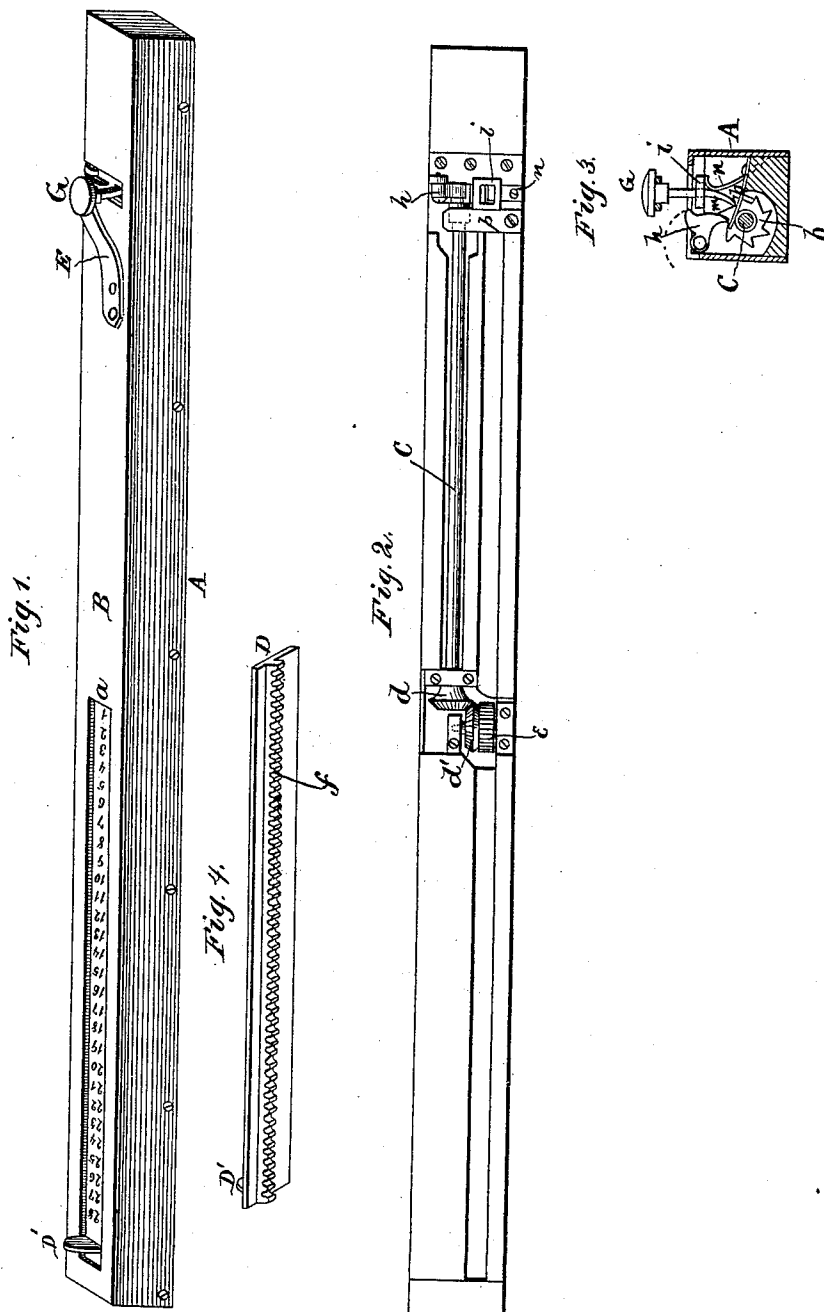


J. CONNER.

REGISTERING YARD-MEASURE.

No. 174,487.

Patented March 7, 1876.



WITNESSES:

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JOHN CONNER, OF PITTSBURG, ASSIGNOR TO INEZ L. CONNER, OF CONNELLSVILLE, PENNSYLVANIA.

IMPROVEMENT IN REGISTERING YARD-MEASURES.

Specification forming part of Letters Patent No. **174,487**, dated March 7, 1876; application filed February 16, 1876.

To all whom it may concern:

Be it known that I, JOHN CONNER, of Pittsburg, in the county of Allegheny and in the State of Pennsylvania, have invented certain new and useful Improvements in Yard-Measures; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to yard-sticks, and has for its object to enable the salesman to correctly measure any quantity of goods desired without counting the same, and thus allow him at the same time to entertain his customer. To this end, the nature of my invention consists in combining with a yard-stick a suitable registering mechanism, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a perspective view of a yard-stick embodying my invention. Fig. 2 is a plan view of the same with the top plate and slide removed, showing the operating mechanism. Fig. 3 is a cross-section thereof. Fig. 4 is a perspective of the slide.

A represents a yard-stick, made hollow and covered with a top plate, B, in which is a longitudinal seat, *a*.

Within the stick A is a shaft, C, having at its front end a ratchet-wheel, *b*, and at the other end a miter-wheel, *d*, which latter gears with a similar wheel, *d'*. Behind this latter wheel, and on the same axis, is secured a spur-wheel, *e*, which works in a rack-bar, *f*, on the under side of the registering plate or slide D, provided on its upper face with numerals.

The front end of the shaft C is centered in a suitable plate, upon which is pivoted the clutch-pawl *h* and guide *i*, the whole secured within the stick.

The wheels *d*, *d'*, and *e* are held in a frame, also secured within the stick. The registering-plate D slides under the top plate B, the rack *f* moving in a groove prepared for it.

The pitch of the teeth of the ratchet-wheel *b* is equal to the distance it is desirable that the plate G should move in order to cover one of the units of measurement thereon. The

figures on the slide D appear through the slot *a* when it is drawn back.

On the top, at the front end, is a spring, E, securely fastened in the end of which is the working-pawl *m*, provided with a button, G. The stroke of this pawl is equal to the movement of one of the teeth of the ratchet *b*.

The operation is as follows: All the parts being in position and the plate D drawn back so that all the figures thereon show through the slot *a*, the pawl *h* is set upon the ratchet *b*, and the measurement being accomplished, the thumb is pressed on the button G, which causes the pawl *m*, guided by a spring, *n*, to turn the ratchet the distance of one tooth, the pawl *h* dropping into the next tooth, and preventing the ratchet from turning back when the pressure is relieved from the button and the pawl *m* rises. A compression-spring, *p*, bears on the hub of the ratchet *b* to equalize the motion.

The motion given to the ratchet is, by the gears above described, conveyed to the rack *f*, thus moving the plate or slide D an equal distance forward, and, as the motion is repeated, covering one after the other under the end of the slot *a* in the top plate B, so that the numeral appearing first from that end of the slot shall indicate the number of times the button G has been depressed. This is repeated as often as desirable, and when done, by putting back the pawl *h* and slightly raising the button G, the plate D can be run back to its starting-point, with the left hand pressing against the projection D' on the outer end thereof. The spring E may be located on the inside and hid from view.

It is evident that by using rollers and dispensing with some of the gearing a flexible band can be substituted for the plate D and accomplish the same result.

This device may also be used as a stationary measure and register on counters.

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

1. The combination, with a yard-stick, A, having slotted top plate B, of the slide D, with rack-bar *f*, the gears *e* *d'* *d*, shaft C, ratchet *b*, and pawl *m*, with knob G and

spring E, substantially as and for the purposes herein set forth.

2. The combination of the yard-stick A, slotted top plate B, slide D, rack-bar *f*, gears *e d' d*, shaft C, ratchet *b*, pawl *m*, pivoted pawl *h*, springs *n p*, and knob G, with spring E, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of February, 1876.

JOHN CONNER.

Witnesses:

H. A. HALL,
C. L. EVERT.