A. K. MUNSON.

Grain-Tallies.

No. 165,021. Patented June 29, 1875.

Fig. 1

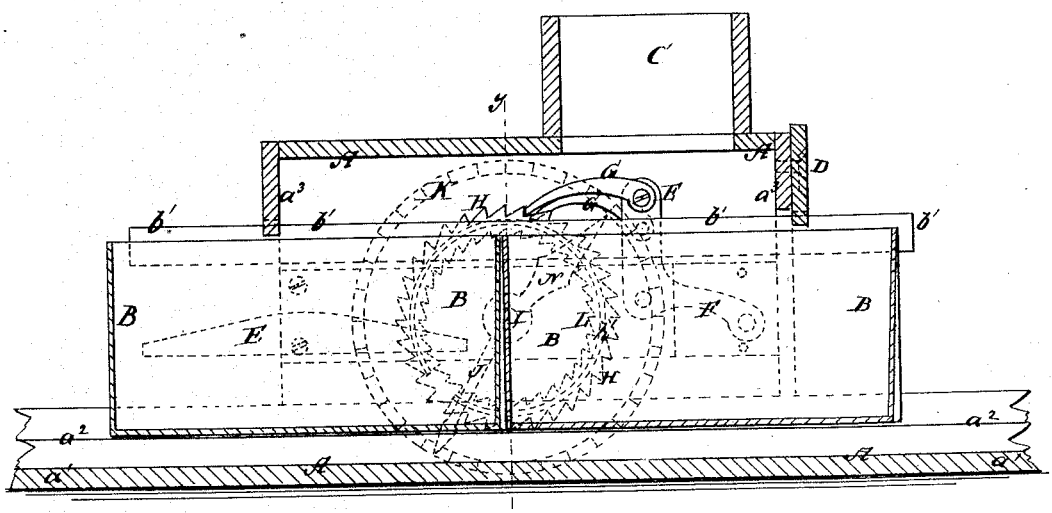


Fig. 4.

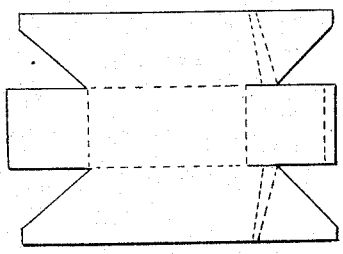


Fig. 5.

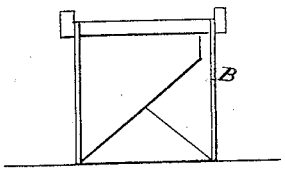


Fig. 2

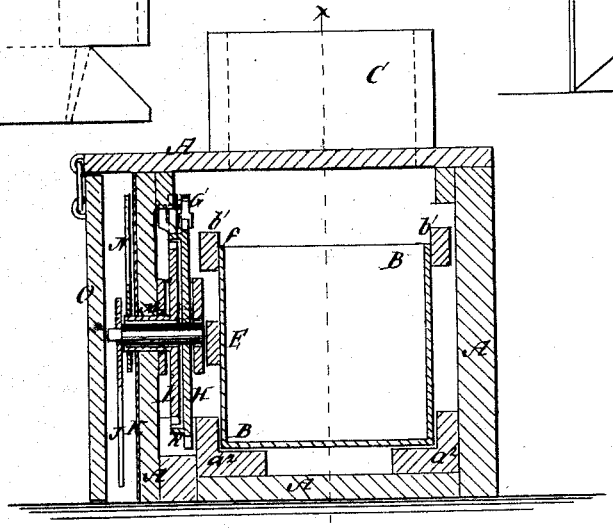
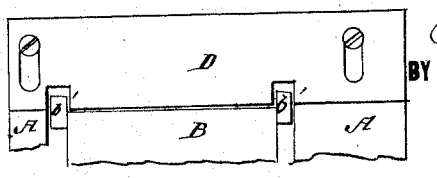


Fig. 3.



WITNESSES:

E. Wolff

Seligmick

INVENTOR:

A. K. Munson

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ADEN K. MUNSON, OF MARYSVILLE, KANSAS.

