

(No Model.)

F. YEAGLEY.
GRAIN MEASURE.

No. 603,309.

Patented May 3, 1898.

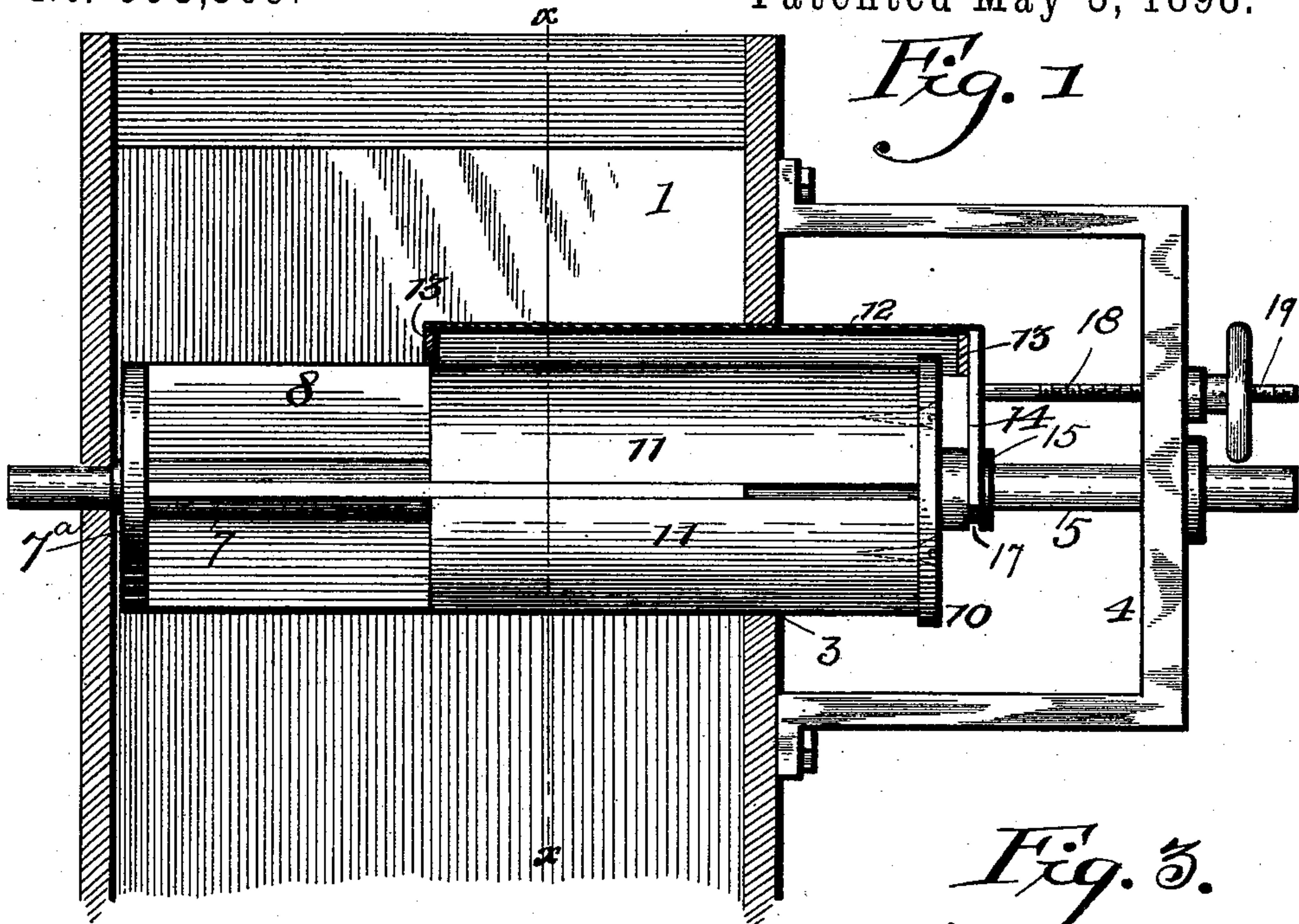


Fig. 1

Fig. 2.

