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2,583,205

TELESCOPING MEASURING RULE

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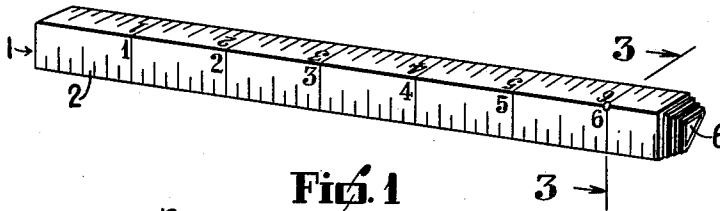


Fig. 1

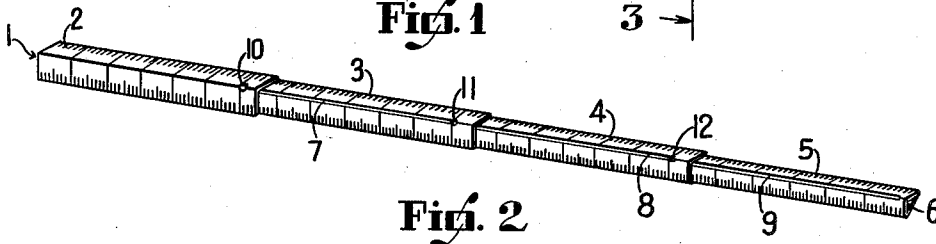


Fig. 2

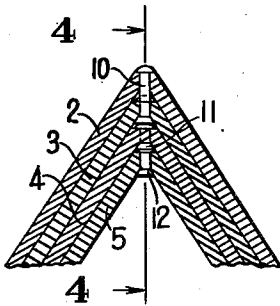


Fig. 3

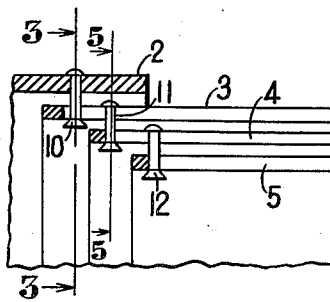


Fig. 4

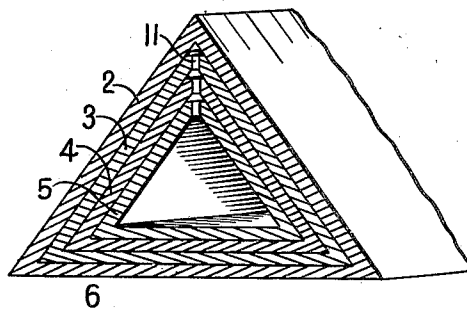


Fig. 5

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TELESCOPING MEASURING RULE

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2 Claims. (Cl. 33-161)

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This invention relates to a new and useful improvement in a telescoping measuring rule.

An object of the invention is to provide a telescoping rule which, when extended, will be of any desired length and which can be collapsed into a compact size, taking very little space, for convenience in storage or transportation.

Another object of the invention is to provide a telescoping rule, the sections of the rule being triangular in cross-section, structure for keeping the rule from coming apart including closed slots extending substantially the full length of one corner of all but the outer-most section and a pin for each inner section, each pin extending through a slot and extending through the next outer section, the outer ends of the inner-most and outer-most sections being closed by plates.

The above and additional objects are accomplished by such means as are shown in the accompanying drawings, described in the following description and then more particularly pointed out in the claims.

In the drawing:

Fig. 1 is a perspective view of my improved rule in collapsed form.

Fig. 2 is a perspective view of my improved rule in extended form.

Fig. 3 is a sectional view on line 3-3 of Fig. 1 or on line 3-3 of Fig. 4, pin 10 being shown in elevation.

Fig. 4 is a sectional view on line 4-4 of Fig. 3, pins 10, 11 and 12 being shown in elevation.

Fig. 5 is a sectional view on line 5-5 of Fig. 4, pins 11 and 12 being shown in elevation.

Referring to the drawing, 1 designates my rule generally. This rule is made up of telescoping sections 2, 3, 4 and 5. The drawing shows four sections although it is clear that more or less sections could be used as desired. These sections are made of metal, plastic, or other suitable material and may be of any desired size. As shown, the sections are triangular in cross-section, which is the preferred shape. Other polygonal sections could be used, such as square. In fact, the sections could be curved, such as elliptical or circular. The outer end of section 5 is closed by an end plate 6, which end plate is secured to section 5 in any suitable way. Likewise, the outer end of section 2 is closed by an end plate, not shown. Each section is provided with a scale on one or more sides. The scales on the different sections are so calibrated that the scale on each section supplements the scales on the other sections when the rule is fully extended.

Suitable structure is provided to keep the sec-

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tions from coming apart. This structure includes slots 7, 8 and 9. Each slot extends along one corner of section 3, 4 or 5. That is, there is a slot in each section, except the outer-most section. A pin 10 extends through an aperture near one end of section 2 and through slot 7 in section 3. The ends of pin 10 are enlarged to keep pin 10 in place. Pin 11 extends through slot 7 and slot 8. Pin 12 extends through slot 8 and slot 9. Slots 7, 8 and 9 are closed at both ends, that is, these slots do not extend to the ends of the sections. The space between the ends of the slots and the ends of the sections are such as to limit the distance that the sections can be pulled apart and such as to prevent an inner section from being pushed too far into the next outer section. As clearly shown in Figs. 3, 4 and 5, the corners that have the slots are cut away or flattened to provide a space to accommodate the enlarged ends of pins 10, 11 and 12. As shown, the slots are at corresponding corners of the sections. These slots could be located at different corners or even at the sides, if desired. The sections would have a relatively close fit, so that the rule will remain in extended position while the rule is used in the usual way.

In practice, I have found that the form of my invention, illustrated in the drawing and referred to in the above description, is the most efficient and practical. Various minor changes in details of construction, proportions and arrangement of the several parts may be resorted to without departing from the scope of my invention.

Having thus described my invention, I claim:

1. A measuring rule including a plurality of hollow sections, each being of a similar polygonal cross-section and provided with a scale on its external surface, said cross-sections being of progressively reduced size so that each section can telescope with frictional engagement upon any one adjacent it, each section except the one of largest cross-section having one of its corners cut away to form a flattened surface having a closed slot extending substantially the length of the section, each section except that of smallest cross-section having a double headed pin fixed in an aperture near that end of its section which in the expanded condition of the rule is adjacent the succeeding section of reduced cross-section, said pin entering the slot and the under surface of its head slidingly engaging the surface of this succeeding section, said pin limiting the extension of the said section.

2. A structure as covered by claim 1 in which

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each end section has its free end closed by a plate made substantially integral with the walls of said section.

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