IMPROVEMENT IN GRAIN-TALLIES.

Specification forming part of Letters Patent No. **165,021**, dated June 29, 1875; application filed June 20, 1874.

To all whom it may concern:

Be it known that I, ADEN K. MUNSON, of Marysville, in the county of Marshall and State of Kansas, have invented a new and useful Improvement in Grain Measurer and Register, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved device, taken through the line *x x*, Fig. 2. Fig. 2 is a vertical cross-section of the same, taken through the line *y y*, Fig. 1. Fig. 3 is an end view of the upper part of the same, showing the adjustable striker. Fig. 4 is a diagram representing the sheet-metal measure before being folded. Fig. 5 is an end view of the measure.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved device for measuring and registering grain as it runs continuously from a spout, and which shall be simple in construction, convenient in use, and reliable in operation.

The invention will first be fully described, and then pointed out in the claim.

A represents a box, in the ends of which are formed openings to receive the measures B. The bottom of the box is extended to form a platform, a^1, at each end of said box, and to the side edges of which are attached the angle-bars a^2, to serve as ways for the measures B. In a hole in the top of the box A is secured a hopper, C, to receive the grain from the spout. The measures B are made of a single piece of sheet metal, as follows: In the ends of the sheet, at the sides of the parts that will form the ends of the measure, are cut angular notches, as shown in the diagram shown in Fig. 4. The side and end parts are then bent up at right angles, and the projecting ends of the sides are turned inward upon the ends, and are secured by rivets, or by bending down the upper edges of the said ends over said flaps. The forward ends of the measures B may be inclined or flaring, in which case the ends of the sides should be bent down upon themselves before overlapping said ends, so as to form vertical flanges or ends to strike against the rear end of the preceding measure, and push it forward through the box A. To the outer sides of the upper edges of the sides of the measures B are attached longitudinal bars b', the forward ends of which project a little in front of the forward end of the said measures, and their rear ends lack the same distance of reaching to the rear end of said measures, so that the said bars may assist in keeping the said measures in place as they are being pushed through the box A. The upper edges of the bars b' project a little above the upper edges of the measures B, so as to enter guide-notches in the lower edges of the narrow boards a^3, attached to the upper part of the ends of the measures B. To the upper part of the ends of the box A is secured the striker D, the lower edge of which is notched to receive the bars b', and which is secured to the box A by bolts that pass through transverse slots in the said striker, so that it may be conveniently lowered or raised to strike off the measures more or less closely, as may be desired. The measures B are made of such a size as to hold exactly a half-bushel, and they are used in pairs. To one of the sides of one of each pair of measures B is attached a bar, E, the upper edge of which inclines downward from the center toward each end, so that as each second measure is pushed through the box A the inclined bar E may strike a pin attached to the end of the bent lever F, and operate the said lever. The lever F is pivoted at its angle to the side of the box A, and to its other or upper end are pivoted two or more pawls, G. The first pawl G rests upon the teeth of the ratchet-wheel H, attached to the inner end of the shaft I, which passes out through the side of the box A, and has an index-finger, J, attached to its end, and pointing to the scale of division-marks of the dial-plate K, formed upon or attached to the outer side of the box A. The second pawl G rests upon a ring-flange, h', attached to or formed upon the side of the ratchet-wheel H. In one place the flange h' is broken away to allow the pawl G to drop through and come in contact with the teeth of the ratchet-wheel L, concentric with the wheel H, and attached to a sleeve, M, through which the shaft I passes, so that the wheel L may be turned one notch

at each revolution of the wheel H. To the other end of the sleeve M is attached an index-finger, N, pointing to the division-marks of the dial K.

Any desired number of flanged ratchet-wheels H *h'* and pawls G may be used. The dial-plate K and the index-fingers J N may be covered with a door, O, to protect them while the device is being used.

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

The combination of the adjustable striker D with the box A and measure B, substantially as herein shown and described.

ADEN K. MUNSON.

Witnesses:
JAMES G. MCINTIRE,
ED. HUTCHINSON.