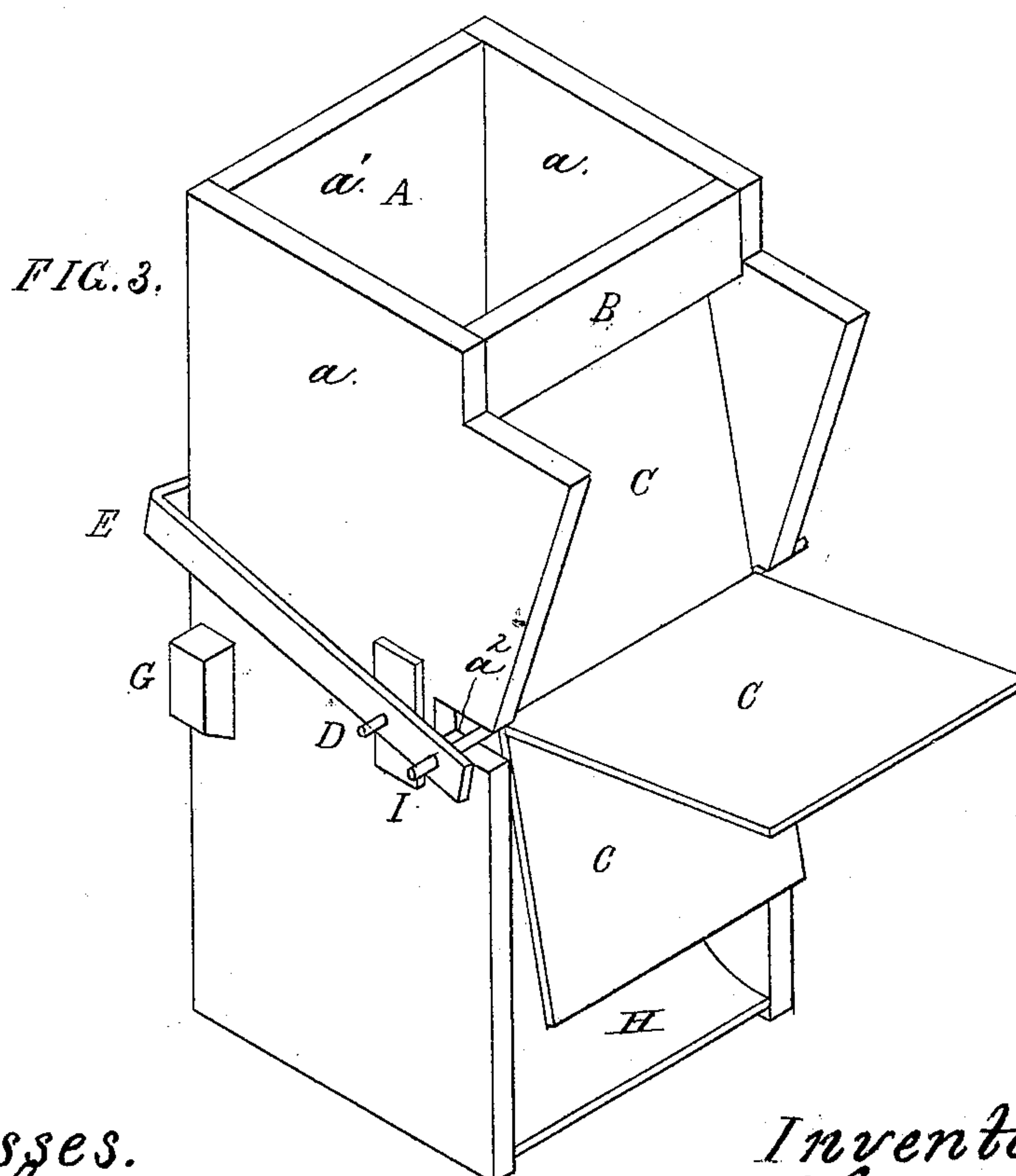
