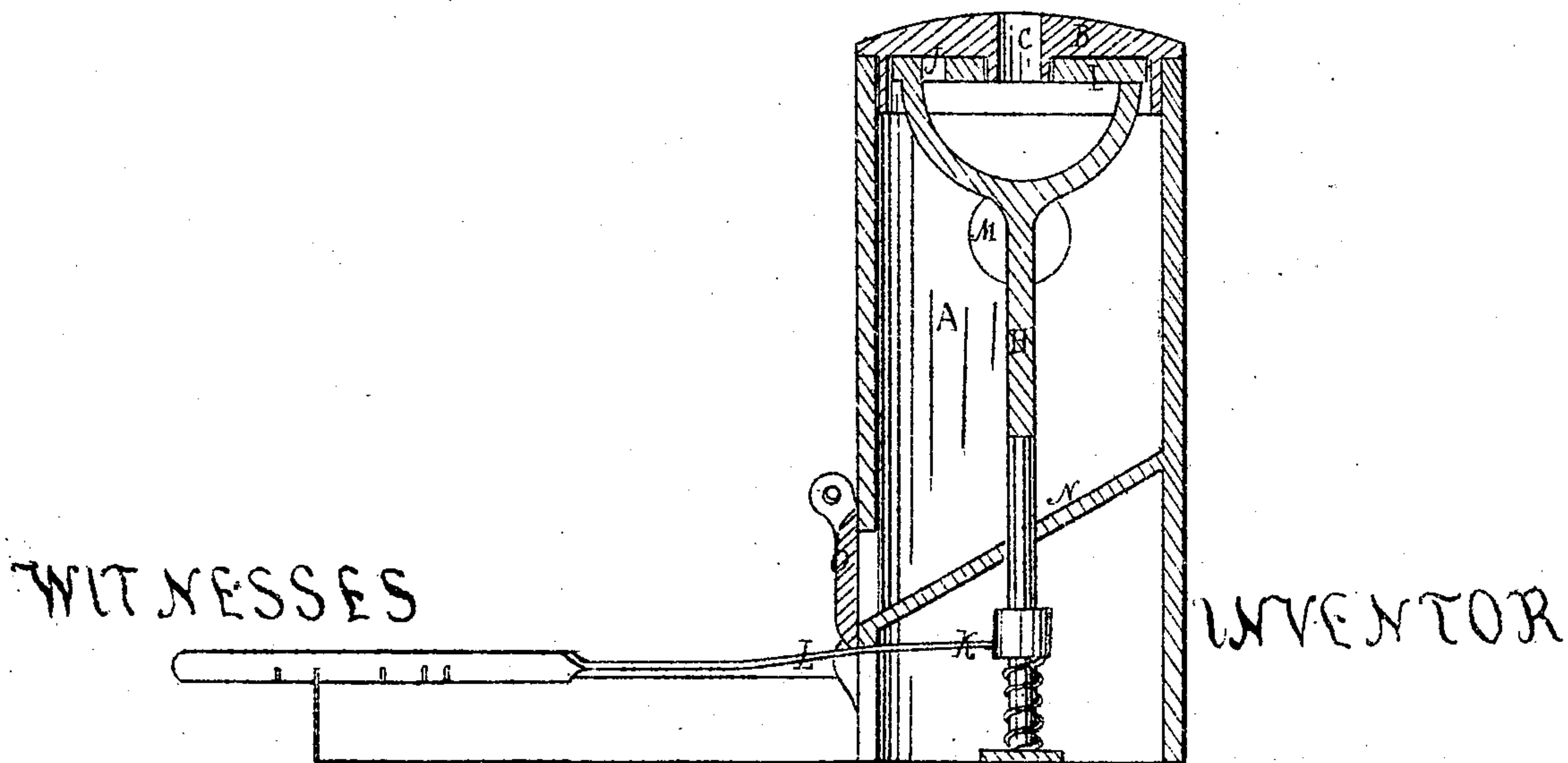
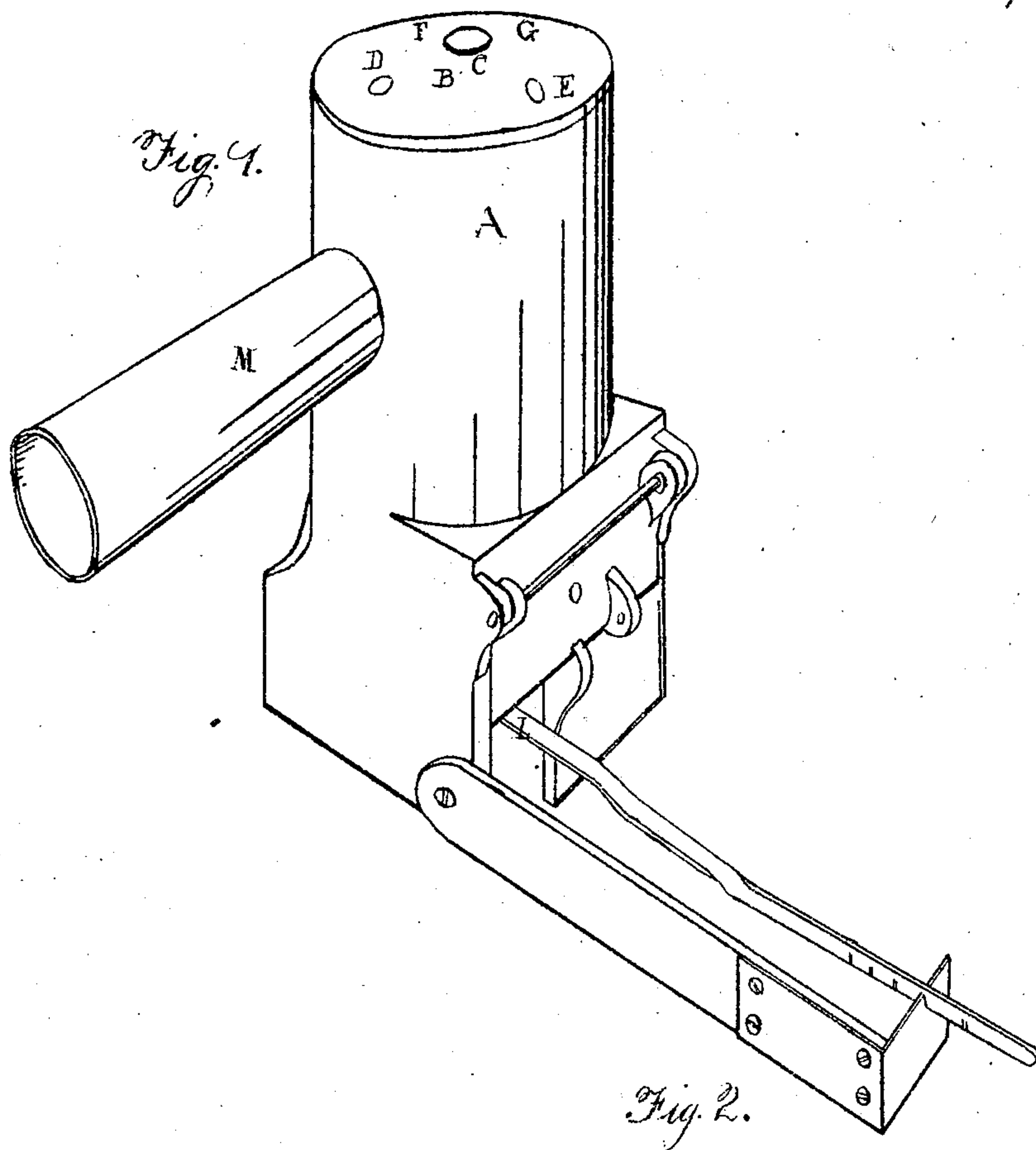


