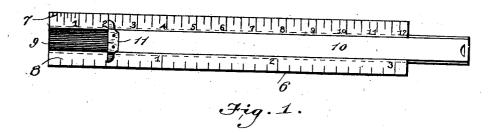
No. 858,498.

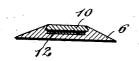
PATENTED JULY 2, 1907.

J. L. BARTELS.

RULER.

APPLICATION FILED SEPT. 7, 1906.





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RULER.

No. 858,498.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed September 7, 1906. Serial No. 333,696.

To all whom it may concern:

Be it known that I, John L. Bartels, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Rulers, of which the following is a specification.

This invention is a combination device of the ruler type, particularly adapted for school use and provided with means whereby it may be adapted for educational

Speaking generally, it comprises a double-edged ruler having different scales on both edges, with a slide set in a dove-tailed groove in the top and carrying an indicator which will show the relation between its two scales, as between the metric system and the ordinary system. The groove in which the slide is held may contain pictures say of the Presidents of the United States, arranged in proper order, so that as the slide is pulled out the pictures of the successive Presidents will be exposed in order. Instead of such pictures the recess may be provided with memoranda or information

of any other kind.

The invention is illustrated in the accompanying drawings, in which

25 Figure 1 is a plan view thereof, showing the top of the ruler. Fig. 2 is a cross section.

Referring specifically to the drawings, the body 6 of the ruler may be made of wood or other suitable material, and it is beveled on both edges and provided with scales 7 and 8. In the top it has a longitudinal groove 30 9 in which is fitted a slide 10, and this slide carries an indicator 11, preferably made of thin metal such as aluminium, the arms of the indicator being bent down to close proximity to the opposite scales, and the edge of the indicator is at an exact right angle to the scale 35 edges so that the indicator will show the relation between the two scales; for example, the number of millimeters required to make an inch.

The bottom of the groove 9 is fitted with a strip of paper or the like, which contains any designs or infore 40 mation desired. Thus, it may have the pictures of the Presidents arranged successively, as indicated above. In order that the bottom of the slide may not come in contact with the face of the strip, the bottom of the groove is depressed slightly as shown at 12, so as to let 45 the paper strip down below the slide.

I claim:

A ruler having opposite edges provided with different scales and a groove extending lengthwise therebetween, and a slide movable in the groove and having an indicator secured thereto and movable therewith and provided with registering arms projecting on opposite sides over the respective scales.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 55

JOHN L. BARTELS.

Witnesses:

CHAS. CHRIST BARTELS, NELLIE FELTSKOG.