No. 736,359. PATENTED AUG. 18, 1903.

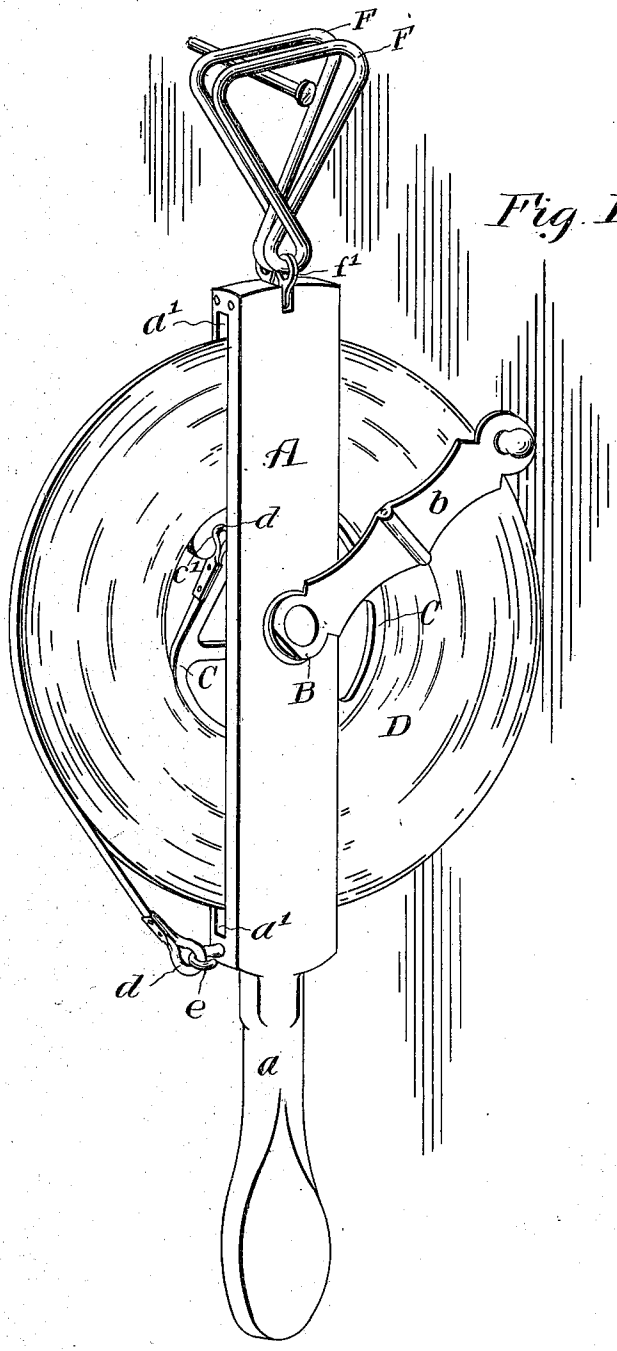
F. BUCK.

MEASURING TAPE.

APPLICATION FILED OCT. 13, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES:

A. E. Merkel

D. T. Davies

INVENTOR.

F. Buck,

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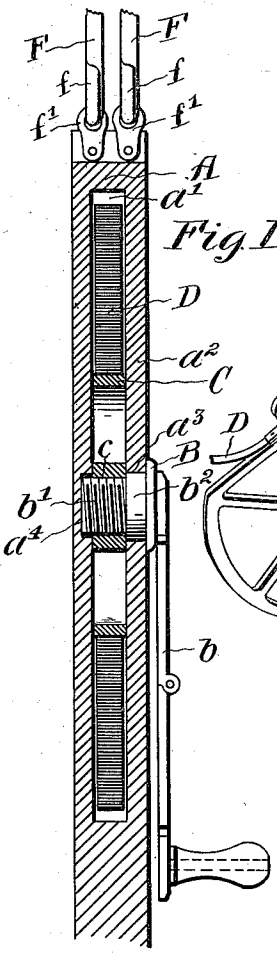


Fig. II.

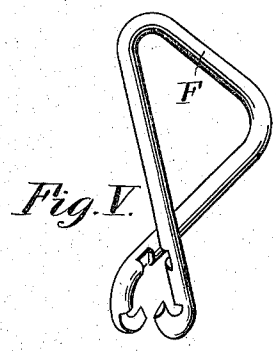


Fig. V.

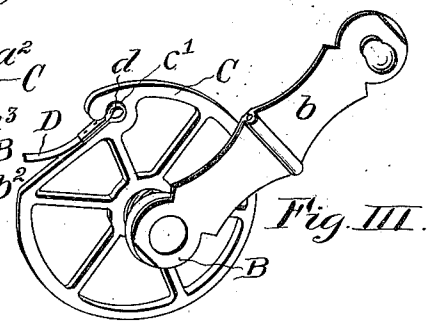


Fig. III.

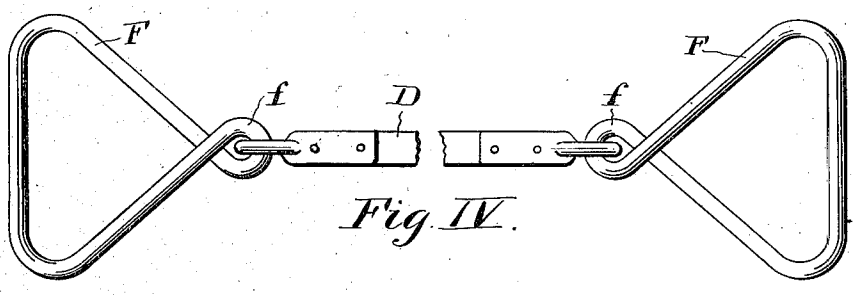


Fig. IV.

