Nov. 15, 1932. J. M. DOUGOVITO 1,888,113

MEASURING RULE

Filed Feb. 21, 1930 2 Sheets-Sheet 1

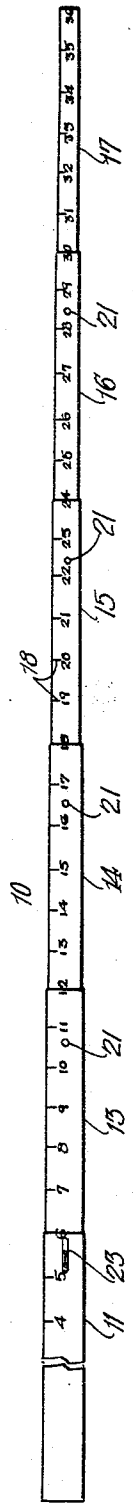


Fig. 1.

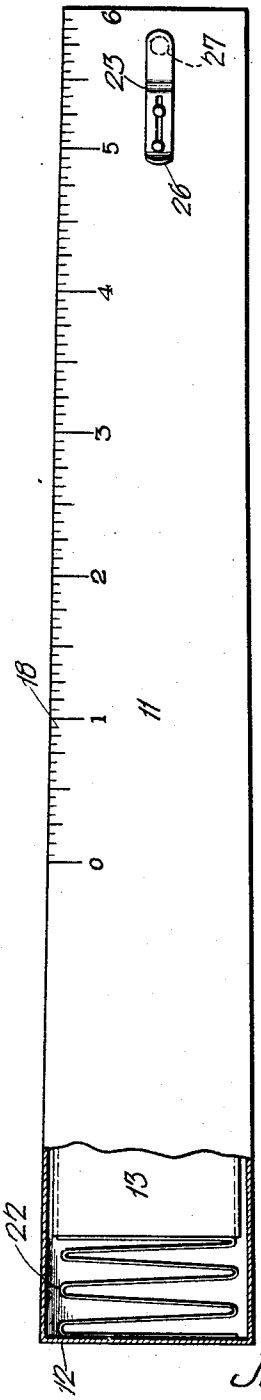


Fig. 2.

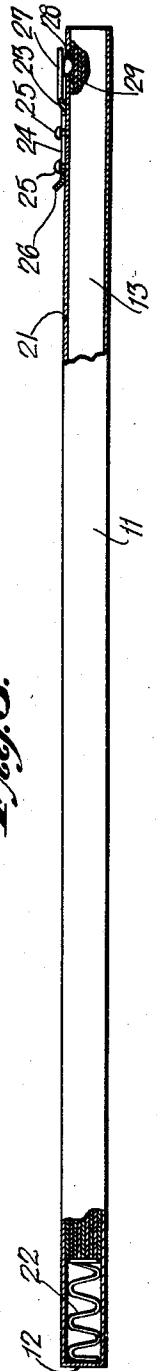


Fig. 3.

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MEASURING RULE

Filed Feb. 21, 1930 2 Sheets-Sheet 2

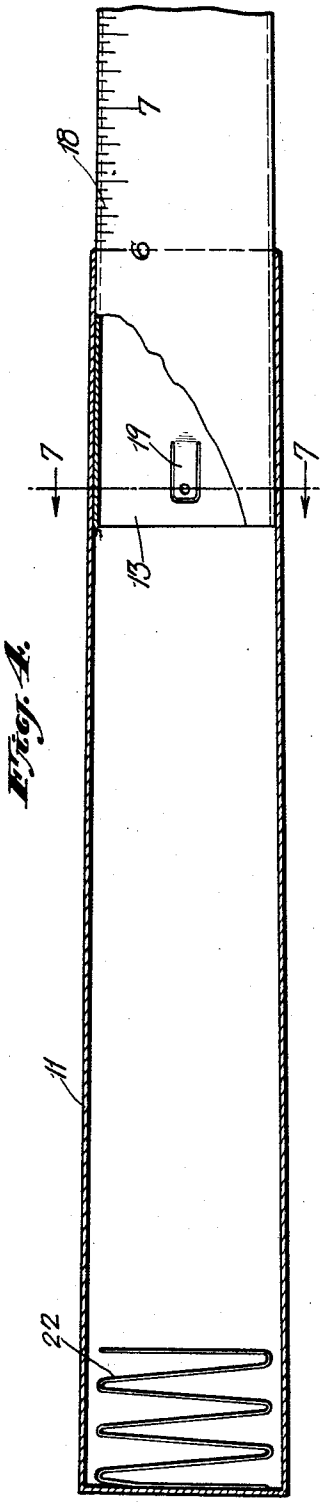


Fig. 4.

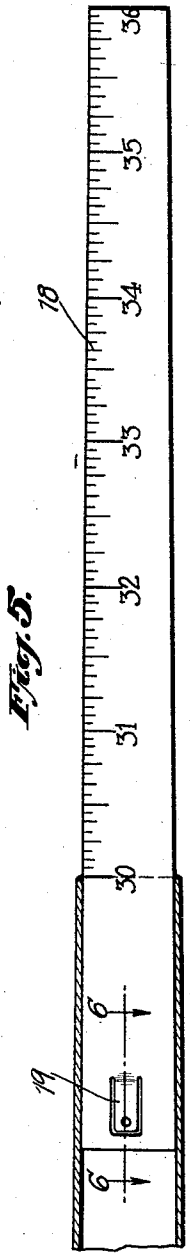


Fig. 5.

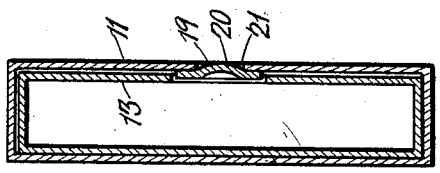


Fig. 7.



