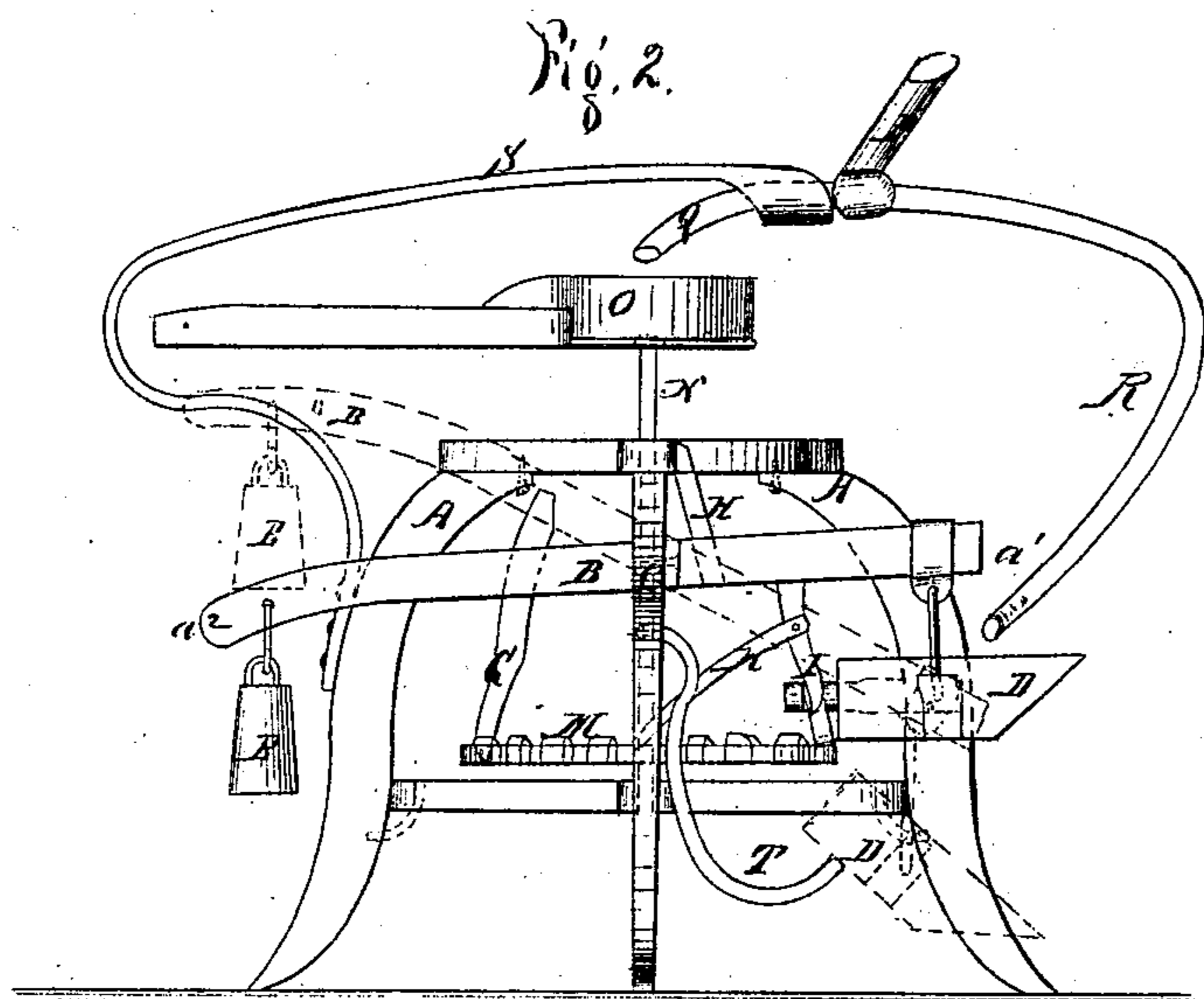


Patented Sept. 13. 1870.



Inventor:
William H. Hall

United States Patent Office.

WILLIAM W. HULL, OF ASHLAND, NEW YORK.

Letters Patent No. 107,375, dated September 13, 1870.

IMPROVEMENT IN IRRIGATING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same

I, WILLIAM W. HULL, of Ashland, Green county, and State of New York, have invented certain Improvements in Irrigating-Machines, of which the following is a specification.

My invention belongs to that class of devices employed for distributing water broadcast over meadows and high-grass lands, and conducting the said water into conduits or channels for distribution at remote distances from the location of the irrigating-machine; and

It consists of a balance-beam, having hung, at one end, a tripping-bucket, and at the other end of said beam an adjustable counter-weight, arranged in such manner that when the bucket is filled with water from a supply-pipe, it will bear down the balance-beam, and be tripped, and the contents of the bucket discharged into a conduit or channel, and carried to its destination, when the beam and bucket will again resume their previous position by means of the adjustable weight.

Furthermore, the balance-beam is provided with a pawl, which, during the movements of the balance-beam, actuates a ratchet-wheel, which, in turn, rotates a chute, which is filled with water from the same supply-pipe, by means of which the water is thrown from the chute broadcast over the land, as I will further explain by reference to the accompanying drawing, of which—

Figure 1 represents a top view of my irrigating-machine, and

Figure 2, a front elevation of same, showing movements of balance-beam.

In the said drawing—

A indicates the frame of the machine.

B is the balance-beam, whose equilibrium shaft, C, extends inward from the frame A.

D is a bucket, attached to the outer end a^1 of the balance-beam; and

E is an adjustable weight, attached to the opposite end a^2 of said beam, as a counterbalance for the weight of the bucket.

The balance-beam B is also provided with stops, G H, for holding the beam in a horizontal position while the bucket receives the water, and an arm, I, projecting downward from said beam, carrying a pawl, K, which, with a retaining pawl, L, (see fig. 2,) attached to the frame A, operates a ratchet-wheel, M, which, in turn, by means of a shaft, N, projecting upward from its center, rotates the chute O, fastened on the upper end of said shaft.

P is the supply-pipe, having a branch, Q, for feeding the chute, and another branch, R, for filling the bucket.

These pipes are sustained in a bearing, S, attached to and extending upward from the frame A; and

T is a tripper, attached to the frame for tripping the bucket D, when it is filled with water, and descends to the position shown in dotted lines in fig. 2.

The operation merely consists of letting the water into the supply-pipe P, when its branches, Q R, will fill the bucket D and the chute O, and, as the bucket descends for discharge of its contents, the pawl K will actuate the ratchet M, and, through the shaft N, rotate the chute O, throwing the water over the land.

What I claim is—

The balance-beam B, the bucket D, counter-weight E, tripper T, pawls K and L, ratchet-wheel M, shaft N, and chute O, constructed, arranged, and operating substantially as and for the purposes described and set forth.

In testimony whereof I have hereunto set my signature this 18th day of June, 1870.

WILLIAM W. HULL.

Witnesses:

D. L. LEWIS,

ADONIJAH PANGMAN.