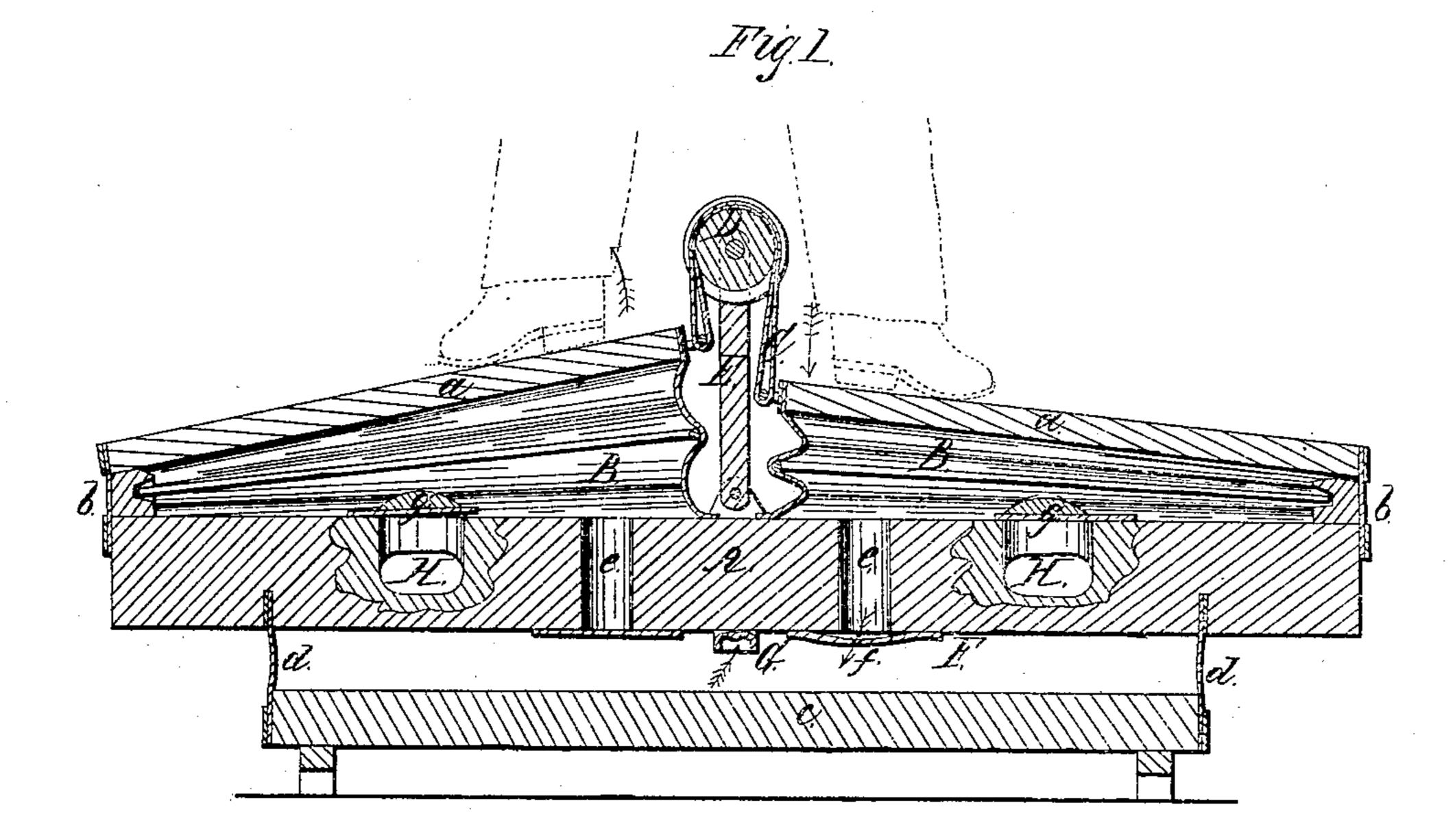
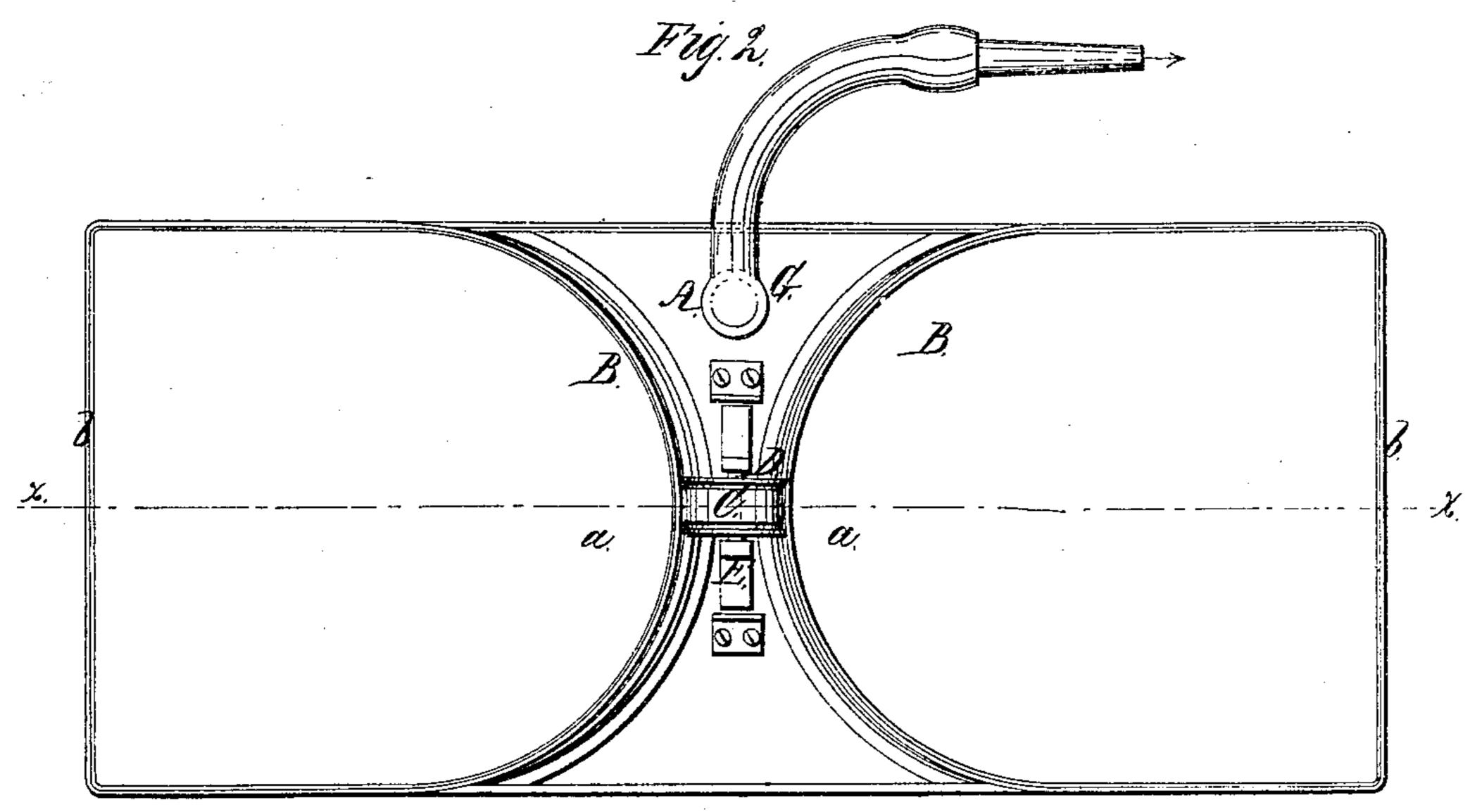
Dellous.

