

C. O. BAGLEY.
Ore-Washer.

No. 203,872.

Patented May 21, 1878.

Fig. 1.

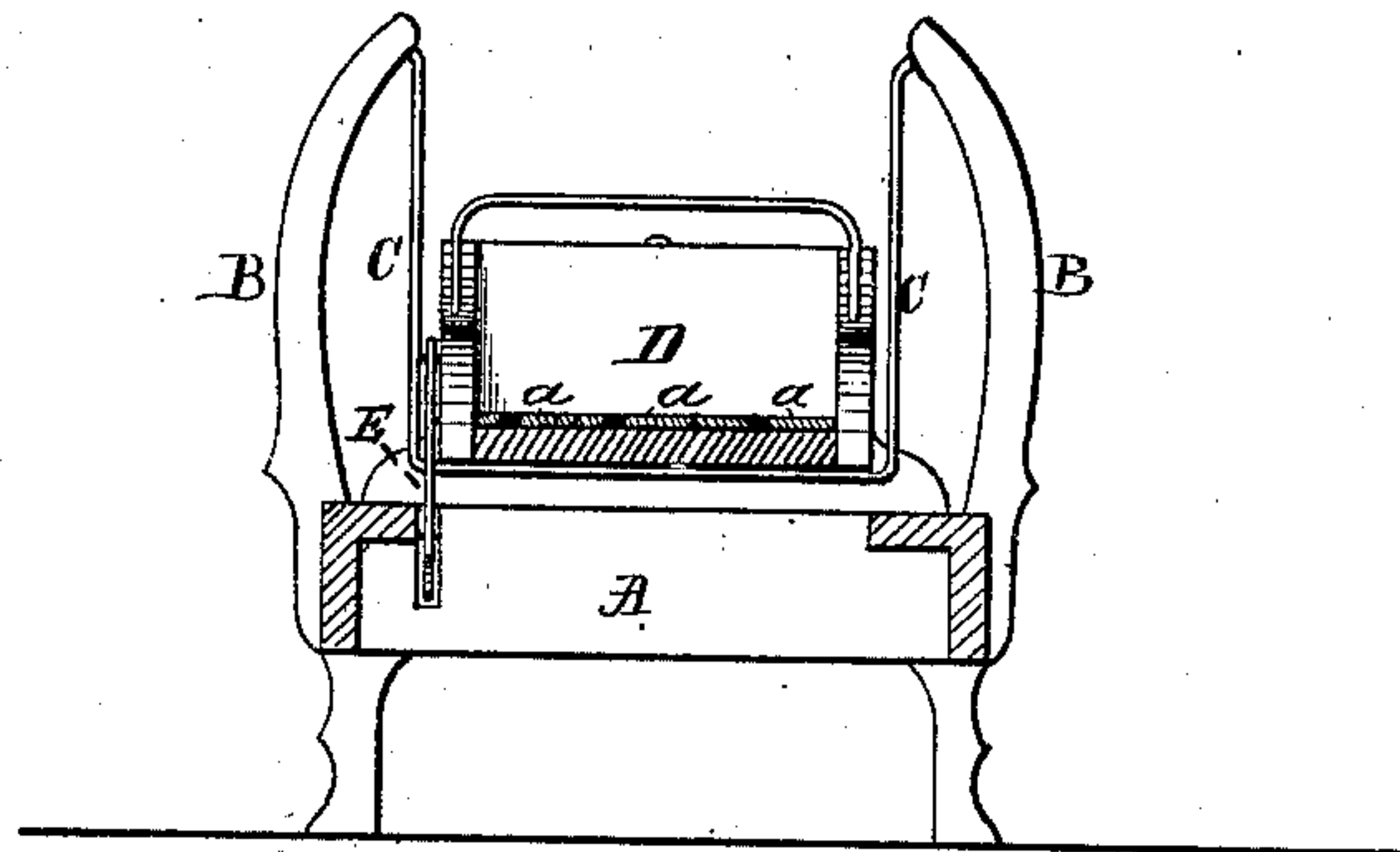


Fig. 2.

