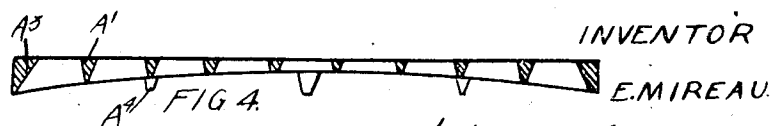
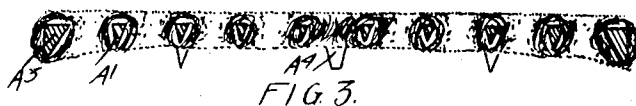
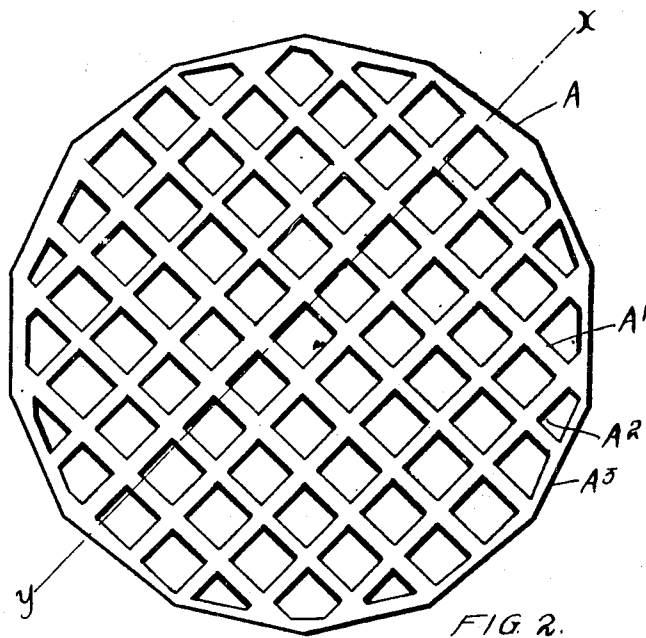
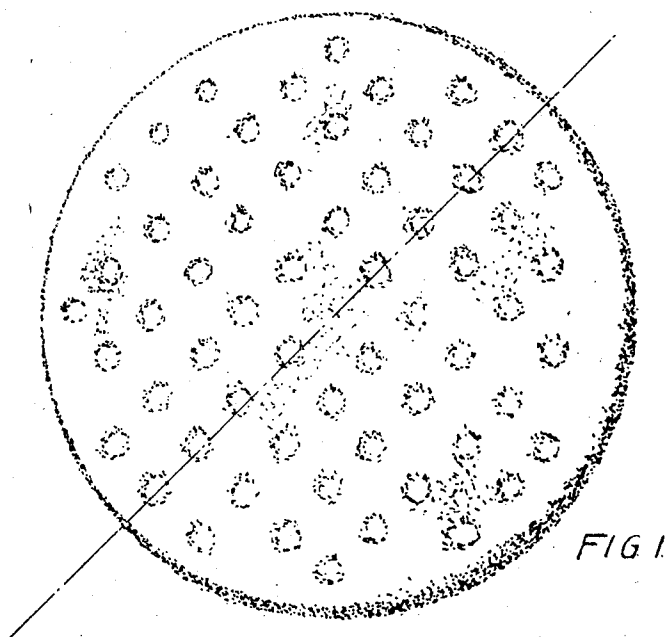


1,022,436.

Patented Apr. 9, 1912.



WITNESSES

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UNITED STATES PATENT OFFICE.

ERNEST MIREAU, OF TORONTO, ONTARIO, CANADA.

FLAME-DEFLECTOR.

1,022,436.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed November 9, 1911. Serial No. 659,366.

To all whom it may concern:

Be it known that I, ERNEST MIREAU, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have
5 invented certain new and useful Improvements in Flame-Deflectors, of which the following is the specification.

