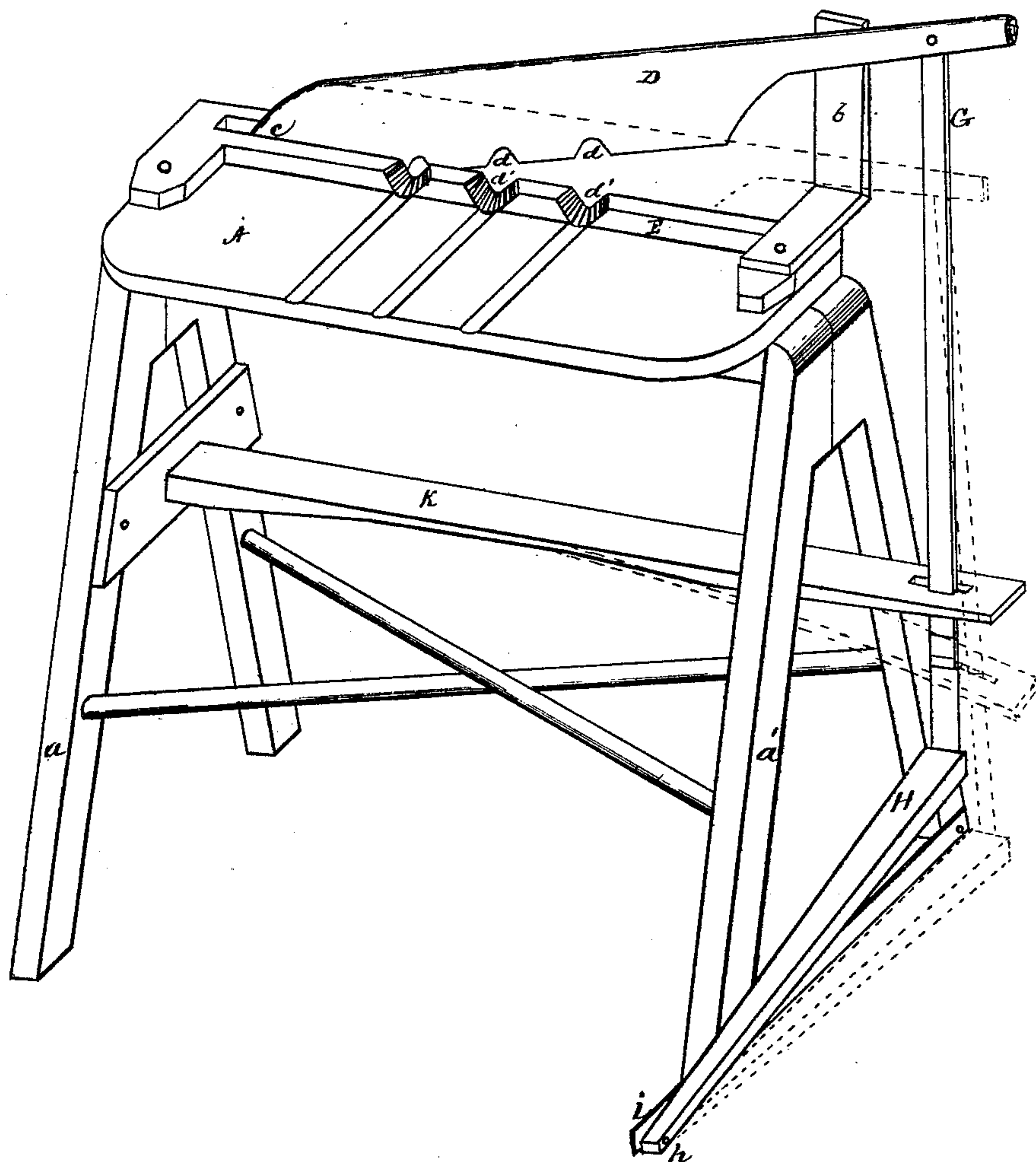


J. TIBBY, Jr., J., W. & M. TIBBY.

CLEANING BLOW-PIPES IN GLASS MANUFACTURE.

No. 176,495.

Patented April 25, 1876.



WITNESSES.

David G. Weems.

Phillip H. Moxon

INVENTORS

James Tibby Jr

John Tibby

Wm. Tibby

Matthew Tibby

per attys.

A. St. Evans & Co.

Washington D. C.

UNITED STATES PATENT OFFICE.

JAMES TIBBY, JR., JOHN TIBBY, WILLIAM TIBBY, AND MATTHEW TIBBY,
OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN CLEANING BLOW-PIPES IN GLASS MANUFACTURE.

Specification forming part of Letters Patent No. **176,495**, dated April 25, 1876; application filed April 5, 1876.

To all whom it may concern:

Be it known that we, JAS. TIBBY, Jr., JOHN TIBBY, WILLIAM TIBBY, and MATTHEW TIBBY, of Pittsburg, in the State of Pennsylvania, have invented a new and Improved Machine for Cleaning the Ends of Blow-Pipes after the formation of glass articles; and we hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view, showing the machine in its normal condition, and the dotted lines indicating the position of the movable parts when the blow-pipes are being cleaned.

In practicing the art of blowing glass bottles, it is necessary to employ, besides the glass-blower, a boy to clean the blow-pipes after each operation, and in such case the glass adhering to the pipe is lost, and the pipes have to be dressed every day. These are disadvantages which it is the object of our invention to overcome.

Our invention consists of a stand having a pivoted recessed knife, and operated by a treadle and a retracting spring, or by hand.

In order that those skilled in the art may make and use our invention, we will proceed to describe the manner in which we have carried it out.

In the said drawings, A is a stand or table supported on legs *a a'*, and having a vertical guide attachment, *b*. Pivoted at *c* in the end of the table is a knife, D, having recesses or notches *d d* beveled from the outside toward the table, so as to form a sharp edge adjacent to a bar, E, which is fastened to the table A, and has corresponding depressions or notches *d' d'* having their edges beveled from the table

toward the knife, and forming sharp edges on the knife side. In the handle of the knife D is pivoted a depending bar, G, which has its lower end attached to the end of a treadle, H, which is pivoted, at *h*, to a cross-bar, *i*, attached to the ends of the legs *a'*. A spring, K, has one end attached to the legs *a*, and the other end attached to the bar G, so as to keep the treadle H and the knife D always raised until some weight is applied to the treadle H. It is evident that the knife D may be operated by other means than the spring and treadle.

The operation of my device is as follows: A blow-pipe having become foul from use, is placed horizontally upon the table in the recesses *d'* of the bar E, when, with a pressure of the foot upon the spring H, the knife D is caused to descend quickly, and with sufficient force to cleanse the blow-pipe at the end, and thus avoid the former slow and expensive manner of doing the same thing.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The table A, having the notched bar E, in combination with a movable knife, D, provided with corresponding notches *d d*, as set forth.

2. The table A, bar E, provided with notches *d' d'*, and the movable knife D, provided with notches *d d*, in combination with the depending bar G, spring K, and treadle H, substantially as and for the purpose described.

JAMES TIBBY, JR.
JOHN TIBBY.
WILLIAM TIBBY.
MATTHEW TIBBY.

Witnesses:

JOHN D. MORELAND,
RICHARD ALLEN.