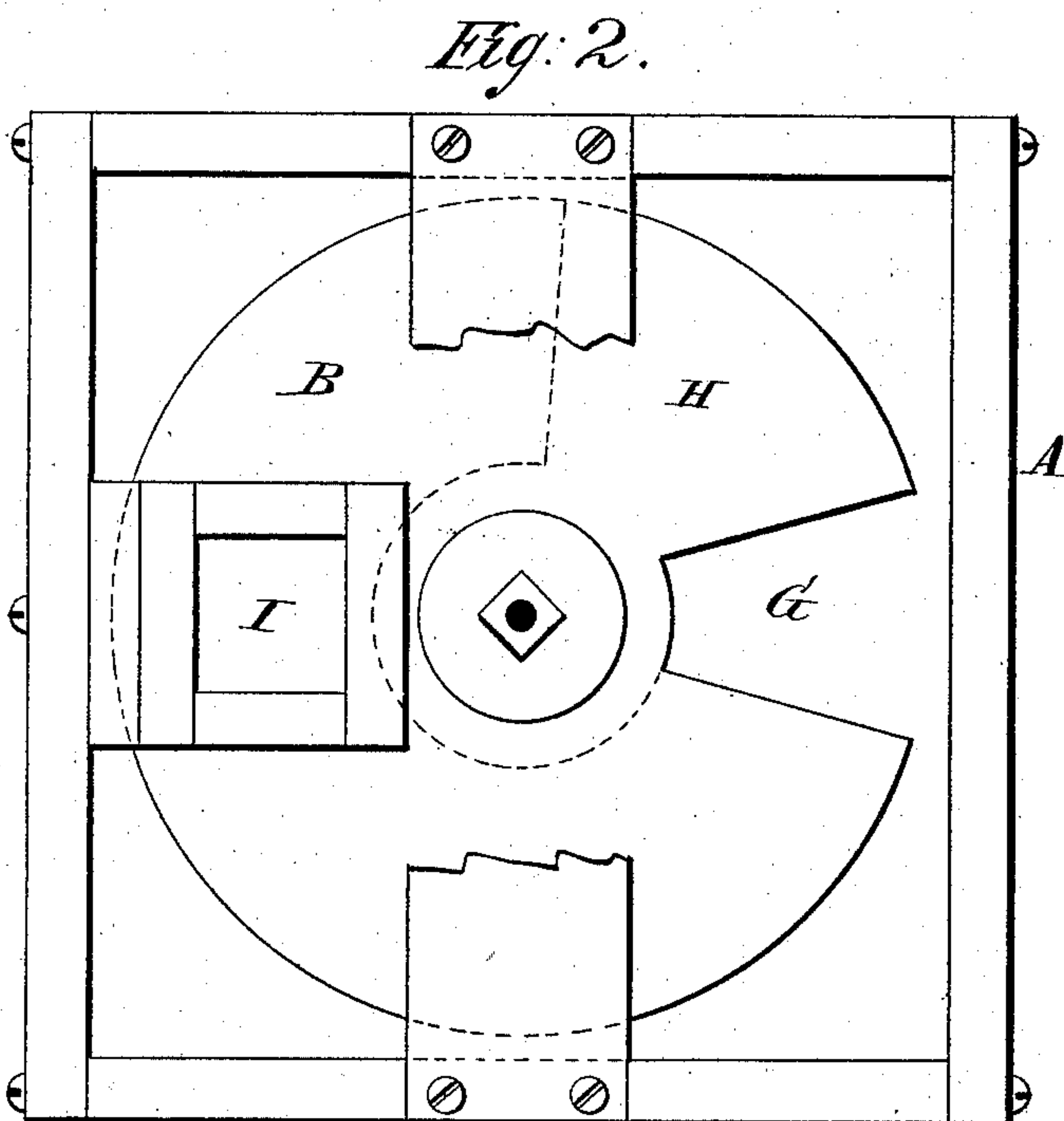
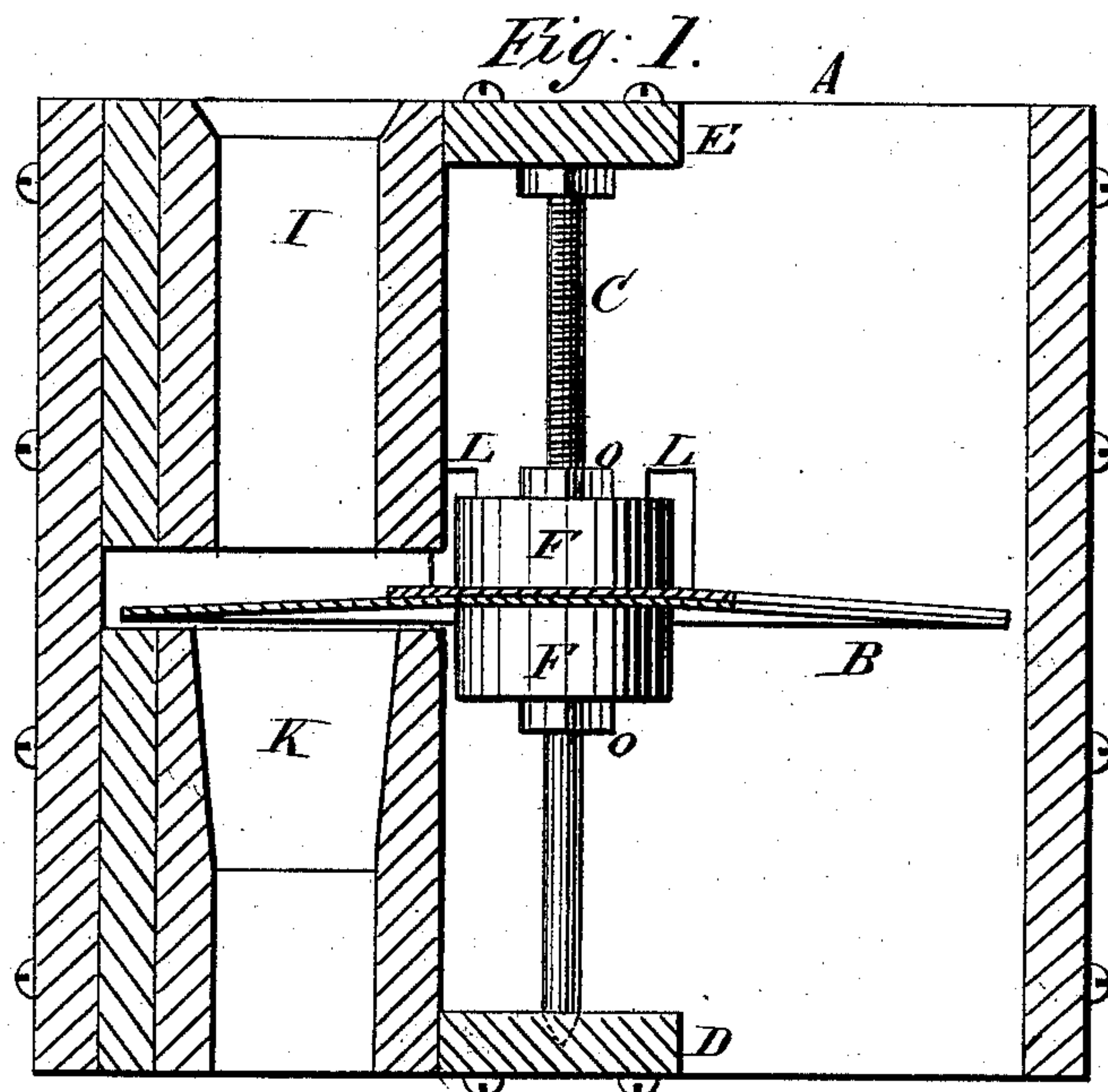