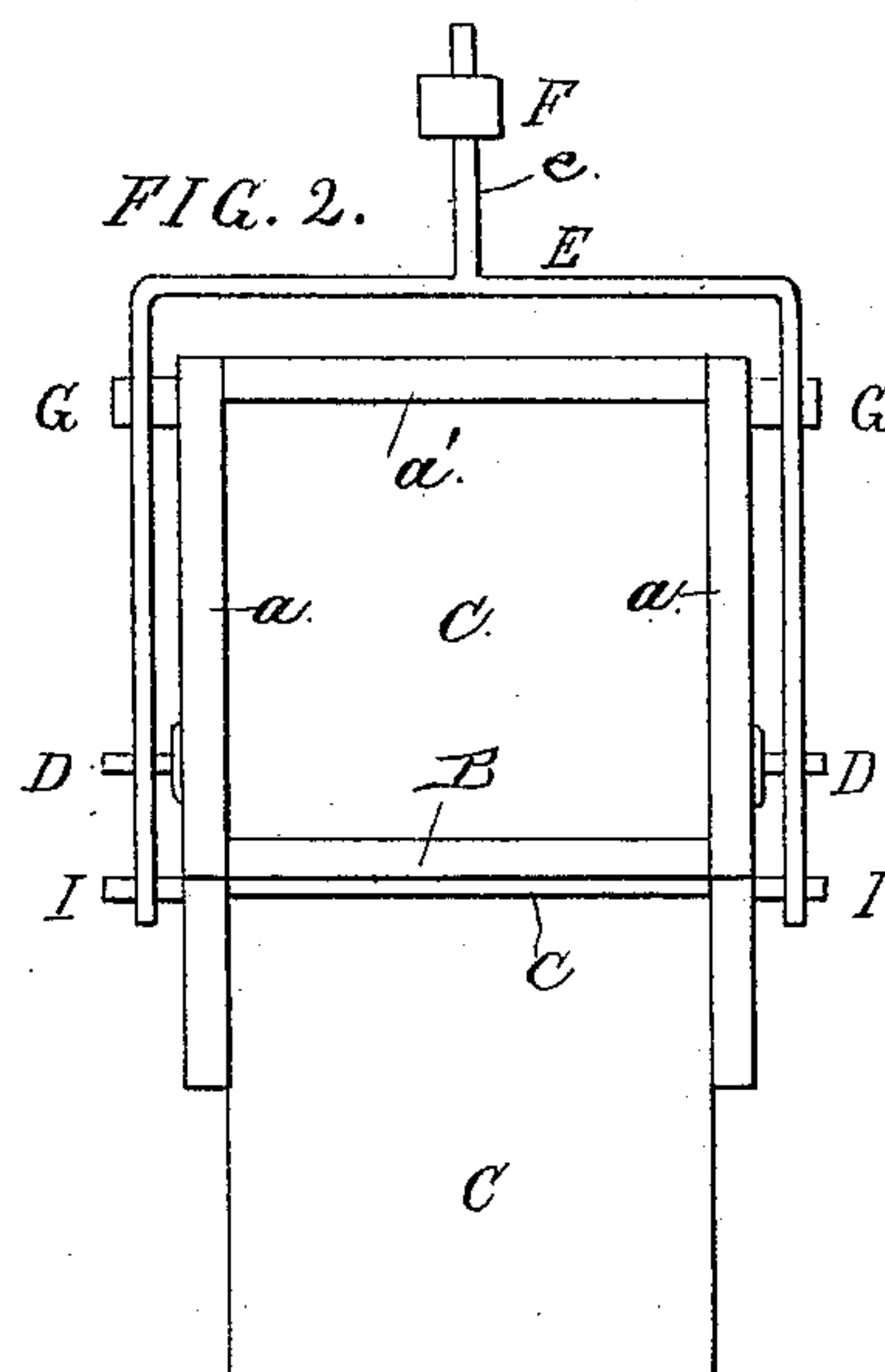