1/2/4,814.

Tatented Oct. 25,1864.





Witnesses; Henry Morris. Lames P. Hall.

Thventor; Stenny Neumeyers Jan munits. Attorney,

United States Patent Office.

HENRY NEUMEYER, OF MACUNGIE, PENNSYLVANIA.

IMPROVEMENT IN FOOT-BELLOWS.

Specification forming parts of Letters Patent No. 44,814, dated October 25, 1864.

To all whom it may concern:

Be it known that I, HENRY NEUMEYER, of Macungie, in the county of Lehigh and State of Pennsylvania, have invented a new and Improved Foot-Bellows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention, taken in the line x x, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like

parts.

This invention relates to a new and improved foot-bellows for blowing and kindling

fires, operating blow-pipes, &c.

The invention consists in the employment or use of two bellows and a wind-chamber, arranged in such a manner that the operator by standing on the device may, in connection with his weight, operate it with but a moderate efort, and eject a continuous blast from the muzzle.

A represents what may be termed the "central" plate or board of the device, on which two bellows, B B, are placed or secured, the top boards, a a, of said bellows being secured at their outer ends to the ends of the plate or board A by hinges or joints b b. The sides of the bellows B B are composed of leather. The inner ends of the top boards, a a, are connected by a strap, C, which passes over a pulley, D, on an upright, E.

E represents a wind-chamber, which is be-

low the plate or board A, and is composed of a bottom plate or board, C, with leather sides d. This wind-chamber communicates with the bellows B B by means of two openings, e e, provided with valves f, opening into the wind-chamber.

G is an eduction-tube communicating with the wind-chamber.

H H are two suction-openings made in one side of the plate or board A, and forming a communication between the bellows B B and the external air, said openings having valves g g over their inner ends opening into the bellows.

The operator stands with one foot on each bellows B B, and works the latter with his feet, one bellows being forced down as the other is elevated, and vice versa. The windchamber F becomes filled with wind and elevates the plate or board A with the operator on the bellows, the weight of the former insuring a steady ejectment of wind from the tube G.

The device is extremity simple, and may be operated with but a moderate effort.

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

The two bellows B B, in combination with. the wind-chamber F, and arranged and applied to the central board or plate, A, and provided with the necessary valves, to operate substantially as and for the purpose herein set forth.

HENRY NEUMEYER.

Witnesses: LUCY A. WALVERT, REUBEN OT.