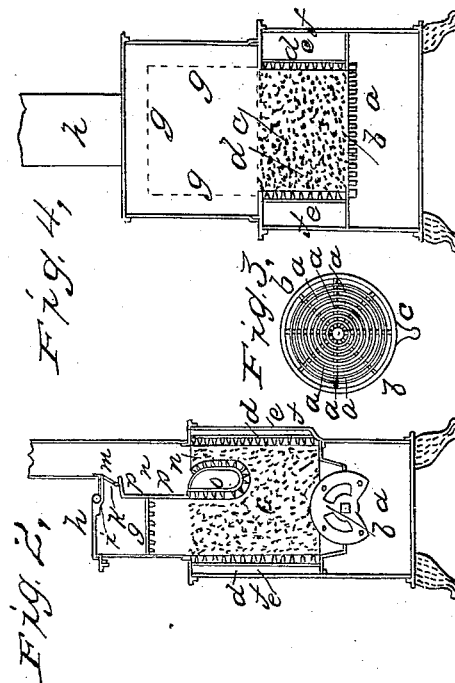
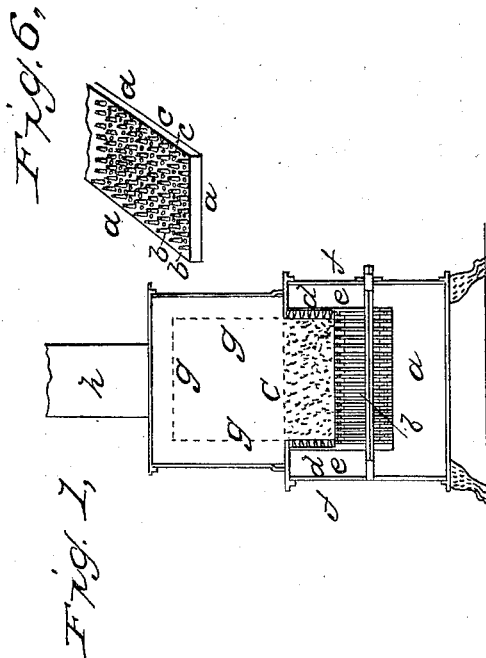
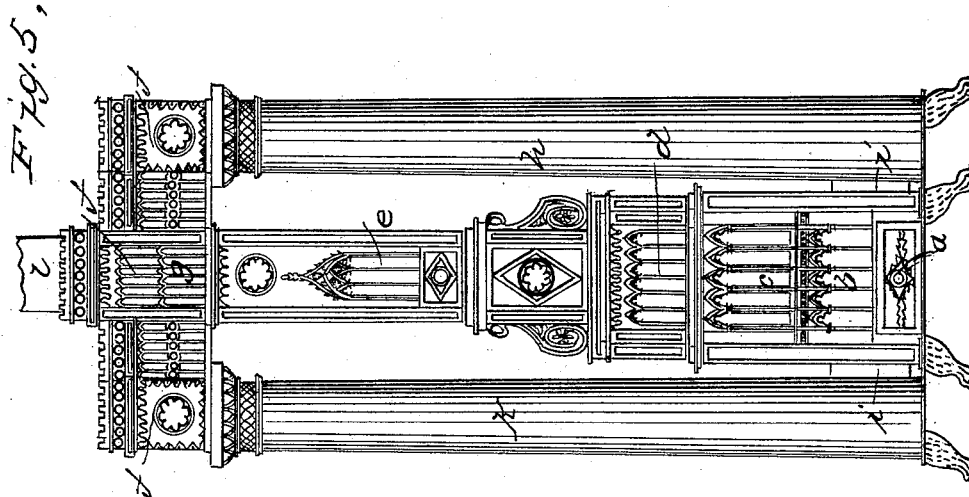


E. NOTT.
Magazine Stove.

No. 1,260.

Patented July 26, 1839.



UNITED STATES PATENT OFFICE.

ELIPHALET NOTT, OF SCHENECTADY, NEW YORK.

IMPROVEMENT IN NOTT'S STOVE.

Specification of Letters Patent No. 1,260, dated July 26, 1839.

To all whom it may concern:

Be it known that I, ELIPHALET NOTT, of Schenectady, New York, have invented Improvements in Nott's Coal-Stoves, of which the following is a specification.

