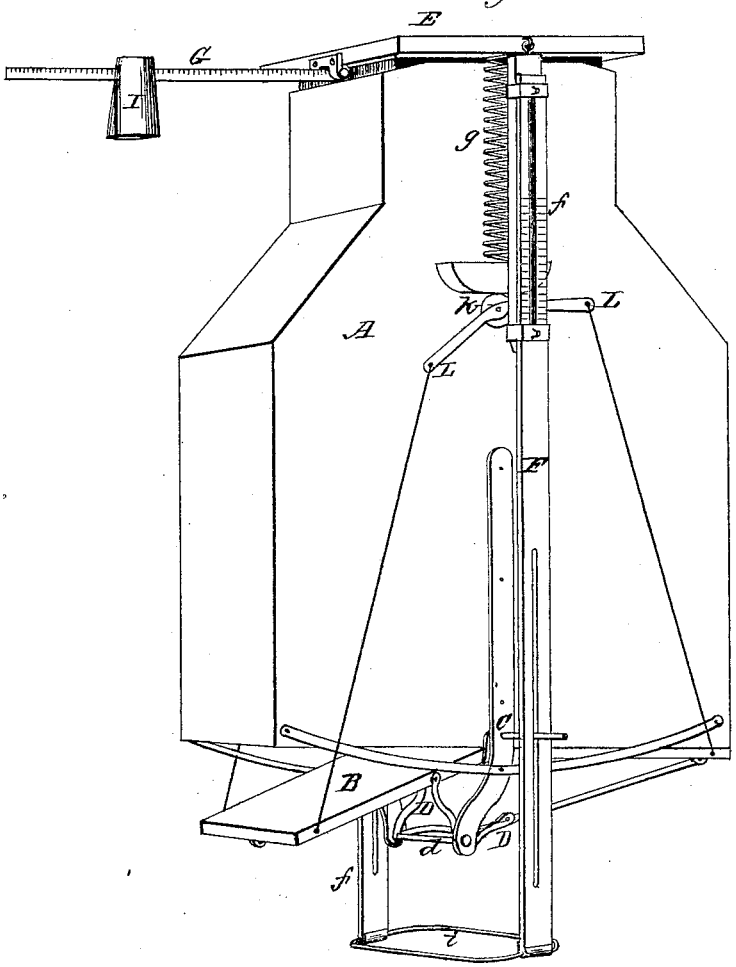
2 Sheets—Sheet 1.

J. FRY.

GRAIN-METERS.

No. 183,049. Patented Oct. 10, 1876.

Fig. 1



Witnesses:

O. Chubbuck

E. J. Wall

Inventor:

Joseph Fry,

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GRAIN-METERS.

No. 183,049. Patented Oct. 10, 1876.

