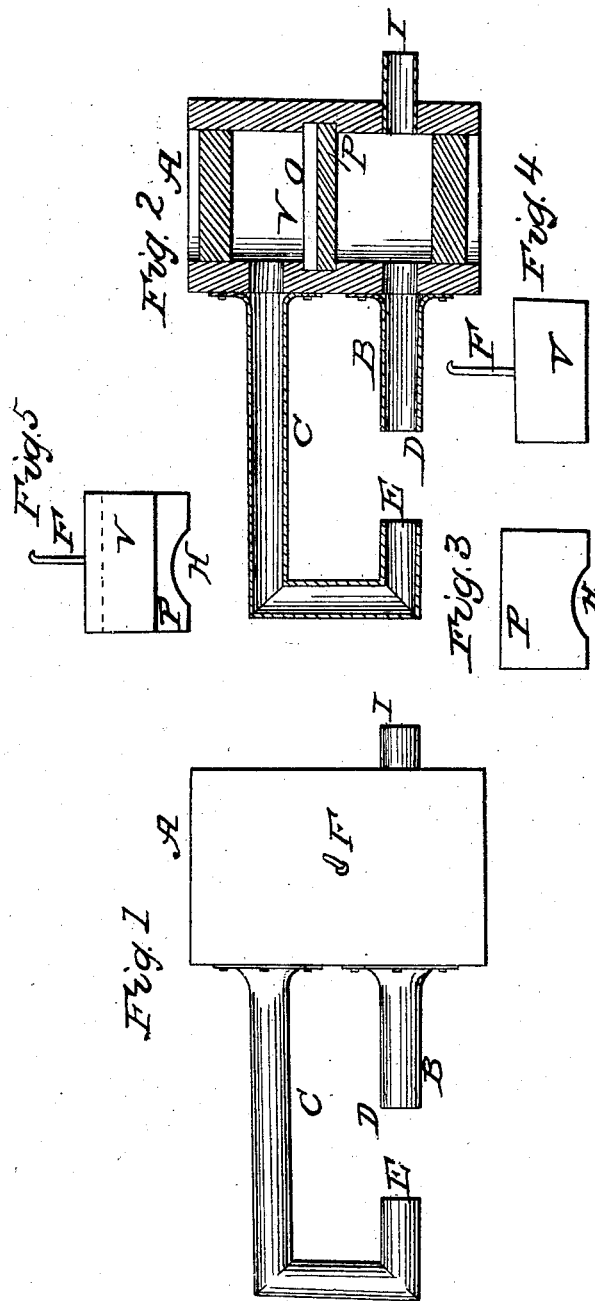


W. & H. W. SHARP.

Counter Blast.

No. 1,270.

Patented Aug. 2, 1839.



UNITED STATES PATENT OFFICE.

WM. SHARP AND H. W. SHARP, OF CATHARINE, NEW YORK.

IMPROVEMENT IN THE MODE OF PRODUCING THE BLAST FOR BLACKSMITHS' FORGES, &c.

Specification forming part of Letters Patent No. 1,270, dated August 2, 1879.

To all whom it may concern:

Be it known that we, WILLIAM SHARP and HEMAN W. SHARP, of Catharine, in the county of Chemung and State of New York, have invented a new and useful Counter-Blast for Blacksmiths' Fires; and we do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings of the same, and making part of this specification.

The nature of our invention consists in providing a wind-chest and two tin or sheet-iron pipes, which are attached to the pipe I of the bellows, thereby dividing the wind which constitutes the blast and conducting the same into the fire at two opposite points, thus preventing the escape of any portion of the blast at either side of the fire and effecting a counter-blast.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

Figure 1 is a view of the outside of the wind chest and pipes; Fig. 2, inside of the same; Fig. 3, partition; Fig. 4, valve; Fig. 5, partition and valve together.

We construct a counter-blast for blacksmiths' fires by applying to the bellows-pipe a wind-chest twelve inches long, eight inches wide, and six inches deep, or larger or smaller, as the case may require, which we construct with a partition, P, in the middle, with a hole, H, in the same, and a valve, V, to slide over the said partition to shift the blast from one to both of the pipes, the wind-chest being shown at A in the accompanying drawings and the valve-handle at F. We then apply a tin or sheet-iron pipe,

B, one and a half or two inches in diameter and twelve inches long, or longer or shorter, as the case may require, to the front side of the wind-chest, which conducts one-half of the blast into the fire at D. We then apply another pipe, C, to the wind-chest, constructed with two elbows, which conducts the residue of the blast around and into the fire at E, the two blasts meeting in the center of the fire. We then build the backs in the ordinary manner. An extra back, however, is required at the right-hand side of the fire at E.

We do not claim as our invention the construction of a wind-chest with a tube leading from it and dividing at a distance from the wind-chest, so as to conduct the blast into the fire at opposite points, as this is not new.

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

1. The construction of the wind-chest with two tubes leading from it for conducting the blast into opposite points of the fire, in combination with the vertical valve V between them, by means of which we are enabled to use one or both of the aforesaid tubes, as represented in the accompanying drawings.

2. The mode of dividing the blast so as to direct it through one or more pipes by means of the valve V, arranged in the manner herein described, or in any other substantially the same, and by which the same effect would be produced.

WILLIAM SHARP.
HEMAN W. SHARP.

Witnesses:

I. C. ROBINSON,
C. I. BASKIN.