

G. T. SMITH.

Middlings Dressers or Purifiers.

No. 133,898.

Patented Dec. 10, 1872.

Fig. 1.

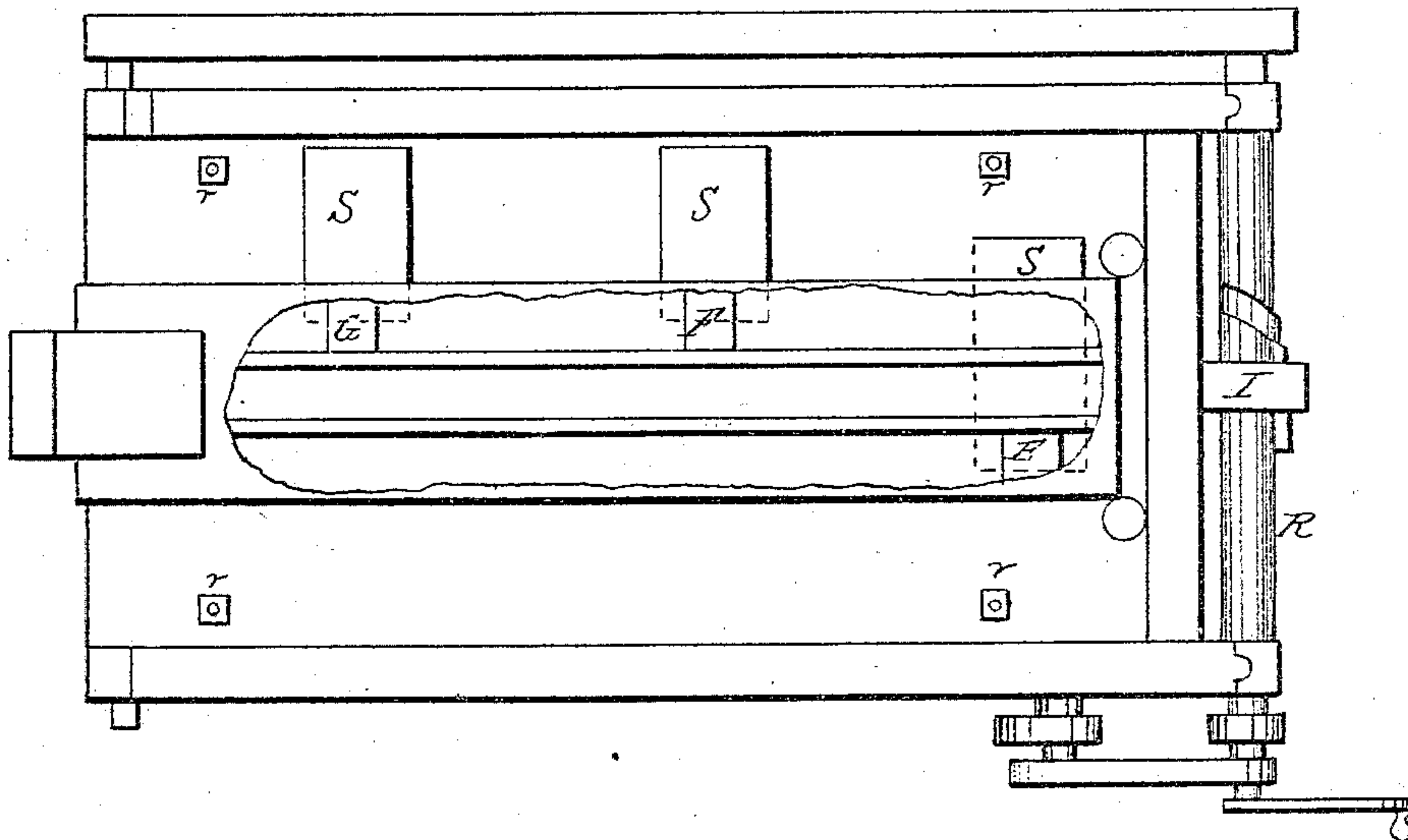
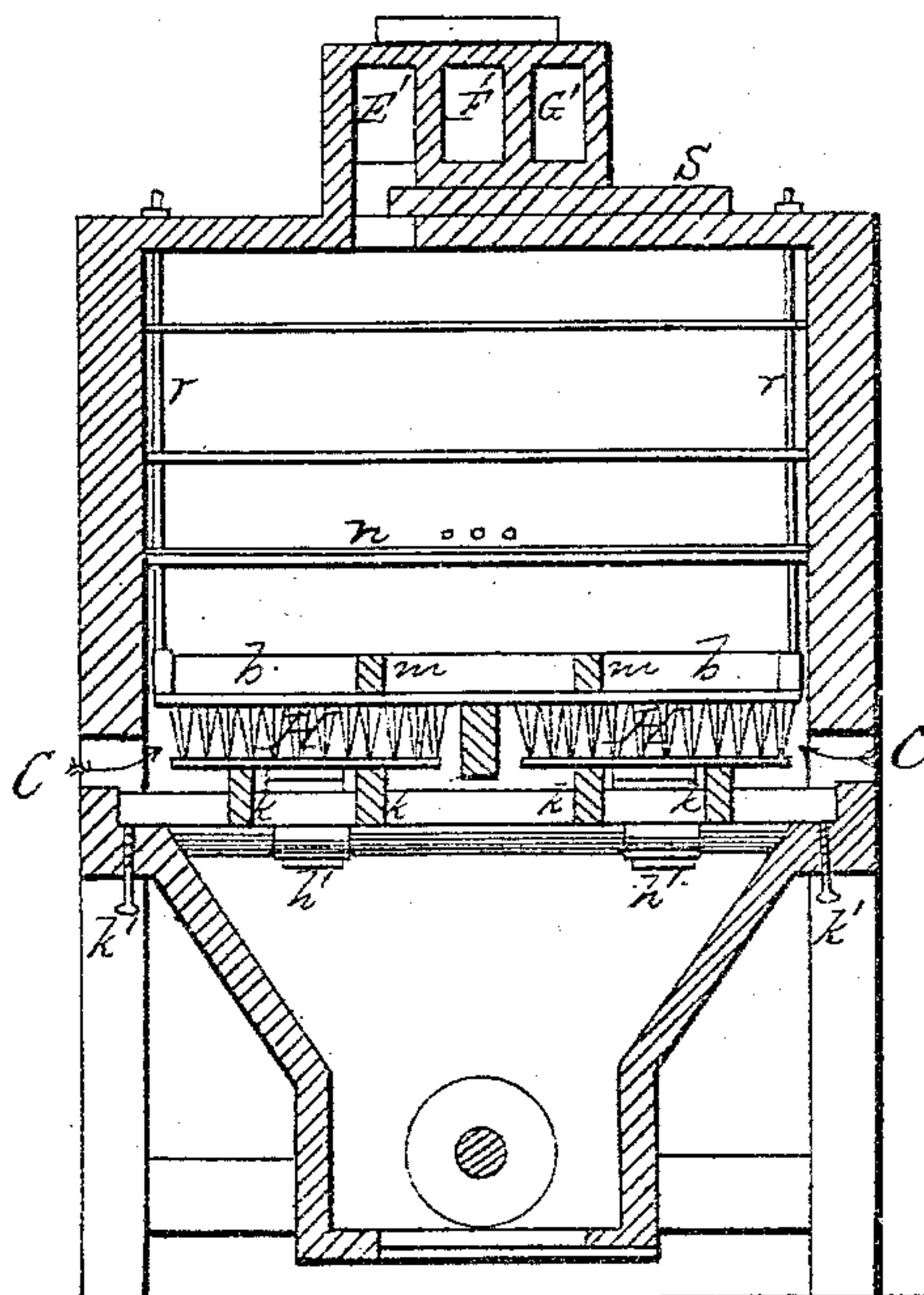


