R. KASTMANN.

MEASURING TAPE.

APPLICATION FILED JULY 1, 1915.

1,189,257. Patented July 4, 1916.

Fig. 1.

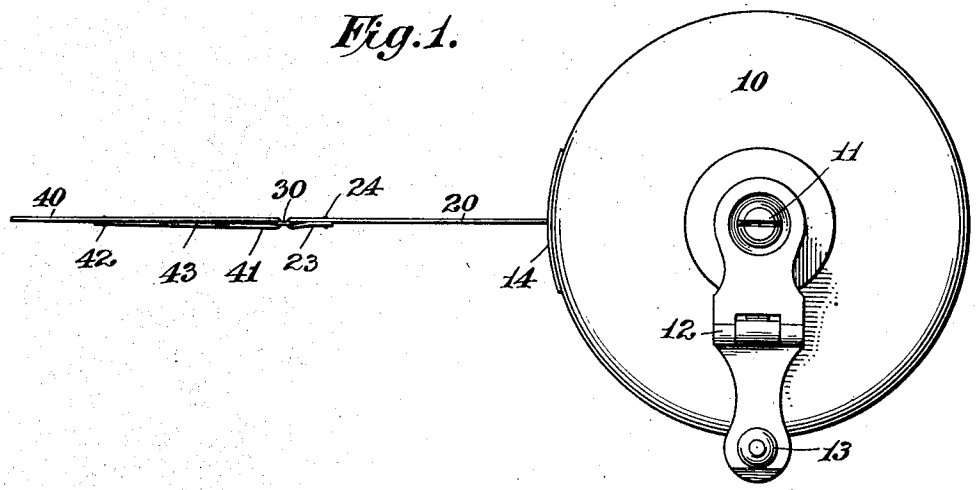


Fig. 2.

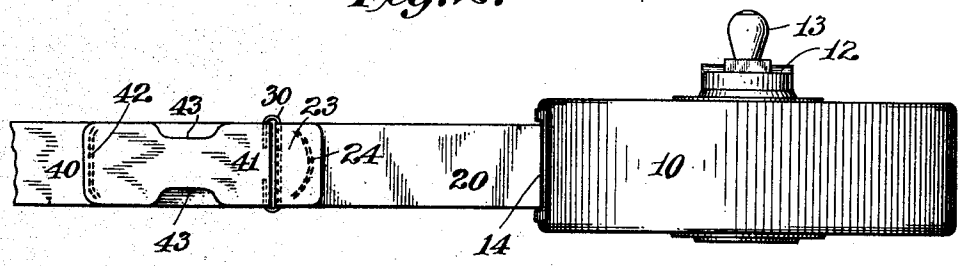


Fig. 3.

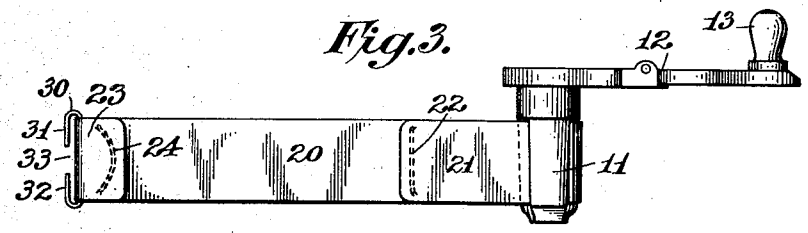


Fig. 4.

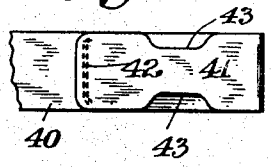


Fig. 5.

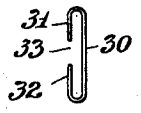
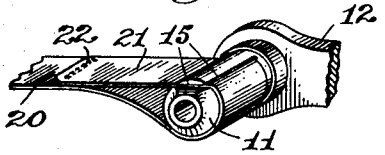


Fig. 6.



Richard Kastmann Inventor:
by William R. Baird
his Atty

UNITED STATES PATENT OFFICE.

RICHARD KASTMANN, OF NEW YORK, N. Y., ASSIGNOR TO THE KEUFFEL & ESSER COMPANY, OF HOBOKEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

MEASURING-TAPE.

1,189,257. Specification of Letters Patent. Patented July 4, 1916.

Application filed July 1, 1915. Serial No. 37,408.

To all whom it may concern:

Be it known that I, RICHARD KASTMANN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Measuring-Tapes, of which the following is a specification.

