T. R. Renwick.

Comb.d Draft Promoter & Heat Economizer

No. 119,646. Patented Oct. 3, 1871.

Fig. 1

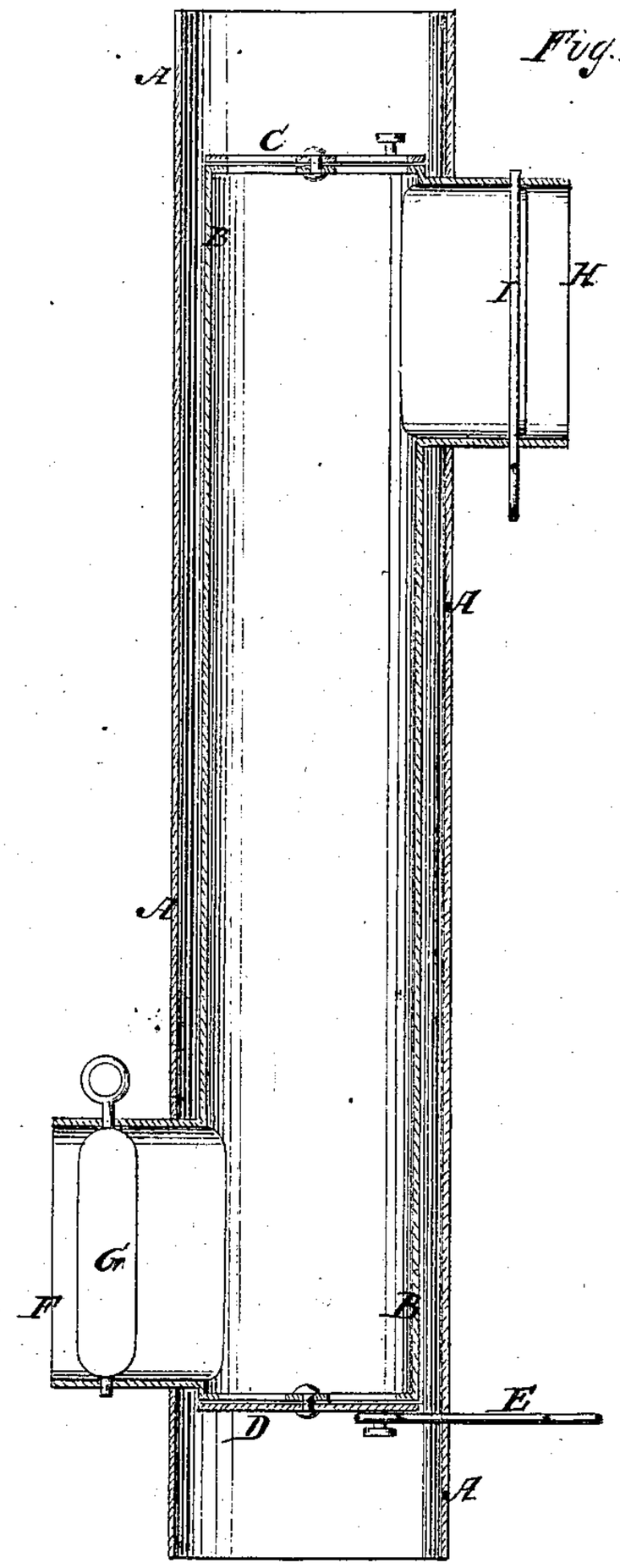
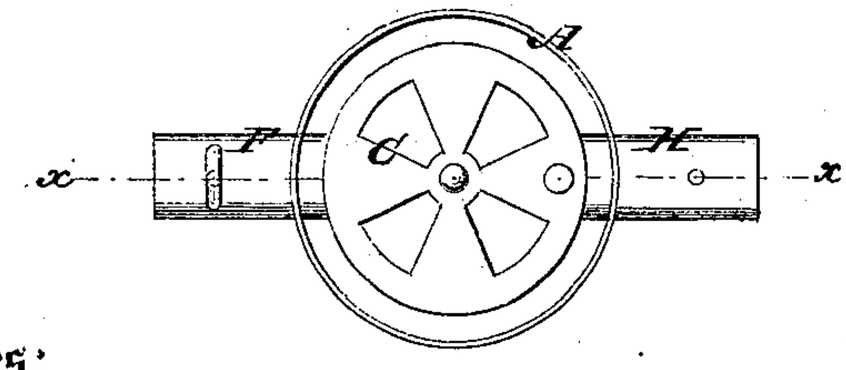


Fig. 2.



Witnesses:

E. Wolff

L. S. Babee

Inventor:

T. R. Renwick

PER Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS R. RENWICK, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO HIMSELF AND JOSIAH A. OSGOOD, AND SAID OSGOOD ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES M. WEISS, OF WATERTOWN, MASSACHUSETTS.

IMPROVEMENT IN STOVE-PIPE DRUMS.

Specification forming part of Letters Patent No. 119,646, dated October 3, 1871.

To all whom it may concern:

Be it known that I, THOMAS R. RENWICK, of Grand Rapids, Kent county, Michigan, have invented an Improved Draft-Promoter, of which the following is a specification:

This invention consists in the combination, with a stove-pipe or the smoke-pipe of a furnace, of an inclosed drum having dampers at its top and bottom, together with means for operating said dampers from the outside, the object of the arrangement being, by the burning of fuel placed within said drum, to produce an increased draught through the pipe for the better removal of smoke from the stove.

Referring to the drawing—in which Figure 1 is a vertical and Fig. 2 a horizontal section—A is a section of a stove-pipe, or of the smoke-pipe of a furnace, that is supposed to be connected at one end with a stove or furnace and at the other end with a chimney. B is the inclosed drum, the same being provided with a pipe, H, at its upper end that extends through a hole in the pipe A, and is furnished with a damper, I; and being further provided with a similar short pipe, F, at its lower end, which also extends through the pipe A, and is furnished with a damper, G; and being further provided with registers C D at its upper and lower ends, respectively, each of which is operated by a rod, E, pivoted at its inner end to a stud that extends from the damper, said rod passing through the pipe A so as to be seizable from the outside.

When this apparatus is to be used for the purpose specified, the registers C D and damper I should be opened and the damper G closed. Paper or other light fuel is passed into the drum B through the pipe H. After igniting the fuel the damper I should be closed. The burning of the fuel heats the air within the pipe A, thereby increasing the draught therein. The closed dampers G I prevent smoke from escaping from the drum otherwise than through the registers C D. The ashes that accumulate within the drum can be removed through the pipe F.

I claim as my invention—

In connection with a stove-pipe, or the smoke-pipe of a furnace, the draught-promoter, consisting of the drum B and registers C D, arranged as specified.

Witnesses: THOMAS R. RENWICK.
JOSIAH A. OSGOOD,
ALFRED PUTNAM. (105)