

(No Model.)

H. STILL.
FEED BOX.

No. 556,033.

Patented Mar. 10, 1896.

Fig. 1.

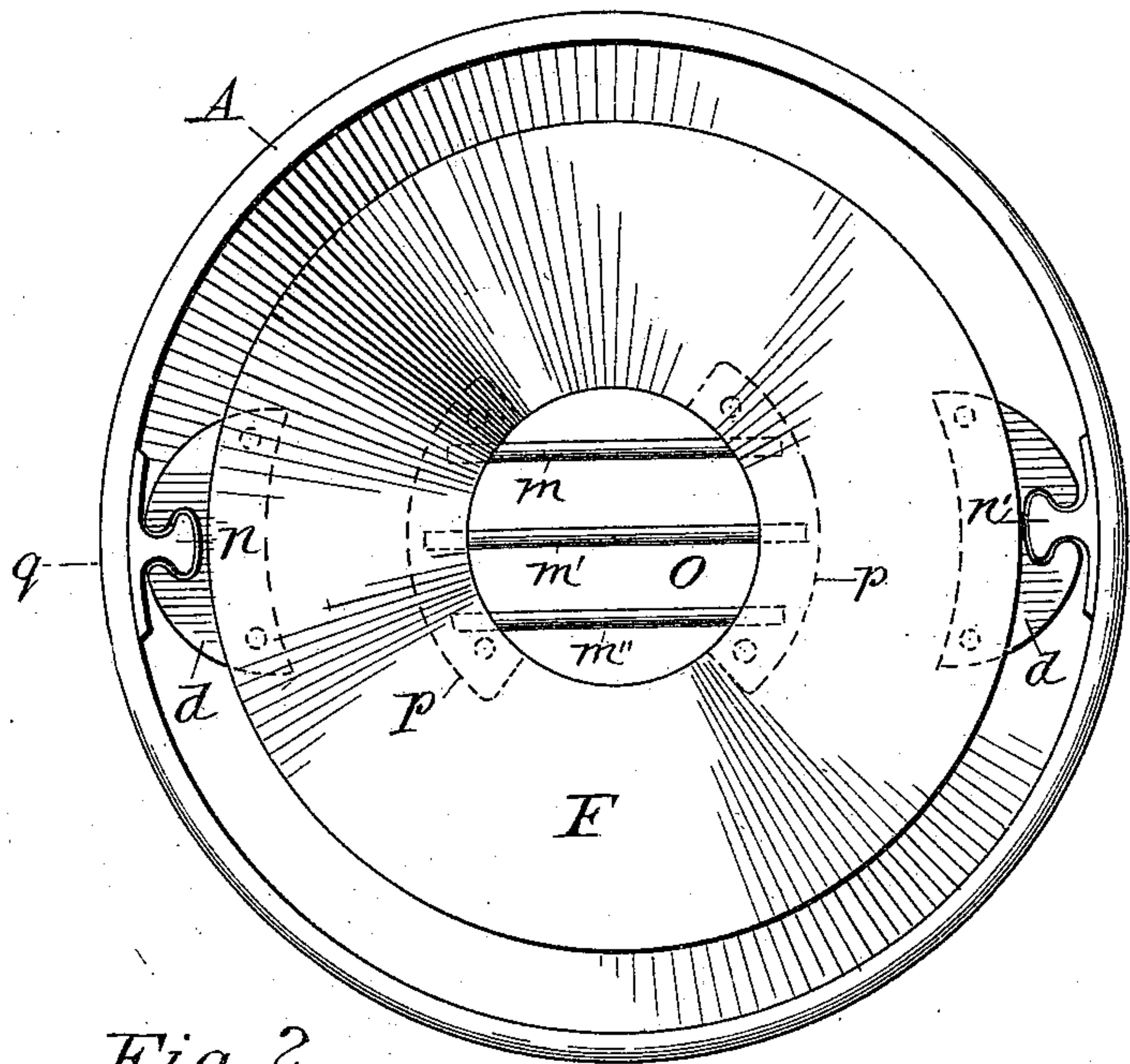


Fig. 3.