This invention relates to measuring tapes and more particularly to woven tapes attached at one end to a post provided with a crank handle whereby they are reeled upon the post and withdrawn into a suitable casing. Its novelty consists in the construction and adaptation of the parts as will be more fully hereinafter pointed out.

Woven tapes wear out in use. The cases in which they are contained when not in use do not readily wear out. In fact a well made case usually outwears several tapes, so that from time to time it is necessary to insert a new tape in the case. As the device is usually constructed this is not easy to do, as it requires the removal of the center post, the slipping of the terminal loop of the tape into the case through the usual side opening, then placing the post into the loop and finally fastening the post into the case. This necessitates the exercise of some skill and much patience unless the person happens to be an expert in this class of work, and the users of such tapes are generally not such experts.

The object of my invention is to provide a tape of this character with means whereby it can quickly be secured to or removed from its connection with the central post, and this I accomplish by providing the post with a tongue which while removable is relatively permanent so far as the tape proper is concerned and which projects outside of the case far enough to be readily manipulated in combination with a simple connector whereby it can be easily and securely attached to the tape proper.

In the drawings in which there is illustrated a device embodying a preferred form of my invention, Figure 1 is a side elevation of the case, crank, tongue, tape loop and connection; Fig. 2 is a top plan view of the same; Fig. 3 is a view of the tongue; Fig. 4 of the loop at the end of the tape; Fig. 5 of the connector, and Fig. 6 is a detail showing how the tongue is detachably secured to the post.

In the drawings, 10 is a tape case of usual form having a central post 11 adapted to be rotated in a bearing at the center of the case and which post is provided with a hinged crank 12 having the usual handle 13. The opening through which the tape passes is protected by the usual guard indicated at 14. The post is provided with a longitudinal slit 15.

The tongue which is preferably made of a piece of the tape material (although this is not necessary, as any flexible band of about the same width will serve) is formed of a main piece 20, turned back at its rear end to form a loop 21 the end of the turned piece being secured to the main piece by any suitable means as stitches indicated at 22. At its opposite end the main piece is turned back to form another loop 23, the end of this turned piece being also secured to the main piece by any suitable means as stitches indicated at 24.

The connector is an oval shaped ring of wire, or the like, 30 bent inwardly at its two ends, 31 and 32 which do not meet however but allow a space 33 to exist between them. This metal loop is placed within the small loop 23 of the tongue. The rear end of the tape 40 is bent back upon itself to form a loop 41, the end of the turned piece being secured to the tape by any suitable means as stitches indicated at 42. The turned piece is also provided with notches or cut outs 43 on each side to allow of the ready engagement of the connector with the tape loop.

In use, assuming that the tape is wound up on the reel and it is desired to change it and substitute another, the tape is unwound until the tongue protrudes from the case, the loop 41 is slipped back until the ends 31, 32 of the ring coincide with the notches 43 when it is easy to disengage the tape loop from the tongue. A new tape is inserted by reversing the operation, *i. e.*, bring the notches of the tape loop to coincide with the ring, then inserting the ring by placing first one end and then the other over the tape loop and finally drawing the parts into the position shown in Figs. 1 and 2.

I claim:

1. In a device of the character described, a tape having a terminal loop with a cut out edge on one stretch of the loop, a post, a tongue carried by the post, a connector se-

cured to the tongue and consisting of a ring having an opening whereby its ends on either side of the opening may readily pass within the loop at its cut out portion.

2. The combination with a tape case provided with a central post and a tongue carried thereby of a tape and means for detachably securing it to the tongue including a loop formed on the end of the tape, a loop carried by the tongue and a connector between them consisting of an open ring secured to one loop and adapted to engage the other.

3. The combination with a tape case provided with a central post and a tongue carried thereby of a tape and means for detachably securing it to the tongue including a loop formed on the end of the tape, a loop at the end of the tongue, one loop having notched edges and a connector between the loops consisting of an open ring secured to the unnotched loop and adapted to engage the notched loop.

4. The combination with a tape case provided with a central post and a tongue carried thereby, of a tape and a loop formed on one end thereof, a connector carried by the tongue, said connector located in the end of said loop for connecting the tape to the tongue and capable of being moved from said end location for separating the tape from the tongue.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD KASTMANN.

Witnesses:

BODEWINE BERTRAND VAN SICKLE,

ALBERT KIMMERLE.