

A. GREENLEAF.
MIDDLINGS-PURIFIER.

No. 174,232.

Patented Feb. 29, 1876.

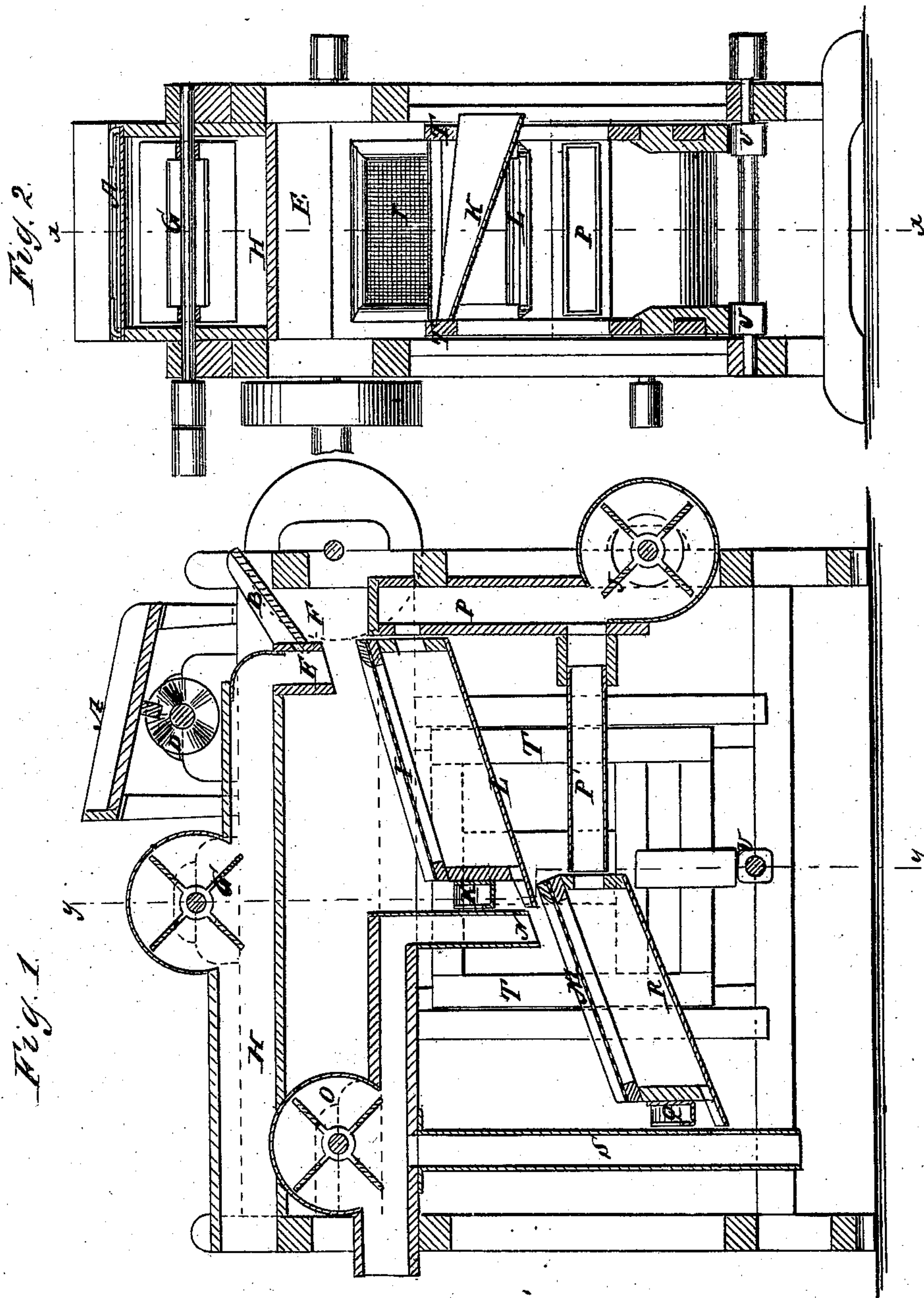


Fig. 2.

Fig. 1.

WITNESSES:

E. Wolff.
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ALBERT GREENLEAF, OF KINGSTON, WISCONSIN.

IMPROVEMENT IN MIDLINGS-PURIFIERS.

Specification forming part of Letters Patent No. **174,232**, dated February 29, 1876; application filed December 18, 1875.

To all whom it may concern :

Be it known that I, ALBERT GREENLEAF, of Kingston, in the county of Green Lake and State of Wisconsin, have invented a new and Improved Middlings-Purifier, of which the following is a specification :

My invention consists of the arrangement of passages, sieves, and fans, hereinafter described, having for its object to contrive a simple and efficient machine for purifying middlings by the combined actions of gravity, suction, and blast currents of air and sieves.

Figure 1 is a longitudinal sectional elevation of my improved middlings-purifier, taken on the line *x x* of Fig. 2; and Fig. 2 is a transverse section, taken on the line *y y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is a shoe, onto which the middlings fall to be fed into the machine by falling in a wide, thin sheet onto the chute B. The shoe is shaken by the cam D. From the chute B they pass into the vertical passage E through the side F, where they are subjected to a current of air by the suction fan G, which discharges the light impurities through the spout H. From passage E the middlings fall upon

sieve I, off from which the light matters are lifted by a blast through spout P from fan J, to be delivered on the bran-spout K, while the fine middlings fall through onto the chute L, and are delivered onto the sieve M under the suction spout N, through which the light matters are delivered by the suction-fan O. On the sieve M the middlings are also subject to a light blast from fan J, through spout P', which takes the light and coarse matters off into the spout Q. The chute R under sieve M delivers into the spout S, through which the heavier matters fall from spout N into the receptacle for fine middlings. The sieves are arranged in a vertical shaking frame T, which is operated by the cam U.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with sieves M and I, of the fans G, J, and O and the spouts E, P, N, and S, substantially as specified.

ALBERT GREENLEAF.

Witnesses:

M. W. STEVENS,
ANNA STEVENS.