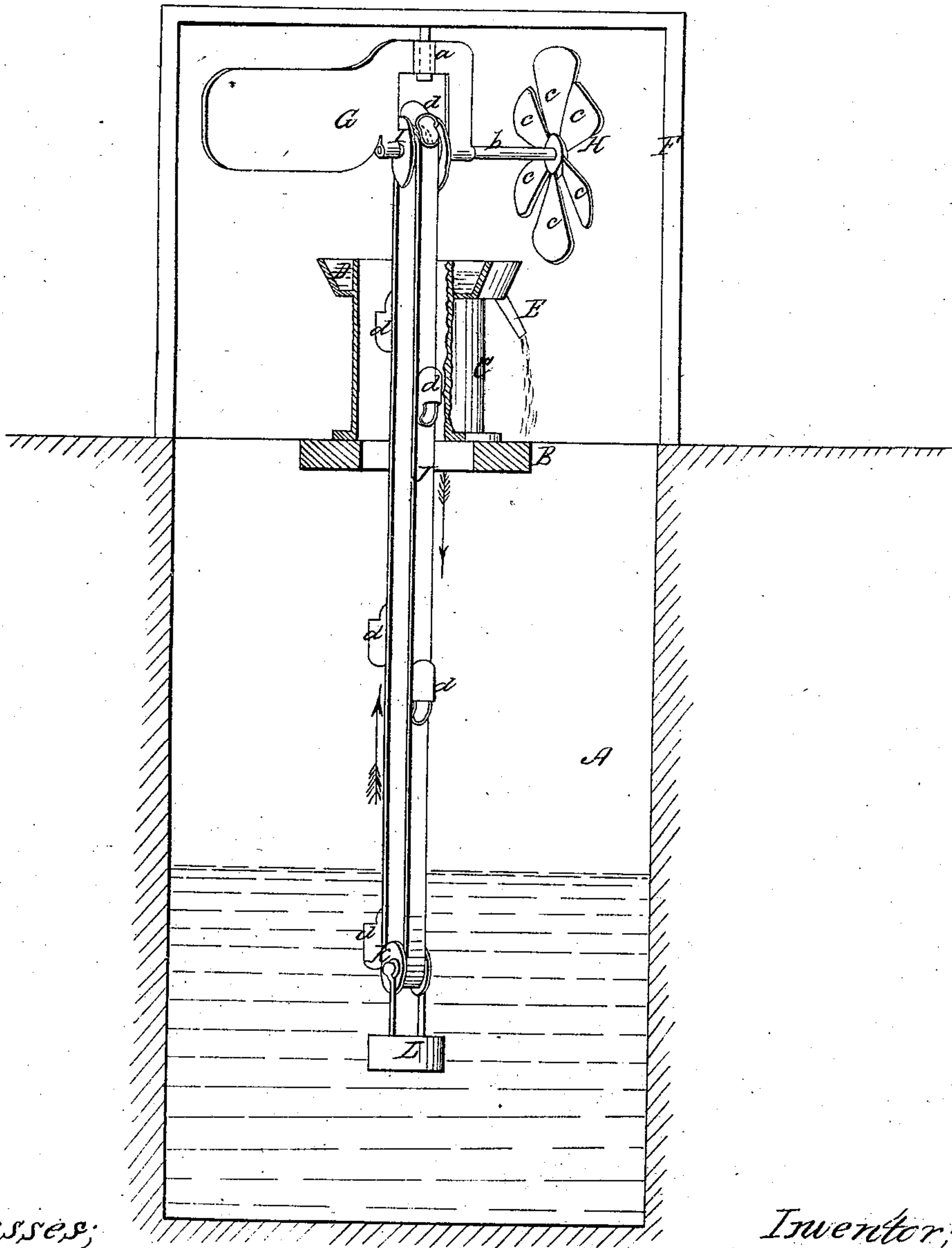


J. A. Ayres,

Chain Pump,

No 24,273,

Patented June 7, 1859.



Witnesses;
Charles T. Weld
David Pierce

Inventor;
J. A. Ayres

UNITED STATES PATENT OFFICE.

J. A. AYRES, OF HARTFORD, CONNECTICUT.

DEVICE FOR RAISING WATER.

Specification of Letters Patent No. 24,273, dated June 7, 1859.

To all whom it may concern:

Be it known that I, J. A. AYRES, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and Improved Device for Elevating Water; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, said drawing being an elevation of my invention, partly bisected.

This invention consists in the employment or use of an endless chain of buckets, a wind wheel and annular water receiver, the whole being arranged and applied to a well as hereinafter fully shown and described, whereby an extremely simple, efficient and economical device is obtained for the desired purpose.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a well and B, is a crosspiece placed over the top of the well and having a vertical cylinder C, attached to its center. This cylinder has an annular trough D, around its upper end and a spout E, leading therefrom.

F, is a framing which may be constructed or arranged in any proper way over the well, and G, is a plate which is suspended by a swivel connection *a*, from the center of the upper part of the framing F. The plate G, forms the vane of a wind wheel H, the shaft *b*, of which is fitted and allowed to rotate freely in one end of the vane G. The wheel H, is formed of a series of oblique radial wings *c*, which rotate in a vertical plane.

To the inner part of the shaft *b*, a drum I, is attached and around this drum a chain or belt J, passes, a drum K, with weight L, attached, being at the lower part of the chain

or belt below the surface of the water and keeping the chain or belt in proper position. This will be clearly understood by referring to the drawing. The chain or belt J, passes through the cylinder C and it has a series of buckets *d*, secured to it.

The operation is as follows:—The vane G, being allowed to turn freely in consequence of the swivel connection *a*, the wheel H, is kept facing the wind, and as the wheel H, rotates the endless chain J, is moved in the direction indicated by the arrows and the buckets *d*, as they dip or pass underneath the drum K, fill with water which they discharge into the annular trough D, as they pass over the drum I.

It will be seen that the chain or belt J, is allowed to turn freely in a horizontal direction with the vane and wheel, as it has no positive connection at its bottom, and it will also be seen that as the trough D, is annular it will receive the contents of the buckets at any point in their horizontal rotation. The cylinder C, also serves as a guide to the chain or belt J.

This invention has been practically tested and it operates well. It may be constructed and applied at a trifling cost.

I do not claim separately any of the parts irrespective of the arrangement and combination herein shown and described, but,

I claim as new and desire to secure by Letters Patent,

The wind wheel H, vane G, endless chain J, with buckets *d*, and weight L, attached, the cylinder C, and annular receiving trough D, the whole being arranged and combined for joint operation substantially as and for the purpose set forth.

J. A. AYRES.

Witnesses:

A. J. GILLET,
CHAS. WHITTLESEY.