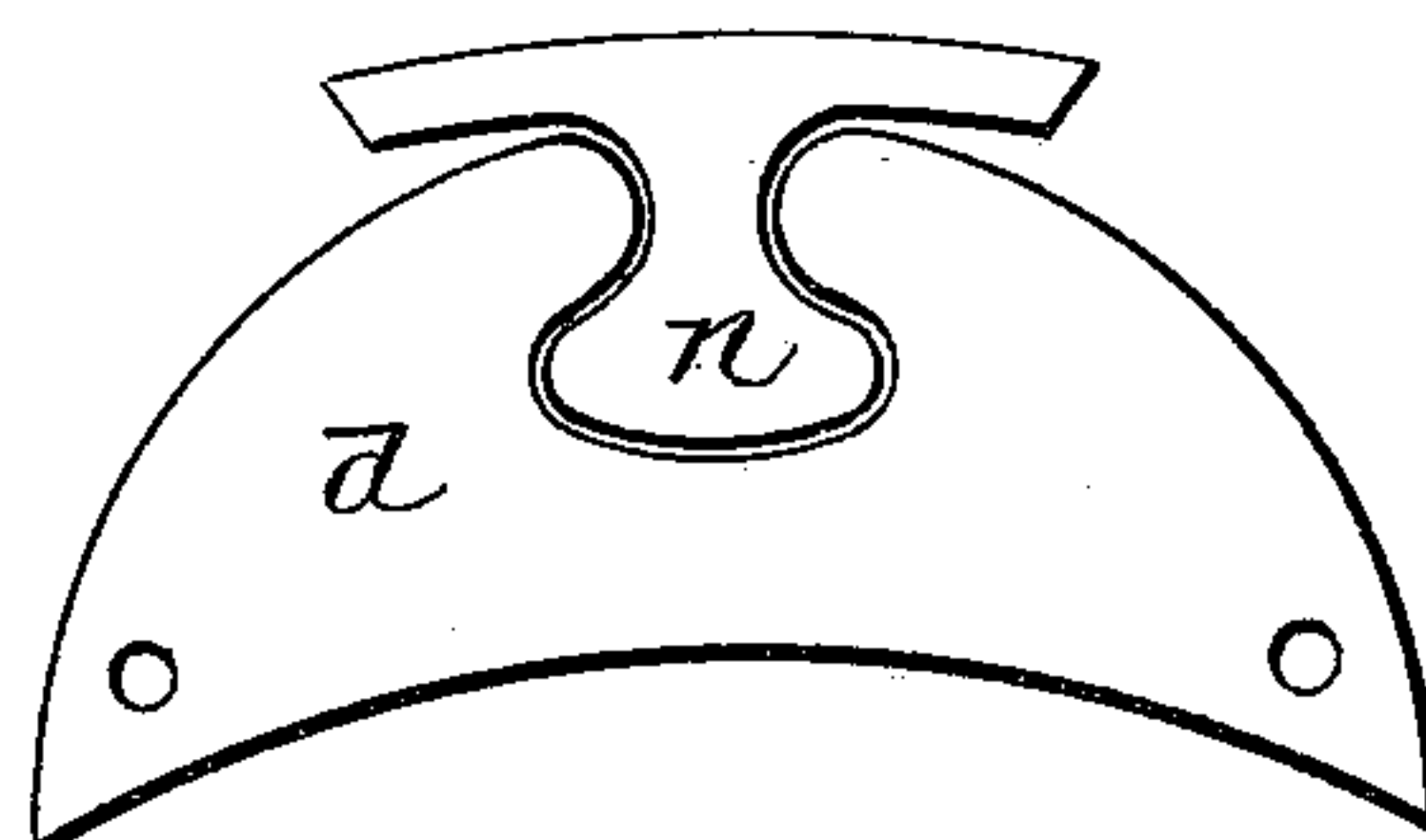


Fig. 4.



Fig. 2.

