

H. B. TYLER.
Tape Measures.

No. 140,745.

Patented July 8, 1873.

fig. 1.

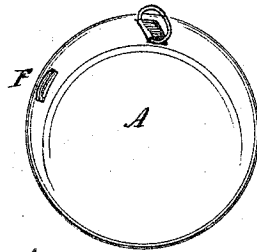


fig. 2.

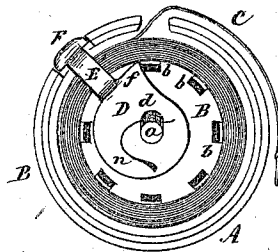


fig. 4.

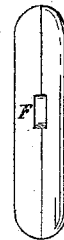
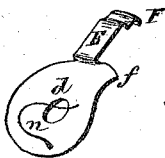


fig. 3.



Witnesses.

H. Shumway
A. J. Tibbitts

Henry B. Tyler
Inventor

By *Atty.*

John P. Earle

UNITED STATES PATENT OFFICE.

HENRY B. TYLER, OF WEST MERIDEN, CONNECTICUT, ASSIGNOR TO
BRADLEY AND HUBBARD, OF SAME PLACE.

IMPROVEMENT IN TAPE-MEASURES.

Specification forming part of Letters Patent No. 140,745, dated July 8, 1873; application filed
May 13, 1873.

To all whom it may concern:

Be it known that I, HENRY B. TYLER, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Tape-Measures; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Fig. 1 a perspective view; Fig. 2, a side view with one half the case removed; Fig. 3, the pawl detached; and Fig. 4, an edge view.

This invention relates to an improvement in that class of tape-measures which have a spring arranged within a drum upon an axis in the center to wind the tape within the case.

Various devices have been resorted to to arrest the reaction of the spring when the tape is withdrawn, so that it may remain unwound outside the case when so desired. The mechanism for such device has usually been more or less complicated and liable to get out of repair; and, further, the external projection from the internal mechanism, by which the user was enabled to operate the pawl, has been arranged upon one side or the other, while the most natural position for it is upon the edge of the case.

To simplify the construction of this pawl, and thus arrange the operating mechanism, is the object of this invention; and it consists in the arrangement of a plate upon one side of the drum, slotted so as to set over the axis of the drum and allow a slight radial motion, one point of the said plate projecting sufficiently far to engage the teeth on the drum, and provided with a spring, the tendency of which is to force the said end outward to engage the teeth on the drum and prevent the reaction of the spring, combined with a mechanism outside the case, by which the said plate may be moved from such engagement with the teeth.

A is the case of any of the known constructions; B, the drum arranged upon an axis, *a*, within the case and inclosing the spring

which causes the revolution of the drum to coil the tape C within the case. Upon one side of the drum teeth *b*, more or less in number, are formed, in substantially the usual manner, and upon that side of the drum a plate, D, is placed over the axis *a*, a slot, *d*, being formed in the plate for the purpose, and at one point, *f*, the plate projects so as to reach the teeth *b*, as seen in Fig. 2. A spring, *n*, is arranged upon the plate, the tendency of the said spring being to force the plate to one side to hold the point *f* in engagement with one of the teeth. From this plate D an arm, E, extends to one edge and is formed into a head, F, as seen in Figs. 2 and 3, the said head passing through an opening in the edge of the case, as seen in Figs. 1, 2, and 4. By depressing the said head the plate passes down, as denoted in broken lines, until the point *f* is below the line of the teeth. The tape may be withdrawn in the usual manner, the back side of the point *f* allowing the teeth to pass over; but when the tape is released the spring reacts to turn the drum in the opposite direction, one of the teeth *b* strikes the point *f* and prevents the return of the tape, and will hold the tape outside the case until the plate is depressed, as before described. The plate D may be actuated by a projection through the side of the case if desirable.

I claim as my invention—

In a tape-measure having a drum, B, and a spring arranged within the said drum to wind the tape upon the said drum, the said drum provided with teeth or projections *b*, the plate D arranged between the drum and side of the case, and with a slot, *d*, so as to work radially on the axis *a* of the drum, and with a projection, *f*, therefrom and a spring to cause the said projection *f* to engage the said teeth on the drum, combined with a projection extending outside the case whereby the said plate may be operated, substantially as described.

HENRY B. TYLER.

Witnesses:

C. P. IVES,
CHAS. F. LINSLEY.