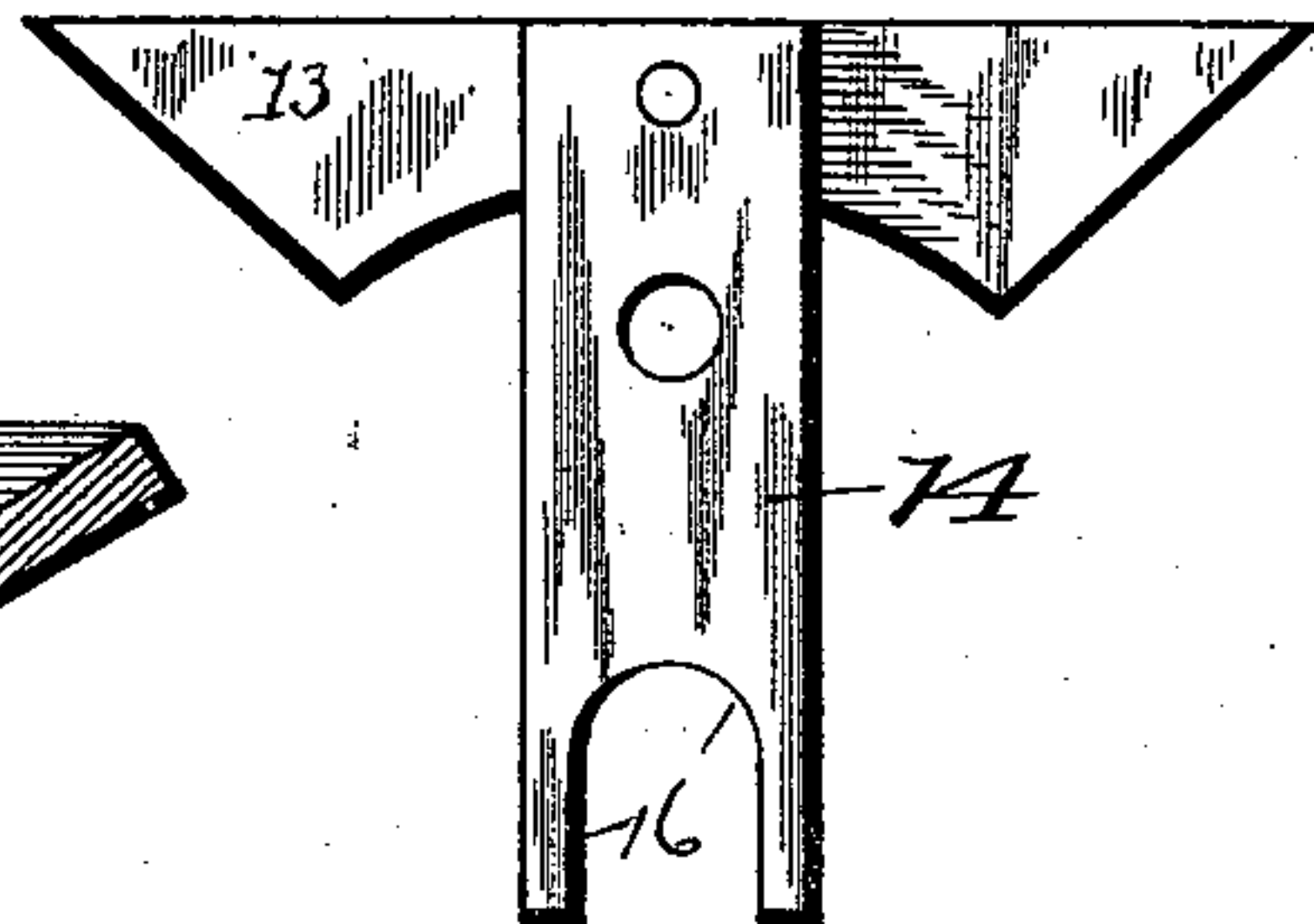
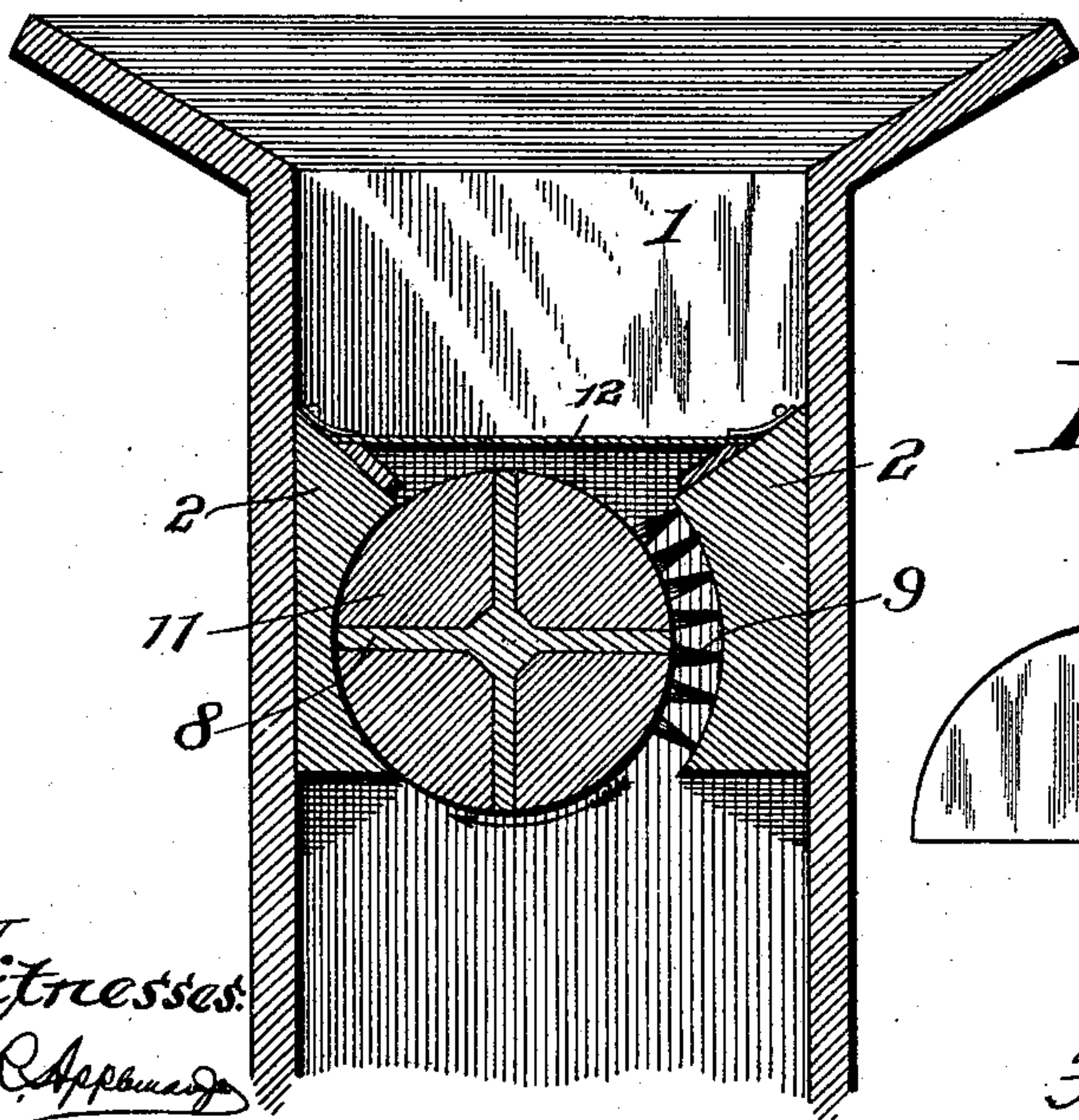
