(No Model.)

H. C. SNOW.

VENTILATING STOVE.

No. 341,069. Patented May 4, 1886.

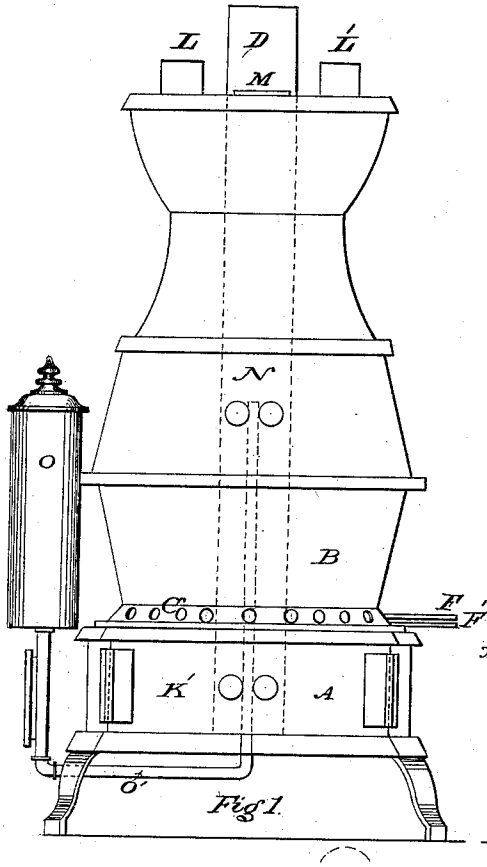

Fig 1.

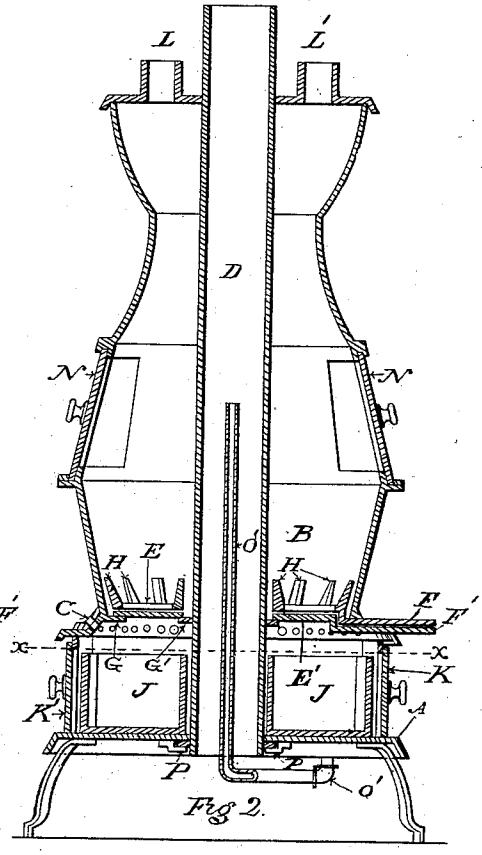

Fig 2.

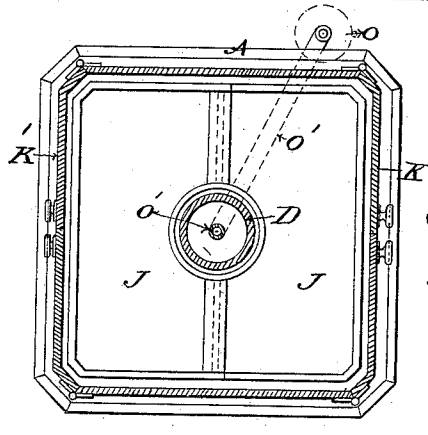

Fig 3.

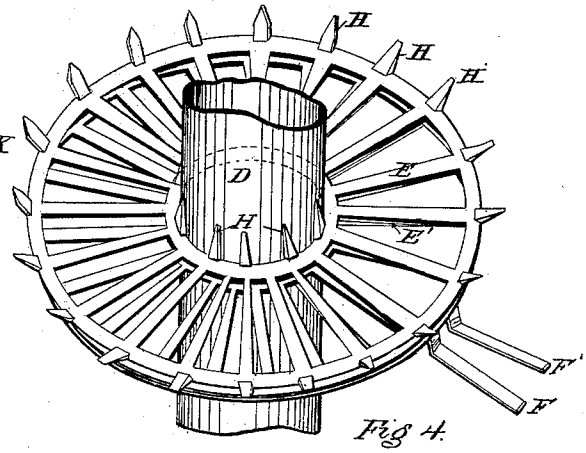

Fig 4.