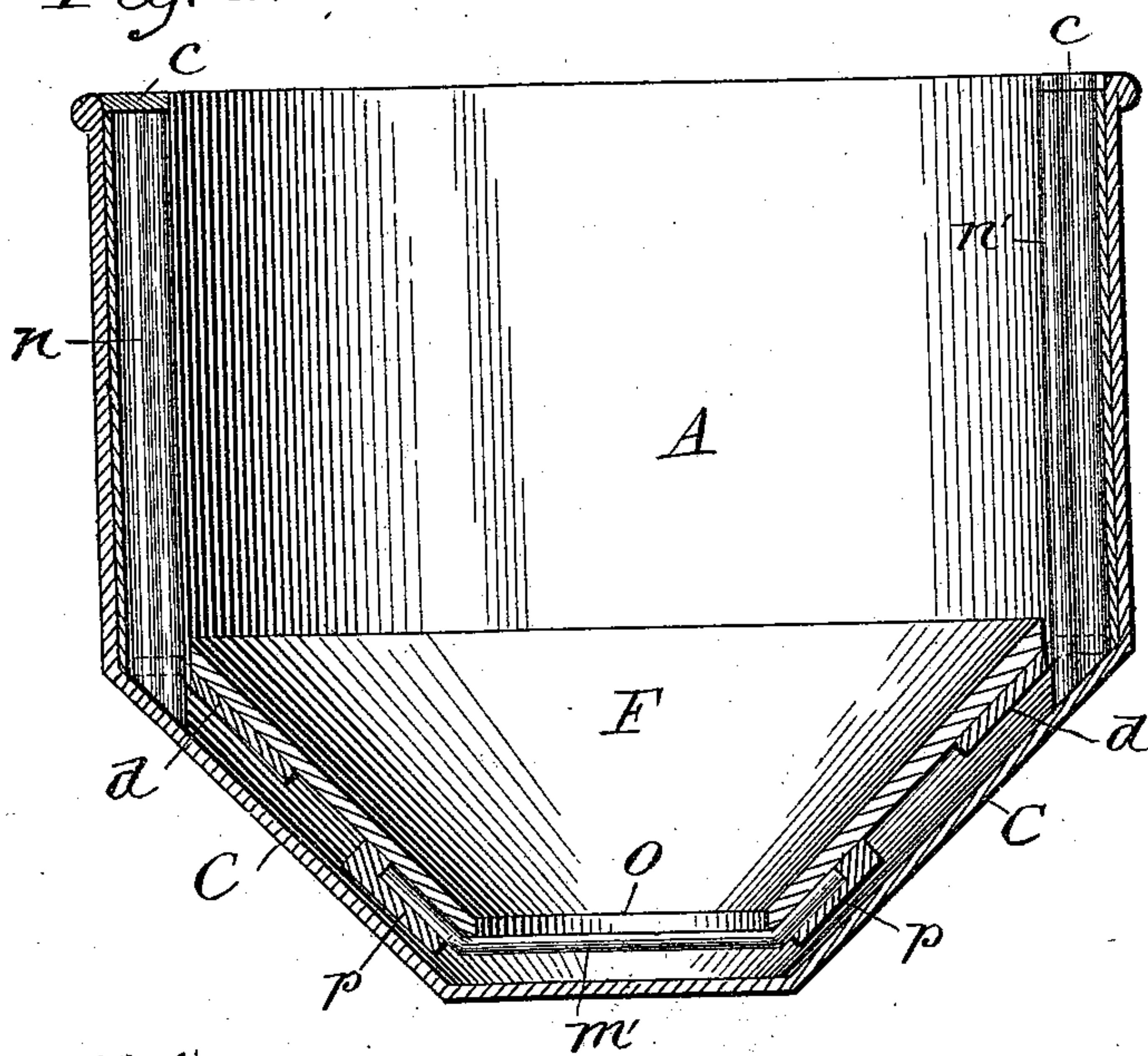


Fig. 5.

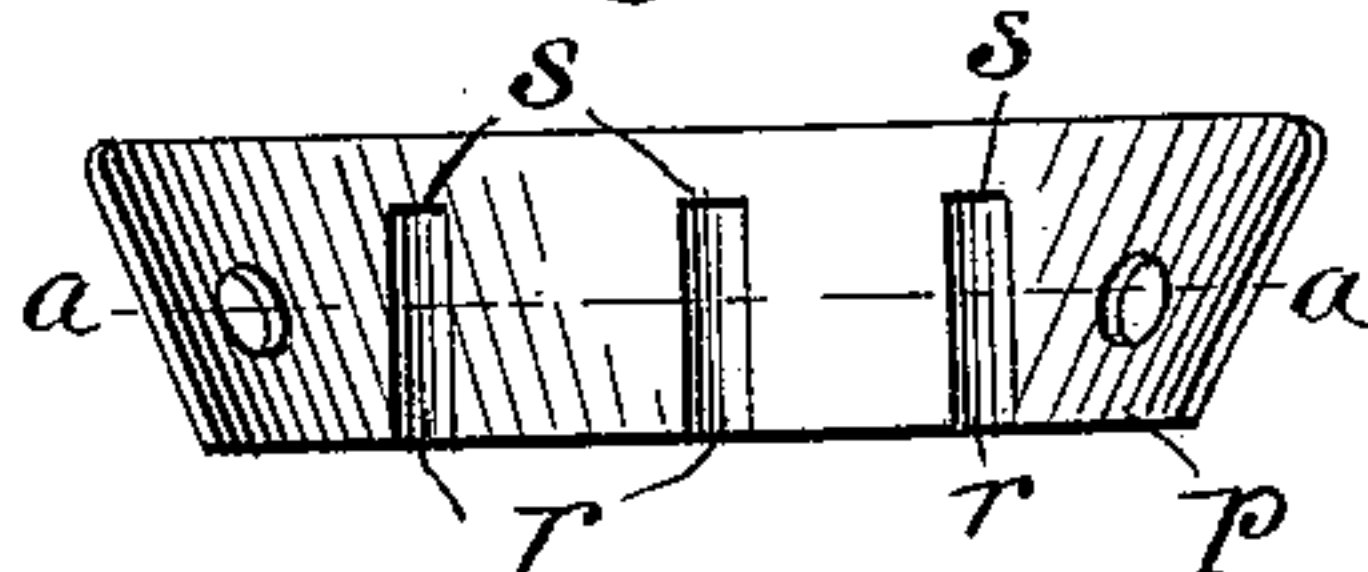


Fig. 6.