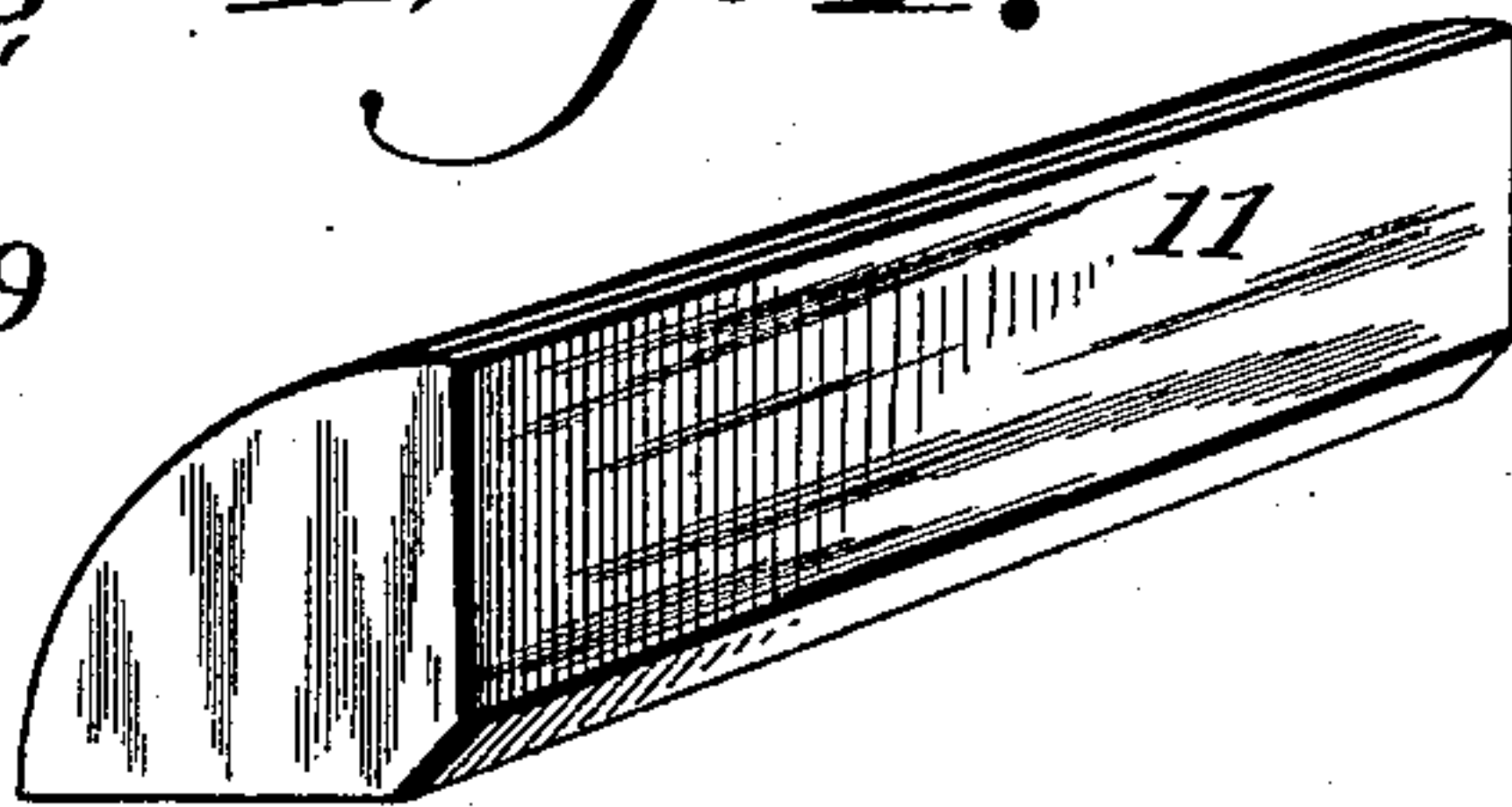