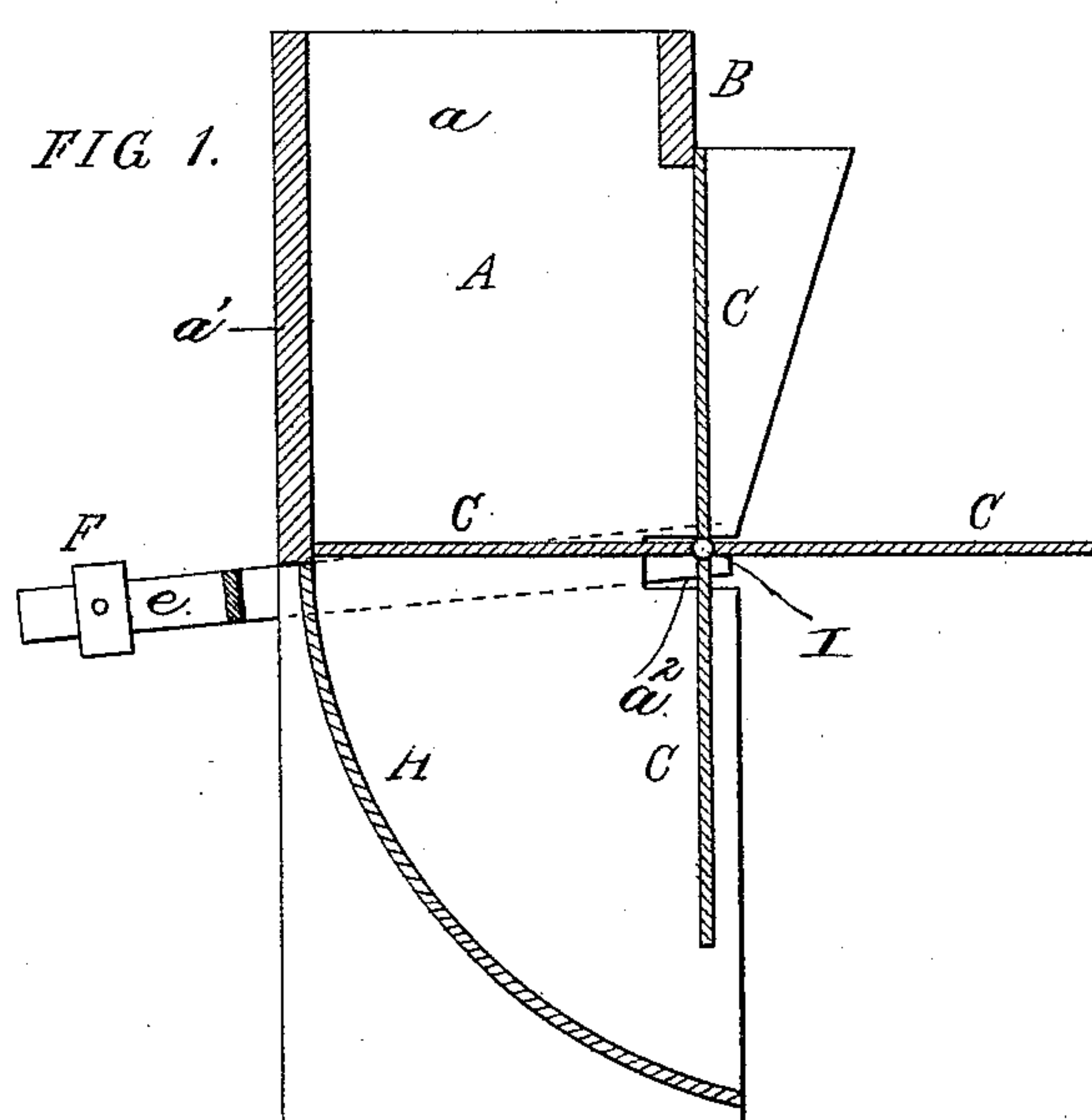


