

(No Model.)

J. H. POULTER.
GRAIN WEIGHER.

No. 439,024.

Patented Oct. 21, 1890.

Fig. 1.

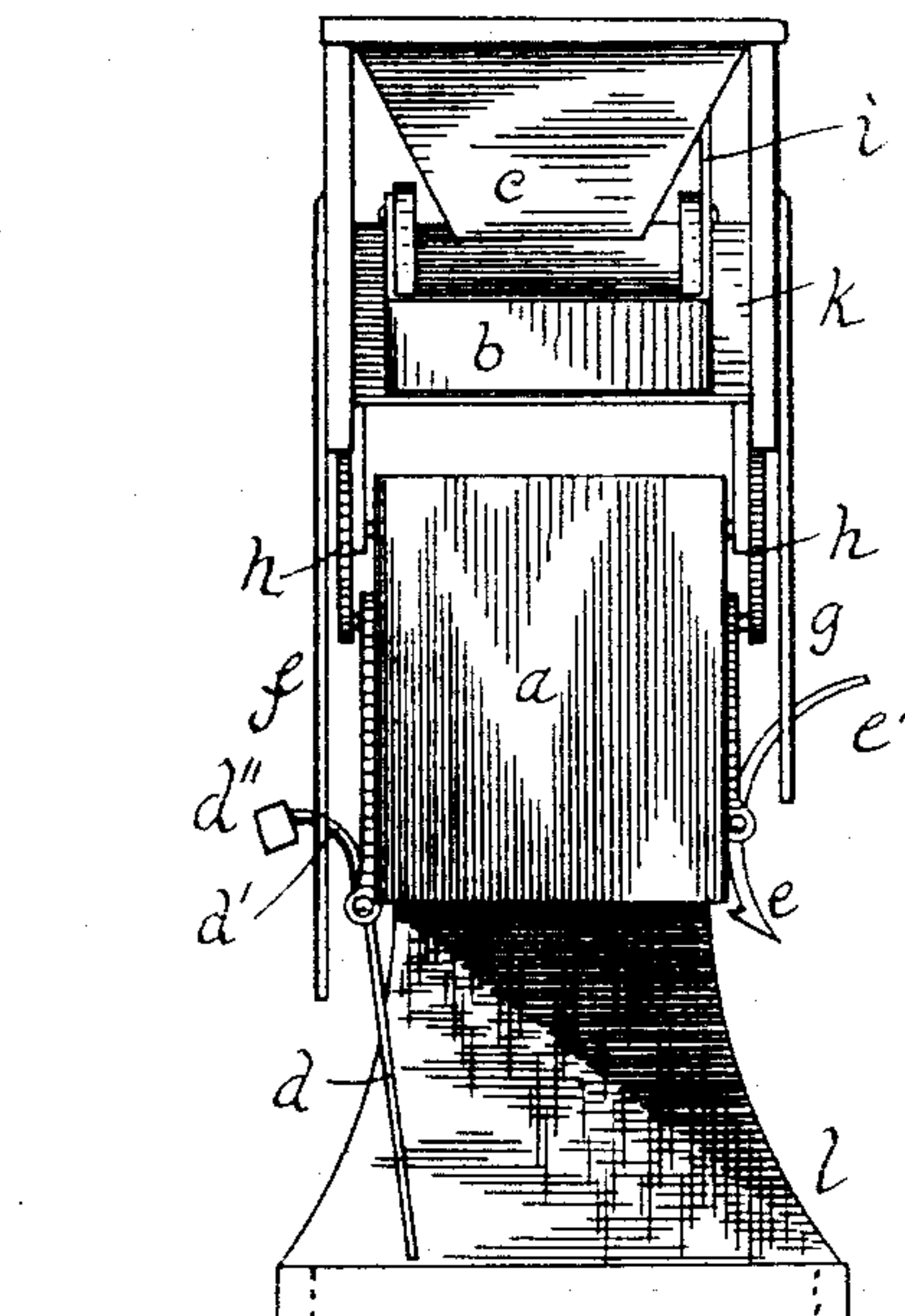


Fig. 2.

