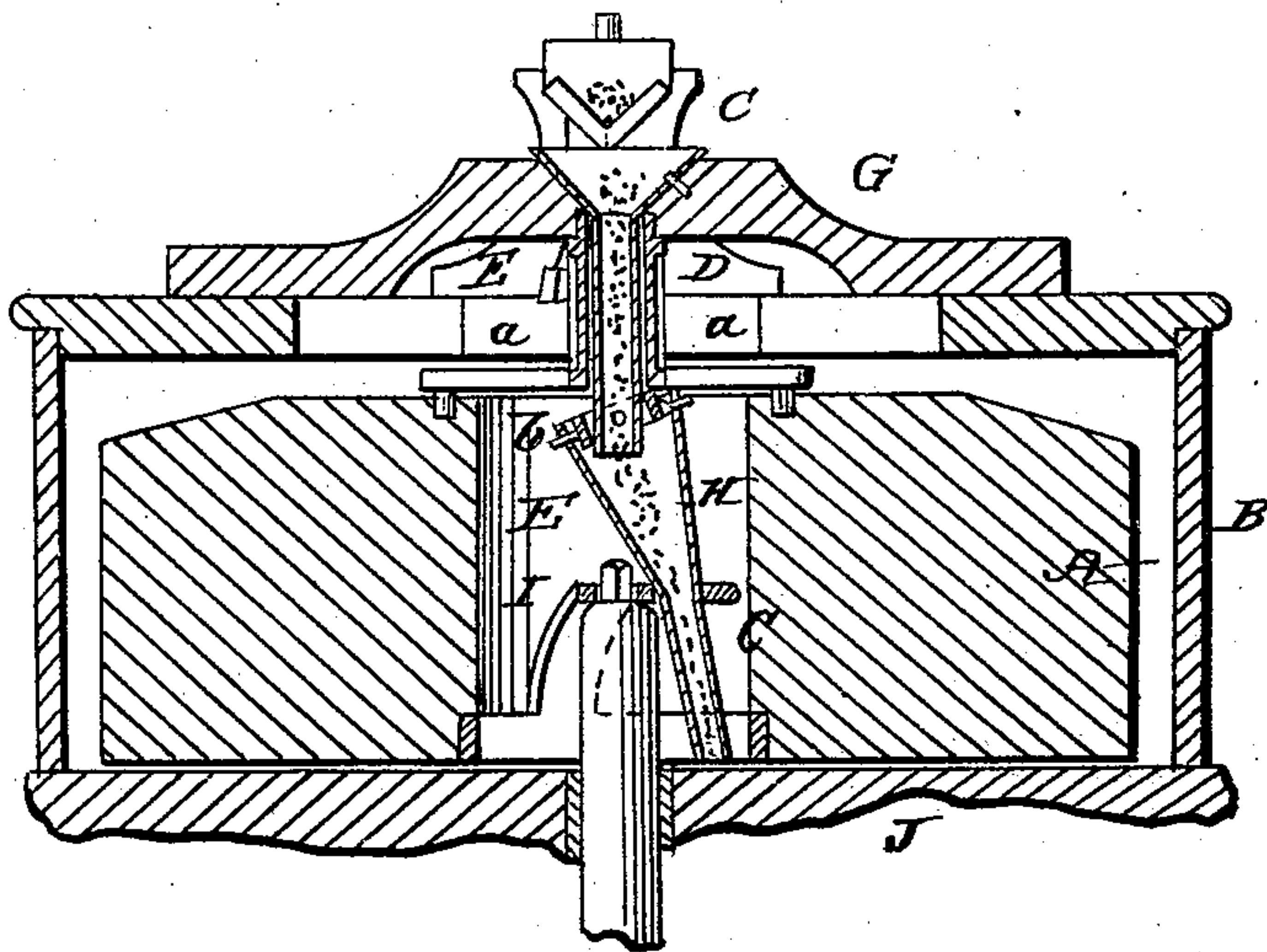


M. & C. PAINTER.
Feed Regulator for Mills.

No. 15,250.

Patented July 1, 1856.



UNITED STATES PATENT OFFICE.

M. PAINTER AND C. PAINTER, OF OWINGS MILLS, MARYLAND.

SWINGING SPOUT FOR FEEDING MILLSTONES.

Specification of Letters Patent No. 15,250, dated July 1, 1856.

To all whom it may concern:

Be it known that we, M. PAINTER and C. PAINTER, of Owings Mills, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Feeding Grain to Millstones; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, said drawing being a vertical section of our improvement applied to a millstone or runner.

To enable others skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A, represents an upper mill stone or runner encompassed by a curb B, as usual.

C, represents a shoe placed underneath the hopper in the ordinary way.

D, represents a damsel which is hollow, the lower end of the damsel having horizontal arms (a) (a) attached to it, which arms are connected with the upper surface of the stone A, adjoining its eye E.

F, is a tube which is fitted within the damsel D, the upper end of this tube above the damsel is of conical form, and is fitted within a cross piece G, attached to the curb B. The upper end of the tube F, is directly underneath the end of the shoe C. To the lower end of the tube F, there is attached by a universal joint (b) a tube H. The lower end of the tube H, is fitted in or passes through a plate (c) attached to one side of the bail or balance rine I, the tube H, being within the eye E.

The grain passes from the shoe C, down through the tube F, and through the tube H, the lower end of which is near the bed stone J. The tube F, remains stationary within the damsel, but the lower tube H, turns with the bail or driving rine I, the universal joint attachment (b) permitting this. By this improvement the grain is prevented from coming in contact with the sides of the eye E, and consequently the clogging or choking of the eye, in consequence of the grain adhering to it by the centrifugal force generated by the rotation of the stone or runner A, is prevented.

The operation of this arrangement it will be observed is radically different from a fixed arrangement of sloping conical tube in the eye of the stone and revolving with it as

has before frequently been used and as may be found in the patent granted to H. B. Miller on Dec. 5th 1854, as in Miller's arrangement the grain has simply a sliding action down the conical tube and is subject, when the motion is rapid and material light, (supposing Miller's arrangement applied to feeding in shelled corn when the diameter of the eye tube would be reduced) to choke and clog, by reason of the centrifugal action continually and uninterruptedly throwing the grain toward and against one and the same side or surface of the sloping eye feeding tube, that always being the outer side during the rotation. But it is not so in our arrangement, for, though the oblique eye feed tube (H) does rotate with the stone so as to distribute the grain equally all around, yet the effect of the centrifugal action is constantly varying as regards the throw of the grain against the sides of said tube, for, by reason of the universal joint attachment of the two tubes (F and H) and their connection with the stone as described, the oblique eye tube (H), which is the movable one of the two tubes, presents opposite sides or surfaces as the outer sides or surfaces at opposite points in the rotation, instead of the one and the same side or surface as the outer one throughout the rotation as in Miller's arrangement, and thus the grain is projected down the tube (H) in our case by the centrifugal effect or action (instead of being caused to cling to the outer side of the tube) by reason of the grain being thrown by it first from one side or surface to the other as the said sides or surfaces of said tube vary their positions from outside to inside of the circular travel described by the tube.

What we claim then as new and useful in feeding grain to millstones, and desire to secure by Letters Patent, is—

Suspending the oblique eye feeding tube (H) by universal joint (b) from above, in combination with and for free rotation and universal movement of said tube by the revolving stone (A) as and for the purposes specified.

M. PAINTER.
C. PAINTER.

Witnesses:

MARTIN PFOUTZ,
GEORGE BUCKMAN.