Figure 1, longitudinal section of stove, having an angular chamber of combustion and its inlet for fuel in front; *a*, ash pit; *b*, rotary cylindric grate; *c*, chamber of combustion; *d d*, "brick plate" side walls; *e e*, space between "brick plate" walls and outer covering; *f f*, outer covering; *g g g*, door for fuel; *h*, flue; Fig. 2, transverse section of stove, having a "brick plate" chamber of combustion, an inlet for fuel at top, and an internal flue for flame; *a*, ash pit; *b*, rotary cylindric grate; *c*, chamber of combustion; *d d*, "brick plate" side walls; *e e*, space for air to circulate; *f f*, outer covering; *g*, "brick plate" follower; *h*, lid; *i*, arm on lid; *k*, arm on ventilator *m*, against which *i* strikes as *h* shuts and by striking raises and shuts *m*, the ventilator; *n n*, internal flue for flame; *o*, hollow "brick plate" prism forming lower front of flue to be used if preferred in place of a solid brick, as is now in use; *p p*, iron plate forming upper front of flue to be used if preferred in place of solid brick now in use; Fig. 3, rotary flat grate (to be used at *b* in Fig. 4); *b b*, outer bar or rim; *a a a*, circular grate bars; *c*, removable or stationary handle projecting through a slit in the crust of the stove for rotating the same; Fig. 4, longitudinal section of stove having a cylindric "brick plate" chamber of combustion and a flat horizontal rotary grate; *a*, ash pit; *b*, rotary grate; *c*, chamber of combustion; *d d*, brick plate cylinder forming chamber of combustion; *e e*, space for air to circulate; *f f*, outer covering; *g g g*, feed door; *h*, flue; Fig. 5, elevation of Fig. 2; *a*, ash pit; *b*, lower opaque part of chamber of combustion; *c*, illuminated sash covering front grate; *d*, second story; *e*, cast iron flue; *f f f*, entablature; *g*, valve in an oblique position by which the flame when shut is turned down *h* or when open passed direct to *l h* down flue; *i i*, flue from *h* to *k*, an up flue; *l*, escape pipe; Fig. 6, a specimen of "brick plate;" *a a*, outer margin; *c c*, spiculæ; *b b*, holes between spiculæ.

The improvements exhibited in the foregoing drawings consist, 1st, in connecting (as exhibited at *h*, *i*, *k*, and *m*, Fig. 2) the cover of the stove with its ventilator in such

manner that both shall open and shut together, by projecting from the cover *h*, arms *i*, that interlock with projections *k* on the ventilator *m*, or by any other device preferred; 2nd, in forming the chamber of combustion with "brick plates," that is with plates covered with spiculæ, or pierced with holes at small distances, or both covered with spiculæ and pierced with holes, as exhibited at *d d*, Figs. 1, 2, 4, and 6, the interstices being filled with clay or clay and sand and the fire face thereof being washed with a solution of alkali and salt, it being understood that for the purpose of holding the clay or composition lining firmly in its place the spiculæ should be a little inclined to or from each other, or if parallel to each other then inclined to the plane of the face from which they are projected, and also that the spiculæ should vary in size and length according to the thickness of the brick plate in contemplation, and it being also understood that said "brick plate" may constitute the only side walls or that an outer covering may be added and immediately adjoin the inner one or adjusted at such distance therefrom as to allow the free circulation of air between the two, as exhibited at *e e*, Figs. 1, 2 and 4; and it is also to be understood that the "brick plate" chamber of combustion may be either a hollow cylinder and cast solid or it may be cast in separate "brick plates" either plane or cylindric, and put together, if plane, in such manner as to form an angular hollow prism, as exhibited at *d d*, Figs. 1 and 2, or if cylindric in such manner as to form a hollow cylinder, as exhibited *d d*, Fig. 4; 3rd, in making use of a hollow "brick plate" cylinder or prism in place of solid brick for the front of the internal flue, as seen at *o*, Fig. 2, said brick plate being constructed or made, as in the flat plate, with spiculæ, or holes, to retain the fire clay or composition; 4th, in making use of the "brick plate" for the follower where one is in use, as seen at *g*, Fig. 2, said follower being in other respects similar to that formerly patented by me; 5th, in making use of a movable grate for sifting through ashes or emptying residuum in combination with a "brick plate" chamber of combustion, which grate may be cylindric and have a vertical rotary motion, as exhibited *b*, Fig. 2, or flat and circular, as exhibited *b b*, Fig. 3, and have a horizontal rotary motion, as exhibited in place at *b*,

Fig. 4,—or it may be flat and angular and have a horizontal slide motion back and forward; 6th, in making use of an illuminated front in combination with a "brick plate" chamber of combustion, as seen at *c*, Fig. 5; 7th, in making use of exterior vertical columns or pilasters connected at bottom for conveying the flame from the entablature to the floor and back again in combination with a "brick plate" chamber of combustion, as exhibited at *f f*, *h h*, *i i*, Fig. 5.

Claims:

1. I claim the connecting of the cover and ventilator in stoves in such manner that the

two shall open and shut together as above set forth.

2. The making use of "brick plates" for the walls of chambers of combustion in stoves and furnaces, whether angular or cylindric constructed as above set forth.

3. The making use of a hollow "brick plate" prism for the lower front of the internal flue as above set forth.

ELIPHT. NOTT.

Witnesses:

THOS. P. JONES,
CLEMT. T. FOOTE.