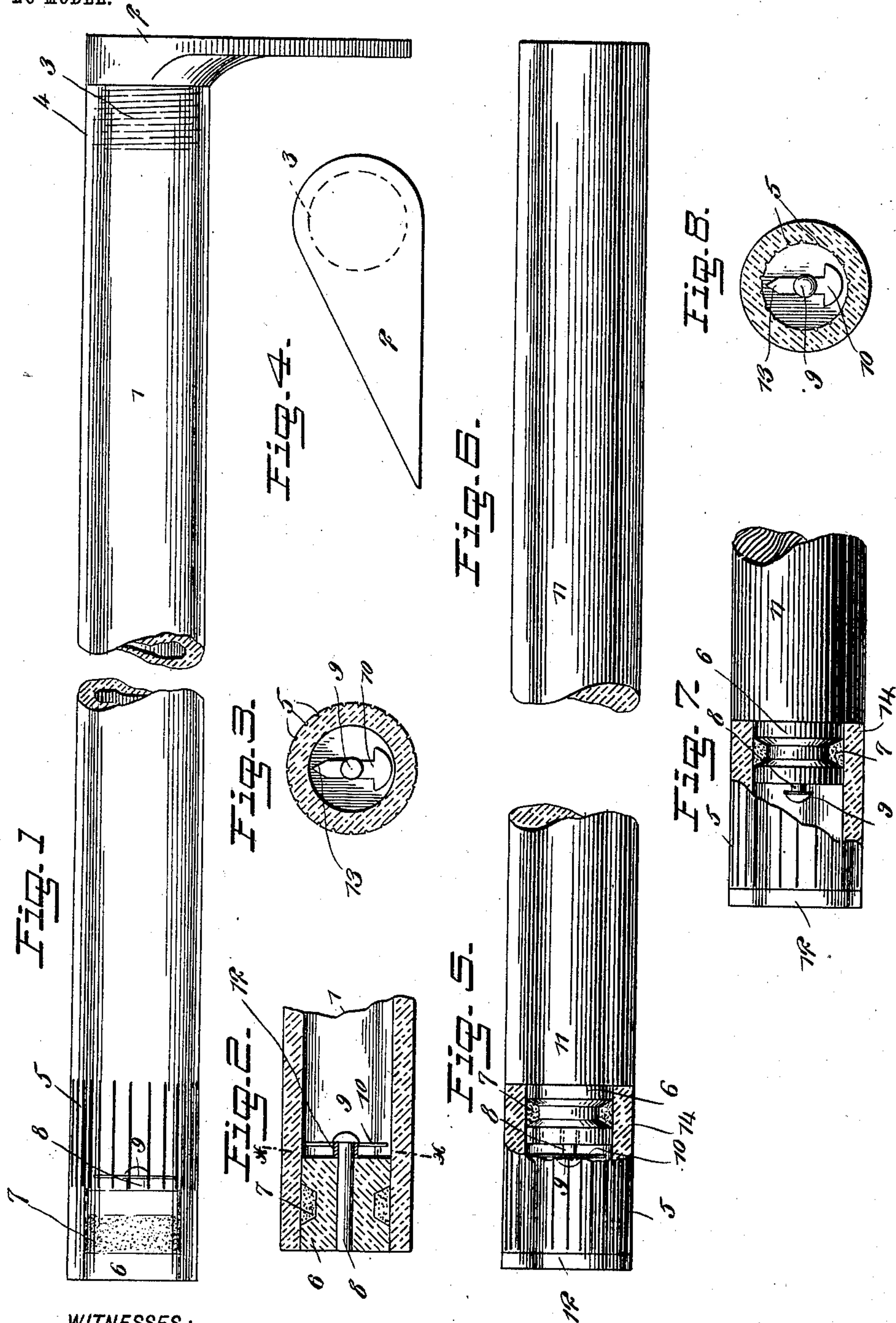
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T. RAMSAY.
RULER.

APPLICATION FILED OCT. 22, 1901. RENEWED NOV. 26, 1902.

NO MODEL.



WITNESSES:

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THOMAS RAMSAY, OF INVERCARGILL, NEW ZEALAND.

RULER.

SPECIFICATION forming part of Letters Patent No. 719,257, dated January 27, 1903.

Application filed October 22, 1901. Renewed November 26, 1902. Serial No. 132,949. (No model.)

To all whom it may concern:

Be it known that I, THOMAS RAMSAY, a subject of the King of Great Britain, and a resident of Invercargill, Southland, New Zealand, have invented a new and useful Improvement in Rulers, of which the following is a full, clear, and exact description.

My invention relates to rulers used in ruling and measuring paper and for analogous purposes.

My invention relates more particularly to that type of rulers in which there are two members, together forming a square.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my device. Fig. 2 is a longitudinal section of the left-hand end of the device shown in Fig. 1. Fig. 3 is a section on the line *xx* of Fig. 2. Fig. 4 is an elevation showing the triangular wedge-shaped end used as a square. Figs. 5 and 6 show modifications in the material used for the ruler proper. Fig. 7 is a view somewhat similar to Fig. 5, and Fig. 8 shows a modification in the location of the scale employed.

