

(No Model.)

W. B. SCHOFIELD.
RULER FOR USE ON DESKS.

No. 468,921.

Patented Feb. 16, 1892.

Fig. 1.

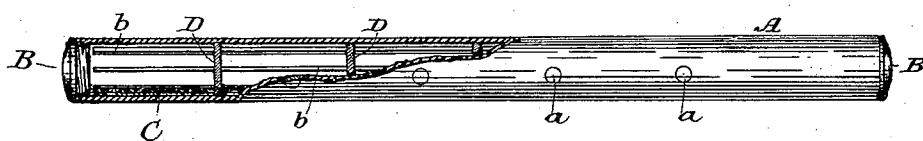


Fig. 2.

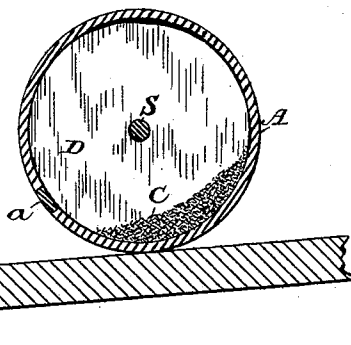
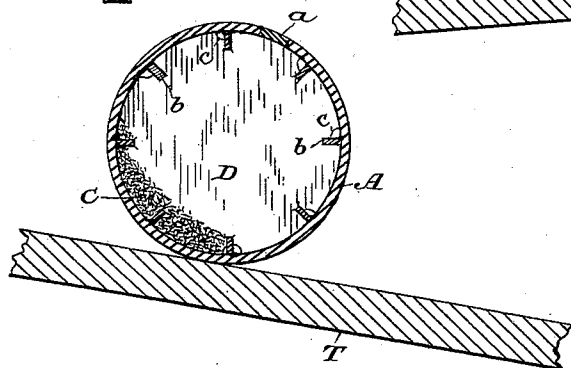


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM B. SCHOFIELD, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
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RULER FOR USE ON DESKS.

SPECIFICATION forming part of Letters Patent No. 468,921, dated February 16, 1892.

Application filed June 27, 1891. Serial No. 397,744. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. SCHOFIELD, of the city of New York, in the county and State of New York, have made certain new and useful Improvements in Rulers for use on Desks; and I hereby declare the following specification to be a full and clear description of the same, reference being had to the accompanying drawings, annexed hereto.

10 This invention relates to that class of rulers used by accountants and others for ruling straight lines, and is more particularly designed to provide a convenient ruler for use on a desk.

15 The principal object of my invention is to produce a round ruler which will roll readily when touched by the fingers, but will remain stationary when the hand is removed from it even on an inclined surface or desk.

20 In the drawings I have shown the construction of my improved ruler.

Figure 1 is a side view, partly broken away to show the interior construction. Fig. 2 is a cross-section where no retarding-strips are used, and Fig. 3 is a cross-section showing the position of the retarding-strips.

25 The ruler consists of the casing A, which may be composed of hard rubber, celluloid, or any desired material. This casing A is made cylindrical in form and hollow, with a perfectly smooth exterior, so as to readily roll when manipulated. The ends of this hollow cylinder A are closed with caps B at each end, which may be made to screw on, if desired.

35 In the interior of the ruler is introduced fine particles of some heavy material, (indicated in the drawings at C,) which particles will move freely on each other and not cohere. In practice I have found steel or metal filings answer this purpose very well; but other materials may be used, such as fine shot or sand. It is desirable to have this balancing medium distributed as evenly as possible along the entire length of the ruler, so as to obtain the best results, and I therefore provide the interior of the ruler with partitions D at suitable distances, dividing it up into sections. These partitions may be fixed or constructed in the ruler as a part thereof and the weight-

ing medium C introduced into each section 50 by means of openings closed by plugs *a a*; or the partitions may be removable and introduced into the interior of the ruler, together with the filings or other weighting medium from the ends.

55 In order to prevent too free movement of the filings or other weighting material around the interior of the ruler slight ribs or longitudinal projections *b b* may, if desired, be formed on the interior of the ruler. These 60 longitudinal ribs may also be made to answer a useful purpose in case the partitions D are made to slide in from the ends by some of them extending only a part of the way and by having stops *c c* on them at the proper 65 places, the partitions being provided with slots *d* in their circumference to permit of their sliding along the ribs until they reach the position at which they are designed to remain.

70 If desired, the partitions D may be first secured to the ribs *b b* or to a central shaft S and then slid into the interior of the ruler, the filings or weighting material being filled into each section as the partitions are introduced. 75 I do not wish to limit myself to any particular mode of construction or class of filings so long as the weighting material is of such a character and so introduced into the interior of the hollow ruler that it will readily accumulate at the lowest point in the circumference and retard the rolling of the ruler when it is not being manipulated.

80 In practice when the ruler is rolled to or laid in a certain position the filings or weighting material contained therein will follow such motion and tend to seek the lowest point, and thereby anchor the ruler in such position until it is again moved.

85 The casing A should be comparatively light, 90 in order that the weighting material on the interior shall exert the proper influence, and the amount of weighting material should be adjusted to the size and weight of the ruler.

95 What I claim as my invention, and desire to secure by Letters Patent, is—

1. A ruler consisting of a hollow circular cylinder or tube containing filings or other

weighting material moving freely on the inner circumference thereof, substantially as and for the purpose shown and described.

2. A ruler consisting of a hollow circular
5 tube the interior of which is divided into sections and partially filled with a weighting material, substantially as shown and described.

3. In a ruler, the outer circular casing A, interior partitions B B, and a weighting material C, contained therein, substantially as and
10 for the purpose shown and described.

4. In a ruler, the outer circular casing A, with weighting material inclosed therein and

retarding-ribs *b b* on the interior circumference thereof, substantially as and for the purpose shown and described. 15

5. The within-described hollow circular cylindrical ruler, the interior being divided into sections, with weighting material inclosed therein and longitudinal ribs on the interior
20 circumference thereof, substantially as and for the purpose shown and described.

W. B. SCHOFIELD.

Witnesses:

EDWIN F. CAREY,
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