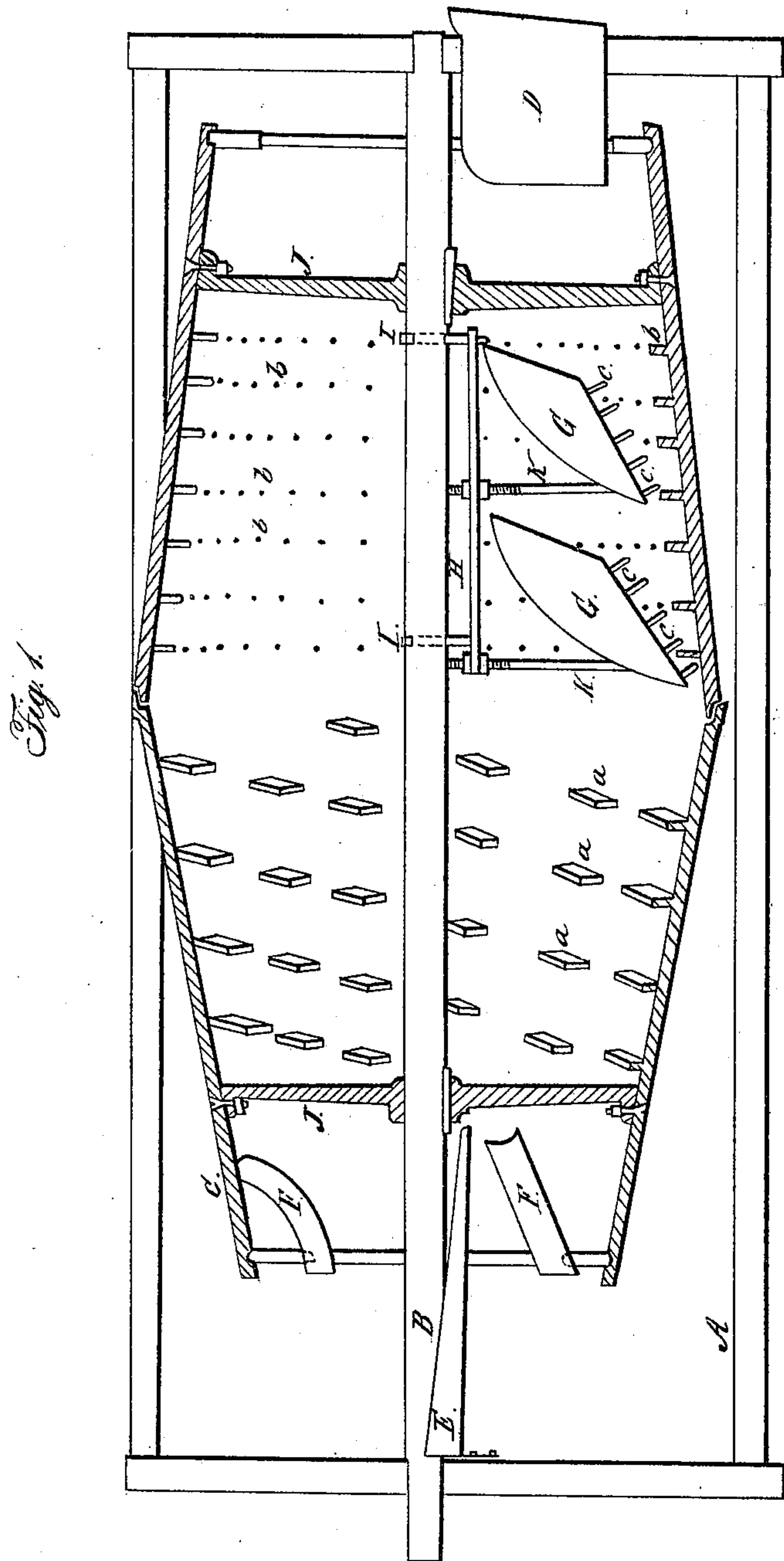


W. L. CARTER.

Ore Washer.

No. 26,089.

Patented Nov. 15, 1859.



Witnesses:

John H. Houghton
Charles Kitchum

Inventor:

Wm. L. Carter

UNITED STATES PATENT OFFICE.

WILLIAM L. CARTER, OF MARIETTA, PENNSYLVANIA.

ORE-WASHER.

Specification of Letters Patent No. 26,089, dated November 15, 1859.

To all whom it may concern:

Be it known that I, WILLIAM L. CARTER, of Marietta, in the county of Lancaster and State of Pennsylvania, have invented a new and Improved Ore-Washer; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which the figure is a longitudinal, central, sectional elevation of the ore washer.

A, is the framework in which the cylinder rotates and it supports the other parts of the machine. It may be made of wood or metal when either is preferable.

B, is a shaft or axle extending through the center of the cylinder to the ends of the frame where it is supported by the journal boxes. One end extends through the journal box far enough to receive a driving pulley or other device that may be desired to turn the same.

C, is a double conical shaped cylinder, made in sections or staves, convenient for the manufacturer and when made in sections the sections or staves are held together by bolts or bands or both if desired; the cylinder is then secured to the shaft by means of the arms or spiders J, J, which are bolted to the inside of the cylinder and keyed to the shaft; at each end and inside of the cylinder is a rim or flange. The width of the same is made according to the size of cylinder or so wide as to leave sufficient aperture for the ore to enter and pass out.

D, is a hopper to receive the ore and convey it into the cylinder.

E, is a conveying spout to carry water into the cylinder.

F and F, are conveyers to carry the ore out of the cylinder after it is washed. They are placed obliquely inside the cylinder and fastened to the same and project beyond the end of the cylinder far enough to convey the ore away from the cylinder.

G and G, are pendulous grinders, made circular at their under surface to correspond with the inside of the cylinder and the ends toward where the ore is fed in is nearly

straight or perpendicular, and at these ends they are held by hooks and eyes or hinges to the bar H. The under or cylindrical portion is one half the same toothed on the side toward which the ore is carried by action of the cylinders. The weight of the grinders is made to suit the material to be washed.

H, is a bar made of sufficient length and strength to hold the number of grinders required.

I and I, are bands used to support the bar H. They are fitted into grooves in the shaft to prevent them from sliding toward either end of the shaft.

K and K, are adjustable supports for the grinders. By these the grinders may be raised or lowered as required.

a, is one of a series of projections or shovels fixed in an oblique position or spiral lines so as to convey the ore toward the end of the cylinder where the ore is discharged.

b, is one of a series of teeth fixed to the inside of the cylinder in rows or otherwise. They serve to separate and break the clay or other material that is mixed with the ore.

c, is one of a series of teeth fixed to the lower surface of the grinders. These and the teeth b are similar and they are used for the same purpose.

To use my invention, cause the cylinder to revolve by any convenient means or power, and let in a small stream of water by the spout E. Then throw the ore into the hopper D and the washing will proceed and will thus proceed for any length of time there by washing the ore and removing it from the machine so that the machine may be continually operating.

What I claim as new and desire to secure by Letters Patent is—

A double conical shaped vessel provided with teeth or cutters inside at the end where the ore is received and the grinders G with the means described for supporting and adjusting the same substantially as specified.

WM. L. CARTER.

Witnesses:

JOHN S. HOLLINGSHEAD,
CHARLES KETCHUM.