1 is a longitudinal tube of thick glass, provided at one of its ends 4 with an internal threaded portion 3, into which screws a plug carrying the part 2. The object of placing these two members together in this way is to form a square, as shown more particularly in Fig. 1. The part 2 need not be attached unless desired, the cylindrical member having a shape as shown in Fig. 6 when that form is preferable. The glass tube may be provided externally with longitudinal lines or corrugations 5, as shown in Figs. 1, 3, 5, and 7, or these lines may be placed upon the internal circumference of the tube, as shown in Fig. 8. The tube is closed by a plug 6, provided with an annular aperture or recess 7 for the purpose of holding an adhesive material, such as plaster-of-paris, and thereby securing the plug firmly in position. Through the plug there extends a pivot 8, rigidly secured thereto and provided with a head 9. Upon the plug there is freely mounted a pendant needle or indicator having the general shape of an anchor 10 and provided with a bearing-band 12, which moves freely upon

the pivot. The lower end of this indicator is quite heavy and normally hangs in the position shown in Fig. 3. The upper part of the indicator is provided with a sharp point 13 for the purpose of showing the center of the ruler.

In the form shown in Figs. 5, 6, and 7 a cylinder 11 of hard wood is used instead of the long glass tube. In this case one end of the wooden cylinder is reduced and provided with an inner aperture or recess for receiving the adhesive material, thus making the plug 6 integral with the body of the ruler proper, 11. When this form is used, the end of the short glass tube 14 is closed by the glass disk 12, as shown more particularly in Figs. 5 and 7.

It will thus be seen that no matter which form is used there is a cylindrical drum-like hollow at the end of the ruler and that this hollow is a part of a transparent tube provided with graduations.

My invention is used as follows: When a square is needed, the part 2 is screwed in the part 1, as shown in Fig. 1, and the device is used as any other square. When it is desired to rule paper, however, or to use the device for any purpose for which a cylindrical ruler is ordinarily employed, the part 2 is either taken out or merely allowed to hang over the edge of the table, as the case may be, and the operator taking hold of the cylindrical body 1 or 11 turns the same with the usual rotary motion, so as to roll the cylinder along the surface to be operated upon. By looking down through the transparent chamber the operator can see the indicator and by arranging the point 13 can bring the same into a position where it will register with any one of the lines 5. Bringing the point to register with one of these lines he can make a mark with a pencil by drawing the same along the side of the ruler in the usual manner and then by rolling the ruler a little farther along can make the point 13 register with the next graduation and can make another mark upon the paper. Of course he can skip every other graduation, and thus make his lines upon the paper of double distance from each other. He can also bring the point 13 into a space equidistant between any two graduations, and can thus make lines upon the paper very close together.

The many uses to which my device can be applied will be readily apparent to persons accustomed to use rulers.

The structure can be made in a variety of 5 ways, all coming within the normal scope of my invention, and the device can be constructed cheaply and readily sold as a commodity.

Having thus described my invention, I 10 claim as new and desire to secure by Letters Patent—

1. As an article of manufacture, a ruler comprising a cylindrical rod provided at one end with a hollow cylindrical chamber coaxial 15 therewith and forming virtually a continuation of said rod, and a pendent indicator mounted in said hollow chamber, the point of support for said indicator being coaxial with both said cylindrical rod and said cylindrical 20 chamber.

2. As an article of manufacture, a ruler consisting of a cylindrical member provided with a transparent chamber, and a pendent indicator inclosed by said transparent cham- 25 ber and suspended from a point in line with the geometrical axis of said cylindrical member.

3. As an article of manufacture, a ruler comprising a cylindrical member provided at 30 one end with a hollow cylindrical chamber coaxial therewith and forming virtually a continuation of said member, said chamber being provided with a circular scale concentric with the axis of said cylindrical member, and

a pendent indicator mounted in said cham- 35 ber and supported from a point located centrally therein.

4. As an article of manufacture, a ruler comprising a cylindrical member provided with cylindrical ends, one of which is hollow 40 and contains an indicator and a scale, the other being provided with screw-threads, an arm provided with a threaded member for engaging the threaded end of said cylindrical member, said arm and said cylindrical mem- 45 ber together forming a square.

5. As an article of manufacture, a ruler comprising a cylindrical member having a hollow end provided with longitudinal gradu- 50 ations, a member fitting into said hollow end and provided centrally with a pivot, and a pendent indicator mounted upon said pivot, substantially as specified.

6. As an article of manufacture, a ruler comprising a cylindrical member provided 55 with a hollow end, a member fitting said end and provided with a recess for containing an adhesive material, a pivot mounted upon said member, and a pendent indicator mounted freely upon said pivot, substantially as speci- 60 fied.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS RAMSAY.

Witnesses:

MATTHIAS THOMAS,
JOHN ROONEY.