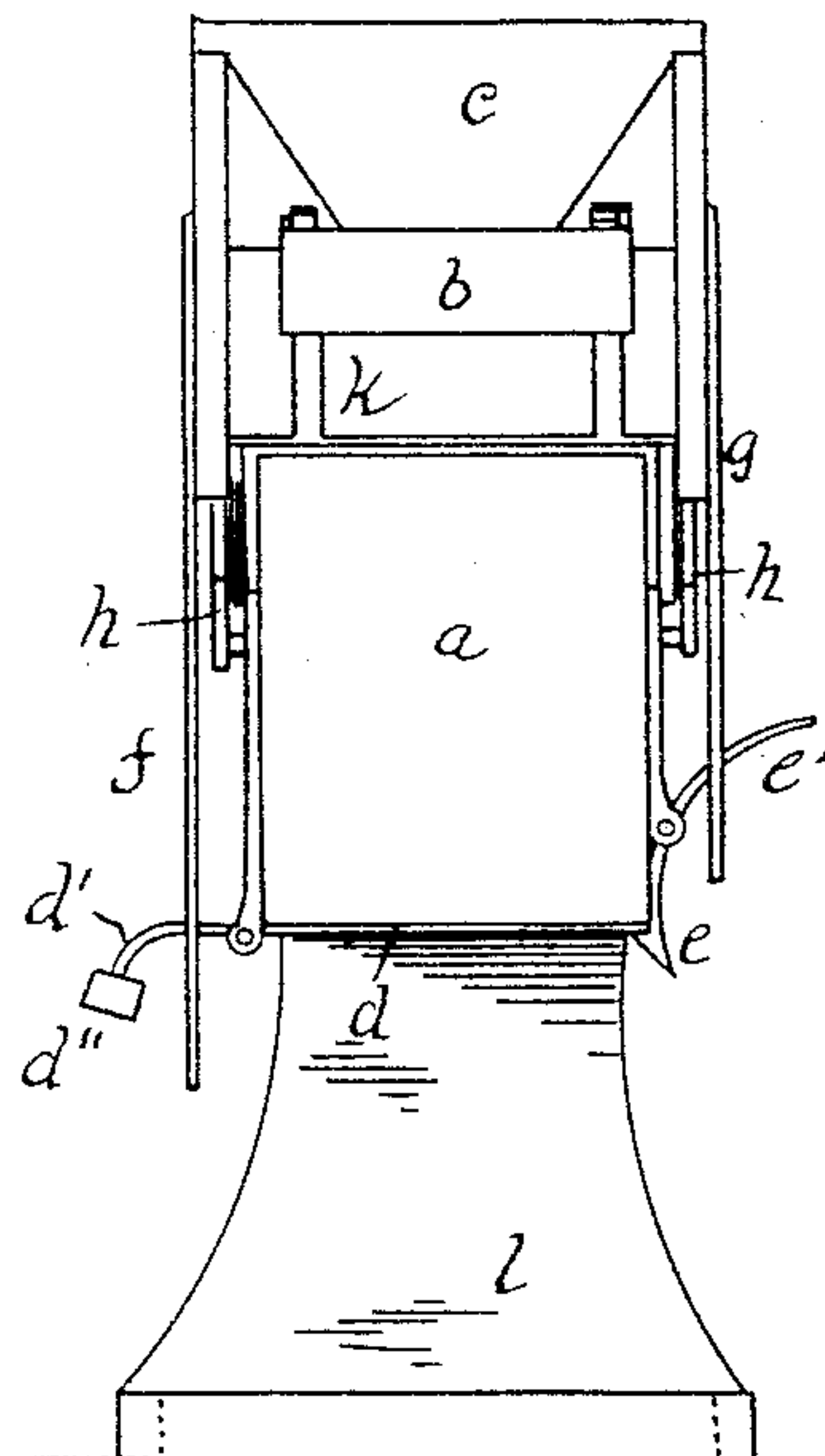