WITNESSES:

A. E. Merkel

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No. 736,359. Patented August 18, 1903.

UNITED STATES PATENT OFFICE.

FRED BUCK, OF SAGINAW, MICHIGAN, ASSIGNOR TO THE LUFKIN RULE COMPANY, OF SAGINAW, MICHIGAN, A CORPORATION OF MICHIGAN.

MEASURING-TAPE.

SPECIFICATION forming part of Letters Patent No. 736,359, dated August 18, 1903.

Application filed October 13, 1902. Serial No. 127,028. (No model.)

To all whom it may concern:

Be it known that I, FRED BUCK, a citizen of the United States, and a resident of Saginaw, county of Saginaw, and State of Michigan, have invented a new and useful Improvement in Measuring-Tapes, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to measuring-tapes, and particularly to that class of measuring-tapes in which the tape-line is wound upon a drum and supported in a suitable case or frame whereby they may be easily handled.

The object of said invention is to provide a tape-line and support or casing therefor of simple construction and such that the tape may be readily removed and used independently of the casing.

Said invention consists of means hereinafter fully described, and specifically set forth in the claims.

The annexed drawings and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting but one of the various mechanical forms in which the principle of the invention may be used.

In the annexed drawings, Figure I represents a perspective view of a measuring-tape embodying my invention. Fig. II represents a vertical transverse view of same. Fig. III represents a perspective view of the drum and hub used in said invention, showing said parts separated from each other and detached from the structure frame. Fig. IV represents the two ends of the tape-line broken away from the main portion of the line and showing the handle-links attached thereto for use in carrying the line when detached from the drum, and Fig. V represents a detail perspective view.

An elongated frame A, preferably of wood, is formed at one end with a handle a and intermediate of such handle and opposite end with a slot a', having parallel sides, as shown in Figs. I and II. Passing through one side a^2 of the frame and intersecting slot a' at about its middle is formed a circular aperture forming a bearing a^3 for a hub B, which is rotatable therein. This hub is formed with a hinged handle b at one end, its opposite end being formed with a screw-threaded portion b'. Intermediate of such portion b' and the handle b is a cylindrical journal portion b^2, which in the assembled structure bears in the bearing a^3, Fig. II. A drum C is formed with a central threaded opening c, into which the threaded portion b' of the hub is screwed and through which it extends and beyond which it projects, as shown in said figure. A circular depression a^4 is formed in the side of frame A opposite the bearing a^3 to receive and center this projecting hub end, which bears therein. The tape-line D is spirally wound upon the drum C and has secured to each of its extremities an eye d, placed at right angles with the plane of the tape-line, as shown. The drum is transversely formed near its periphery with a slot c', corresponding in form with the form of one of the eyes d, whereby such eye may be slipped therein laterally and held firmly against removal in a tangential direction. The inner extremity of the tape is thus secured to the drum. Upon one side of the frame and intermediate of the slot and handle is secured a hook e, to which the eye d, secured to the outer end of the tape-line when rolled up and not in use, is removably secured. Upon the end of the frame opposite the handle end are removably secured two handle-links F and F. These links are provided, as shown, with an eye f, preferably formed by crossing the sides of the link and split so that it may be sprung open for the purpose of removing and replacing it. These eyes are snapped into two links f', loosely pivoted upon the end and opposite sides of said frame, whereby the handle-links may be caused to lie flat upon the sides of the frame, and the device so caused to occupy the least possible compass when placed in a box for shipping or laid away. When distances of considerable length are measured, the tape-line may be removed from the frame by unwinding it from the drum and removing the inner eye d from the slot c'. The handle-links are then removed from the links f' and attached to each end of the tape-line by snapping them into the eyes d, as shown in Fig. IV. The line

may then, by means of these handles, be readily carried about.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention—

1. The combination of a frame formed with a longitudinal open slot and a bearing on one side of the latter, a drum in said slot for receiving and supporting a tape-line, and a hub journaled in said bearing, supporting said drum and removably secured to and passing through the latter, the frame being provided, on the side opposite said bearing, with a circular recess, one end of said hub projecting into said recess.

2. The combination of a frame formed with a slot, a drum in said slot provided with an internal thread, and a hub passing through and having threaded engagement with said drum, and having a bearing in said frame on one side of said slot.

3. The combination of a frame formed with a slot, a drum rotatively mounted upon said frame in said slot, a tape-line wound upon said drum having its inner extremity provided with an eye secured thereto and removably secured to the drum, the outer end being provided with an eye of same form and size as that upon the inner end and arranged to be secured upon said drum in place of the eye upon the said inner end, whereby the tape-line may be reversed upon the drum.

4. The combination of a frame provided with a slot, a drum in said slot provided with an internal thread, a hub passing through and having threaded engagement with said drum and having a bearing in said frame upon opposite sides of said slot, a tape-line wound upon said drum and having its extremities each provided with an eye, said drum provided with a slot adapted to receive either of said eyes, the eye upon the inner extremity of the tape being secured in said slot.

Signed by me this 3d day of October, 1902.

FRED BUCK.

Attest:

GEO. W. SAYWELL,
A. E. MERKEL.