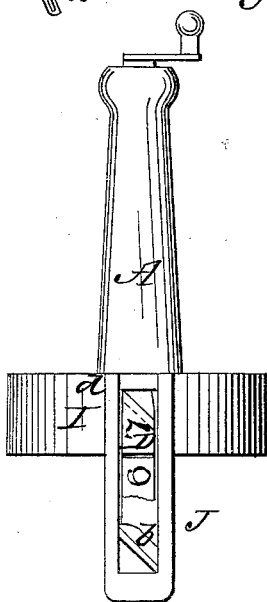
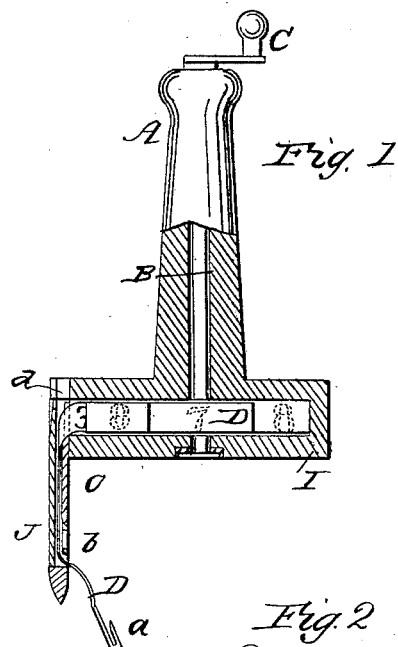


W. BEATON.
Cloth Measure.

No. 45,131.

Patented Nov. 22, 1864.



WITNESSES
C. L. Traft
Henry Morris

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UNITED STATES PATENT OFFICE.

WILLIAM BEATON, OF GRINNELL, IOWA.

DEVICE FOR MEASURING CLOTH IN THE PIECE OR ROLL.

Specification forming part of Letters Patent No. **45,131**, dated November 22, 1864.

To all whom it may concern:

Be it known that I, WILLIAM BEATON, of Grinnell, in the county of Poweshiek and State of Iowa, have invented a new and useful Improvement in Cloth-Measurers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents an elevation, partly in section, of a cloth-measurer made after my invention. Fig. 2 is a plan thereof, the "bill" being uncovered so as to show the path of the tape.

Similar letters of reference indicate like parts.

My invention consists in the construction of an implement by means of which cloth and other materials put up in rolls can be measured in the roll, thereby saving the necessity of opening or unrolling a package or roll in order to measure its contents.

To a hollow circular box, I, is attached a handle, A, projecting on one side therefrom in the line of its axis. A shaft, B, passes through the center of the handle and box, being secured in place by suitable washers at each of its ends. A measuring-tape, D, is attached to a reel on the shaft B within the box I, which latter is to be made of whatever capacity the length and width of the tape requires. A bill, J, of a width slightly exceeding the tape, extends from the outside of the box I in a direction opposite to but parallel with the handle A. Its length should be about that shown in the drawings. This bill has a longitudinal channel, O, cut in it, extending nearly to its end, across which two wire or other rods, *d* *b*, stretch at an angle of forty-five degrees at either end of the bill. The channel O communicates with the interior of the box I, so as to receive the tape. The rod *d* is at the inner end of the bill, and

in such a position as to cross the reel of the tape, also at an angle of forty-five degrees, so that by bringing the tape over the rod *d* its path is changed to a line at right angles to its position on the reel. The tape is then carried to the other end of the bill, through its channel O, to the rod *b*, over which it is carried and bent to a line at right-angles with its path through the bill. The inner face of the bill is cut away opposite the rod *b* so as to permit the tape to pass out, as seen in Fig. 1, and that edge of the opening in the bill across which the tape is drawn when it is extended in a plane paralld to the plane of the bill is sunken so that the tape may pass out freely between the edge of the bill and any substance upon which the inner face of the bill may be pressed. The end of the tape is armed with hooks *a*.

The operation of the device and implement above described is as follows: When a roll of cloth or other material wound upon itself is to be measured, the hooks *a* are inserted into the cloth or other material at its central fold, a little way within the edge thereof, when the bill is inserted within the same fold up to the face of the box, and carried by means of the handle A, in the grasp of the operator, along the successive folds until it arrives at the outside of the roll, the tape meanwhile paying out as the instrument travels along, and lying upon or encircling the successive folds of the roll. When the bill emerges from beneath the last fold the measurement of the cloth will be indicated by the scale.

It is evident that the position of the wire or rod *b* determines the direction in which the measurer is to operate. If it is placed at right angles to its present position it will operate by moving the bill through the folds in the opposite direction. The rod *b* may be made adjustable to either position, or it may have a form similar to the letter V, its limbs being at right angles to each other, in which

case the measurer will work from either direction. As this is an obvious change requiring no invention beyond what I have already shown in the implement, I have left the rod *b* single in this example of my invention.

The handle A may be made loose on the shaft B, so as to rotate thereon, if desired.

This implement can be applied to round rolls, to goods folded or wound in a flat condition, and in any other way so that the bill can be inserted in the fold.

The tape may be flat, round, or of any other character.

I claim as new and desire to secure by Letters Patent—

1. A cloth-measurer for measuring cloth and other materials in the roll or folds, substantially as described.

2. The hollow bill for inserting the tape in the folds of the goods to be measured in the roll, in combination with the reel of the tape, substantially as described.

WILLIAM BEATON.

Witnesses:

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ISRAEL S. SPENCER.