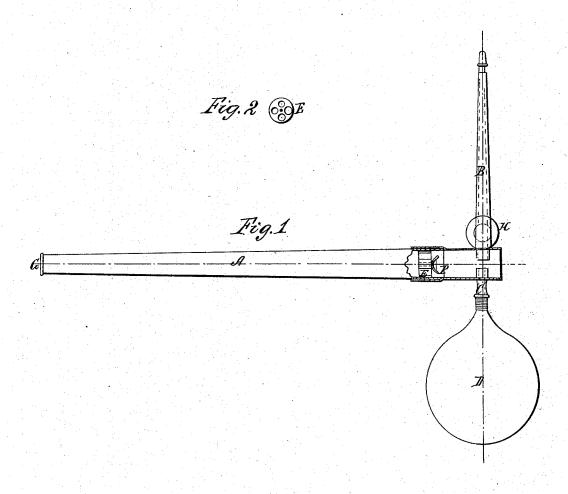
J. Handy,

Blow Pipe,

1. Patented May 16, 1865.



Witnesses; Chat R. Fond James Benson

Inventor; Joshua Hendy

## UNITED STATES PATENT OFFICE.

JOSHUA HENDY, OF SAN FRANCISCO, CALIFORNIA.

## BLOW-PIPE.

Specification forming part of Letters Patent No. 47,721, dated May 16, 1865.

To all whom it may concern:

Be it known that I, JOSHUA HENDY, of the city and county of San Francisco, State of California, have invented a new and Improved Blow-Pipe; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents the blow-pipe with a portion of the lower end removed, so as to show the valve. Fig. 2 represents the valve.

The simple tubes A B form what is commonly known as a "blow-pipe." C is a pipe or tube attached to tube A, provided with an india-rubber bag, D, or other flexible air-vessel. E is a valve formed of the metal piece, as shown in Fig. 2, and the circular piece of rubber F, represented in Fig. 1 as open. H is a stop-cock.

Operation: The blow-pipe is operated, as in other blow-pipes, by blowing with the breath at the mouth piece G. The stream of air passes through the valve E, and at same time that it passes out of the tube B, upon the desired object, it inflates the air-vessel D. When the air-vessel is sufficiently distended, the operator may remove his mouth from the pipe, the valve will shut, and the gradual collapsing of the bag or vessel D will cause a continuous stream of air to pass through the tube B. thus greatly relieving the operator and more effectually performing the required work.

The stop-cock H can be used for regulating the quantity of air passing through pipe, B or stop it off altogether, retaining it in the airvessel D.

The india-rubber bag D can be readily detached, and the opening in the pipe C can be closed by means of a stopper, when it is desired to use the blow-pipe without the elastic air-vessel.

Having thus fully described the nature of my invention, I would state that I do not claim, broadly, the application of elastic airvessels to blow-pipes; but

What I do claim, and desire to secure by Letters Patent, is-

1. The combination, with the pipe A, of the valve F, tube C, and elastic air-chamber D, all constructed and arranged as and for the purposes specified.

2. The combination, with the pipe A, of the valve F, tube C, and elastic air-chamber D and stop-cock H, when constructed and arranged as herein described.

JOSHUA HENDY.

Witnesses:

CHAS. R. BOND. HENRY HAIGHT.