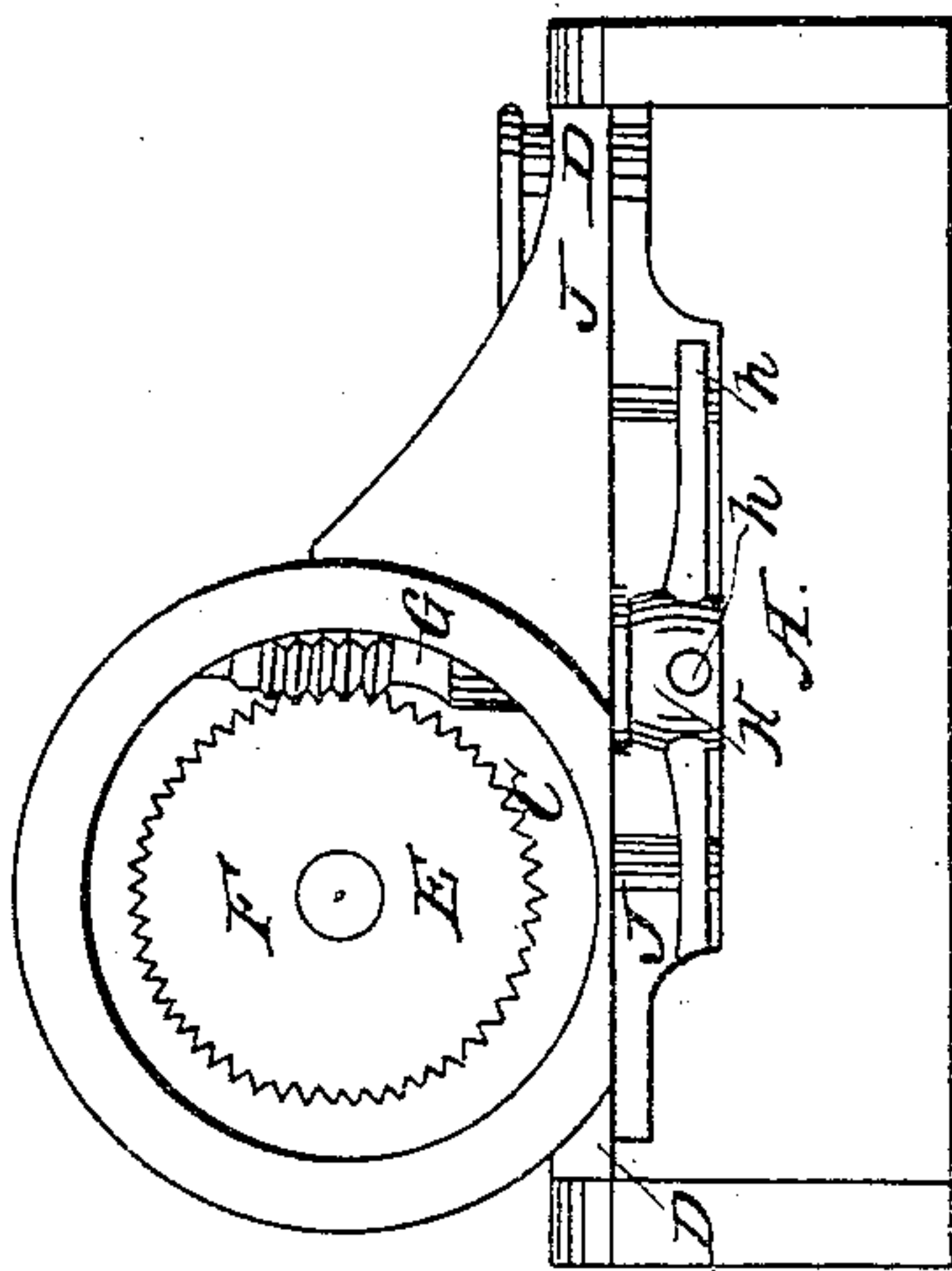
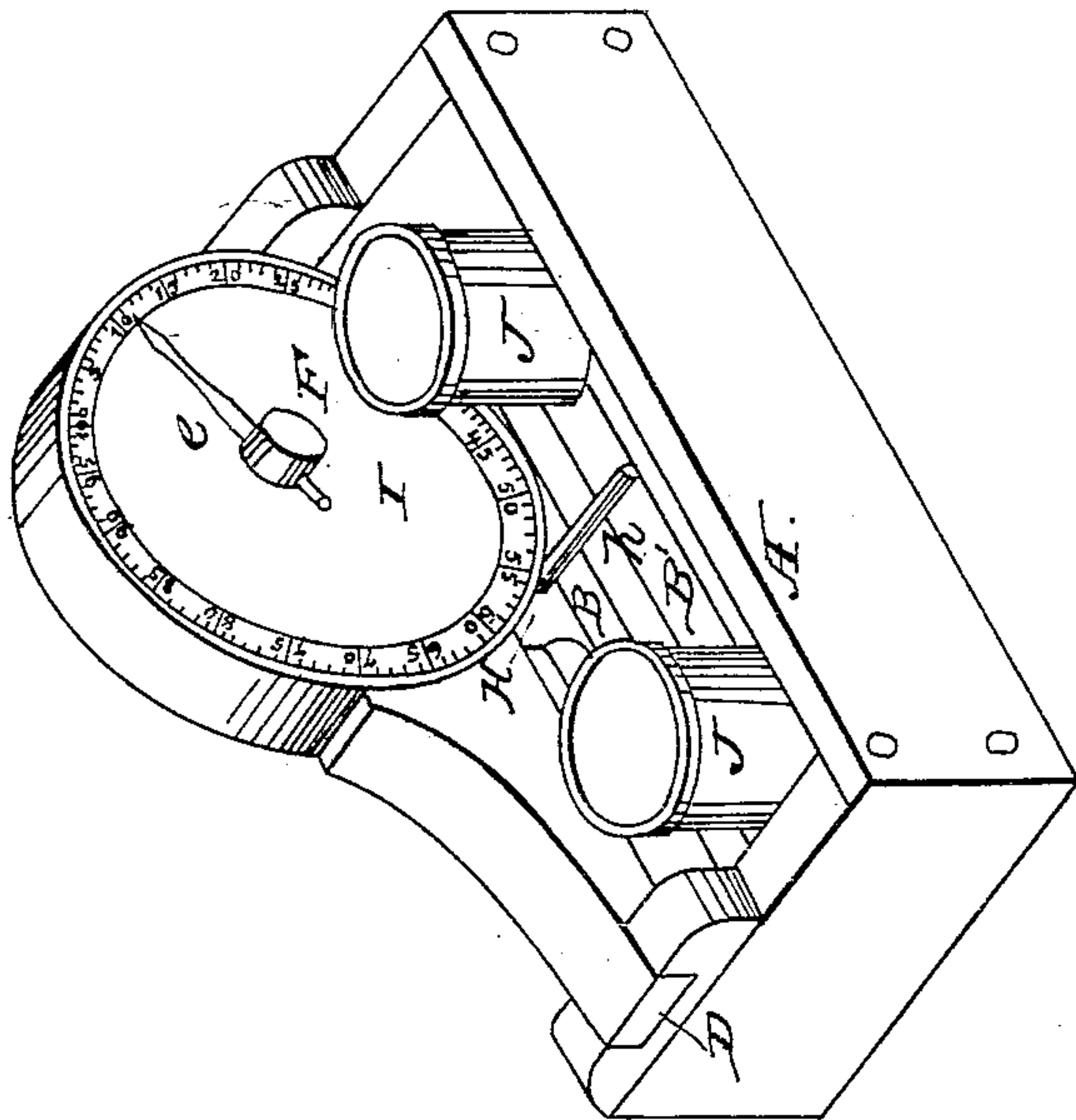


