(No Model.)

E. F. GORDON & H. HOBBS.

SUMMER COOKING STOVE.

No. 323,665. Patented Aug. 4, 1885.

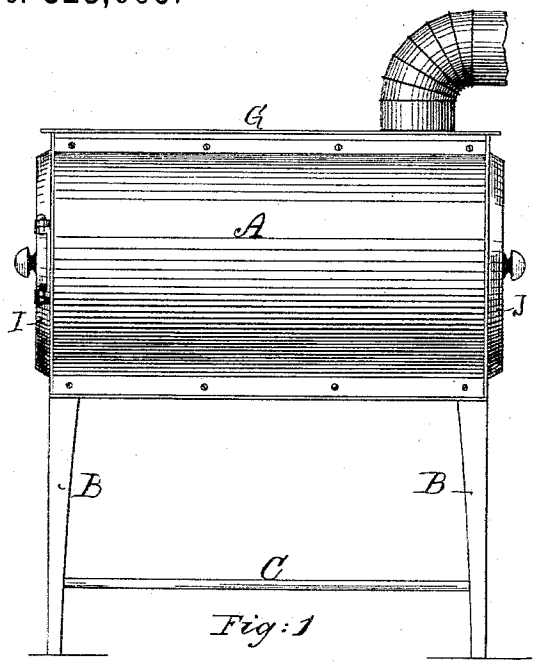


Fig: 1

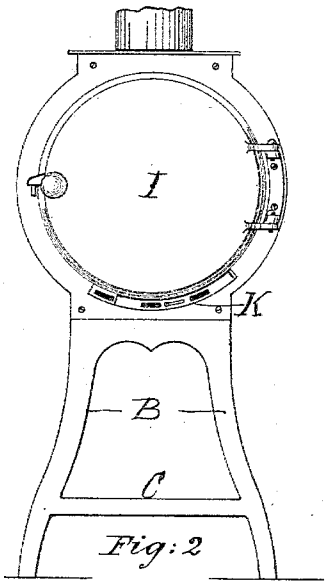


Fig: 2

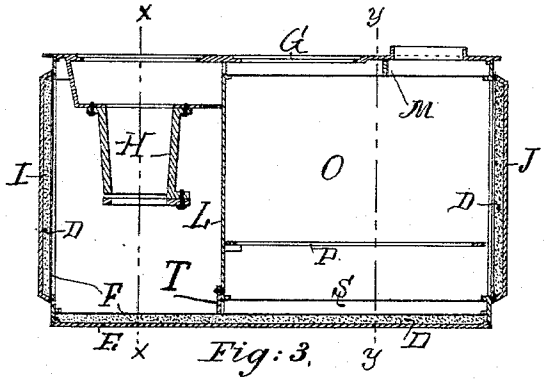


Fig: 3.

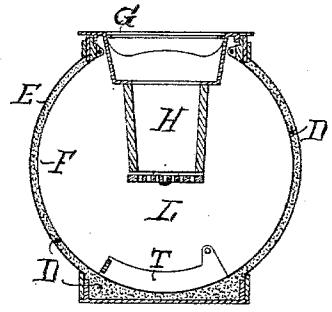


Fig: 4

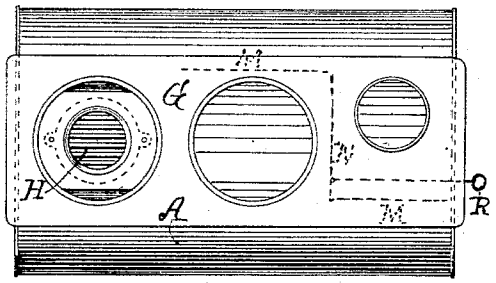


Fig: 5.

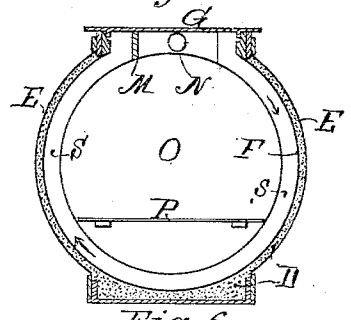


Fig: 6

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UNITED STATES PATENT OFFICE.

EDWARD F. GORDON AND HORATIO HOBBS, OF CONCORD, NEW HAMPSHIRE.

SUMMER COOKING-STOVE.

SPECIFICATION forming part of Letters Patent No. 323,665, dated August 4, 1885.

Application filed August 14, 1884. (No model.)

To all whom it may concern:

Be it known that we, EDWARD F. GORDON and HORATIO HOBBS, citizens of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have jointly invented certain new and useful Improvements in Summer Cooking-Stoves; and we do hereby declare that the same are fully described in the specification and illustrated in the accompanying drawings.

