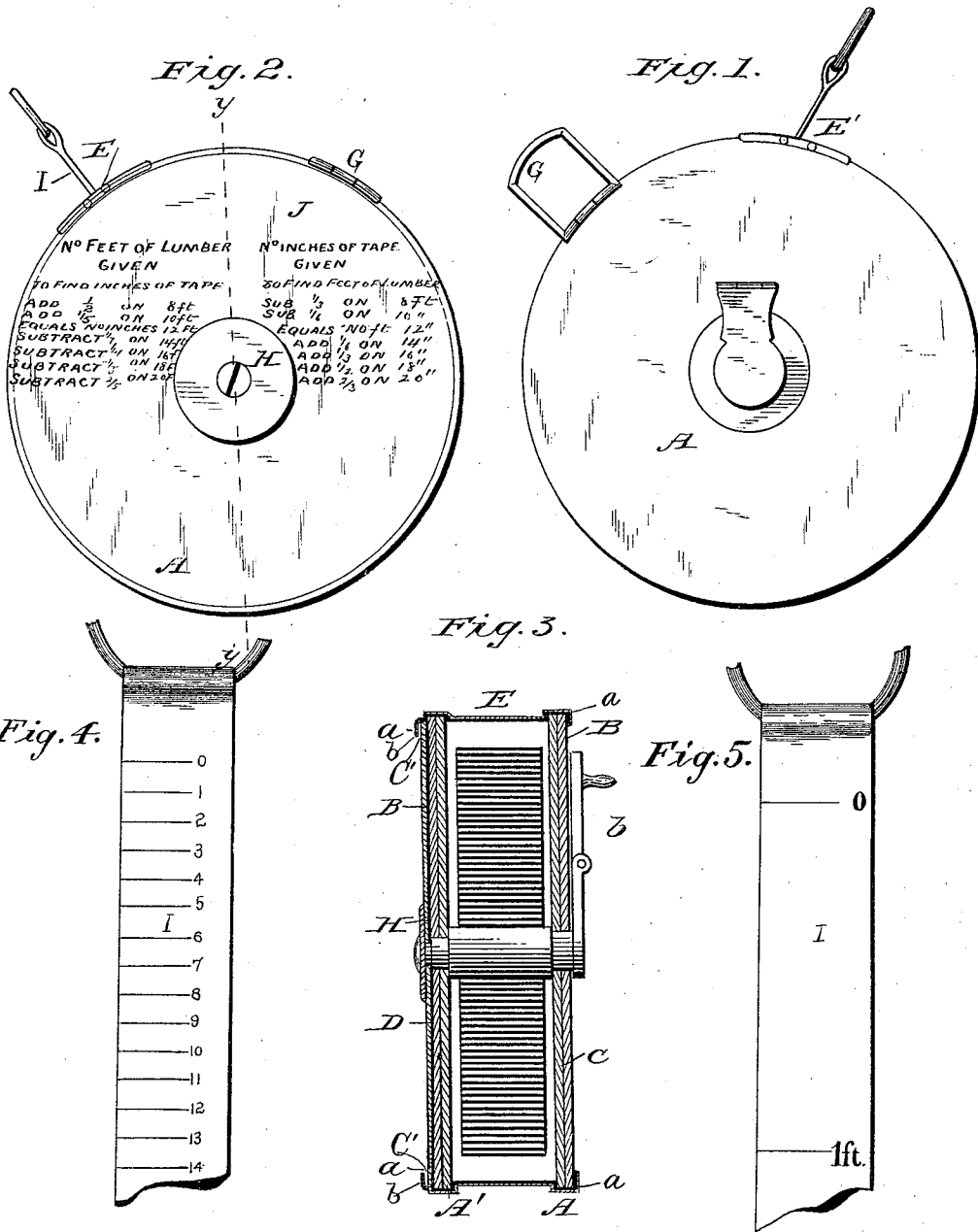


(No Model.)

F. M. SLAGLE.
TAPE MEASURE.

No. 308,287.

Patented Nov. 18, 1884.



WITNESSES,
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UNITED STATES PATENT OFFICE.

FRANK M. SLAGLE, OF ALTON, IOWA.

TAPE-MEASURE.

SPECIFICATION forming part of Letters Patent No. 308,287, dated November 18, 1884.

Application filed June 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. SLAGLE, a citizen of the United States, residing at Alton, in the county of Sioux and State of Iowa, have invented certain new and useful Improvements in Tape-Measures, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to improvements in tape-measures; and it consists in the construction and novel arrangement of devices, as will be hereinafter more fully set forth, and particularly pointed out in the claims appended.

