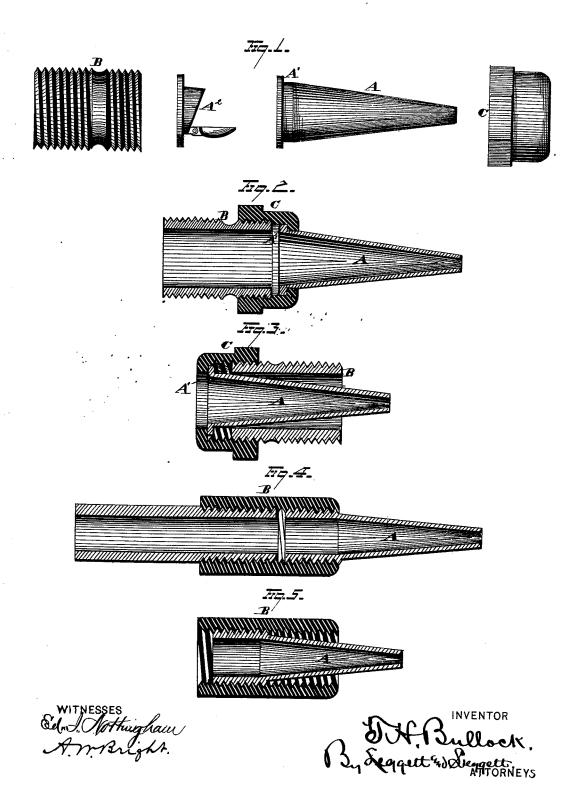
T. H. BULLOCK. Bellows-Nozzle.

No. 202,700.

Patented April 23, 1878.



## UNITED STATES PATENT OFFICE.

THOMAS H. BULLOCK, OF CLEVELAND, OHIO.

## IMPROVEMENT IN BELLOWS-NOZZLES.

Specification forming part of Letters Patent No. 202,700, dated April 23, 1878; application filed March 9, 1878.

To all whom it may concern:

Be it known that I, THOMAS HENRY BUL-LOCK, of Cleveland, in the county Cuvahoga and State of Ohio, have invented certain new and useful Improvements in Bellows-Nozzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to nozzles, especially such as are adaptable to bellows-blasts and the like; and it consists in such a construction as will hereinafter be specified, whereby the nozzle proper may be detached from its neighboring parts and reversed and inserted therein, thus enabling the entire device to be packed into a small compass, and rendered more safe

for shipment and transportation. In the drawings, Figure 1 represents the different parts of a device according to my invention separated from each other. Fig. 2 represents one form of my device in longitudinal section as put together for use; Fig. 3, the same, representing the different parts arranged for packing and shipment. Fig. 4 shows, in longitudinal section, a modified form of my device as put together for use; Fig. 5, the said modified form of device as put together for transportation.

A represents a common nozzle, of substantially such description as indicated in the drawing. At its base is provided the flat

If desired, a valve, A2, may be provided, which shall permit a free escape of air from the bellows, but will prevent a passage of air

or gas into said bellows. This valve, however, being already a known device, forms no part of my invention, and may be omitted, if

B is a cylinder, having a male screw formed upon its surface. C is a binding cap or collar, provided with a female screw, adapted to engage with the male screw of the cylinder B.

Fig. 2 of the drawings shows the parts just specified as put together for use in a bellows; and it seems unnecessary to do more than to refer to said figure as a sufficient description in this particular.

Likewise Fig. 3 of the drawings sufficiently shows this form of device as put together for transportation, to obviate the necessity for further specification.

Fig. 4 shows a modified form, wherein the cylinder B has a female, instead of a male, screw-thread, and the nozzle at its base has a male screw-thread, adapted to engage with said female screw. Here the cap or collar may be dispensed with.

It will be observed that the foregoing-described invention differs from simply making the nozzle readily removable from the head of a bellows, as has been heretofore done.

What I claim is-

The combination of nozzle A, cylinder B, and cap or collar C, constructed and combined substantially as shown.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.
THOMAS H. BULLOCK.

Witnesses:

JNO. CROWELL, Jr., E. M. CROWELL.