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C. ASHMUSEN

2,282,509

MEASURING TAPE

Filed Jan. 30, 1941

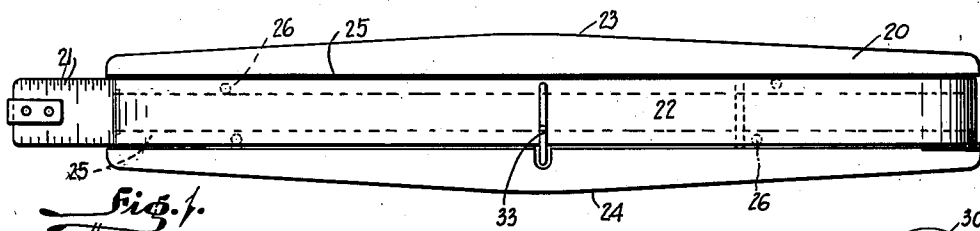


Fig. 1.

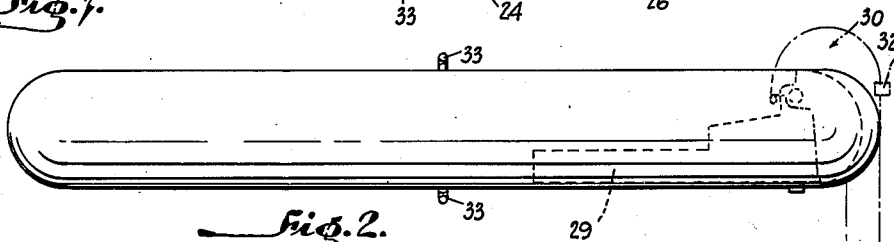


Fig. 2.



Fig. 4.

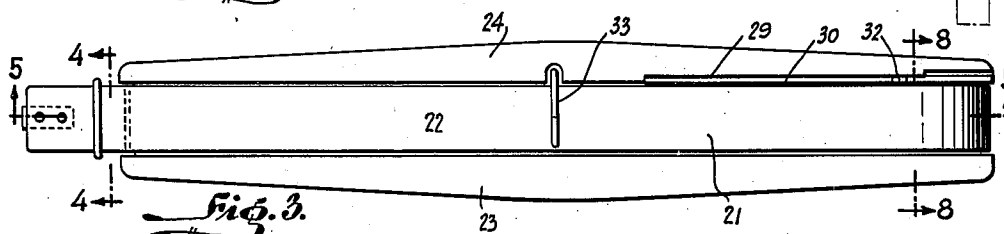


Fig. 3.

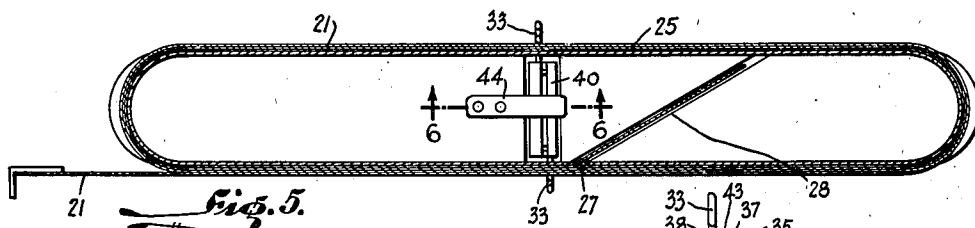


Fig. 5.

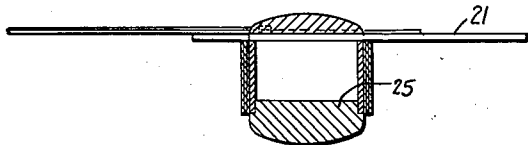


Fig. 8.

Fig. 6.

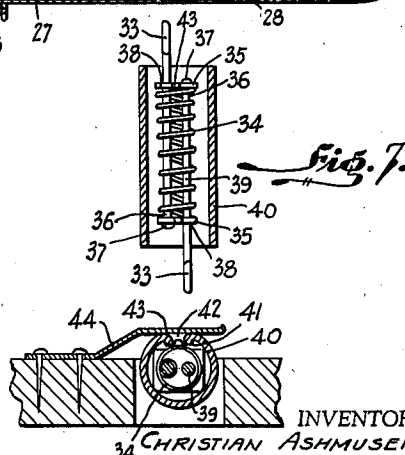


Fig. 7.

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MEASURING TAPE

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3 Claims. (Cl. 33—138)

This invention relates to new and useful improvements in means for taking tape scale measurements.

The modern flex rigid type steel tape scale has long been recognized among craftsmen, especially in the building trades, as a superior scale over those of wood or other types. However, its adaptation has not met with general approval, because as now manufactured it is clumsy and awkward in handling.

In order to overcome those objections and provide a practical solution of the same, I have devised a type of holder, which will facilitate the use of this kind of scale.

Thus my said device may be characterized "a shuttle or bobbin type" scale, which is especially adaptable for taking inside measurements. This specimen has spring pressed loop points for retaining the tape on the shuttle or bobbin, which incidentally facilitates speed in handling the same.

