

F. C. BARBER & O. J. PRICE.
Blow-Pipes.

No. 154,632.

Patented Sept. 1, 1874.

Fig. 1.

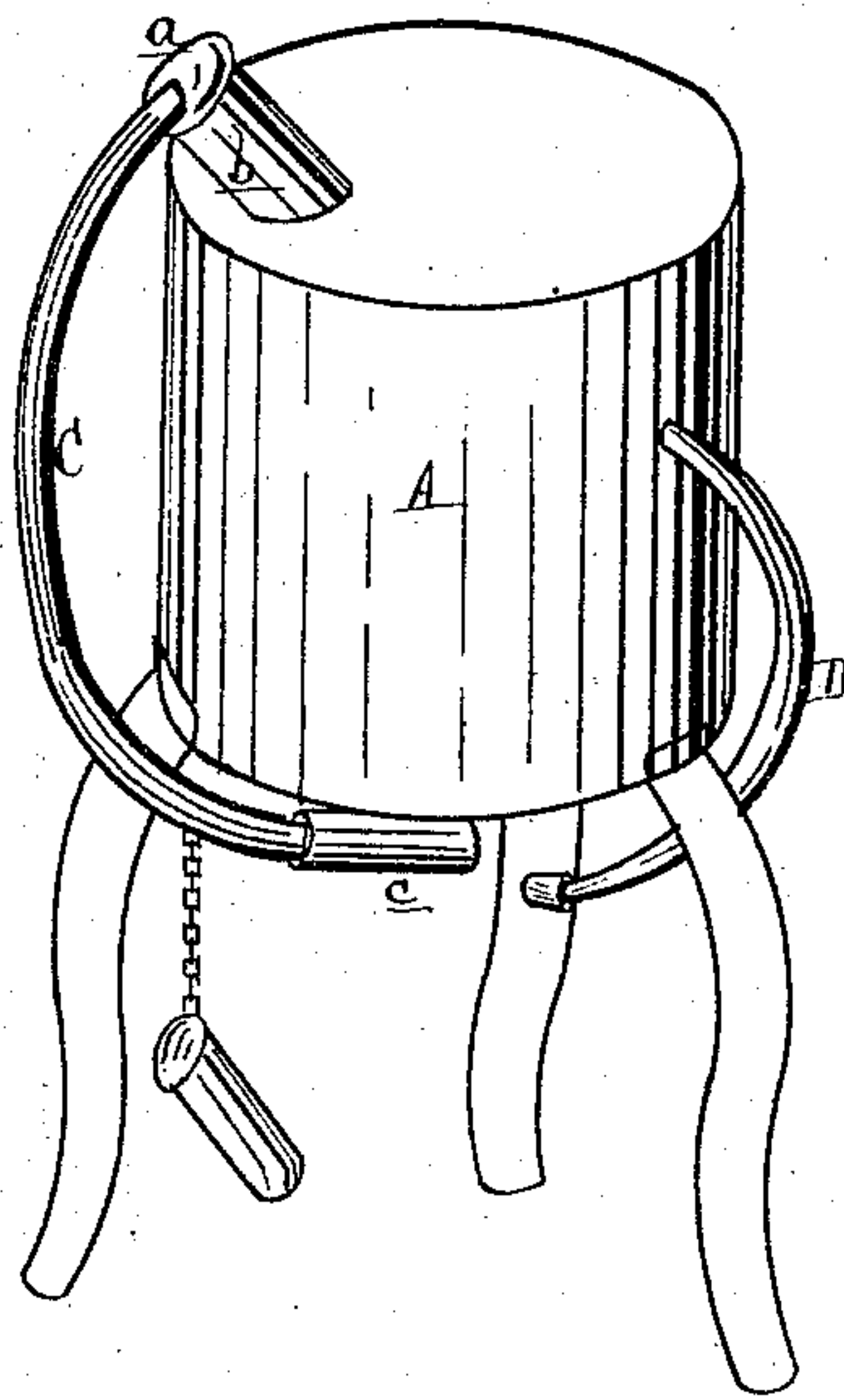
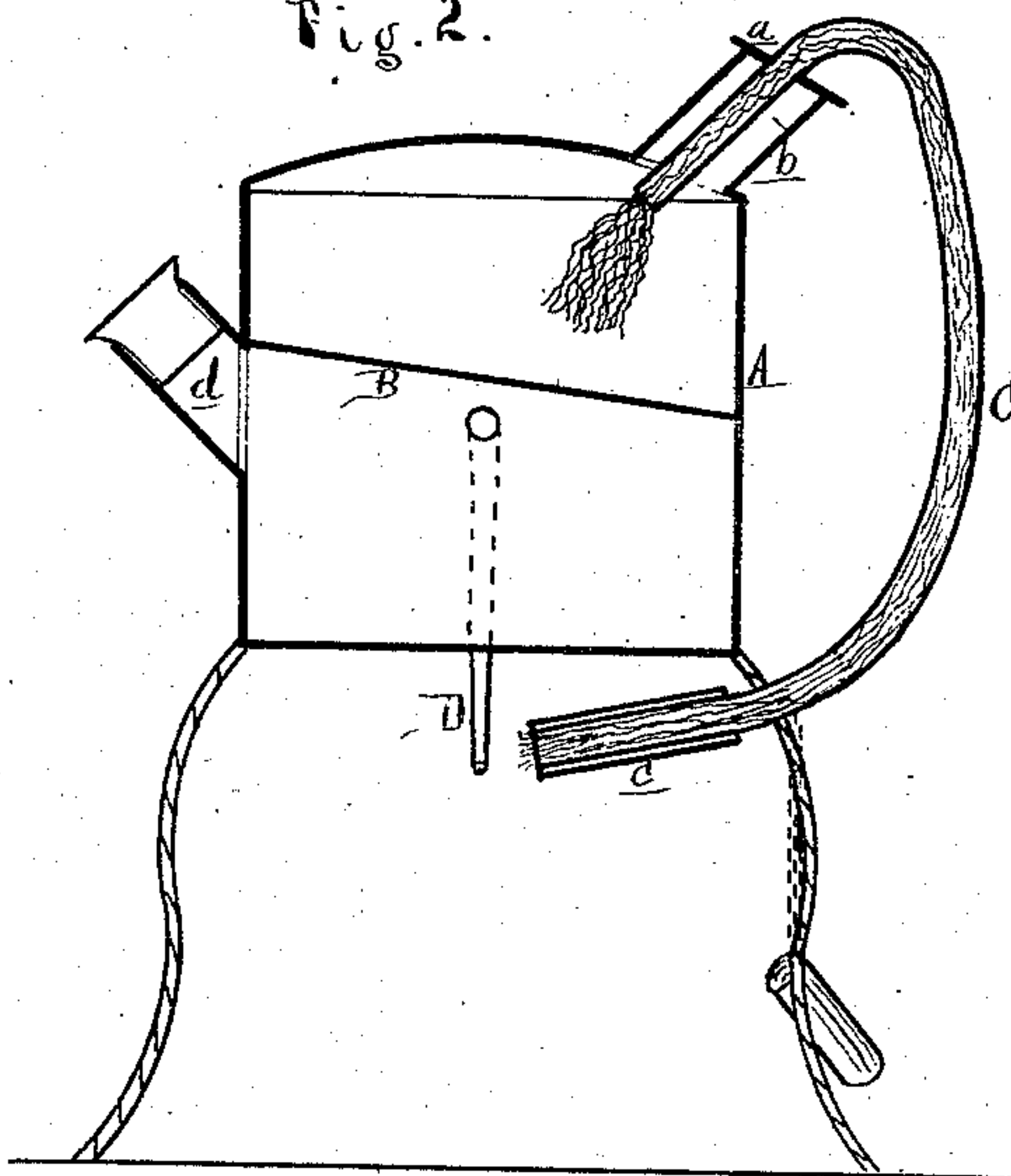