The object of this invention is to provide an acceptable non-radiating summer cooking-stove as a substitute for the ordinary cook-stove and the more objectionable oil and gasoline stoves, all of which classes radiate (and therefore waste in hot weather) a large percentage of the heat generated by combustion.

The invention consists in certain peculiarities of construction and combinations of parts, hereinafter pointed out and claimed. The combination, form, and arrangement shown are, however, original with us, and are advantageous in respect to convenience in use and to economy in fuel, and are therefore claimed as a part of our invention.

The drawings represent the best form in which we have contemplated applying our invention, Figures 1 and 2 being, respectively, side and end elevations of our improved stove mounted on legs and provided with a horizontal shelf connecting them. Fig. 3 is a longitudinal section of the stove without legs. Figs. 4 and 6 are transverse sections of the same on the lines *x* and *y*, and Fig. 5 is a top plan.

In the drawings, A is the body of the stove, preferably in the form of an elongated drum having a flat top and bottom. This drum may be mounted upon legs B, connected horizontally by a shelf, C, as in Figs. 1 and 2; or the legs may be omitted, as in the sectional views, and the stove placed upon any suitable support.

The non-conducting filling or packing D is shown in Figs. 3, 4, and 6 as interposed between the outer metallic shell, E, and the inner one, F, which are perhaps an inch apart. For this packing we prefer the substance known as "mineral wool" or "mineral conton," which is both non-conducting and incombustible, and has the merit of being inexpensive and easily worked. With this material we fill all the spaces between the shells E and F, thus furnishing a packed double wall for the sides, bottom, and both ends of the stove.

G is the cast-iron top of the stove having two griddle-holes and a flue-opening in it.

H is the fire-pot, with a swinging grate at its bottom, and in the space below this we place an ash-pan, which may be reached by opening the end door, I. Fuel—either coal, coke, or hard wood—is supplied to the fire-pot through the griddle-hole, and the draft is regulated by a slide, K, Fig. 2. L is a transverse cast-metal partition separating the fire-pot from the oven O. The oven-door J is shown at the rear end. In the oven is a grate or rack, P.

We form the oven as a sheet-metal cylinder, (shown in Figs. 3 and 6,) its ends being the partition L and the rear door, J. The caloric current passes entirely around this oven in the annular space between it and the packed walls, a guard or fender, M, and damper N (shown in dotted lines in Fig. 5) preventing its direct course to the flue. The damper may be turned down to open a direct draft by a rod, R, Fig. 5.

The annular space for the caloric current is indicated by the letter S. Soot and ashes may be dislodged from its walls by a wire or flexible rod or brush introduced from above. A pivoted door, T, permits removal of such matter at the bottom through the ash-space. (See Fig. 4.)

Many advantages follow the construction shown. The nearly cylindrical form of the stove-body with the annular flue around the oven utilizes the fuel, heats the oven very speedily, and promotes the draft by giving the caloric current an unobstructed course in curved lines, instead of being frequently deflected at right angles, as in the usual form of stoves; and as the current, in passing entirely around the oven, moves forward from the fire-pot to the funnel, it takes a generally helical direction, and does not deposit soot and ashes to such an extent as in the common rectangular stoves. The fire-pot is surrounded by a hot-air space, and is detached from the transverse partition, so that the entire end of the oven is heated quite uniformly by radiation, and not intensely at one point by conduction, as in

stoves having the fire-pot in contact with the oven-wall.

We claim as our invention—

1. A cooking-stove having unpacked top and griddle-holes in its top, and the remainder of its body packed to resist radiation by a filling of mineral wool or other non-conducting material between two metallic shells, as set forth.

2. A packed cooking-stove having an inclosed fire-pot near one end, with an ash-door in said end, an interior oven with its door at the opposite end of the stove-body, and an annular space for the caloric current between the oven and the packed outer wall, as set forth.

3. A stove having a substantially cylindrical body with a flat top, a fire-pot at one end, an interior oven, and a flue leading from the fire-pot entirely around the oven to the funnel, so as to give a generally helical movement to the caloric current from front to rear of the stove, substantially as set forth.

4. A stove having a substantially cylindrical body with a flat top, a fire-pot at one end, and an interior oven, a flue leading from the fire-pot entirely around the oven to the funnel, and a covered opening from said flue through the partition which separates it from the ash-pit, to provide for cleaning said flue, substantially as set forth.

In testimony whereof we hereto affix our signatures in presence of two witnesses.

EDWARD F. GORDON.
HORATIO HOBBS.

Witnesses:
A. C. OSGOOD,
NATHANIEL E. MARTIN.