April 14, 1931. L. R. SMITH 1,800,911

TAPE MEASURE

Filed Jan. 23, 1929

Fig. 2

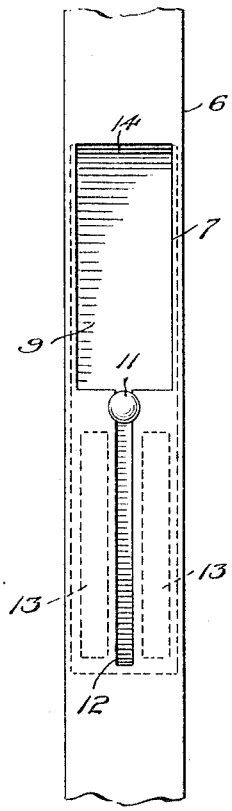


Fig. 1

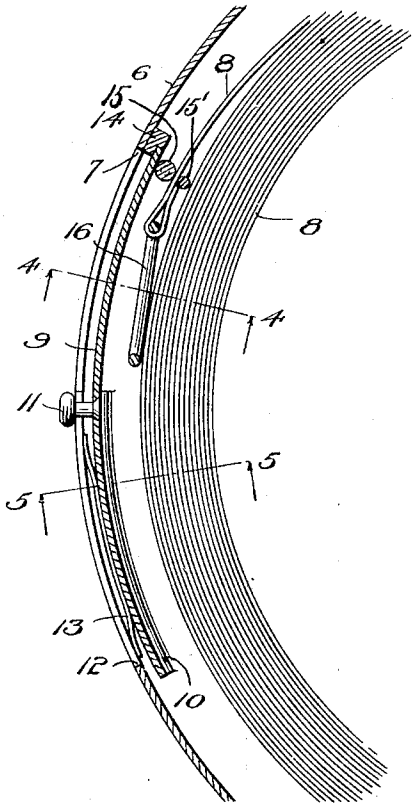


Fig. 3

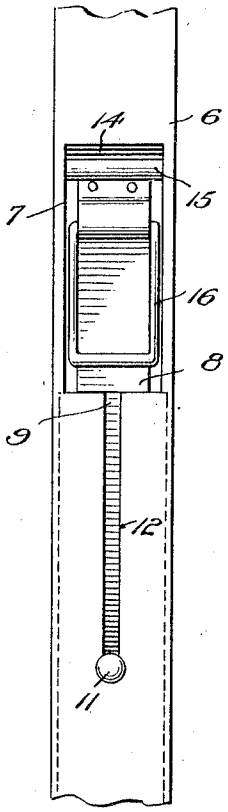


Fig. 4

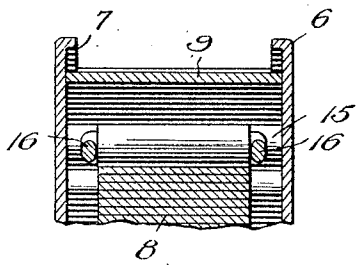
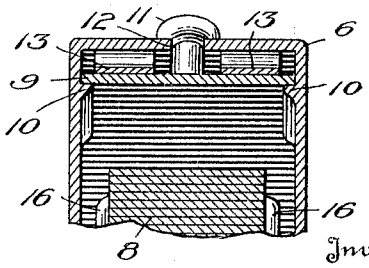


Fig. 5



Witness

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Patented Apr. 14, 1931 1,800,911

UNITED STATES PATENT OFFICE

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TAPE MEASURE

Application filed January 23, 1929. Serial No. 334,459.

This invention relates in general to tape measures, and particularly to that class of tape measures which are constructed of metal, or some breakable material and wound in successive layers upon a spool or bobbin and housed in a suitable casing.

In tape measures of this kind, considerable annoyance is experienced by reason of the exposed or free end of the tape becoming broken when permitted to dangle or hang loose through the slot in the casing.

The primary object of the present invention is to overcome this existing condition, to which end, it is proposed to so construct the casing which houses the tape that the free end of the tape will be suitably protected and housed within the casing when not in use.

A further object is to accomplish the foregoing results in a simple and cheap manner and to employ a construction which will leave the periphery of the casing free of any radial extensions or outstanding enlargements.

Further objects will be apparent upon reference to the accompanying drawing and following description.

The invention will be hereinafter particularly described and then pointed out in the claims following.

In the accompanying drawings which form part of this application for Letters Patent, and whereon corresponding numerals refer to like parts in the several views:

Figure 1 is a fragmentary sectional view of the invention in the normal arrangement and relation of parts;

Figure 2 is also a fragmentary view, being an elevation of a portion of the casing closed;

Figure 3 is a view corresponding with Figure 2 except that here the closure of the casing is shown open;

Figure 4 is a transverse, sectional view taken on the line 4—4 of Figure 1; and

Figure 5 is also a transverse section taken on the line 5—5 of Figure 1.