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UNITED STATES PATENT OFFICE.

HORACE C. SNOW, OF WINNIPEG, MANITOBA, CANADA.

VENTILATING STOVES.

SPECIFICATION forming part of Letters Patent No. 341,069, dated May 4, 1886.

Application filed July 27, 1885. Serial No. 172,779. (No model.) Patented in Canada June 5, 1885, No. 21,809.

To all whom it may concern:

Be it known that I, HORACE CARLETON SNOW, of the city of Winnipeg, in the Province of Manitoba, in the Dominion of Canada, have invented certain new and useful Improvements in Ventilating Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention consists in the combination, with a stove having a central ventilating-pipe through the fire-box, of a water-reservoir having a pipe passing into the lower end of the tube and above the top of the reservoir, for moistening the rarefied air ascending through the tube.

Figure 1 is an exterior elevation of my stove. Fig. 2 is a vertical section of the same. Fig. 3 is a horizontal section through the ash-pan; and Fig. 4 is a perspective view, enlarged, of the shaking-grates and part of ventilating-tube.

A represents the square base of a stove, on which base seats the circular fire-chamber B, carrying the upper part of the stove. The base at top is perforated to admit air with uniform distribution to the fire.

C is an annular ring having coinciding perforations to the base A, and moves axially to close the orifices when admission of air is not desired.

D is a straight vertical tube passing centrally through the bottom and top of the stove and fire-chamber, to rarefy the air passing through the tube, which may connect with a pipe from a source of supply, or terminate at the bottom of the stove to draw cold air from the floor of the apartment, and the upper end of the pipe may discharge into the apartment or connect with a pipe to conduct the heated air to another apartment.

The circular grate, which I do not claim in this application, but which forms the subject-matter of my application No. 181,096, filed October 27, 1885, is composed of two sections, E E′, correspondingly perforated, one overlying the other, and each provided with a handle, F F′, extending outside the stove. The lower section is supported on annular bearings G G′, and the upper section is provided with vertical prongs H, which by rotation of the section causes the inner and outer peripheries of the grate to scrape or break away ashes or clinkers that may have accumulated to prevent operation of the grate, and to allow the fuel to concentrate around the wall of the stove and central air-tube. By spreading the handles F F′ the perforations in the grates will coincide, to allow coarse ashes to fall through, and by closing the handles together more or less the perforations will be contracted or closed.

J is the ash-pan, constructed in two parts, to close around the central tube, D, and inserted through doors K K′ at opposite sides of the base.

L L′ are the smoke-flues, located in the top of the stove and oppositely placed to the central tube, whereby the draft is divided to cause a uniform current through the upper part of the stove and equalize the heat around the air-tube.

In the top of the stove are two covered apertures, M, oppositely placed in the side of the stove, to admit of the fuel being equally distributed around the central tube, D.

O is a water-reservoir attached to the side of the stove on the exterior, said reservoir having a pipe, O′, from the bottom turned upward into tube D, to supply moisture to the rarefied air passing up the tube.

The tube D is made removable by providing it at the bottom with a notched collar, to engage with lugs P on the bottom of the stove, so that by coinciding the notches with the lugs and turning the tube axially the lugs will engage with the collar and support the tube in position.

I claim as my invention—

1. The combination, with a stove having a ventilating-tube passing through the fire-chamber, of a pipe within the ventilating-tube, a water-reservoir, and a pipe connect-

ing the reservoir with the pipe within the interior of the ventilating-tube, substantially as set forth.

2. The combination, with a stove having a ventilating-tube, D, passing through the fire-chamber, of a pipe, O′, within the ventilating-tube, a water-reservoir, O, secured to the side of the stove, and a pipe connecting the reservoir with the pipe within the interior of the ventilating-tube, the pipe within the ventilating-tube adapted to discharge vapor into the ventilating-tube above the level of the reservoir, substantially as set forth.

HORACE C. SNOW.

Witnesses:
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Both of the city of Winnipeg, gentlemen.
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