(No Model.)

H. APPLEN.
ROTATING GRAIN METER.

No. 405,689.

Patented June 25, 1889.



Witnesses.

J. Bayliss
J. H. Porter

Inventor.

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UNITED STATES PATENT OFFICE.

HENRY APPLIN, OF SARATOGA, ILLINOIS.

ROTATING GRAIN-METER.

SPECIFICATION forming part of Letters Patent No. 405,689, dated June 25, 1889.

Application filed December 16, 1886. Renewed May 24, 1889. Serial No. 311,914. (No model.)

To all whom it may concern:

Be it known that I, HENRY APPLIN, a citizen of the United States, residing at Saratoga, in the county of Marshall and State of Illinois, have invented certain new and useful Improvements in Grain-Meters, of which the following is a specification.

My invention relates to improvements in grain-meters; and it consists in certain novel features, hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a central vertical section of my device. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view thereof.

Referring to the drawings by letter, A designates the hopper, formed by the side boards a and the back board a' . The back board a' extends from the top of the side boards to about the center of the same, and in the front edges of the side boards at the center of the same I form the notches a^2 , in which the shaft of the cut-off plays. Across the front of the hopper at the top of the same I provide a stop B, consisting of a board or strip secured to the side boards in any desired manner. The bottom H of the hopper is curvedly inclined from the lower edge of the back board a' to the lower front corners of the side boards a , so as to direct the grain toward the front of the device, where it is discharged.

D D are pivot-pins, which are secured in the side boards a in rear of the notches a^2 , and on these pivot-pins I mount the arms of the U-shaped lever E. The shoulder or cross-piece of this U-shaped lever is arranged in rear of the hopper, and projecting rearward from the cross-bar at the center thereof is an arm e , on which is mounted an adjustable counterbalance-weight F. Near the rear edges of the side boards of the hopper I form the lugs G, which support the lever E when it is at rest. The front ends of this lever project past the pivot-pins D, and a shaft I is journaled therein. Upon this shaft are rigidly mounted four cut-offs C, arranged at right angles to each other and of a length about equal to the width of the hopper. These

cut-offs C are designed to receive and support the grain until the predetermined quantity has been fed into the hopper, when it will be automatically discharged.

The operation of the device will be readily understood.

In Figs. 1 and 2 the several parts are shown in their normal positions. In this position the cut-offs are so arranged that one is extended across the width of the hopper, serving as a bottom therefor, while the next one has its upper edge in contact with the stop B, thereby preventing the rotation of the cut-offs. While the cut-offs are in this position the grain fed into the hopper will accumulate in the cut-offs extended across the hopper until the weight of such grain will be sufficient to overcome the counterbalance-weight F, when the cut-offs will drop sufficiently to allow the vertical cut-offs to escape past the stop B, when the cut-offs will be revolved and the grain be discharged.

My device is intended to be attached to a thrashing-machine and receive the grain from the elevator of the same, as will be readily understood, and it is thought that its advantages will be readily appreciated without a detailed reference thereto.

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

1. The combination, with the hopper, of the balance-lever pivotally secured to the sides thereof, and the revolving cut-offs having a common shaft journaled in the balance-lever, one of said cut-offs serving as a bottom for the hopper, while the next one is in contact with a stop, substantially as set forth.

2. The combination, with the hopper having the stop B across its front side at its upper end, of the balance-lever pivotally secured to the sides of the hopper, and the revolving cut-offs adapted to impinge against the stop B and mounted on a shaft journaled in the balance-lever, substantially as set forth.

3. The combination, with the hopper having the stop B and the notches a^2 , of the balance-lever pivotally secured to the sides of the hopper, and the revolving cut-offs adapted to impinge on the stop B and having their

shaft journaled in the balance-lever and playing in the notches a^2 , substantially as specified.

4. In combination with the hopper, the series of cut-offs, one of which is extended across the width of the hopper, so as to serve as a bottom therefor, while the next one is in con-

tact with a stop, thereby preventing the rotation of the cut-offs, as set forth.

HENRY APPLIN.

Witnesses:

S. E. CARLIN,
A. K. PORTER.