The object of my invention is to provide a tape-measure which is particularly adapted for the use of lumbermen, for by ascertaining the width of any board or number of boards and the length of each by the use of the line and reference to the table attached to one side of the case the number of square feet contained therein is easily made known with a short calculation, and, further, by reference to the table one is enabled to ascertain quickly and accurately the length of line to be run out to produce a certain given number of square-feet.

Another object of my invention is to provide a line having one side spaced into inches and the other side into feet, to be used in connection with the reference-table on the case, as will be hereinafter fully explained. These objects I accomplish by the means shown and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a tape-measure with my improvements applied, and Fig. 2 is a similar view of the opposite side of the same. Fig. 3 is a transverse sectional view taken on the lines *yy* of Fig. 2. Fig. 4 is a view of a portion of one side of the tape, and Fig. 5 is a similar view of the opposite side.

Referring to the said drawings by letter, A indicates the casing, consisting, preferably, of leather, re-enforced by a wooden filling, C. One side of this case is provided with a reference-table, J, as shown in Fig. 2, which may be printed on the leather disk A' of the casing, the said table being protected by a disk, D, of mica or any transparent substance; but I prefer the use of mica, owing to its great elasticity and durability.

E is an annular metal band for securing the

two disks or sides of the case together. The band may be provided with the ordinary rollers, between which the tape I passes. The case is provided with the ordinary spindle, upon which the tape is wound, provided with the folding crank *f*.

G is a ring or bail secured to the band or edge wall of the casing in any well-known manner, so as to fold either on the said band or side of the case, and is designed as a means for holding the case when paying out the line, and as a convenient means for suspending the case when not in use.

The annular band E is provided at opposite edges with longitudinal grooves *a*, to engage and hold the outer edges of the wood and leather disks, respectively, and the sides or disks firmly at a proper distance from each other. One of the annular edges of the band is raised vertically and horizontally from the edge of the said groove *a*, as shown at *b*, to form an under annular recess, C', for the reception of the outer edge of the mica covering-disk D, whereby with the assistance of the central washer, H, the mica, after having its edges sprung into the recess C', may be securely held in proper position upon the side of the case, the washer H being suitably secured to the case or spindle, as shown. The line I may be any length; but I prefer to have it seventy-five (75) feet long, and provided with the ordinary metal ring at the end to prevent it running into the case, and a sufficient portion of its outer end left plain, so that the ring may be taken up as the line wears out. One side of the line is to be spaced into inches running from one to nine hundred, inclusive, and the reverse side of the line is to be spaced into feet running from one to seventy-five, inclusive. The casing should be provided with a table to be used in connection with each side of the line, respectively, and to be as follows:

Number of feet of lumber given to find inches of tape.	Number of inches of tape given to find feet of lumber.
Add $\frac{1}{2}$ on 8 feet.	Subtract $\frac{1}{2}$ on 8 feet.
Add $\frac{1}{4}$ on 10 feet.	Subtract $\frac{1}{4}$ on 10 feet.
Equals number inches on 12 feet.	Equals number feet on 12 feet.
Subtract $\frac{1}{4}$ on 14 feet.	Add $\frac{1}{4}$ on 14 feet.
Subtract $\frac{1}{4}$ on 16 feet.	Add $\frac{1}{4}$ on 16 feet.
Subtract $\frac{1}{4}$ on 18 feet.	Add $\frac{1}{4}$ on 18 feet.
Subtract $\frac{1}{4}$ on 20 feet.	Add $\frac{1}{4}$ on 20 feet.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

5 1. The combination, with a casing having one side provided with reference-tables, of the annular band for securing the side walls having the overlapping flange, and the disk of mica adapted to have its annular edge sprung under the said flange in the recess C', and secured thereto, substantially as specified.

10 2. The tape-measure described, consisting of the tape-line I, spaced on one side into inches and the opposite side into feet, the leather casing having the reference-tables J, the wooden filling, mica disk D, annular band connecting the

sides and mica disk, and the bail G, adapted to fold over the edge wall of the case, substantially as specified.

3. A tape-measure case composed of an outer covering of leather, a filling of wood, 20 and an annular metallic band having edge grooves for engaging and securing the side walls of the case, substantially as specified.

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

FRANK M. SLAGLE.

Witnesses:

L. F. FEHLEISEN,
W. S. SLAGLE.