Fig. 2

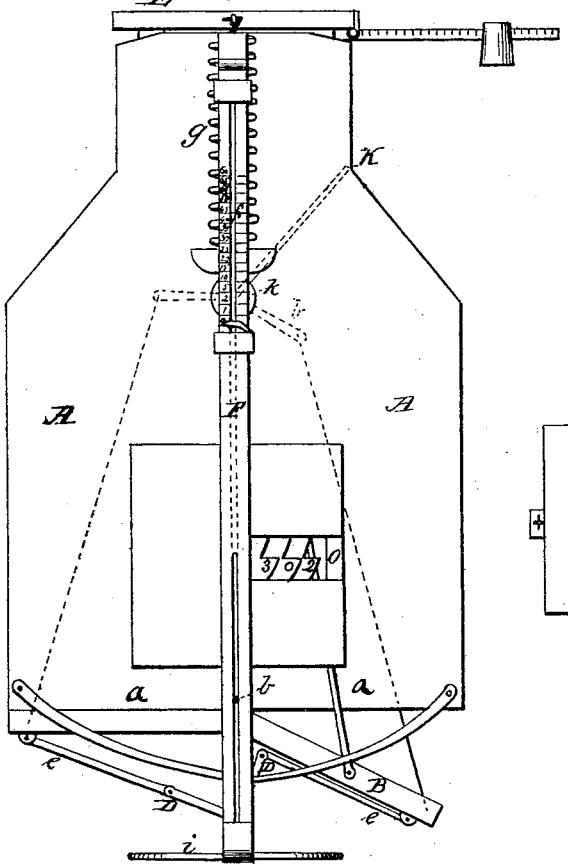


Fig. 3

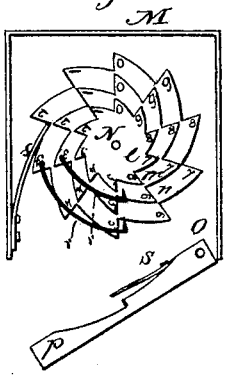


Fig. 5

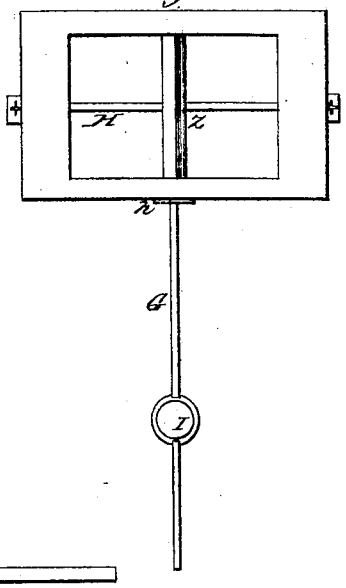
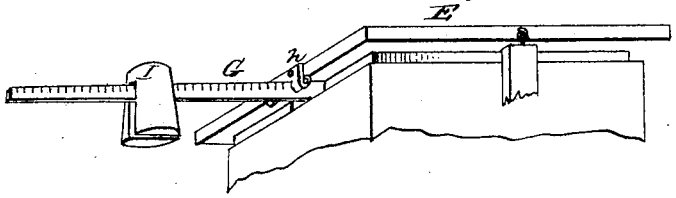


Fig. 4



Witnesses:
O Chubbuck
E J Wall

Inventor:
Joseph Fry.

UNITED STATES PATENT OFFICE.

JOSEPH FRY, OF ALLEN, ILLINOIS.

IMPROVEMENT IN GRAIN-METERS.

Specification forming part of Letters Patent No. **183,049**, dated October 10, 1876; application filed November 17, 1873.

To all whom it may concern:

Be it known that I, JOSEPH FRY, of Allen, La Salle county, Illinois, have invented an Improvement in Weighing Grain as it comes from a spout or hopper, of which the following is a specification:

My invention consists of the double-chambered receptacle and the oscillating angular bottom, and the combination of the double-chambered receptacle with the oscillating angular bottom, the jointed braces by which the bottom is held in place, the oblong circular rod by which the joint in the middle of the jointed brace is doubled in such a manner that the loaded chamber of the receptacle is discharged, and the bottom of the other chamber of the receptacle is closed, so arranged and attached to spiral springs or scale-beam that when the desired weight of grain shall have run into one chamber of the receptacle, the downward motion of the receptacle will bring the jointed brace in contact with the oblong circular rod, and by means of the doubling of the middle joint thereof discharging the loaded chamber of the receptacle, and so on, loading and discharging the chambers of the receptacle alternately, and alternately shifting the flow of the grain from one chamber of the receptacle to the other by means of a shifter or valve in the neck of the receptacle. A tally may be attached, so that the quantity of grain passing through the chambers of the receptacle in a day, week, or month may be indicated.

Figure 1 represents a transverse view of the side elevation with spring attachment; Fig. 2, a plan of the invention with spring attachment.

A is the receptacle into which the grain passes through the spout or neck at the top, for the purpose of being weighed. *a a* are chambers of the receptacle A divided by the partition *b b*. B is an oscillating angular bottom to the chambers *a a* of the receptacle A, attached to the bottom of the receptacle A at the angle *c* by a hinge in such a manner that it will close the bottom of one of the chambers *a* and open the bottom of the other chamber *a* of the receptacle A by an oscillation of the bottom B. D D are jointed braces, so arranged that when the oscillating angular bottom B closes one chamber, *a*, of the receptacle A, the joint in the middle of the brace D on the one of the closed chamber *a* will fall to and stop by means of shoulders in the middle joint a little below a right line from the point where the brace is attached to the oscillating angular bottom B and the point of support *d*, made by means of a frame of iron or timber extending down from the receptacle A, each of the said jointed braces working on three joints, *e e e*, at the points of support *d*, and at the middle of the brace D, and at the point where the jointed brace D attaches to the oscillating angular bottom B. *i* is an oblong circular rod, so attached and located that when grain is run into either chamber of the receptacle A sufficient to turn the scale-beam when applied, or extend the spiral springs when applied sufficiently to bring the straightened jointed brace D in contact with the oblong circular rod *i* by the downward motion of the receptacle A near the center of the jointed brace D, and will rest most of the weight of the receptacle A and the grain it contains upon the middle of the jointed brace *d*, and cause the middle joint of the brace to double, and when it has passed a right line from the point of support *d* to the place where it is attached to the oscillating angular bottom B, the weight of the grain in the loaded chamber of the receptacle will cause the bottom to oscillate, opening the bottom of the loaded chamber, and closing the bottom of the other or empty chamber, and by this process unloading the loaded chamber, and preparing the empty chamber to receive its load, and when loaded to be discharged by a similar process, and so on, loading and unloading each chamber of the receptacle alternately, the grain being constantly kept running into one of the chambers, and as soon as one is filled the flow of grain is transferred to the other by means of a valve or shifter in the neck of the receptacle operated by an attachment to the oscillating angular bottom.

I claim—

The combination of the receptacle A with the oscillating angular bottom B, the jointed braces D D, and the oblong circular rod *i*.

JOSEPH FRY.

Witnesses:

DUNCAN MCDOUGALL,

ALEX. MCDOUGALL.