My invention relates to improvements in gas purifiers and savers for gas stove and
10 furnace burners, and the object of the invention is to provide a device of this class, which will concentrate and retain the heat in immediate proximity to the burner and purify the gas, so that all odor is eliminated
15 and perfect combustion insured.

My invention consists of a lattice-like grid preferably of regular form with openings of the same size and so arranged that there is an opening in the center of the grid, the bars of the grid being tapered from top
20 to bottom and the underside of the grid being of concave form and provided with suitable depending legs intermediate of the diameter of the grid and designed to form a
25 support for the grid upon the burner, the grid being wrapped entirely throughout the bars with asbestos fiber and leaving holes for the passage of the heat and the parts being otherwise constructed and arranged as
30 hereinafter more particularly explained.

Figure 1, is a plan view showing my improved gas purifier for gas stove burners. Fig. 2, is a view of the grid with the asbestos
35 fiber removed. Fig. 3, is a section through A—B Fig. 1. Fig. 4, is a section through x—y Fig. 2.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the grid, which is made in lattice-like
40 form as indicated having the bars A' with a suitable bounding edge bar A². It will be noticed that the bars are so arranged that there is an opening in the center of the grid. The bars of the grid are also formed tapered
45 from top to bottom, that is have a flat top and the bottom has a comparatively narrow edge. The grid is also formed so that the bars are shallow in the center gradually decreasing from the outer edge to the center,
50 that is to say the grid at the underside is of concave form as indicated clearly in Figs. 3 and 4. The concavity thus formed provides a pocket which prevents lateral escape of
55 the heat. Legs A⁴ extend down from the grid within the concave portion and are de-

signed to help to form a support for the grid on the burner.

It will be seen on reference to Figs. 1 and 3 that the grid is wrapped and the material used is preferably asbestos fiber which will
60 get red hot without deteriorating. Such fiber is suitably wound, wrapped or otherwise fixed to the grid.

It is particularly desirable that the central opening should be closed and for this
65 reason it is entirely filled with asbestos fiber, but the remaining openings are for the most part open. The central opening is closed, so that the burning gases may be deflected from the center outwardly as the
70 tendency in ordinary gas burners is to concentrate at the center whereas my purpose in my invention is to deflect the gases in
75 such a manner that they will when burning impart practically even heat over the entire surface of the purifier. The portion underneath serves to effect this deflecting and also
80 in practice, I find, enables the gases to be thoroughly purified, so that there is absolutely no odor and perfect combustion is assured and consequently the heat intensified,
and a great saving is effected.

What I claim as my invention is:

1. In a gas purifier and saver for stove burners, a grid of lattice form having a suitable
85 binding edge, said grid being of circular shape and of uniformly increasing thickness from its center toward its edge forming a pocket.

2. In a gas purifier and saver for gas
90 stove burners, a grid of lattice form having a suitable bounding edge, the bars of the grid being tapered from top to bottom as and for the purpose specified.

3. In a gas purifier and saver for gas
95 stove burners, a grid of lattice form having a suitable bounding edge, the bars of the grid being tapered from top to bottom, and the bottom of the grid being in concave form as and for the purpose specified. 100

4. In a gas purifier and saver for gas stove burners, a grid of lattice form having a suitable bounding edge, the bars of the
105 grid being tapered from top to bottom, and the bottom of the grid being in concave form and provided with suitable legs as and for the purpose specified.

5. The combination with a grid of lattice form having one of the openings disposed centrally, of a non-combustible and heat ra- 110

diating covering for the same having the material thereof extending over the central opening and leaving openings over the remaining openings of the grid as and for the
5 purpose specified.

6. In a device of the class described, a grid of lattice form, having a central opening and uniformly arranged openings located between said central opening and the

outer edge of the grid, said central opening 10 being plugged and said uniformly arranged openings being partially closed by asbestos fiber.

ERNEST MIREAU.

Witnesses:

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