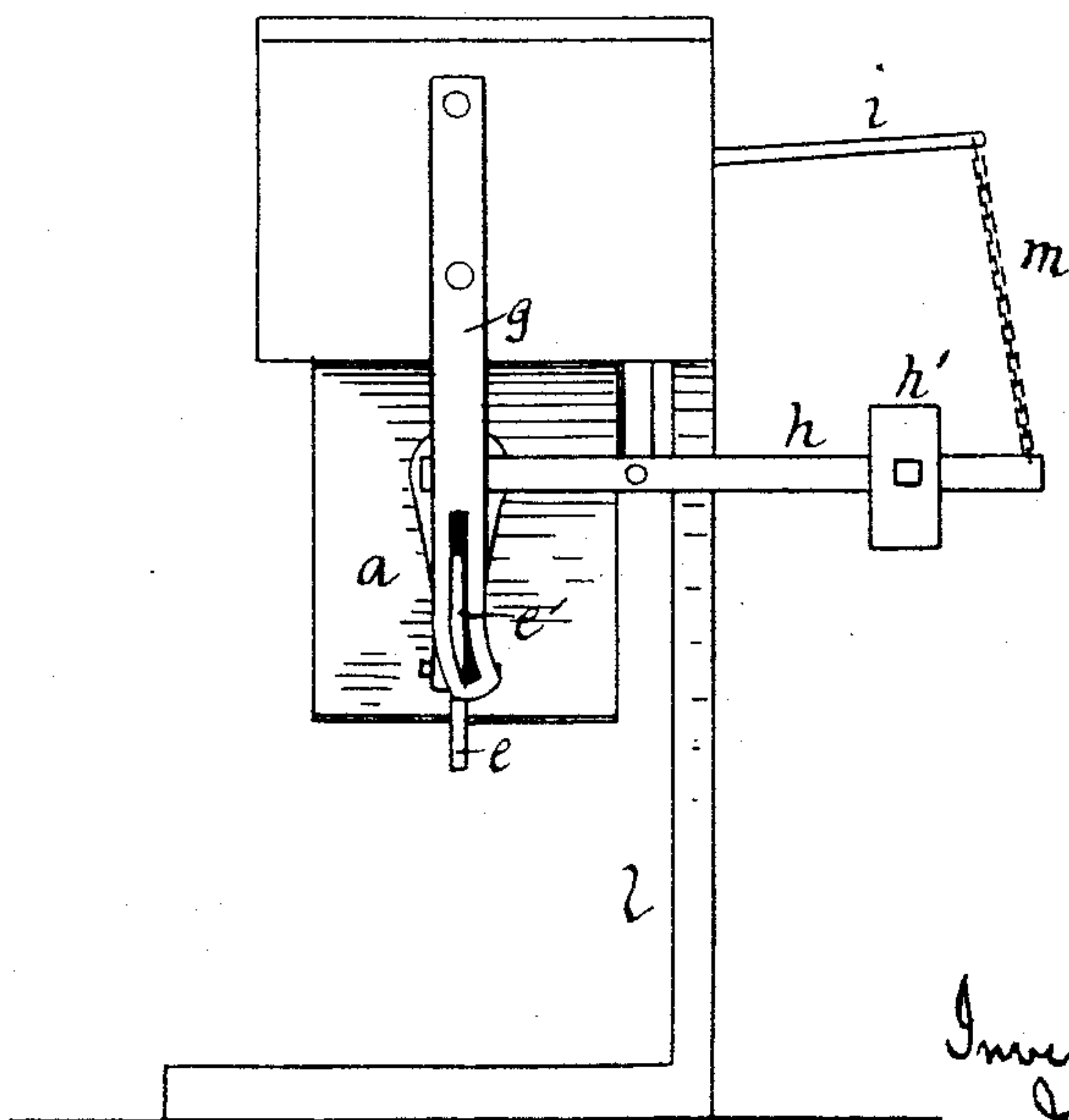