G. D. DENISON.

Grain Register.

No. 34,052.

Patented Jan. 7, 1862.



witnesses  
Charles Knight  
James H. Schuyler.

Inventor  
G. D. Denison  
Per Marshall  
Hornsey.

# UNITED STATES PATENT OFFICE.

GEORGE D. DENISON, OF TROY, OHIO.

## IMPROVED GRAIN-REGISTER.

Specification forming part of Letters Patent No. 34,052, dated January 7, 1862.

*To all whom it may concern:*

Be it known that I, GEORGE D. DENISON, of Troy, in the county of Wood and State of Ohio, have invented a new and Improved Grain-Register; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents my invention by a perspective view. Fig. 2 is an elevation of the same with a dial-plate removed.

Similar letters of reference indicate corresponding parts in both figures.

The subject of my invention is a machine for counting and registering the numbers of measures or bushels of grain issuing from a thrashing or other machine, or for other like purposes; and it consists in the combined arrangement of parts hereinafter fully explained.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents a rectangular box, provided longitudinally thereof with skids B B', which are mortised into the ends of the box, or may be secured in any other suitable manner, so as to leave a space below them.

C represents a cylindrical box or casing with projecting ends D D, by means of which it is supported at each end of the box.

E is a worm-wheel, provided with fifty teeth and secured upon the arbor F, which is supported at each end, respectively, in front and back of the casing C.

G is a vertical worm-shaft fitted in bearings at top and bottom in the case and meshing into the teeth of the worm-wheel E.

H is a hub fitted on the lower end of the worm-shaft and provided with four radial arms h, forming a turnstile.

I is the face or dial plate graduated into one hundred parts and marked thereon with numerals. e is an index-hand secured to the arbor F and pointing to the graduations on the dial-plate. J J represent grain-measures.

The operation of my machine is as follows: The end of the machine to which the cone is

the nearest is placed toward the machine or place from which the grain is to be taken. If from a thrashing-machine, it is placed so that the grain will run into the measure when placed at the end nearest the thrashing-machine. When the measure or basket is filled, it is moved to the opposite end of the box on the skids, and at the same time replaced by an empty measure or basket. One of the arms of the turnstile projecting horizontally across the skids while the measure is being filled necessarily comes in contact therewith when the same is moved to the opposite end of the box, and is thereby caused to make a quarter of a turn, which, through the medium of worm wheel and shaft, registers one degree on the dial-face. By striking the measures after they are placed on the skids the box A may serve to receive the strikings. A dial can be placed on either or both sides, if desired.

Grain-registers have heretofore usually operated by weighing. Such machines are of expensive construction and extremely liable to derangement. My invention affords an automatic grain-register at a cost which places it within the reach of every farmer.

I am aware that mechanical movements analogous to that above described have previously been employed in registers for other purposes, and do not therefore desire to be understood as claiming novelty in such movement otherwise than in the combination and for the purpose hereinbefore explained.

What I claim as new and of my invention herein, and desire to secure by Letters Patent, is—

The combination of the box A, skids B B', worm-shaft G, arms h, wheel E, index e, and dial I, constructed, arranged, and operating substantially as herein shown and explained, and for the purpose specified.

The above specification of my improved grain-register signed this 13th day of April, 1861.

G. D. DENISON.

Witnesses:

JAMES H. GRIDLEY,  
OCTAVIUS KNIGHT.