D. WAUGH.  
Grain-Toller.

No. 214,734.

Patented April 22, 1879.



WITNESSES:

*Achilles Schebel.*  
*C. Sedgwick*

INVENTOR:

*D. Waugh*  
BY *M. H. Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

DAVID WAUGH, OF WELLSBURG, WEST VIRGINIA.

## IMPROVEMENT IN GRAIN-TOLLERS.

Specification forming part of Letters Patent No. **214,734**, dated April 22, 1879; application filed February 25, 1879.

*To all whom it may concern:*

Be it known that I, DAVID WAUGH, of Wellsburg, in the county of Brooke and State of West Virginia, have invented a new and Improved Grain-Toller, of which the following is a specification.

Figure 1 is a vertical section of the toller. Fig. 2 is a plan of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a cheap, simple, and accurate device for tolling grain, and one that is less liable to get out of order than any other now in use.

Inclosed in the box A is the toller, which consists of a concavo-convex or flat disk, B, secured upon the shaft C and made to revolve therewith. The shaft is stepped in journal-box D, and is steadied at its upper end in box E, and it has secured to it the pulley F, to which the power for revolving it is applied by means of a belt. At G a section of the disk is removed to leave an opening for the downward passage of grain, and a cover, H, pivoted on the shaft C, is for the purpose of diminishing or increasing the said opening.

To toll the grain the machine is made to revolve, and as it revolves the grain is poured down the spout I, that terminates just over spout K. Whatever grain falls upon the surface of the disk is thrown or falls off outside of the spout K, while what passes through the opening G falls into spout K and is counted as toll. Of course, the area of the opening G must be properly adjusted by the cover H to regulate the amount of toll.

I usually run these machines about thirty revolutions per minute; but they can be run faster or slower without changing the result; nor does it make any difference whether the grain runs in fast or slow, so that it runs in a regular stream.

The top of the disk is preferably made convex, so that damp grain will readily pass off from it. Of course, the speed of the machine must not exceed certain limits, lest the centrifugal force should interfere with the correctness of the toll-taking.

The power required to run the machine is too trifling in amount to be worth consideration.

The holes L L in the side of the box are for the passage of the driving-belt; and it will be seen that the pulley F is made in two parts, each of which can be used as a pulley, the one above and the other below the disk, and, in effect, holding it between them. Outside of these pulleys or parts of a pulley are the nuts O O, that travel on the screw-threads cut on the shaft; and by this device the position of the disk between the spouts can be adjusted.

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

1. The within-described grain-toller, consisting of box A, disk B, having opening G and cover H, shaft C, pulley F, and spouts I and K.

2. In the construction of a grain-toller, the disk B, with opening G and cover H, in combination with shaft C, substantially as herein shown and described.

3. A grain-toller having a disk, B, with opening G and cover H, secured between two pulleys or parts of a pulley, F, on shaft C, and adjustable upward and downward by nuts O O, that travel on screw-threads cut in shaft C, substantially as herein shown and described.

DAVID WAUGH.

Witnesses:

CAMPBELL P. WAUGH,  
JAMES L. LAWSON.