As a further outstanding feature in regard to this device may be mentioned the folding blade with tape retaining hook and limit stop; and, also, a friction slot for holding the tape in place for the taking of inside measurements.

With the above and other objects in view, this invention consists of the novel features of construction, combination and arrangement of parts, hereinafter fully described, claimed and illustrated in the accompanying drawing, forming part of this specification, and in which similar characters of reference indicate corresponding parts in all views, and in which:

Figure 1 is a plan view of the steel tape holder.

Figure 2 is a side elevational view of my device, as shown in Figure 1.

Figure 3 is a bottom plan view thereof.

Figure 4 is a sectional view, taken on the lines 4—4 in Figure 3.

Figure 5 is a longitudinal cross-sectional view, taken on the lines 5—5 in Figure 3.

Figure 6 is a sectional view taken on the lines 6—6 in Figure 5, showing the centering mechanism of the tape clamp.

Figure 7 is a cross-sectional view of Figure 6, showing the tensional relation of both clamp members; while

Figure 8 is a section on the line 8—8 in Figure 3.

It is obvious that my device may be made from brass, plastic material, or any other kind of suitable material.

Referring more particularly to the drawing, 20 indicates a shuttle or tape holder adapted

to have a steel tape 21, of the scale measurement type, wound around it.

While the said holder may well be constructed in different ways, the present embodiment comprises a center portion 22, and two lid members 23 and 24, fixedly secured to the latter in any suitable manner, as for instance by means of small pins 26. The center portion 22 consists herein of a piece of metal bent upon itself to form a housing; it has a slot 27 therein of the width of a steel tape, so that the end of the latter may be inserted to form an anchorage.

In order to accommodate the withdrawal of the steel tape 21, the depending portions 25, shown in dotted lines, of the lid members 23 and 24, are formed with slits 28 therein, registering with the slot 27; one of said slits being shown in Figure 5.

One of the said lid members may conveniently be made removable, by making the pins 26 subject to be easily withdrawn, so that access may be had to the interior of the housing.

The said holder has one of its lid members slightly recessed, as shown in dotted lines at 29, in order to permit an arm 30 to be pivotally mounted at said end of the holder, and, also, in order to permit the tape 21 to be slid through said housing.

This arrangement is particularly desirable for the taking of certain, for instance inside, measurements, as it will permit a steady run and easy reading of the tape which is guided by a catch 32 formed upon said arm.

In order to secure the tape tightly and conveniently in place upon the holder, when not in use, clamping means has been mounted upon the latter.

Said clamping means comprises two arms 33, the outer parts of which project upon each side of the holder for engaging the tape, while the inner end of the arms are overlapping each other and held together by means of two endplates 35, 35; the inner ends 36 of each arm 33 are riveted to the plate 35, as at 37, while as shown at 38 the arms 33 are free to slide in and out.

The inner arm portions 39, with their spring 34, are located in a tube 40 in substantially their full inner lengths; the said tube 40 is made of sheet metal, the two ends of which are turned inwardly as at 41, thereby forming a groove 42 to accommodate a tongue 43 in each plate 35. Thus, the arms 33 will be securely held in an upright position because the inturned ends 41 will form a flat surface against which the spring 44 rests.

It is obvious that slight changes may be made in the form, construction and arrangement of the several parts, as shown, within the scope of the appended claims, without departing from the spirit of the invention, and I do not, therefore, wish to limit myself to the exact construction and arrangement shown and described herein.

What I claim as new, and desire to secure by Letters Patent of the United States, is:

1. In a device of the class described, a housing adapted to have a tape scale wound thereon, said housing comprising an open center reel portion, and top and bottom lids secured to the latter to form rims for the reel, the center portion having a slot in one side thereof into which the fixed end of the tape projects, and small aligned cut-away portions in each side thereof respectively, a member consisting of two arms mounted in said center portion, said arms protruding through the respective cut-away portions and being adapted to engage the tape wound upon the housing, and a spring wound around the arms to urge them towards the housing.

2. In a device of the class described, a housing adapted to have a tape scale wound thereon, said

housing comprising an open center reel portion, and top and bottom lids secured to the latter to form rims for the reel, the center portion having a slot in one side thereof into which the fixed end of the tape projects, and small aligned cut-away portions in each side thereof respectively, a member consisting of two arms mounted in said center portion, said arms protruding through the respective cut-away portions and being adapted to engage the tape wound upon the housing, a substantially cylindrical casing within the housing and surrounding said arms, and a spring wound around the arms to urge them toward the housing, said casing being made with inwardly bent portions, whereby to form a recess, and a leaf spring mounted within the housing and adapted to engage said recess.

3. In a device, as claimed in claim 2, and wherein one of the lids at the end thereof is formed with a recess adapted to receive the tape, an arm pivotally mounted in said recess, and a catch formed upon said arm, whereby to guide the tape during operation.

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