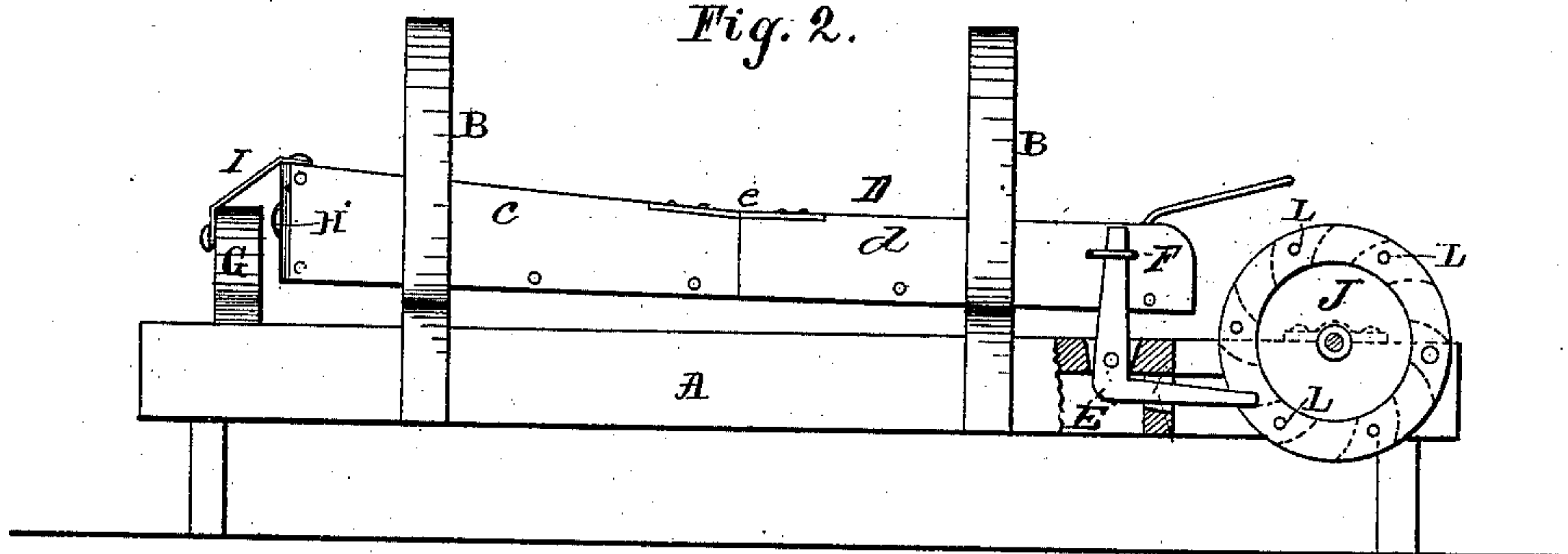
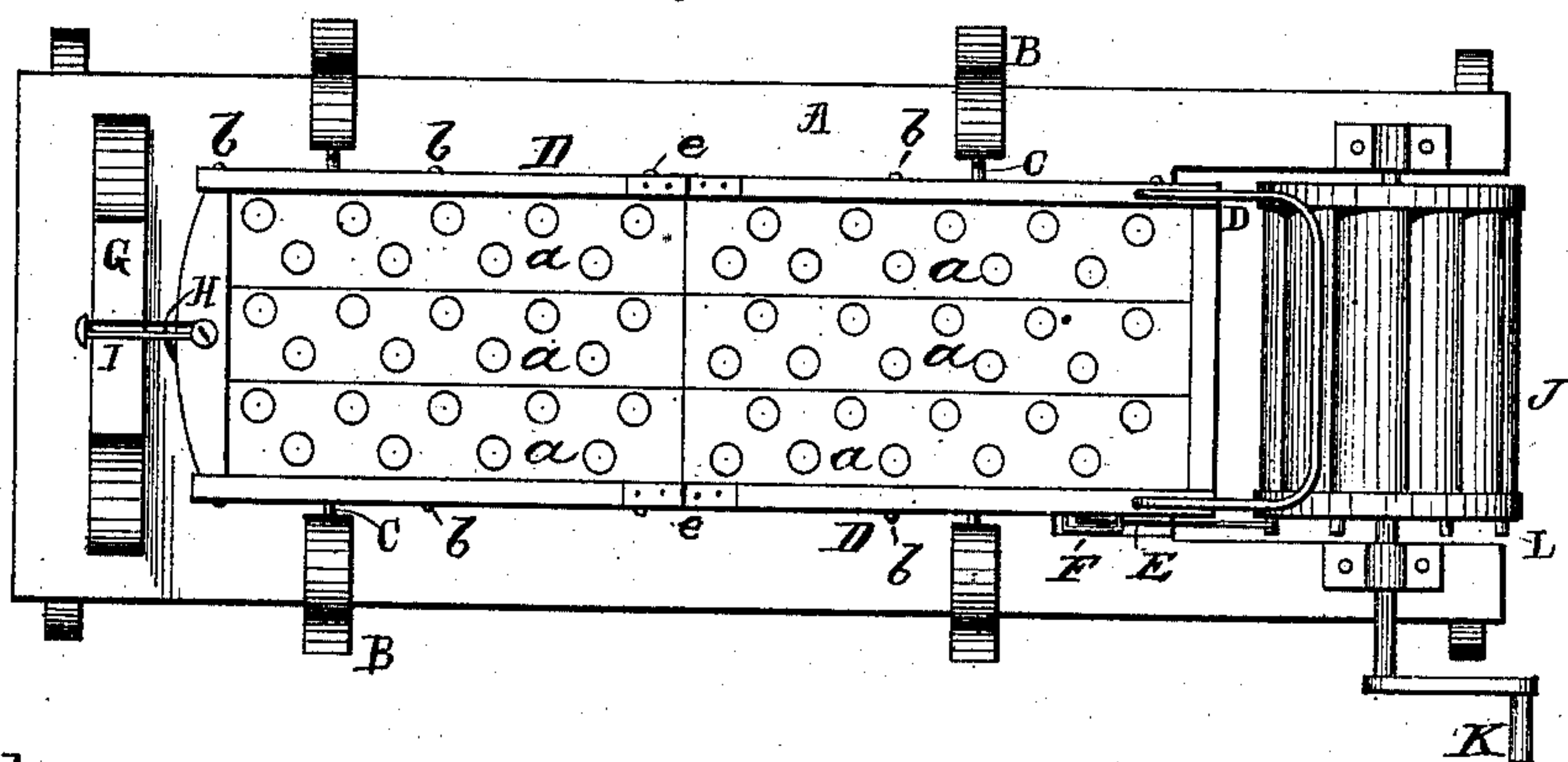


