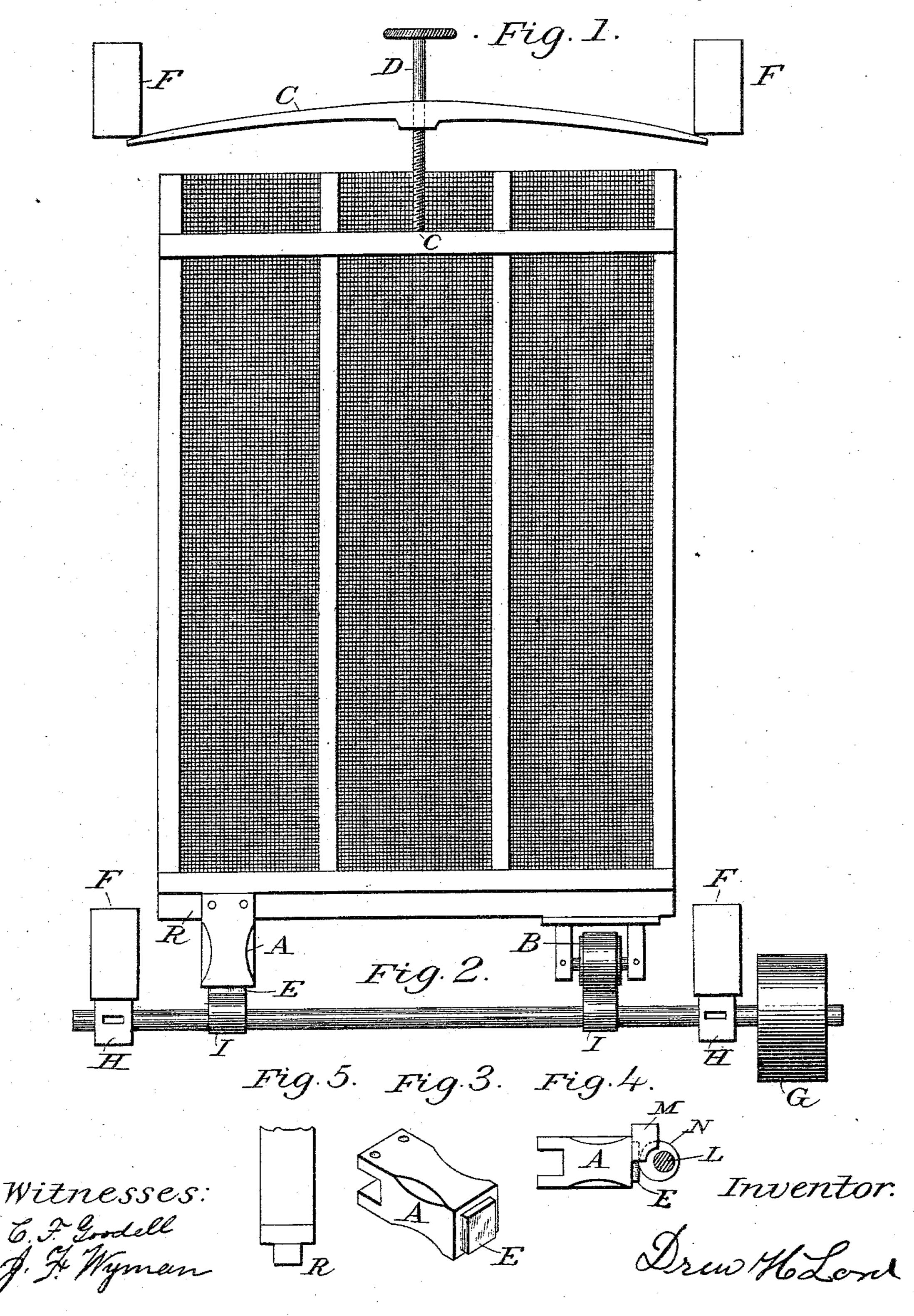
D. H. LORD.
ECCENTRIC BEARING.

No. 281,197.

Patented July 10, 1883.



## United States Patent Office.

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## ECCENTRIC-BEARING.

SPECIFICATION forming part of Letters Patent No. 281,197, dated July 10, 1883.

Application filed April 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, DREW H. LORD, a citizen of the United States, residing at Northfield, in the county of Rice and State of Minnesota, have invented certain new and useful Improvements in Eccentric-Bearings, of which the following is a description.

My invention relates to improvements in eccentrics in which a shaker is operated in conjunction with a rotating shaft, eccentric-pul-

ley, eccentric-bearing, and spring.

The objects of my invention are, first, to provide an eccentric that will give a steady and even motion; second, to reduce the power for driving the shaker; third, to reduce the cost of lubricating; and, fourth, to provide an eccentric that will not give out by natural wear. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a top view of shaker such as is commonly used in flouring-mill machines for purifying middlings, separating wheat, &c.; Fig. 2, the driving-shaft; Fig. 3, a perspective view of eccentric-bearing; Fig. 4, a side view of eccentric-bearing; Fig. 5, a side view of head of shaker.

Similar letters refer to similar parts through-

out the several views.

ohine; H H, Fig. 2, the bearings for driving-shaft; G, Fig. 2, the driving-pulley; II, Fig. 2, eccentric-pulleys. B in Fig. 1, in conjunction with I, Fig. 2, forms the old style of eccentric.

B, Fig. 1, is a friction-pulley made of pressed paper or leather, with iron flanges, with round shaft passing through the pulley and held by an iron bearing on either side. This admits of its revolving. This friction-pulley is pressed against the face of eccentric-pulley I by means

of a wood spring, C, and iron screw D, Fig. 1, passing through the spring, with end of screw D, Fig. 1, pressing against cross-bar on tail end of shaker, as at C, Fig. 1. By this operation the shaker is caused to move back and forth 45 by reason of the revolving eccentric. As the eccentric and friction-pulley revolve together, the heavy side of the eccentric wears the friction-pulley out of round, and that produces an uneven and unsteady motion which will not do 50 for machines of this character. I overcome these difficulties by means of A, Fig. 1, which represents a block of wood or iron, with a block of flint-glass set into the head end of block A, Fig. 1, as at E, Fig. 3, giving it a 55 smooth flat surface. Block A. Fig. 1, is attached to head of shaker, as at K, in place of B, Fig. 1, by means of a groove in rear end of block, as Fig. 3. Block A is screwed fast to a timber running parallel with the head of shaker 60 by means of four common wood-screws, two in top, as shown in A, and two in bottom.

Fig. 4 represents my improvement complete, used in connection with shaker, Fig. 1, wood spring C, iron screw D; Fig. 4, block of wood 65 or iron; E, Fig. 4, block of flint-glass set in head end; N, Fig. 4, eccentric-pulley bearing against block E; L, the shaft passing through the eccentric-pulley; M, tallow-box.

What I claim as my invention is— A flat bearing-surface for eccentric-pulleys, such as a block of glass set in a block of wood or iron, and connected to the head of a shaker, and operated by means of a screw and spring, substantially as set forth.

DREW H. LORD.

Witnesses:

O. F. PERKINS, R. J. DRAKE.