Fig. 2.



Witnesses  
Alex. Kahn  
H. Doubleday

Inventor  
George T. Smith  
by A. M. Smith  
Attorney

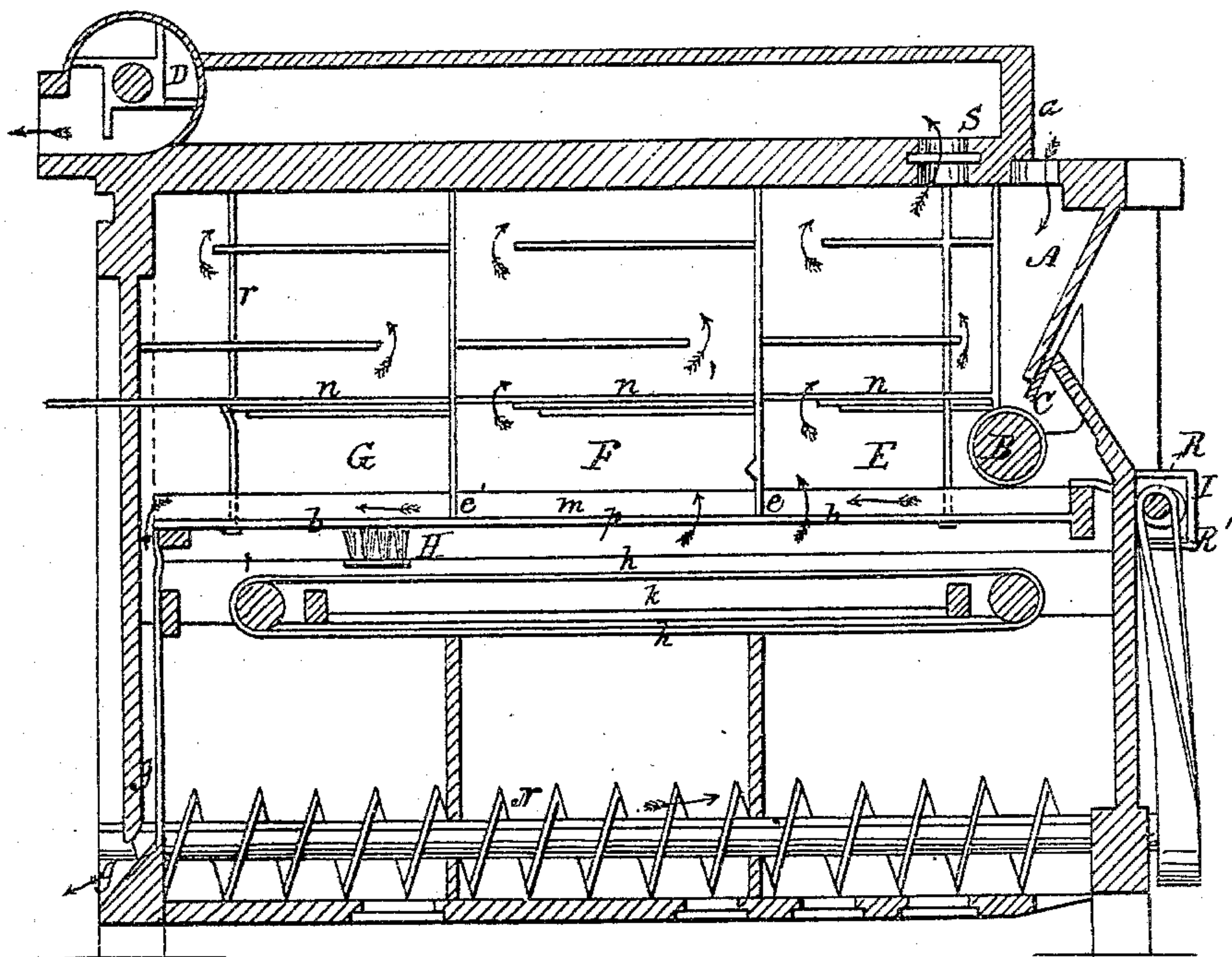
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Fig. 3.



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE T. SMITH, OF MINNEAPOLIS, MINNESOTA.

## IMPROVEMENT IN MIDLINGS DRESSERS OR PURIFIERS.

Specification forming part of Letters Patent No. 133,898, dated December 10, 1872.

*To all whom it may concern:*

Be it known that I, GEORGE T. SMITH, of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Machine for Dressing Flour, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a plan or top view of my machine with a portion of the air-flue removed; Fig. 2 is a vertical transverse section, and Fig. 3 is a vertical longitudinal section.

In the drawing, A represents a hopper, in which the meal or middlings to be treated is delivered from an elevation or by any other means. The meal is fed by the rollers B to the bolt, the amount of feed being regulated by a slide, c. The bolt or shaker is suspended from the frame-work by pivoted links r r, and has a reciprocating motion imparted to it by eccentric R on shaft R' and the inclosing-box I. As the meal is agitated by the motion of the bolt the flour or middlings falls through it. As there is a continuous current of air in an upward direction through the bolt it will cause the very fine portions of flour to adhere to the threads of which the cloth is composed,

and thus close up the meshes to such an extent as to materially interfere with the operation of them. In order to obviate the adhering of the fine particles of flour to the bolt I employ brushes to traverse the under side of the shaker and keep it clean. H H are brushes attached to and carried by endless belts h, the brushes being supported on ways k k during their contact with the bolt.

By preference I make the frame-work and ways which support the brushes adjustable by means of set-screws k', (see Fig. 2,) so that I can keep the brushes always in contact with the bolt.

I do not claim the application of brushes to the under surface of the bolt, as that is admitted to be old; but

What I do claim in this application is—

The brushes H H, when attached to an endless belt, chain, rope, or an equivalent of the same, and traveling in one direction on ways and around pulleys, as shown, in combination with a reciprocating-bolt, substantially as set forth.

GEORGE T. SMITH.

Witnesses:

H. H. DOUBLEDAY,  
F. G. DOUBLEDAY.