Fig. 6.

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UNITED STATES PATENT OFFICE

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MEASURING RULE

Application filed February 21, 1930. Serial No. 430,289.

This invention relates to improvements in measuring rules and has particular reference to a compact telescoping rule for carpenters' and mechanics' use.

The primary object of the invention resides in a rule constructed of a plurality of telescoping sections for facilitating collapsing of the sections into a compact structure when not in use, but which may be readily extended for use when desired by the actuation of a releasable catch, there being spring means for initially extending the rule sections to permit the hand of an operator to pull the same to their fully extended position.

Another object is to provide a telescoping carpenter's rule which may be folded and conveniently carried in the pocket of a user when not in use, and in which the telescoping sections are provided with interlocking means engageable when the sections are in a fully extended position for securely locking them in such position against accidental movement.

With these and other objects in view, the invention resides in the certain novel construction, combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claim, and are illustrated in the accompanying drawings, in which:

Figure 1 is a side elevational view of my improved carpenter's rule showing the same in an extended position.

Figure 2 is a side elevational view of the same in a completely folded position with parts broken away in section.

Figure 3 is an edge view of the same with parts broken away in section.

Figure 4 is an enlarged vertical longitudinal sectional view through the casing section showing the rule sections in extended position.

Figure 5 is a vertical sectional view showing the interlocking means between the outermost rule sections and the section in which it telescopes.

Figure 6 is an enlarged vertical sectional view on the line 6—6 of Figure 5.

Figure 7 is an enlarged vertical transverse sectional view on the line 7—7 of Figure 4.

Referring to the drawings by reference characters, the numeral 10 designates my improved carpenter's rule in its entirety which includes a hollow casing or base section 11, which is closed at one end as at 12, while the opposite end is open for telescopically receiving the respective rule sections 13, 14, 15, 16 and 17. All of the rule sections are constructed of resilient metal and all excepting the outer most section 17 are substantially tubular in cross section and of a rectangular configuration as will be best seen in Figure 7 of the drawings. The rule sections gradually taper from the casing section 11 to the outermost section 17 and one of the edges is provided with graduations 18 representing inches and fractions thereof. The rule in the present instance is constructed of six sections for producing a thirty-six inch rule but it is understood that the sections may be increased to increase the length of the rule or decrease depending upon the size of rule desired.

Each section 13 to 17, inclusive, has a spring tongue 19 stamped from one of the walls thereof and which tongue has a tendency to bear against one of the flat side walls of the rule section in which the particular section telescopes, the outer free end of each spring tongue being provided with a rounded or ball head or teat 20, which head is adapted to seat in an opening 21 provided adjacent one end of each of the sections 11, 13, 14, 15 and 16. The heads 20 snap into the openings 21 when the respective rule sections have been pulled to the limit of their extension movement. In order to disengage the heads 20 from the walls of the opening 21, it is only necessary to push inwardly upon the respective rule sections, or the operator may depress the spring tongue by inserting and pressing his finger upon the heads 20 which are disposed within the opening 21.

Contained within the casing section 11 and abutting the closed end wall 12 thereof is an expansion spring 22, which spring is placed under compression when the rule sections are

in a folded or telescoped position, thus placing the telescoped sections 13 to 17, inclusive, under tension. For the purpose of holding the telescoped sections within the casing section 11 against the action of the spring 22, I provide suitable catch means which includes a resilient slide member 23, mounted upon the exterior of the casing section 11, and which slide member is provided with an elongated slot 24 through which headed studs 25 extend, and which serve to slidably secure the member to the casing section. One end of the slide member is turned upwardly to provide a manipulating portion 26, while the other end is offset, and has a bore head 27 on the under side thereof, the said head being extendable through an opening 28 in one of the side walls of the casing section. The head 27 which passes through the opening 28 is adapted to enter an opening 29 adjacent the outer end of the rule section 13 as best seen in Figure 3 for the purpose of preventing accidental outward movement of the section 13 against the action of the spring 22. When the sections are in telescoped position, the heads 20 of the spring tongues 19 frictionally engage the adjacent side wall of the section with which it telescopes for preventing accidental extension of the section, thus if the section 13 is locked against the action of the spring 22, all of the sections are prevented from being extended. However, by shifting the slide plate 23 so as to cause the head 27 to disengage the opening 29, the spring 22 will cause the telescoped sections to be extended through the open end of the casing 11 whereby the operator may grasp the partially extended rule sections and pull them to a fully extended position at which time the respective locking tongues 19 interlock with the particular section. By this arrangement the rule is held in a fully extended position against accidental folding and may be used in a manner similar to the present type of flexible steel rule.

From the foregoing description it will be seen that the rule may be compactly folded into the base section or casing 11 and the rule conveniently carried in the pocket of a user.

Having thus described the invention, what I claim as new and desire to secure by Letters Patents is:—

In a measuring device, a plurality of relatively flat telescoping sections provided with U-shaped incisions defining longitudinally extending spring tongues, said tongues being provided at points spaced inward of the sides and the free ends thereof with rounded protuberances, said sections being provided with apertures for the partial reception of said rounded protuberances to yieldingly hold said sections in a predetermined position, and a casing receiving said sections and having a closed end, and a spring between said closed end of the casing and the adjacent ends of said sections and being expansible to urge the sections endwise, said casing being provided with a catch to yieldingly retain said sections in place in the casing, the protuberances of said sections being adapted to press against adjacent closed portions of the sections to yieldingly hold the sections against movement with respect to each other.

In testimony whereof I affix my signature.

JOSEPH M. DOUGOVITO.