Fig. 4.



Witnesses:
A. R. Applegate
David McAdam

Inventor:
Frank Yeagley
By J. H. McAdam

UNITED STATES PATENT OFFICE.

FRANK YEAGLEY, OF LEBANON, PENNSYLVANIA.

GRAIN-MEASURE.

SPECIFICATION forming part of Letters Patent No. 603,309, dated May 3, 1898.

Application filed July 1, 1897. Serial No. 643,089. (No model.)

To all whom it may concern:

Be it known that I, FRANK YEAGLEY, a citizen of the United States of America, residing at Lebanon, in the county of Lebanon and State of Pennsylvania, have invented certain new and useful Improvements in Grain-Measures, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to grain-meters, and particularly to that class known as "rotary" measures, the object being to produce a device of simple construction and rapid and accurate operation, a further object being to provide, in connection with a grain-meter of this character, means whereby the capacity of the measuring-compartments may be regulated for the purpose of varying the quantity to compensate for the condition of the grain and the requirements of the operator; furthermore, to provide a cover for such regulating parts to prevent them from becoming clogged and useless by the accumulation of grain and dust, a still further object being to provide a brush or its equivalent along one of the concaved sides of one of the side blocks, whereby the passage of all superfluous grain will be prevented.

30 With the above and other objects in view the invention consists in the details of construction, as well as in the combination and arrangement of parts, to be hereinafter more fully set forth and specifically claimed.