Witnesses:

Lowland Hill
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Inventor.

Henry Still

UNITED STATES PATENT OFFICE.

HENRY STILL, OF NORFOLK, VIRGINIA.

FEED-BOX.

SPECIFICATION forming part of Letters Patent No. 556,033, dated March 10, 1896.

Application filed September 15, 1891. Serial No. 405,824. (No model.)

To all whom it may concern:

Be it known that I, HENRY STILL, a citizen of the United States, residing at Norfolk, in the county of Norfolk, in the State of Virginia, have invented new and useful Improvements in Feed-Boxes for Horses and other Grain-Eating Animals; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being made herein to the accompanying drawings, which are illustrations of the feed-box constructed in accordance with my invention.

The object of my invention is to prevent the waste of feed.

By my invention it is impossible for any horse or other grain-eating animal to remove the bars which regulate the amount of feed which can be taken up at a time. In other words, the bar or follower in my invention cannot be removed from its proper position by any animal feeding with it, while it may be readily removed, when desired, for the purpose of emptying the box for other uses.

By my invention all disagreeable rattle of the follower against the side of the box is avoided.

Similar letters refer to similar parts of the box in the several views.

Figure 1 is a plan view of the entire box. Fig. 2 is a vertical section of the same on the line $q q$ of Fig. 1. Fig. 3 is an enlarged top view of the guide-pieces. Fig. 4 is an enlarged top view of the cap or stop at the upper end of the guide-piece n , and Fig. 5 shows the plate for holding the regulating-bars fast to the follower. Fig. 6 is a sectional view of the plate p on line $a a'$ for holding the regulating-bars $m m' m''$.

The feed-box proper, A, may be made of any desired form and of any suitable material. It preferably should be made of metal and circular, of an entire depth of not less than twelve inches and diameter not less than fourteen inches.

C is a concave bottom that inclines to the sides at an angle of not less than forty-five degrees. F is a concave follower to conform to the angle of the said bottom C and of such

diameter as will permit of its easy movement between the guide-pieces $n n$.

O is an opening through the central portion of the follower F, across which opening are the regulating-bars $m m' m''$. These bars are fastened to the under or convex side of the follower F by means of the plate p , the ends of the said wires fitting in the depressions $r r' r''$ in said plate. Said depressions $r r' r''$ do not extend through the face of said plate p , but are terminated by the stops $s s' s''$. By this contrivance I am enabled readily to clamp the bars rigidly to the follower, so they cannot be forced from their proper position across the opening O or be drawn upwardly or outwardly, and the said plate p being fastened to the said follower by means of rivets or other equivalent means.

The regulating-bars may be set any distance apart. The space of six inches is sufficient for all purposes of the opening O through the said follower F. The guide-pieces n and d should be so proportioned as to allow as great a diameter of the follower as possible and yet permit its free movement between the guide-pieces $n n'$. Said guide-pieces $n n'$ may be made of metal or combination of metal and wood, which latter form is preferable. These guide-pieces n and d may be attached to their proper places by means of rivets or any other well-known means.

I prefer fixing the pieces n to the body of the box, for the liability of having the movement of the follower up and down clogged is prevented, as would be the case if the parts d were attached to the box. At the upper end of each piece n is a cap or stop c . (Shown enlarged in Fig. 4.) Each cap is so made as to cover only one-half of the top and of the corresponding guide-piece n . By this construction of the said cap c the follower can, when desired, be removed from the box, which is done by raising the follower up against the said stop c and then turning the follower F upon a line drawn through the centers of the two pieces n as an axis, the side of the follower which is raised being on the opposite side of the said axis from the caps or stops c . When the follower has been turned through one hundred and eighty degrees it can be

readily released from the box by a slight lateral movement.

I do not claim as my invention a sliding disk with a central opening, as the same has
5 heretofore been known; but

What I do claim as my invention, and for which I desire to secure Letters Patent, is—

A feed-box having a substantially concave bottom and vertical T-shaped or doubly-
10 grooved guides mounted within said box at diagonally-opposite points and extending through substantially the cylindrical portion of the box, said guides being each surmounted by a cap or stop, each of said caps or stops
15 covering and terminating one only of the grooves of each guide, said grooves so ter-

minated or covered being upon the same side of a line drawn through the centers of the two guides, in combination with a follower concaved to conform to the lower portion of the
20 feed-box, and having a grated opening at the lower end thereof, and having at diametrically-opposite sides thereof recessed lugs, portions of which are adapted to enter and be guided by the guides upon the feed-box, 25 substantially as described and for the purposes set forth.

HENRY STILL.

Witnesses:

CRICKET JACOBS,
HENRY H. LITTLE.