Fig. 3.



Witnesses:

Inventor:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN ORE-WASHERS.

Specification forming part of Letters Patent No. **203,872**, dated May 21, 1878; application filed November 11, 1876.

To all whom it may concern:

Be it known that I, CHARLES O. BAGLEY, of Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Mining Sluices and Shakers, of which the following is a specification, reference being had to the accompanying drawing and the letters marked thereon.

Figure 1 is an end sectional view, Fig. 2 side elevation, and Fig. 3 a plan view, of the same.

This invention has relation to devices for concentrating the heavy particles of pulp or pulverized ore by the wet process, and refers more particularly to that class in which a water-wheel or hydraulic motor is used for the purpose of utilizing the water which carries off the waste as a motive power to give the desired motion to the sluice section or table; and has for its object to so construct the sluice section or table and connect the same to the operating parts as will admit of the sluice section or table being readily removed therefrom and taken apart for convenience of transportation, as will be hereinafter described, and subsequently pointed out in the claim.

In the accompanying drawings, A represents a support or bed, having upon its sides standards B, to the upper ends of which are secured bails C, for suspending the table or sluice section D. The sluice section or table D is provided with a perforated false bottom, consisting of short sections *a*, made with lap-joints, and held together by bolts *b*. This construction of the perforated false bottom renders it easily removed from the sluice section or table for cleaning or repairing, or for any other purpose desired.

The sluice section or table is formed in two parts or sections, *c d*, hinged together, as shown at *e*, so that the sections may be folded upon each other, for convenience of transportation, but when in use are held apart by a suitable brace upon the bottom thereof.

To the support or bed A is pivoted a right-angled lever, E, one end of which passes up

through a loop or staple, F, upon the side of the table or sluice section. To the opposite end of the sluice section or table is a bumper, H, and from the support or bed A projects an abutment, G. A spring, I, connects the end of the sluice section or table with the abutment, and assists in imparting to the sluice-section the desired reciprocating motion.

An overshot water-wheel or hydraulic motor, J, is suitably located or arranged upon the support or bed A, and carries upon its side or end projections or pins L, which, during the rotation or revolution of the wheel, are brought in contact with one end of the lever E, causing the sluice-section to be impelled in one direction, while the spring I forces it back or in the opposite direction, thereby securing a perfect agitation of the contents of the sluice section or table, and a consequent complete separation and concentration of the heavier particles of the pulp or pulverized ore.

It will be seen that by the employment of the water-wheel J and the connections made with the sluice section or table D the water used in the process of separating the ore is utilized after passing from the sluice-section by being directed upon the buckets of the wheel, causing the same to rotate, which, in turn, reciprocates the sluice-section D, the water being aided as a motive power by the weight of the particles of ore carried with it.

Should water not be plentiful, the wheel J may be provided with a crank-handle, K, for operating the same.

It will be further noticed that the sluice section or table is not only made portable, but every provision is made for the ready detaching of the same from the spring I and lever E, and also from the bails C, as the sluice section or table merely rests thereon, and the spring I and lever E are detachably connected to the section or table, thereby rendering it quickly and easily disconnected, folded, and transported, when required.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The folding sluice section or table D, provided with perforated false bottom, consisting of detachable and removable sections *a*, said sluice-section resting upon the bails C, and connected at one end to an abutment, G, by a detachable spring, I, and at the other end to the upright arm of a right-angle lever, E, by staple F, whereby the sluice section or table

may be readily removed or detached from its connections, folded, and transported, substantially as and for the purpose set forth.

CHARLES O. BAGLEY.

Witnesses:

S. A. REDSTONE,

JOHN H. REDSTONE.