Fig. 2.



ATTEST:

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UNITED STATES PATENT OFFICE.

FERNANDO C. BARBER AND ORRIN J. PRICE, OF OXFORD, MICHIGAN.

IMPROVEMENT IN BLOW-PIPES.

Specification forming part of Letters Patent No. **154,632**, dated September 1, 1874; application filed March 13, 1874.

To all whom it may concern:

Be it known that we, FERNANDO C. BARBER and ORRIN J. PRICE, of Oxford, in the county of Oakland and State of Michigan, have invented an Improvement in Blow-Pipes, of which the following is a specification:

The nature of this invention relates to certain improvements in blow-pipes; and the invention has for its object to so construct the device that the heat from the flame of a wick will generate steam from alcohol or other appropriate fluid, which, escaping through a suitable tube or pipe, the end of which terminates just below the end of the wick-tube, will ignite, and perform the functions of the ordinary blow-pipe, thereby saving the necessity of blowing with the mouth by the operator, and, at the same time, giving him the use of both his hands for his work.

Figure 1 is a perspective of our device. Fig. 2 is a vertical cross-section of the same.

Like letters indicate like parts in each figure.

In the accompanying drawings, A represents a tight metallic vessel, divided into two compartments, upper and lower, by the diaphragm B, so that there is no communication between the two. C is a curved wick-tube, the upper end of which passes through the cork *a* in the neck *b*, through which the upper compartment may be filled with alcohol by a removal of the cork. This wick-tube terminates, on nearly a horizontal plane, under the vessel, and its end

is provided with a sleeve, *c*, by means of which the flame is increased or diminished at will.

The upper compartment filled with alcohol, and the wick-tube being provided with a proper wick, is ready for operation. The lower compartment is also nearly filled with alcohol through the neck *d*. Leading from near the top of the lower compartment is the blow pipe or tube D, the lower end of which terminates on a plane near, and a trifle below, the end of the wick-tube.

The sleeve *c* being withdrawn, the wick is lighted, and, with a large flame, soon converts the alcohol in the lower compartment into steam or gas, which, under pressure, escapes from the tube or pipe D, and, igniting from the wick-flame, performs the functions of the ordinary blow-pipe. As less flame is required, the sleeve *c* may be forced forward to reduce it.

What we claim as our invention, and desire to secure by Letters Patent, is—

A blow-pipe wherein the vessel A, divided into two compartments by the diaphragm B, the pipe C, having a sleeve, *c*, leading out of the upper compartment, and the pipe D, leading out of the lower compartment, are, respectively, constructed and arranged substantially as described and shown.

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ORRIN J. PRICE.

Witnesses:

H. S. SPRAGUE,
C. E. HUESTIS.