WILLIAM JONES.

Atmospheric Motive Power.

No. 124,361. Patented March 5, 1872.

Fig 1

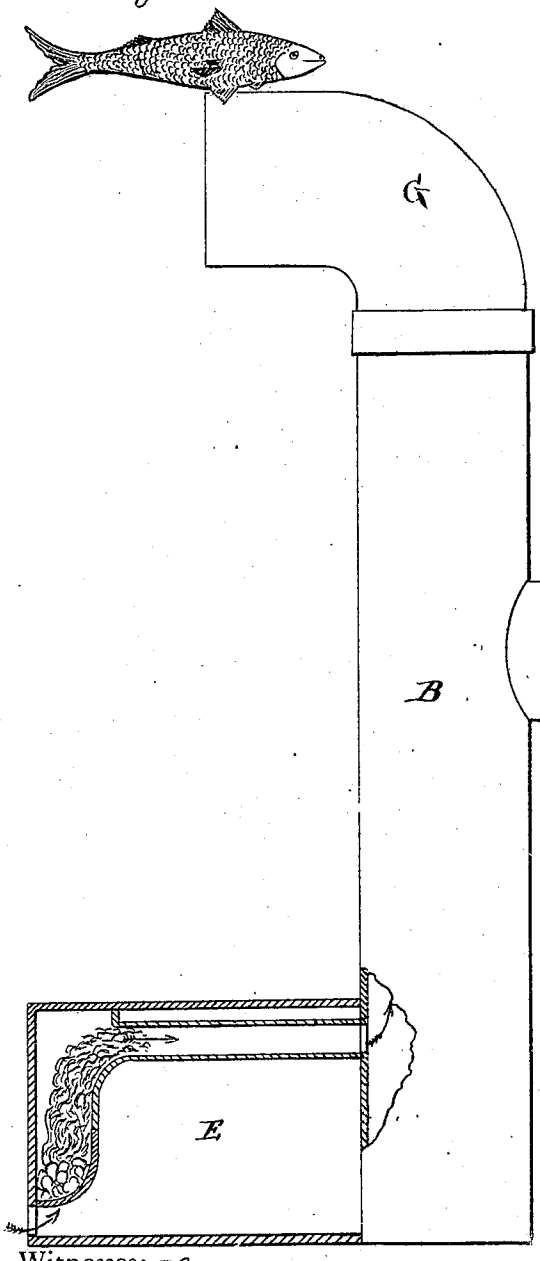
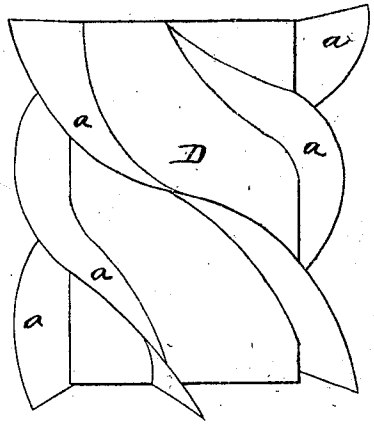


Fig 2



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UNITED STATES PATENT OFFICE.

WILLIAM JONES, OF NEW ALBANY, INDIANA.

IMPROVEMENT IN ATMOSPHERIC MOTIVE POWERS.

Specification forming part of Letters Patent No. 124,361, dated March 5, 1872.

To all whom it may concern:

Be it known that I, WILLIAM JONES, of New Albany, in the county of Floyd, and in the State of Indiana, have invented certain new and useful Improvements in Motive Power; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "device for operating machinery by atmospheric air," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, part in section, of my device; and Fig. 2 is an enlarged side view of the revolving-wheel.

A represents a cylinder of any suitable dimensions, the lower end of which is open, and the upper end connected with a high stack or chimney, B. The cylinder A is elevated, as shown, so that the air can have free access to pass under and up through the same. Through the cylinder passes a central upright shaft, C, provided with a wheel or drum, D, upon the circumference of which are spiral flanges or wings *a a*. Below the cylinder, the shaft C is provided with a miter-wheel, *b*, gearing with a similar wheel, *b'*, upon a shaft, *d*, connected with the machinery to be driven. Connected with the stack or chimney B is a furnace, E, from which the heat and smoke pass up the stack, creating a heavy draught up through the same. This draught causes the atmospheric air to be drawn up through the cylinder A, and the current of air thus created, striking the spiral flanges or wings on the drum D, causes said drum to revolve, and, through the medium of the shaft C and gear-wheels *b b*, turn or operate the machinery connected therewith. With a very high stack or chimney, it is not necessary to use the furnace E, as there will be a strong enough draught without it to revolve the wheel D and thus run the machinery. In place of the gear-wheels, belting may be used to connect the shaft C with the machinery to be run. One or more of the cylinders may be used with each stack, and the cylinder or cylinders may be horizontal as well as vertical.

At the upper end of the stack or chimney B is a movable elbow-cap, G, provided with a vane or wind-board, H, upon which latter the wind acts, so as to always bring the mouth of the cap away from the wind, and thus increase the draught through the stack.

It will be perceived that this invention is based upon the theory that a chimney or stack having a strong draught, whether by reason of its altitude or of a current created by heat at its base, will, by the momentum of this draught, draw the current or currents of one or more auxiliary pipes communicating laterally, as described, in which latter the operating mechanism is placed.

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

The combination of the chimney A, open at its lower end and having a propeller-wheel, D, mounted upon a shaft, C, with the chimney B provided with a movable elbow, G, all arranged as shown, whereby air is taken in the cylinder under the wheel, and is also taken in the chimney B for creating a suction, all substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of January, 1872.

WM. JONES.

Witnesses:
A. N. MARR,
EDM. F. BROWN.