

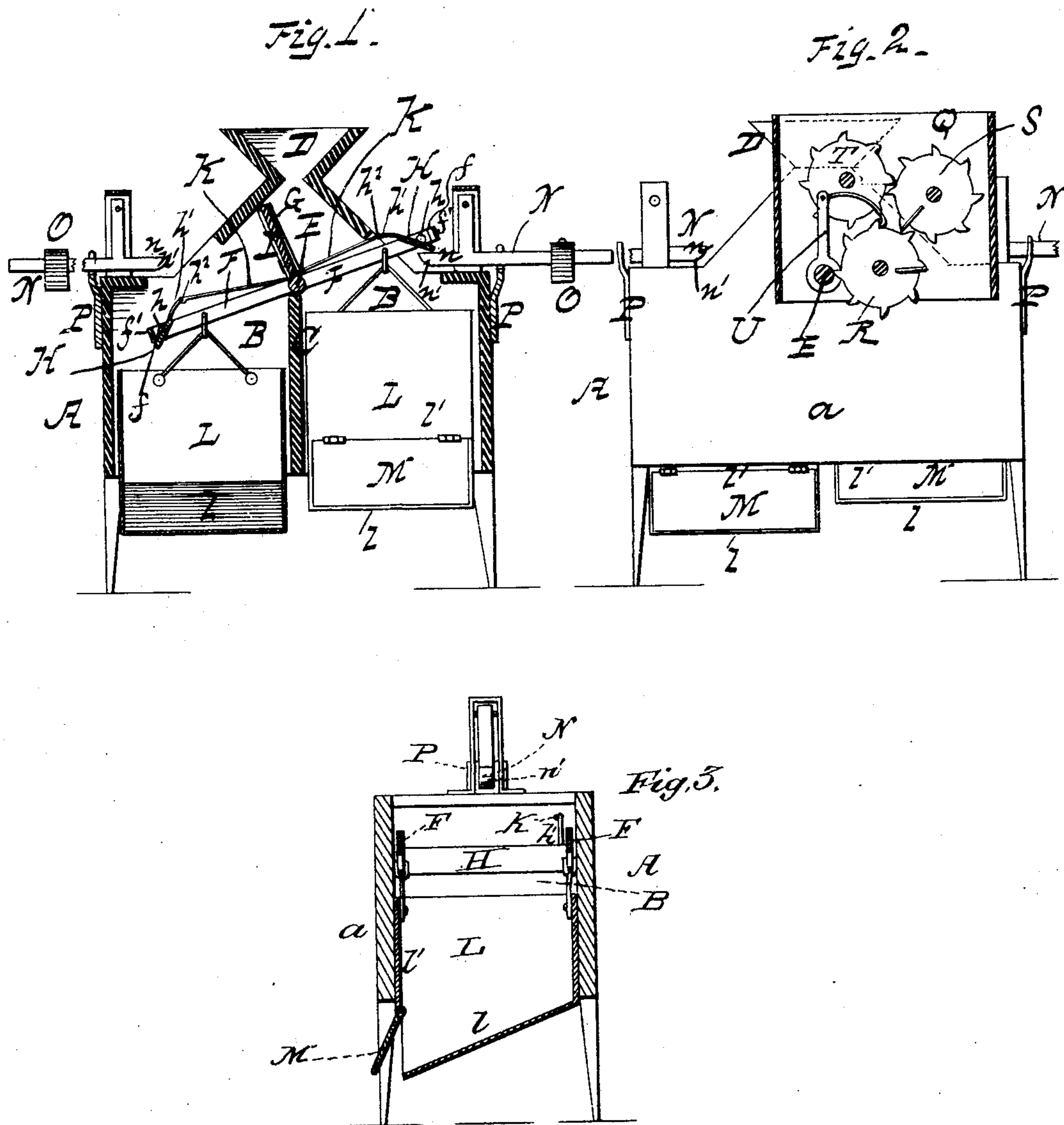
(No Model.)

G. B. LYNCH & T. J. GRIFFITH.

GRAIN METER.

No. 270,821.

Patented Jan. 16, 1883.



WITNESSES  
*E. W. Bates*  
*James J. Sheehy.*

INVENTORS  
*George B. Lynch & Thos. J. Griffith.*  
by *Andrew Smith*  
*their* ATTORNEYS

# UNITED STATES PATENT OFFICE.

GEORGE B. LYNCH AND THOMAS J. GRIFFITH, OF DARLINGTON, INDIANA.

## GRAIN-METER.

SPECIFICATION forming part of Letters Patent No. 270,821, dated January 16, 1883.

Application filed May 31, 1881. Renewed October 5, 1882. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE B. LYNCH and THOMAS J. GRIFFITH, citizens of the United States, of Darlington, in the county of Montgomery and State of Indiana, have invented a new and valuable Improvement in Grain Measurers and Registers; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal sectional view of our invention, and Fig. 2 is a side view thereof. Fig. 3 is a transverse section.

This invention relates to improvements in grain-measurers.

The invention consists in the construction hereinafter set forth.

In the annexed drawings, A is a box or frame consisting of two compartments, B, formed by the division C, and open at top and bottom. Above the division C is placed the hopper D, opening into both compartments. Journaled above the division C is the shaft E, having the transverse arms F F and vertical arms G. At the ends the arms F are connected by the bars H, the journals  $h$  of which bear in holes  $f$ , in said arms, and said bars having the fingers  $h'$  with eyes  $h^2$ . On one arm F is a stop,  $f'$ . Arranged above shaft E and held by arms G is a plate, I. K K are springs running from the end of this plate to fingers  $h'$ .

Suspended from arms F are the buckets L, of a given capacity. The bottoms  $l$  of these buckets have a slant toward the side  $a$  of the box, and at the lower end the sides  $l'$  of these buckets are provided with doors M, hinged above and opening outward.

Pivoted at the ends of the box A are the beams N, having an adjustable weight, O, on the outer ends, and the inner ends,  $n$ , beveled off below at  $n'$  and projecting in the path of bars H, a catch-plate, P, keeping the beams from swinging too far in.

Q is the registering device consisting of an intermeshing chain of gear-wheels, R S T, having dials and pointers. The wheels R and S have each an enlarged tooth, so that one revolution of each of these wheels causes the next wheel in the train to move one tooth by the teeth interlocking.

On the end of shaft E is a catch pawl, U, which is arranged to engage the teeth of wheel R and cause its rotation. The plate I is swung to one side, so that the hopper D shall lead to only one of the compartments B. This causes the bar H on that side to turn on its journals against the spring K, and, sliding up the bevel  $n'$ , it rests on top of end  $n$  of beam N. At the same time the hinged doors M are held closed by the side  $a$  of the box A. The amount of grain which is to be the unit having been determined, the weights O are placed accordingly. Grain is poured in the hopper and falls in the upper bucket, L, and as soon as the proper amount is in the bucket swings down, bar H sliding off of end  $n$ , the empty bucket comes up into position, plate I cuts off the hopper from the first compartment and opens it to the other, and the catch-pawl U causes wheel R to turn one tooth. At the same time the hinge of door M coming below the edge of the side  $a$ , said door is opened by the pressure of the grain and the latter runs out, this being facilitated by the slant of the bottom.

We claim—

The combination of swinging beams N, having the ends  $n$  beveled at  $n'$ , and carrying the adjustable weights O, buckets L, shaft E, arms F, turning bars H, and springs K, as set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

GEORGE B. LYNCH  
THOMAS J. GRIFFITH.

Witnesses:

STEPHEN WARD,  
ISAAC LARRICK, Jr.