(No Model.)

M. GRISWOLD, Jr. & D. SHIELDS.

GAS STOVE.

No. 601,039. Patented Mar. 22, 1898.

Fig. 1.

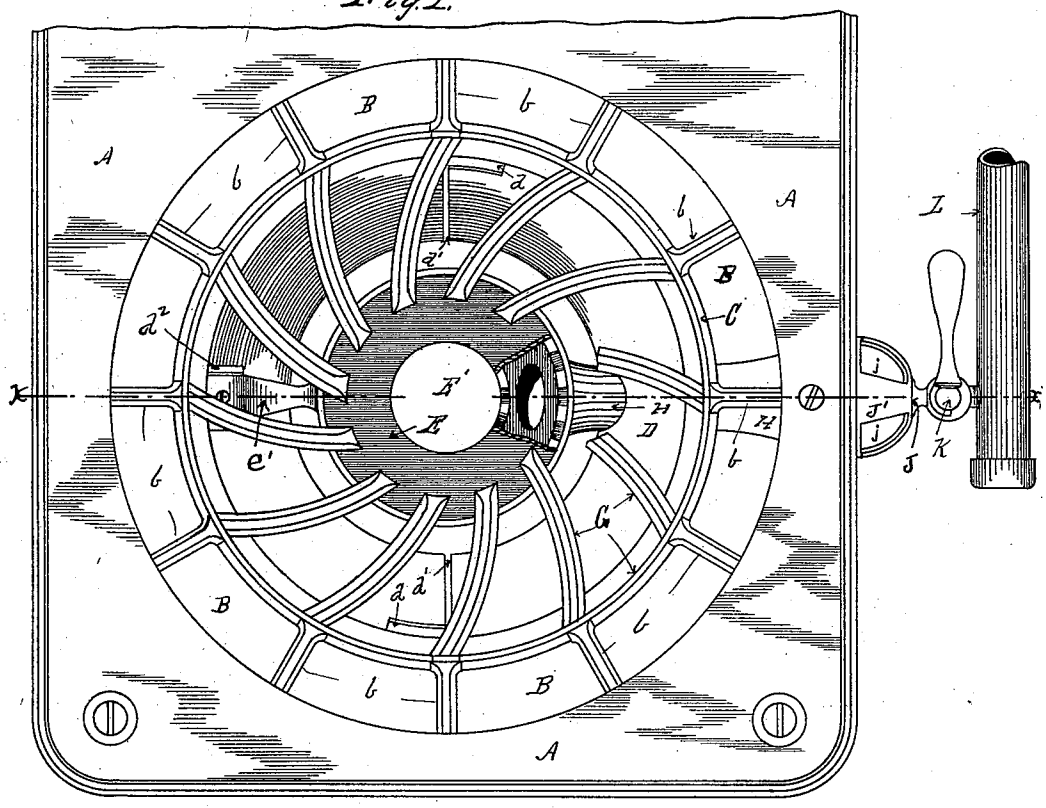


Fig. 2.

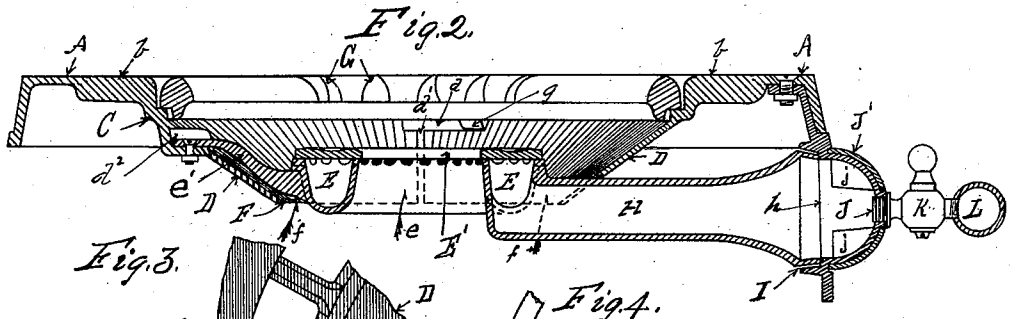


Fig. 3.

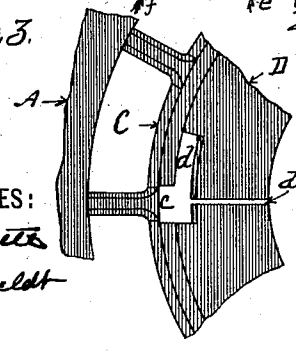
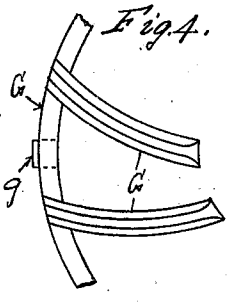


Fig. 4.