Reference being had to the drawings and numerals thereon, 6 indicates a tape line casing of the usual drum-like construction, having a rectangular slot 7 in its periphery to permit withdrawal of the free end of an ordinary tape line 8, or other measuring line of fabric or ribbon steel when desired. The line 8 itself is of the usual, or of any preferred construction, and bears upon its surface suitable graduations. It is secured at its inner end and is preferably arranged upon a centrally positioned recoil drum (not shown), as usual in the mounting of such lines or measures in their enclosing casings.

In order that the exposed or free end of the line 8 may be protected and suitably housed within the casing 6 when the measure is not in use, a reciprocating shutter or closure for the peripheral opening 7 is provided, comprising an arcuate shaped strip 9 of sheet metal, conforming in shape to the outer circumference of casing 6. This shutter or closure 9 is slidably mounted upon oppositely disposed ledges 10, 10, as best shown by Figure 5, is adapted to be actuated by agency of a push knob 11 projecting through a circumferential groove 12, at one side of and communicating directly with the opening 7 aforesaid, and is retained in operative position by the tension of a leaf spring 13 interposed between the shutter and the inner circumference of casing 6.

Adjacent one end of the outlet opening 7 there is provided a lug 14 serving as a permanent abutment for the inner end of shutter 9 when closed, and beneath this lug or stop 14, is positioned transversely arranged rollers 15 and 15′ between which the line 8 must pass when being reeled out or in, while the free end of line 8 is provided with the usual ring or rectangular bail 16, which differs however, from the ordinary terminal rings or bails in that it is of a width less than that of the slot 7, which it can therefore enter bodily as shown by Figure 3.

This being substantially the construction

and arrangement of the present invention, its use and operation are quite apparent at a glance and would seem to require no detailed explanation.

Obviously it is highly desirable to have the line or measure 8 completely housed and therefore protected, when not in use as indicated by Figure 1. When occasion requires however, the operation of placing the line in use is simply that of pushing the knob 11 along the slot 12 to the position indicated by Figure 3, thereby opening the outlet 7, and exposing the free end of the line 8.

Terminal ring or bail 16 may now be lifted and drawn through slot 12 as required, followed by the line 8 beneath the transverse rollers 15 and 15′ ready for use. The reverse action is equally apparent, and when released, line and bail again resume their completely enclosed or housed position within the casing 6, whereupon shutter 9 may be again returned to its closed position by agency of the knob 11, as shown by Figure 1.

Having thus described my invention, what I now claim and desire to secure by Letters Patent is:

1. A casing for a tape measure or the like comprising a cylindrical housing having an opening in its periphery, ledges carried by the housing inwardly of the opening and at one end thereof, and a shutter slidably mounted on said ledges.

2. A casing for a tape measure or the like comprising a cylindrical housing having an opening in its periphery, ledges carried by the housing inwardly of the opening, a shutter slidably mounted on said ledges and means for holding the shutter in frictional engagement with the ledges.

3. A casing for a tape measure or the like comprising a cylindrical housing having an opening in its periphery, ledges carried by the housing inwardly of the opening, a shutter slidably mounted on said ledges, and a spring positioned between the shutter and the periphery of the casing to urge the shutter resiliently against the ledges.

4. A container having an outer portion provided with an opening, a ledge and a stop spaced apart at opposite ends of the opening, and a shutter slidably engaged with the ledge, the ledge being shaped to guide the shutter against the stop.

5. A container having a portion provided with an opening, a ledge and a stop associated with the container near the opening and being spaced apart to allow access through the opening between them to the interior of the container, and a shutter slidably engaged with the ledge, the ledge being shaped to guide the shutter against the stop to close the opening.

6. A cylindrical container including a peripheral portion provided with an opening, a pair of ledges formed in the container at one end of the opening and a stop member positioned in the container at the opposite end of the opening, an arcuate shutter slidably engaged with the ledges, the ledges being arcuate to guide the shutter against the stop member.

7. A container as claimed in claim 4, in which a slot is formed in the outer portion and in which the shutter is provided with a knob which projects through the slot.

In testimony whereof I affix my signature.

LOUIS R. SMITH.

CERTIFICATE OF CORRECTION.

Patent No. 1,800,911. Granted April 14, 1931, to

LOUIS R. SMITH.

It is hereby certified that error appears in the above numbered patent requiring correction as follows: In the grant, and in the heading to the printed specification the residence of the patentee was erroneously written and printed as "Kekaha, Kauai, Territory of Hawaii", whereas said residence should have been written and printed as Hawthorne, Nevada; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 26th day of May, A. D. 1931.

M. J. Moore,
Acting Commissioner of Patents.

(Seal)