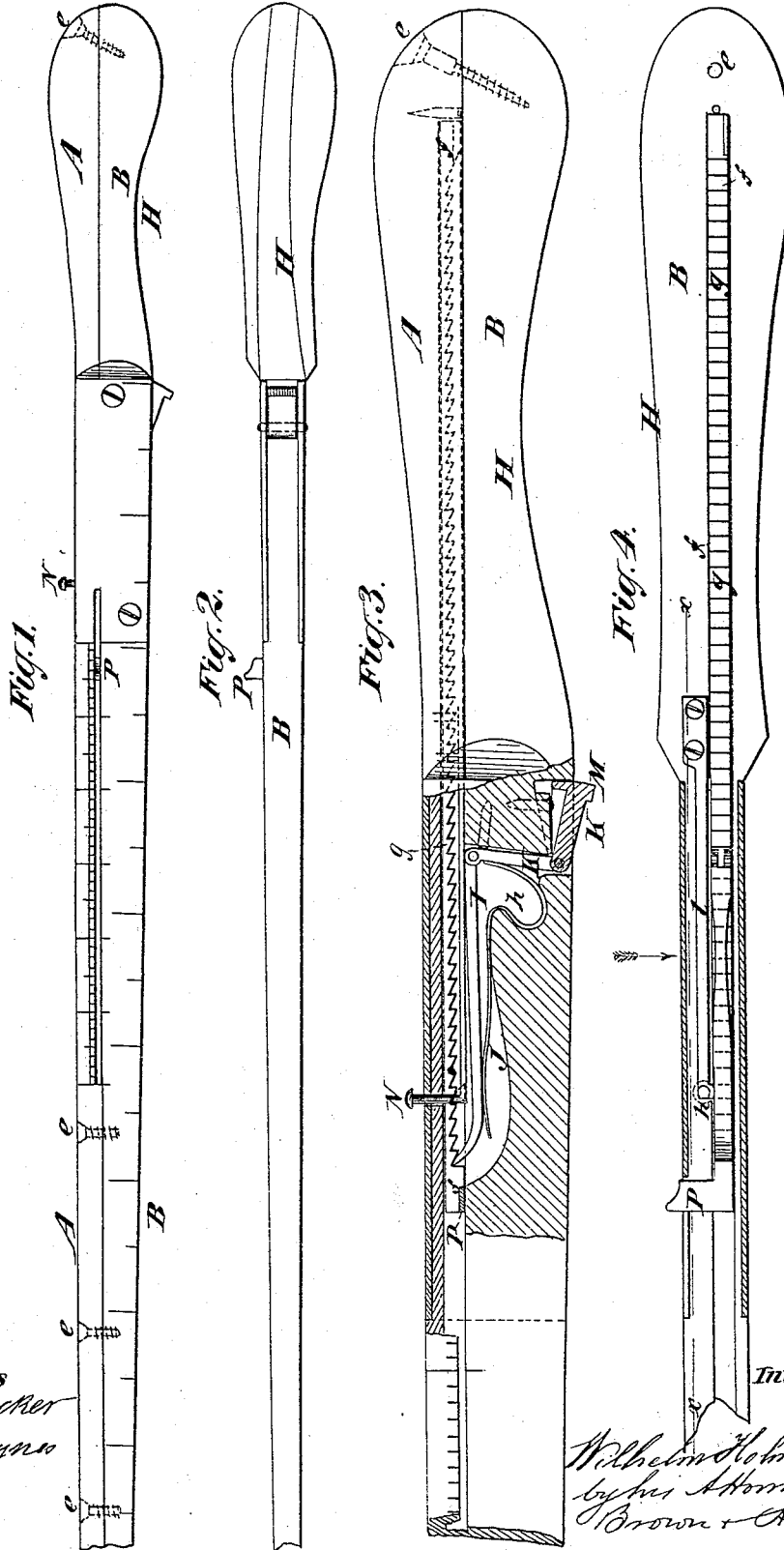


W. HOLMSTRÖM.

Registering Attachment for Measuring Rules.