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MATTHEW GRISWOLD, JR., AND DAVID SHIELDS, OF ERIE, PENNSYLVANIA, ASSIGNORS TO THE GRISWOLD MANUFACTURING COMPANY, OF SAME PLACE.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 601,039, dated March 22, 1898.

Application filed February 2, 1897. Serial No. 621,672. (No model.)

To all whom it may concern:

Be it known that we, MATTHEW GRISWOLD, Jr., and DAVID SHIELDS, citizens of the United States, residing at the city of Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Gas-Stoves; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

This invention relates to improvements in gas-stoves; and it consists, substantially, in constructing a shield around the burner in such shape that it not only protects the burner from lateral drafts of air, but at the same time operates not only as a deflector for the air-currents around the periphery of the burner, but prevents the heat therefrom from being radiated downward, and in constructing the burner and grate so that they can be readily removed from the stove when desired. These features of the invention, together with others hereinafter described, are illustrated in the accompanying drawings, in which—

Figure 1 is a top or plan view of a section of a gas-stove top embodying this invention. Fig. 2 is a vertical section of the same on the line *x x* in Fig. 1. Fig. 3 is an enlarged detail of a portion of the stove-top and shield, showing the slot in which the removable grate is secured. Fig. 4 is an enlarged detail of a portion of the removable grate, showing the lug thereon for engaging in the slot shown in Fig. 3.

In the construction of this invention thus illustrated, A is the stove-top, cast with a circular opening B, in which are arms *b*, connecting with an annular ring C, and to the under edge of this ring C and preferably cast integral therewith there is a shield or deflector D, which inclines downward and inward to a point nearly coincident with the bottom of the burner E, leaving, however, an annular space or opening F between the lower edge of the shield or deflector D and the periphery of the burner E to allow the air to pass up around the periphery of the burner, as clearly illustrated by the arrows *f f* in Fig. 2.

The ring C, it will be observed, is cast upon the under surfaces of the inner ends of the arms *b*, so as to admit of a round grate G being placed thereon, so that the upper surface thereof will be on a level with the stove-top A and the arms *b*, as is clearly shown in Fig. 2. In opposite sides of the ring C are vertical slots *c*, which extend down into the upper edge of the shield or deflector D, and joining thereto are lateral extensions *d* of said slot in the upper edge of the shield or deflector D, and on the ring forming the periphery of the grate G are lugs *g*, adapted to pass down through the slot *c* and as the grate G is rotated pass into the lateral extensions *d* of said slots, so as to firmly hold the grate G from being lifted out of place, these features being clearly illustrated in Figs. 3 and 4. Through the shield D, at each side, there are also cut narrow slits *d'*, which substantially separate the shield D into two halves to provide for the expansion and contraction thereof when heated and cooled and prevent the breakage of the parts from undue strain thereon.

The burner E is made circular in form and provided with a central opening E' therein, through which air can be supplied to the central part of the flame, as illustrated by the arrow *e* in Fig. 2.

To one side of the burner E is secured an arm *e'*, adapted to drop into a pocket d^2 in the shield or deflector D, and on the opposite side of the burner E there is an inlet-pipe H, the outer end *h* of which fits into a socket I on the inner end of an air and gas mixer J, secured to one side of the stove, so that by raising the arm *e'* out of the pocket d^2 the burner can at once be removed from the stove. The air and gas mixer J is of the usual and ordinary construction, except that it is provided with a rotating shield J', which may be rotated so as to increase or diminish the size of the air-inlet openings *j*, as may be desired. This air and gas mixer is also supplied with an ordinary shut-off cock K between it and the gas-supply pipe L in the usual manner.

Having thus fully described this invention,

so as to enable others to construct and utilize the same, what we claim as new, and desire to secure by Letters Patent of the United States, is—

The combination in a gas-stove, of a top having a circular opening therein, a ring inside of said opening and arms between said ring and the margin of said opening, a removable grate seated in said ring and adapted to interlock therewith, a shield or deflector secured to said ring and inclining downward and inward therefrom, and an annular gas-fuel burner under said grate and within said deflector, substantially as and for the purpose set forth.

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

MATTHEW GRISWOLD, JR.
DAVID SHIELDS.

Witnesses:
FRED EINFELDT,
THOS. C. MILLER.