

J. BROWN.
Grain Tally.

No. 22,411.

Patented Dec. 28, 1858.

Fig. 1

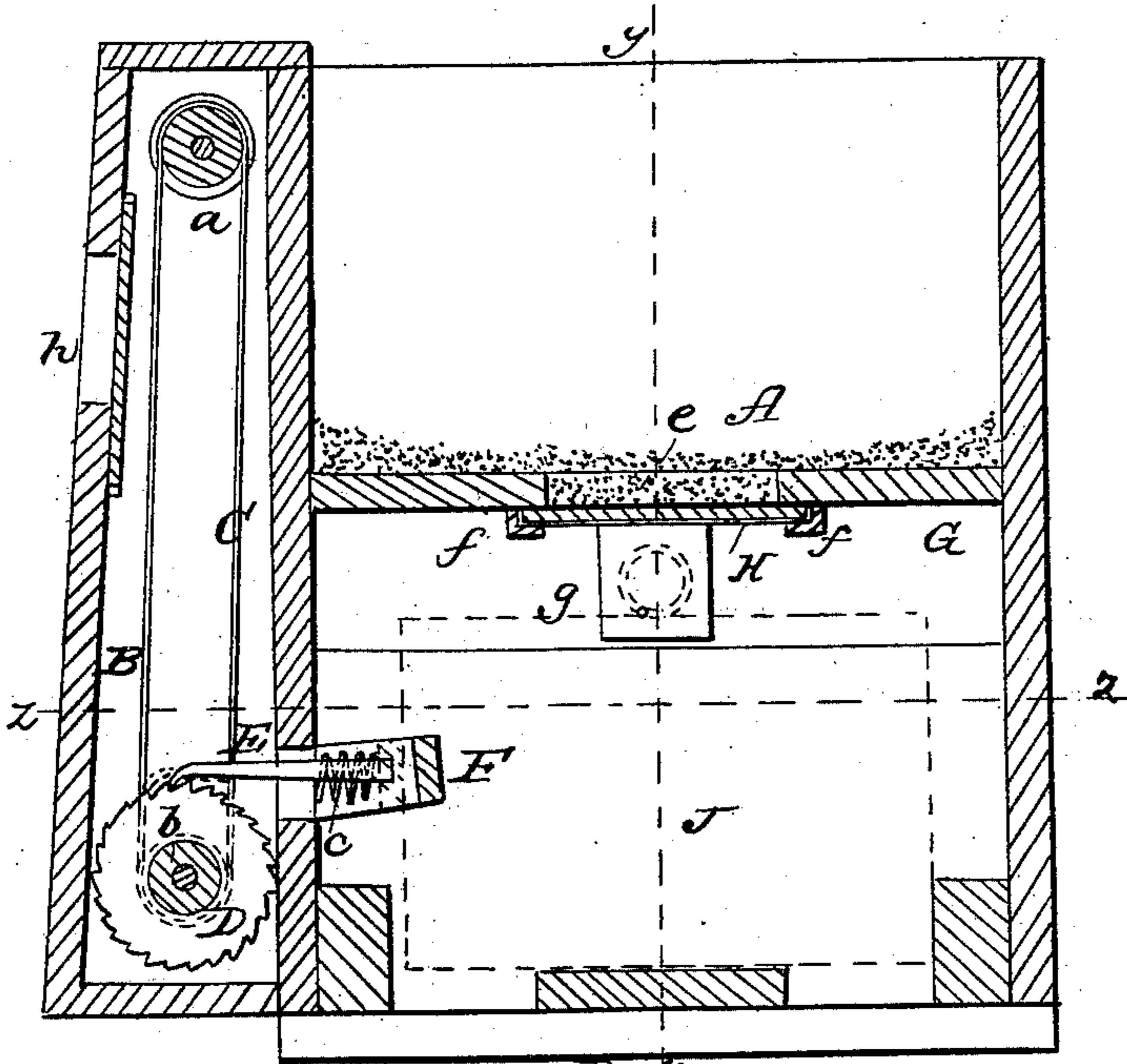


Fig. 4

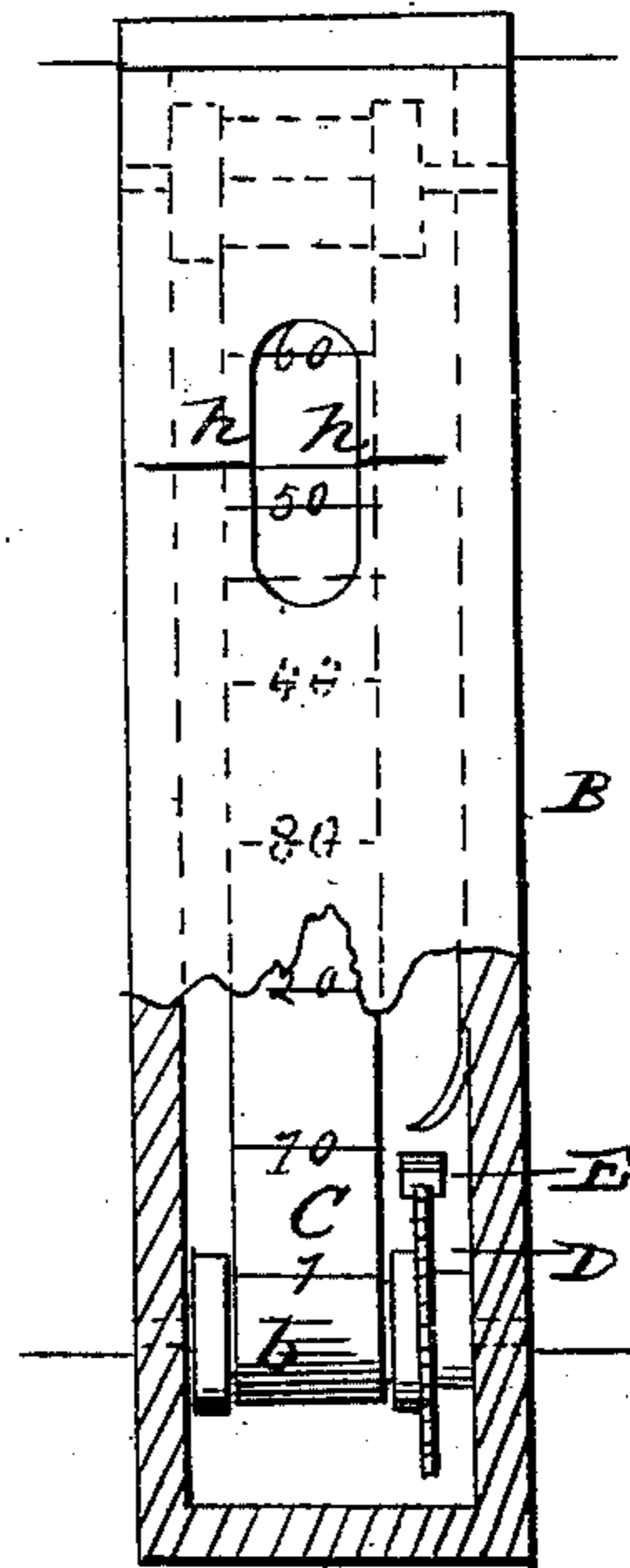


Fig. 3