No. 204,823.

Patented June 11, 1878.



Witnesses  
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 and  
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# UNITED STATES PATENT OFFICE.

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WILHELM HOLMSTRÖM, OF WESTERVICK, SWEDEN.

## IMPROVEMENT IN REGISTERING ATTACHMENTS FOR MEASURING-RULES.

Specification forming part of Letters Patent No. **204,823**, dated June 11, 1878; application filed March 16, 1878.

### *To all whom it may concern:*

Be it known that I, WILHELM HOLMSTRÖM, of Westervick, in the Kingdom of Sweden, have invented an Improvement in Counting and Registering Attachments for Measuring-Rules, Yard-Sticks, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms a part of this specification.

The object of my invention is to supply a counting and registering attachment for rules and yard-sticks, by means of which the number of units measured may be registered on a scale, and counted or read therefrom at a glance.

The invention consists in a novel construction of a rule or yard-stick, whereby a ratchet-bar, carrying an index inserted in or attached to the body of the stick, is actuated by a thumb-lever to count or register measurements.

The invention will be sufficiently illustrated by a description of the same as applied to a yard-stick.

Figure 1 in the drawing is a side view, and Fig. 2 is an edgewise view, of a yard-stick constructed in accordance with my invention. Fig. 3 is a partial section and a partial side view of the same. Fig. 4 is a view of the inside of one part of the yard-stick, separated from the other part of which the said yard-stick is composed.

The said yard-stick is composed of two parts, A and B, fitted to join truly and closely on the line *c d*. Said parts are held together by screws *e*.

In the part A of said yard-stick is formed a groove, *f*, for the ratchet-bar *g*, said groove being a little longer than twice the length of said ratchet-bar.

In the part A is formed a recess, *h*, Figs. 3 and 4, for the reception of the pawl I, spring J, bell-crank lever K, and spring-pawl *l*. The bell-crank lever K has a thumb-piece, M, which protrudes through an opening in the piece B.

The spring-pawl *l* also has a thumb-piece, N, which protrudes through the side of the piece A. On the ratchet-bar *g* is an index, P, which protrudes through a slot in the side of the piece A. Along the margin of the said

slot is inscribed a scale, the graduations of which correspond in length to the length or pitch of the ratchet-teeth on the ratchet-bar *g*. On the outer margin of the piece B is inscribed the scale for measurement, to wit, a yard length divided into fractional parts of a yard.

One end of the stick formed of the conjoined parts A and B is shaped into a handle, H, which, in use, is grasped in the hand, while the thumb of the same hand rests on the thumb-piece M. The yard-stick is then applied to the piece or article to be measured and for each unit of measure the thumb is pressed on the thumb-piece M. This causes the bell-crank lever K to actuate the pawl and thrust along the ratchet-bar the distance of one tooth, which is indicated by the index P on the scale along the margin of the piece B. At the same time the spring-pawl *l* engages the ratchet-bar *g*, and prevents it from moving until it is moved again by the action of the bell-crank lever and the pawl I, as above described.

When it is desired to restore the ratchet-bar to its original position, the yard-stick is held with the end opposite the handle uppermost. The thumb is pressed on the thumb-piece N, which presses both pawls out of engagement with the ratchet-bar, and allows the said ratchet-bar to slide back to its first position.

I do not claim, broadly, a registering yard-stick in which is employed a sliding ratchet-bar, operated by a knob and pawl, and in which the tally is indicated through an aperture in the back of the stick, as such is not new of itself.

I claim—

The combination, with the longitudinally grooved and recessed rule or yard-stick A and ratchet-bar *g*, carrying the index P, which projects through the yard-stick, of the thumb-piece M, bell-crank K, pawl I, and spring J, for moving the ratchet-bar, and the spring-pawl *l*, having a thumb-piece, N, projecting through the stick for holding the ratchet-bar until moved, all substantially as and for the purpose described.

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