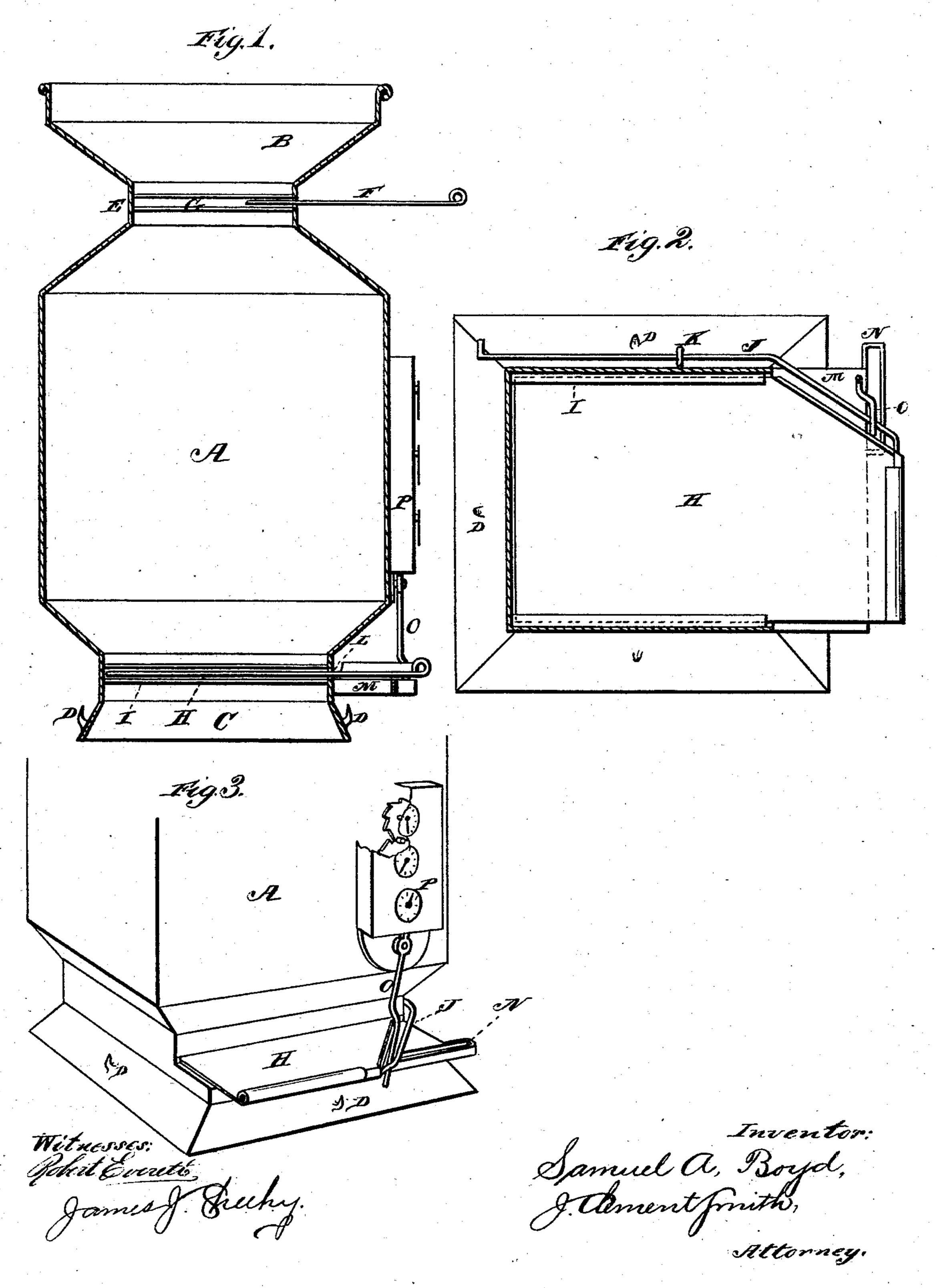
(No Model.)

## S. A. BOYD. Grain Measure and Register.

No. 232,445.

Patented Sept. 21, 1880.



## United States Patent Office.

SAMUEL A. BOYD, OF AVONDALE, OHIO.

## GRAIN MEASURE AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 232,445, dated September 21, 1880.

Application filed July 8, 1880. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. BOYD, a citizen of Ohio, U. S. A., resident at Avondale, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Grain Measures and Registers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention has relation to grain measurers and registers; and it consists in the features of construction and combination hereinafter fully described and particularly pointed out in the claim.

Figure 1 is a transverse vertical sectional view of my improved grain-measurer. Fig. 2 is a horizontal sectional view, and Fig. 3 is a partial perspective view of the mechanism for operating the register and the register with its face partially broken away to show the wheels.

Referring by letter to the drawings, A designates the grain-measurer, which is made of sheet metal or galvanized iron or any other 30 suitable material. Its central portion is preferably rectangular in form, and has a converging top and a converging bottom. The top is provided with a hopper, B, and the bottom with a flaring discharge, C, having hooks D, for attaching a grain-sack thereto. The neck E of the hopper B is provided with a slide, F, working in ways G.

Between the converging bottom and the flaring discharge C a lower slide, H, works in ways I. This lower slide, H, is cut away diagonally at one of its front corners, and is provided with a guide-rail, J, which follows the incline of the cut-away portion and then extends back along the straight side of the lower slide, as shown, the straight portion of said guide-rail passing through a guideway, K, secured to the outside of the grain-measurer in line with the lower slide, H.

Beneath the opening L, through which the 50 slide H is introduced to the measurer, is an extension, M, having at its front, near the right-

hand corner, a guideway, N, parallel with the front of the measurer, and in this guide the power end of the pivoted lever O, by which the register P is operated, is worked by the 55 guide-rail J when the lower slide, H, is drawn out and pushed back.

The register is composed of three wheels and three dials, representing and registering units, tens, and hundreds. The wheels inter- 60 mesh in such a manner that when the units-wheel has described one revolution the tens-wheel will be moved one point, and when the tens-wheel has made one revolution the hundreds-wheel will be moved one point.

The measure holds exactly one bushel, and is to be attached to the side of the machine, so that it may be filled from the head of the elevator. The upper slide is to be drawn out to permit the measurer to be filled, and then 70 closed, and the lower slide drawn out to permit the contents of the measurer to be discharged into the grain-sack below. During the time that the grain is running from the measurer to the bag the hopper will hold the 75 grain that continues to come from the elevator-head until the lower slide has been closed and the upper one again opened.

The upper end of the pivoted lever O is provided with a spring-pawl, by which the 80 units-wheel is operated when said lever is worked.

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

In a grain measure and register, the lower slide, H, cut away at one corner and provided with the guard-rail J, extending along the incline and the side of the slide, in combination with the extension M, having the guideway 90 N parallel with the front of the measure, and the pivoted lever O of the register projecting through the ways in the slide H, and the extension M, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

S. A. BOYD.

Witnesses:
J. S. Elliott,
JEZREL SUTTON.