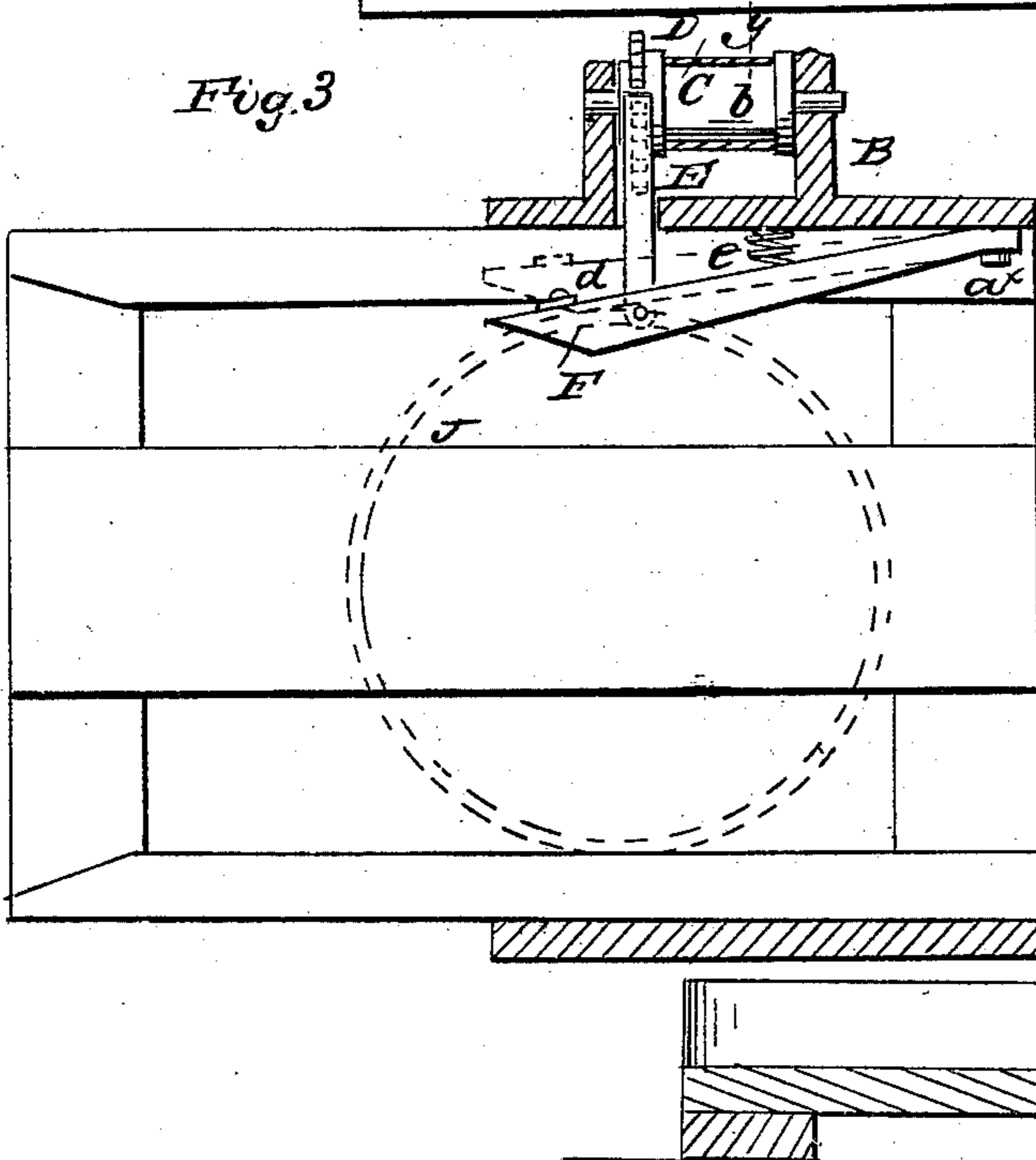
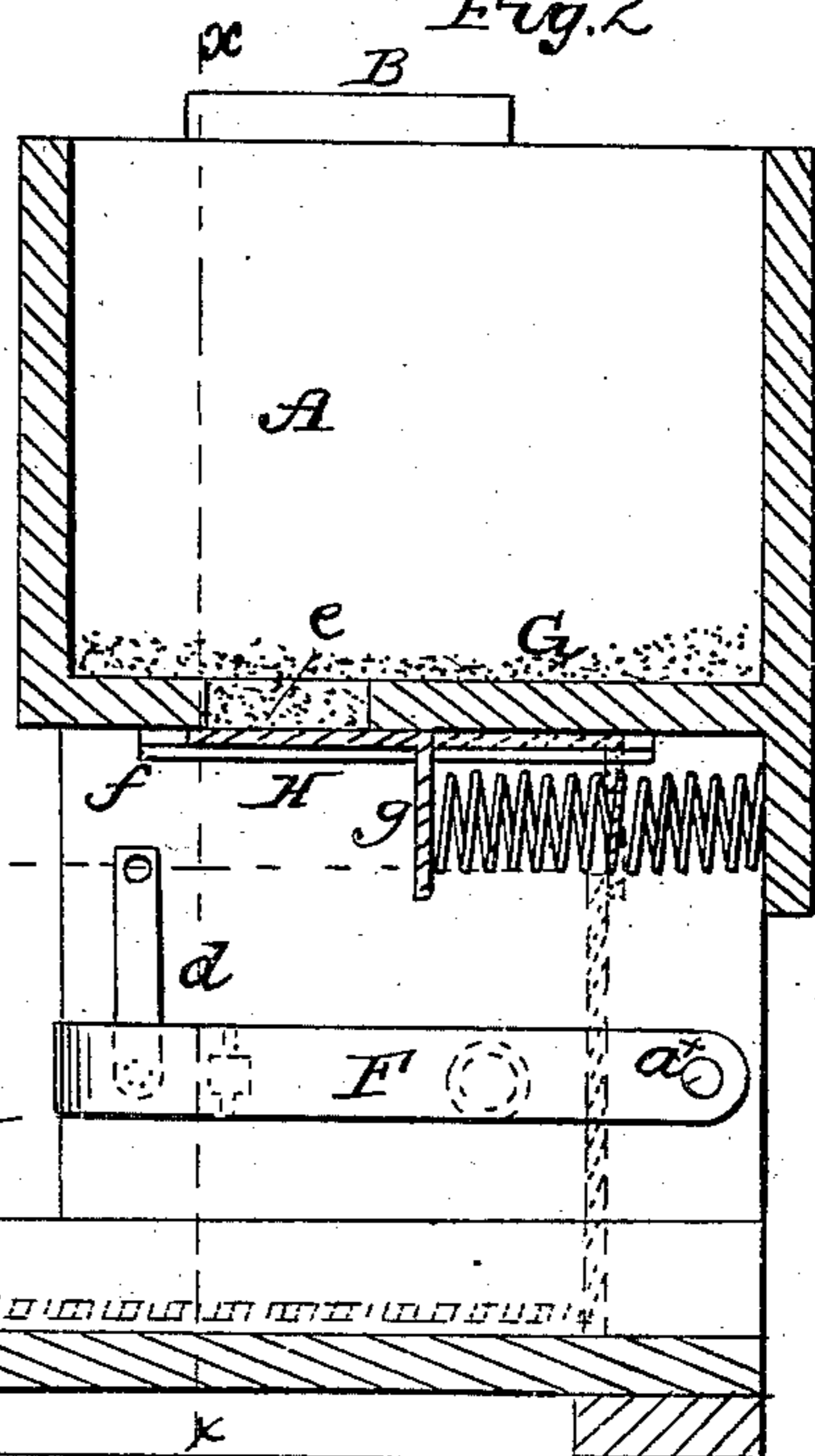


