J. Lingenfelter,

Millstone Exhaust.

No. 113,676. Patented Apr. 11. 1871

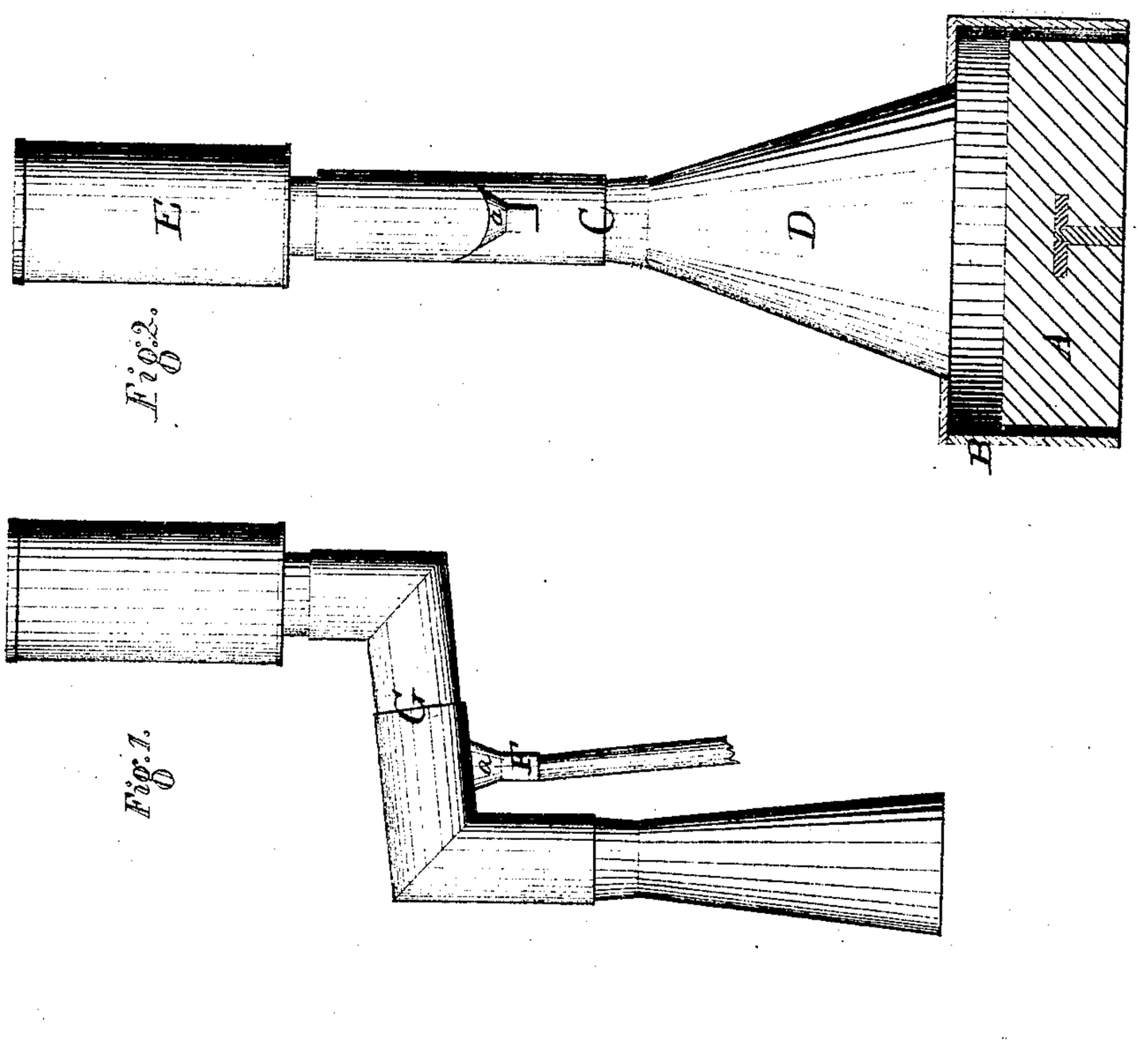

Fig. 2.