Fig. 3.



Witness
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By his attorney
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UNITED STATES PATENT OFFICE.

JOHN H. POULTER, OF ARCOLA, ILLINOIS, ASSIGNOR OF ONE-HALF TO
JOS. P. BARRICKLOW, OF SAME PLACE.

GRAIN-WEIGHER.

SPECIFICATION forming part of Letters Patent No. 439,024, dated October 21, 1890.

Application filed December 4, 1889. Serial No. 332,507. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. POULTER, of Arcola, in the county of Douglass and State of Illinois, have invented certain new and
5 useful Improvements in Grain-Weighers, of which the following is a specification.

It is the object of my invention to produce a cheap, simple, and effective weigher that may be easily operated and that is not liable
10 to get out of order; and I attain my object in the manner and by means of the mechanism hereinafter set forth and claimed.

In the drawings accompanying and forming a part of this specification, Figure 1 is a
15 face elevation of my device with the discharge-valve open. Fig. 2 is a similar view with the discharge-valve closed, and Fig. 3 is a side elevation with the discharge-valve closed.

20 The weighing-bucket *a* has open ends, the lower of which is provided with the swinging valve or door *d*. The cut-off *b* has an arm *i*, (seen clearly in Fig. 3,) which connects with the scale-beam *h* by means of chain *m*.

25 The hopper *c*, or an equivalent device, delivers the grain to chute *k*, and the chute conveys the same to the weighing-bucket. A catch *e*, pivoted on a side of the bucket, engages the valve *d* and tends to hold the same
30 closed. It has an upward and outward extension *e'*, that acts through gravity to engage the catch with the valve, and such action may be intensified when desired by the introduction of a weight or spring. The
35 valve *d* has the curved extension *d'*, that is preferably provided with the counterbalancing-weight *d''*.

Extending downward from the chute-frame on opposite sides of the weighing-bucket are
40 bars *f* and *g*, both of which are slotted and curved to conform to the swing of the bucket, as seen at *g* in Fig. 3. The slot of bar *f* is adapted to the curved extension of the valve, and the slot of bar *g* is adapted to the curved
45 or inclined extension of the catch.

The device, as shown, has a support *l*; but in practical use it will be ordinarily suspended from or otherwise supported by the elevator of a thrashing-machine, and it will have
50 a tally-box to register the number of its automatic operations.

With the device in the condition shown in Fig. 2 the grain will run through the chute and into the weighing-bucket until the weight *h'* is overbalanced, when the bucket 55 will descend, permitting the cut-off *b* to close and stop the flow of grain temporarily, and the extension *e'* of the catch will strike the lower end of the slot of bar *g* and permit the discharging-valve to open. When the bucket 60 is relieved from the weight of the grain, it immediately ascends, forcing the curved extension of the valve against the upper end of the slot in bar *f*, thereby closing the valve and simultaneously opening the cut-off by the 65 pull on chain *m*.

Ordinarily a half-bushel will be dumped at each operation of the machine, and the register will furnish means for accurately determining the amount thrashed in any given 70 interval.

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

1. The grain-weigher comprising the bucket swung in the scale-beam, the valve hinged to 75 one side of the lower end of the bucket and having the curved extension, the catch pivotally connected with the opposite side of the bucket and having the inclined extension, the bars having slots for the reception 80 and operation of the extensions of the valve and the catch, respectively, and the cut-off connected with the scale-beam, as set forth.

2. In a grain-weigher, the combination, with a bucket suspended from the scale-beam, 85 of a valve hinged to its lower end, having a curved extension projecting outwardly therefrom, a catch pivotally secured to the bottom of the bucket, having a curved extension projecting outwardly, bars at the sides of the 90 bucket, each provided with a curved slot for the reception and operation of the curved extensions of the valve and catch, respectively, a cut-off above the bucket, and a chain for connecting the arm of the cut-off with the 95 scale-beam, as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

JOHN H. POULTER.

Attest:

JOHN WALLACE,
EDGAR BAIR.