Fig. 2



UNITED STATES PATENT OFFICE.

JOB BROWN, OF LAWN RIDGE, ILLINOIS.

GRAIN-MEASURE.

Specification of Letters Patent No. 22,411, dated December 28, 1858.

To all whom it may concern:

Be it known that I, JOB BROWN, of Lawn Ridge, in the county of Marshall and State of Illinois, have invented a new and improved device for registering or noting the measures of grain as they are taken from a bin, and which I term a "grain-tallying machine;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical section of my invention taken in the line *x, x*, Fig. 2. Fig. 2, is also a vertical section of ditto, taken in the line *y, y*, Fig. 1. Fig. 3, is a horizontal section of ditto, taken in the line *z, z*, Fig. 1. Fig. 4, is a detached face view of the endless graduated tape or belt fitted within its box, a portion of the latter being broken away.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a grain bin to one side of which a trunk or box B, of rectangular form is attached, said box having an endless belt C, placed in it and working on rollers *a, b*. The belt C, is graduated into an equal number of parts or divisions which are numbered and sub-divided into equal parts, see Fig. 4. On the lower roller *b*, of the graduated belt a ratchet D, is placed, and E, is a pawl which catches therein. This pawl passes through the back of the box B, and is attached to an arm or lever F, below the bin A, said arm or lever having a spiral spring *c*, bearing against it, which spring has a tendency to keep one end of the arm or lever outward from the box B, as shown clearly in Fig. 3. The opposite end of the arm or lever is connected by a joint or hinge *a'*, with the framing of the bin and a pendent elastic support *d*, which is also attached to the framing is connected with the arm or lever and retains the same in proper position.

In the under side or bottom G, of the bin A, an aperture *e*, is made, and a slide or door H, is fitted over said opening, the slide or door working in or between suitable guides *f, f*, and retained over the aperture *e*, when not otherwise acted upon, by a spring

I, which is fitted between a pendent *g*, attached to the slide or door, and the framing, see Fig. 2.

In the outer side of the box B, an opening *h*, is made in which a glass is inserted. This opening exposes a portion of the belt C, and a horizontal index line *j*, is made on the box B, said line crossing the opening *h*, see Fig. 4.

The operation is as follows and will be readily understood. The operator in placing a measure J, shown in red, underneath the bin A, and below the opening *e*, will shove back the slide or door H, in consequence of the measure striking against the pendent *g*, of the slide or door, and at the same time the arm or lever F, will be pressed toward the box B, by the measure J. This movement of the arm or lever F, of course actuates the pawl E, and the latter turns the ratchet D, the distance of one notch or tooth, the belt C, being correspondingly moved which is equivalent to one degree of the belt, the movement being designated by the numbers on the belt in connection with the index line *j*. The belt being so adjusted previous to the operating of the machine, that the zero mark will be in register with the index line *j*, or the number at said line first noted. As the filled measure is removed from underneath the bin, the slide or door H, and arm F, are returned to their original position by their respective springs *c, I*.

By this invention therefore it will be seen that each filled measure is registered by the belt C, and the precise amount of grain taken from the bin duly noted.

I am aware that tallying machines have been previously used and arranged in various ways, and I therefore do not claim broadly such device irrespective of the particular arrangement of parts herein shown and described; but,

I claim as new and desire to secure by Letters Patent,

As an improved article of manufacture, a grain tally, having a slide H, operated by a pendant (*g*) and spring I, a lever F, pawl E, ratchet-wheel D, and indicating belt C; the whole combined and arranged as herein shown and described.

JOB BROWN.

Witnesses:

JOHN HALSTED,
W. T. SMITH.