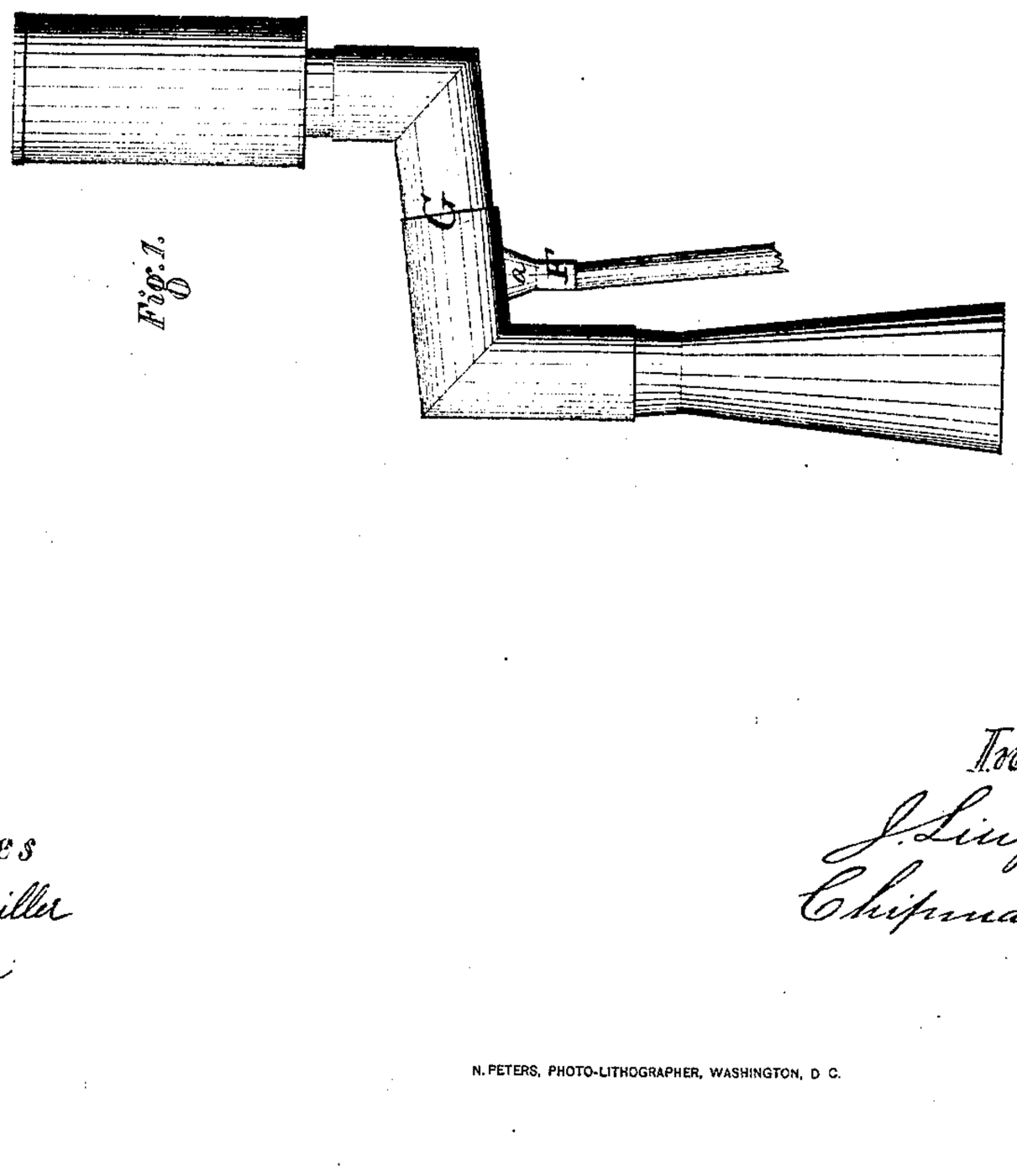

Fig. 1.

Witnesses
Henry N. Miller
Chas Kenyon

Inventor
J. Lingenfelter.
Chipman Hosmer & Co.
Attorneys.

United States Patent Office.

JACOB LINGENFELTER, OF BLOODY RUN, PENNSYLVANIA.

Letters Patent No. 113,676, dated April 11, 1871.

IMPROVEMENT IN MILLSTONE EXHAUSTS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB LINGENFELTER, of Bloody Run, in the county of Bedford and State of Pennsylvania, have invented a new and valuable Improvement in Millstone Exhaust; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a side view of my improved exhaust-pipe.

Figure 2 is a front view of the same.

My invention is an improvement upon the apparatus for which Letters Patent of the United States were granted to David Baird, December 3, 1867; and

It consists in the means provided for saving any dust or fine flour which may be drawn up by the exhaust, and for carrying off the condensed steam and moisture.

The letter A of the drawing represents the runner.

B, the hoop.

C, the exhaust-pipe, provided with the expanded chamber D at its lower end.

E designates the upper expansion leading to the fan; and

F the waste-pipe or conduit which conveys away the condensed steam and moisture.

G represents an elbow or inclined section of the exhaust-pipe, designed to cause the water of condensation to flow back into the funnel *a* of the waste-pipe F.

The object of expanding the lower end of the exhaust-pipe is to effect a slow draught in this portion, thereby giving the fine particles of flour-dust which are drawn upward with the steam sufficient time to enable them to become dampened by its condensation, thus acquiring sufficient weight to cause them to fall.

Thus a great saving is accomplished, and this expansion or chamber D is so well adapted to the object in view that flour-dust is never carried beyond the first bend in the pipe, and therefore both the elbow G and the pipes and chambers above it are never coated, but always bright and clean.

The chambers and pipe above the elbow G being suitably arranged, all the water of condensation is conveyed back into this portion of the pipe and runs along its inclined bottom into the funnel-shaped mouth of the conduit F, whereby it is carried wherever it may be desired.

By these simple devices the millstone exhaust is rendered efficient and economical. Time and labor are saved, as well as a great quantity of the finest quality of flour.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. At the lower end of a millstone exhaust-pipe, the enlarged chamber D, when constructed and arranged to operate in the manner and for the purpose shown and described.

2. In combination with the expanded chamber D, at the lower end of a millstone exhaust-pipe, the inclined elbow G and waste-pipe F, as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JACOB LINGENFELTER.

Witnesses:

E. W. ANDERSON,

EDM. F. BROWN.