35 In order that those skilled in the art to which this invention appertains may understand how to make and use the same, reference is had to the accompanying drawings, forming part of this specification, wherein like characters of reference denote corresponding parts in the several views, in which—

40 Figure 1 is a longitudinal sectional view of a grain-chute having my improvement applied thereto. Fig. 2 is a sectional view taken on the line $x x$ of Fig. 1. Fig. 3 is an end view of the cover for the regulating parts having the arm secured thereto. Fig. 4 is a perspective view of one of the regulating-blocks.

45 In carrying out my invention I provide a chute 1, having the blocks 2 secured on opposite sides thereof, and formed in one of the walls of the chute is an opening 3, having the housing 4 secured thereover. Journaled be-

tween the housing and one wall of the chute is a shaft 5, and formed on this shaft is the cylindrical measuring-receptacle, consisting of hub 7, the end 7^a, and the wings 8, secured to the hub and end. The blocks 2 are concaved on their inner faces to conform to the contour of the measuring-receptacle, and on one of these blocks are the brushes 9, arranged to sweep the superfluous grain in one compartment into the following compartment, thereby reducing the liability of inaccurate measurement to a minimum.

60 On that portion of the shaft within the housing I spline or slidably secure the face-plate 10, and on the face-plate provide the regulating-blocks 11, said blocks being of such size that they fit snugly within one end of each of the compartments, completely filling the space between the wings, with the ends of the blocks forming the ends of the compartments. Arranged over these regulating-blocks is the cover 12, having the arched ends 13, the sides of the cover being beveled to fit on the slanting tops of the side blocks 2, whereby the cover is slidably supported above the regulating-blocks 11, thereby preventing the grain and dust from accumulating in the crevices between the blocks and wings and also serving to support the grain against contact with the blocks in order that the rotation of the measuring-receptacle will be in no way interfered with.

85 The blocks 11 may be drawn back and forth in the compartments in order to regulate their measuring capacity, as before explained, and that the cover may be operated in conjunction with the blocks I provide the arm 14, secured to the end of the cover, and on the face-plate 10 form an extension 15, which fits in a U-shaped notch 16 in the end of the arm, and the edges of this notch in turn fit within the groove 17, formed around the extension, whereby any longitudinal movement of the cover is communicated to the face-plate. To bring about this movement, a screw-rod 18 is secured to the arm and projects rearwardly through an aperture in the housing, where it is operated by a hand-wheel threaded thereon, the hand-wheel being anchored to the housing by a swiveled joint or other suitable means.

100 In order that the compartments may be accurately regulated and their capacity deter-

mined, a gage is formed by inscribing graduation-marks on the end of the screw-rod, as indicated at 19.

From the foregoing description it will be seen that the operation is as follows: The shaft is rotated by any suitable mechanism at a rate of speed slow enough to allow the compartments to be completely filled by grain running through the chute, each compartment being filled when reaching the highest point of its rotation and emptied of its contents when its side walls have turned sufficiently.

If desired, a registering device may be secured to the casing in connection with the operating mechanism, that the amount of grain passing through the meter may be determined.

It will be noted that various changes may be made in the proportions and other details of construction, and yet the spirit of my invention will not be departed from.

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

1. In combination with a grain-chute having blocks secured on opposite sides thereof, said blocks having concaved inner faces and slanting upper faces, a shaft journaled within the chute concentric with the concaved faces of said blocks, a measuring-receptacle having

a number of compartments closed at one end and open at the opposite end, a face-plate splined on the shaft, said face-plate having an extension formed thereon, regulating-blocks on the face-plate slidably fitted in the compartments of the measuring-receptacle and forming the ends thereof, a cover having beveled sides to fit on the blocks in the chute, an arm secured at one end to the outer end of the cover and extending downward, said arm being notched to embrace the extension of the face-plate and fit in an annular groove formed therein, and an arm connected to said arm to draw the cover and blocks back and forth, as and for the purpose described.

2. A grain-meter consisting of a chute, side blocks secured on the inner walls of the chute, said blocks having slanting tops and concaved faces, a rotary cylindrical measuring-receptacle journaled to be rotated between the blocks, movable blocks fitted in the compartments of the receptacle, and cover having beveled sides fitting on the slanting walls of the side blocks and connected to the movable blocks.

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

FRANK YEAGLEY.

Witnesses:

WILLIAM I. HACKMAN,

REUBEN KOSER.