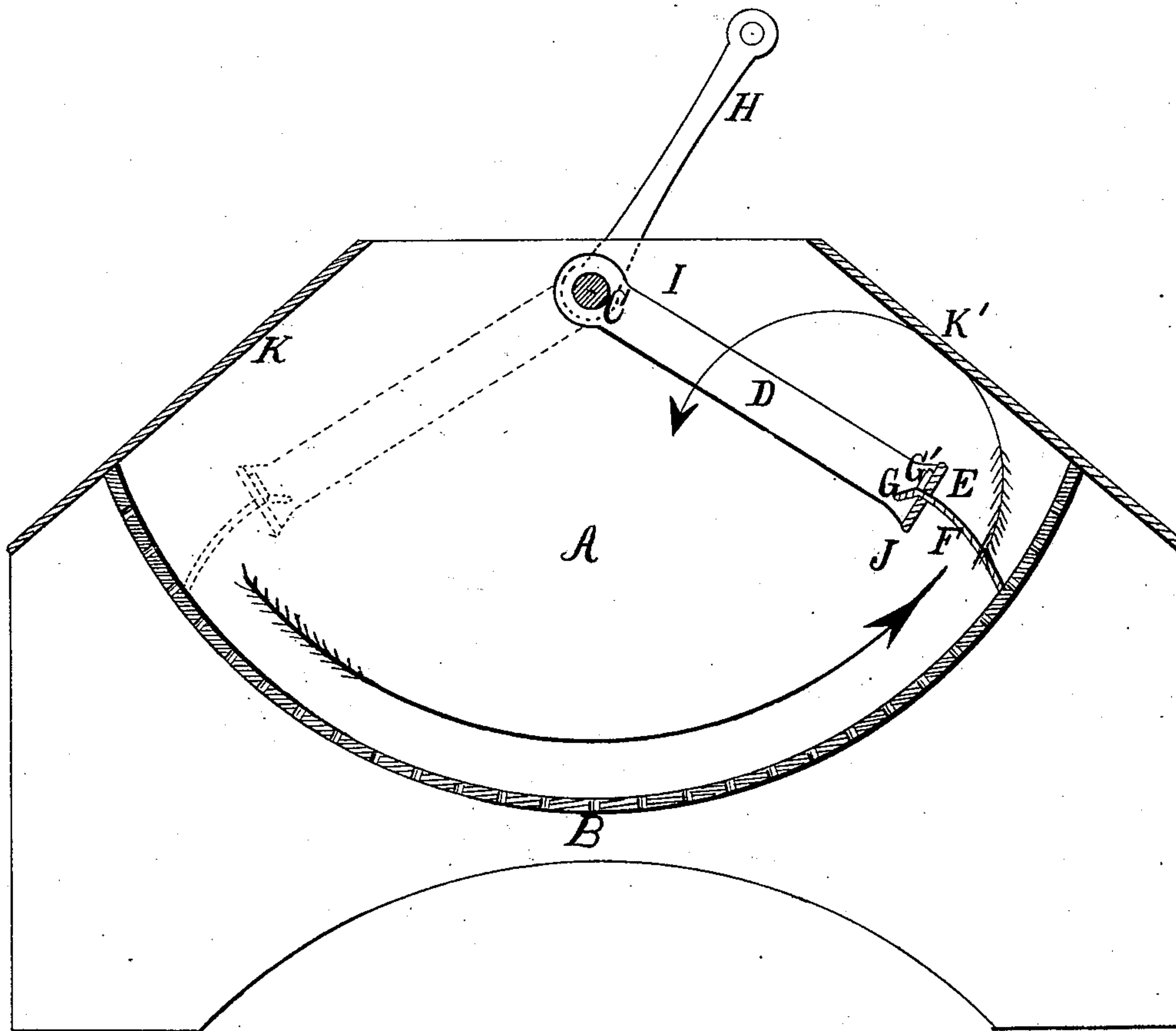


W. C. McGill,
Flour Sieve,
No. 53,644, Patented Apr. 3, 1866.



Witnesses.

James H. Layman
Geo. H. Wright

Inventor.

W. C. McGill

UNITED STATES PATENT OFFICE.

WILLIAM C. MCGILL, OF CINCINNATI, OHIO.

IMPROVED FLOUR-SIFTER.

Specification forming part of Letters Patent No. 53,644, dated April 3, 1866.

To all whom it may concern:

Be it known that I, WILLIAM C. MCGILL, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Flour-Sifter; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, and in which a sifter embodying my invention is represented by a transverse section.

A represents one of a pair of vertical plates or boards which constitute the ends of my sifter.

B is my sieve, in the form of a cylindrical arc, and either perforated or composed of wire-gauze, its ends being securely fastened to the plates or boards A. The ends A are perforated concentric with the sieve B to afford bearings for a horizontal shaft, C, from which projects an arm, D, having a slot, E, which holds a flexible blade, F, having two lugs, G G', which retain the blade in the slot and limit its vibrations.

H is a handle for operating the shaft C. The parts C D E F G G' H, I call collectively the "sweep," I. The parts F G G', I call collectively the "scraper," J. Extending from end to end of the sifter are two oblique boards or plates called the "deflectors," K K'.

Operation: A suitable quantity of flour having been introduced, the sweep is vibrated briskly to and fro, so as to urge a portion of the particles of flour through the meshes of the sieve and to impel other portions upward against the deflectors K and K' alternately, whence they fall down into the middle portion of the sifter, as indicated by the descending arrow.

It will be seen that the scraper, by its jointed connection with the arm and by its flexibility, is well adapted to press or urge the flour over the surface of or through the sieve and at the same time to pulverize the lumps, and that the sweep acts, in conjunction with the deflectors, to open up and loosen the flour.

I claim herein as new and of my invention—

The arrangement of vibrating sweep I with flexible and jointed scraper J and concave sieve B, substantially as set forth.

In testimony of which invention I hereunto set my hand.

W. C. MCGILL.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.