J. Brown.

Tuyere-Iron.

N^o 73574

Patented Jan. 21, 1868.



H. H. H. H. H.
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J. Brown
Per Attorney
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United States Patent Office.

JAIRUS BROWN, OF PORTLAND, MICHIGAN.

Letters Patent No. 73,574, dated January 21, 1868.

IMPROVEMENT IN TUYERE-IRONS.

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

TO WHOM IT MAY CONCERN:

Be it known that I, JAIRUS BROWN, of Portland, in the county of Ionia, and State of Michigan, have invented a new and useful Improvement in Tuyere-Irons; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and making a part of this specification.

Figure 1 is a perspective view of my invention.

Figure 2 is a vertical sectional view of the same.

The same letters refer to like parts in each figure.

The object of my invention is to so construct a tuyere-iron that I can concentrate or expand my fire, as may be necessary or desirable, for heavy or light work. In order to do this, I construct a tuyere-iron, of which the following description will give those skilled in the art sufficient information, when reference is had to the drawings.

A is a hollow cylinder, covered by the head or cap B, which is constructed with proper openings, C, D, E, F, and G, through which the air passes into the fire, which is made above the head or cap B. From the top to the bottom of the cylinder is placed a rod, its lower end being acted upon by a spiral or other appropriate spring, while upon the top of the rod H is fastened a false cap, I, with openings, J, to correspond with the openings in the head or cap B. K is a crank, attached to the rod H, and to which is attached the lever L, by which the rod H, with false cap I, is made partially to revolve. This lever is graduated or marked, so that the operator can know the position of the false cap I at all times. M is a proper cylinder, leading into the cylinder A, and is designed to receive the nose of the bellows which supplies the air. N is a false bottom to receive any ashes or other substances that may fall through the holes in the head and false cap, and O is a door, through which such ashes or other substances may be discharged.

Should I wish to contract my fire, I turn the false cap, by means of the lever and crank, so as to cut off the passage of air through all the holes in the head except C. To expand it, I so turn the false cap that it will allow the air to pass through holes in the head, D, E, F, and G, one or more of them, as may be desired.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction and arrangement of the cylinder A, the head or cap B, provided with more or less openings, C, D, E, F, and G, the rod H, the false cap I, provided with appropriate openings, J, the crank K, the lever L, the cylinder M, the false bottom N, and the door O, when constructed and operating substantially as and for the purposes set forth.

JAIRUS BROWN.

Witnesses:

H. S. SPRAGUE,

W. C. HAMILTON.