(No Model.)

W. W. GOODWIN.

GAS COOKING STOVE OR RANGE.

No. 265,407. Patented Oct. 3, 1882.

Fig. 2.

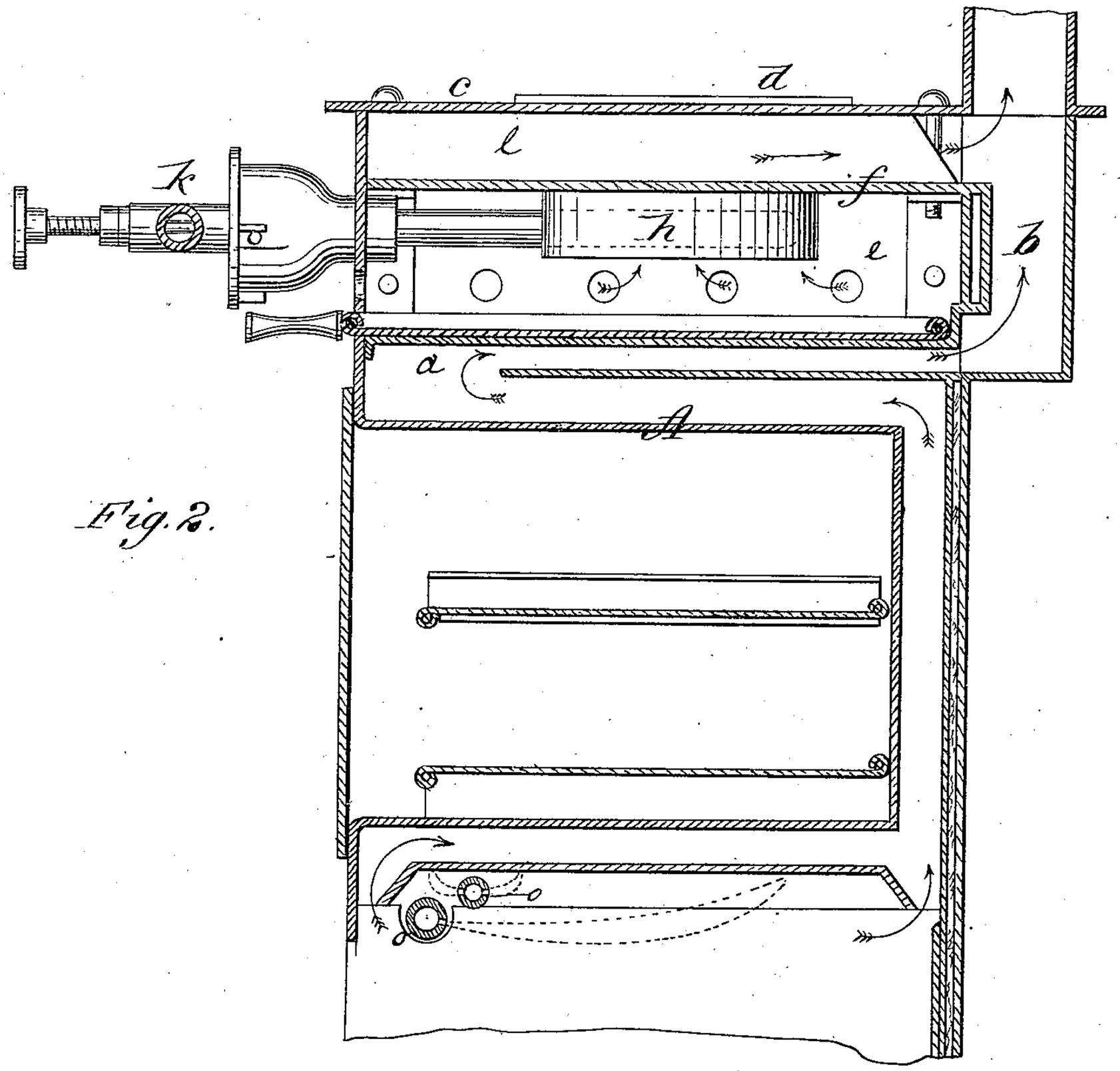
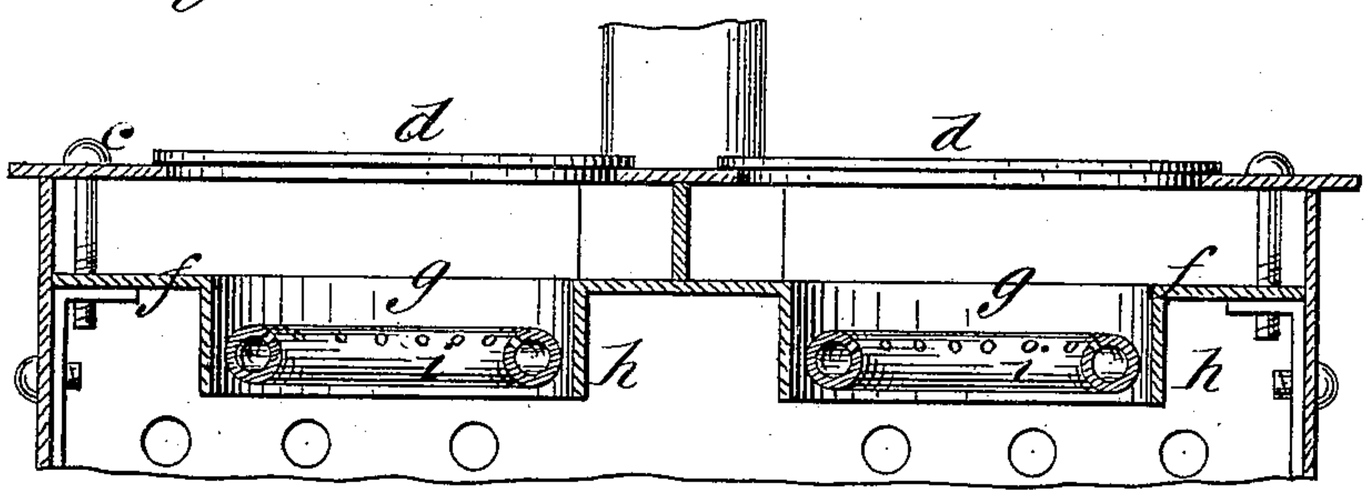


Fig. 1.



WITNESSES:

Donn Tortchell.

B. G. Underwood.

INVENTOR:

W. W. Goodwin.

BY Munn & Co.

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM W. GOODWIN, OF PHILADELPHIA, PENNSYLVANIA.

GAS COOKING STOVE OR RANGE.

SPECIFICATION forming part of Letters Patent No. 265,407, dated October 3, 1882.

Application filed June 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. GOODWIN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Gas Cooking Stoves or Ranges, of which the following is a full, clear, and exact description.

The object of my improvements is to construct gas cooking stoves and ranges in such a manner as to give the greatest facility and convenience for cooking operations, and at the same time insure the escape of the waste products of combustion to the chimney or escape-flue.

The invention consists in the peculiar construction and arrangement of the top plates of the stove and the burners, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional front elevation of a gas cooking-stove of my improved construction, and Fig. 2 is a transverse section of the same.

The body of the stove is of the construction shown in the Letters Patent granted to me December 20, 1881, No. 251,215.

A represents the top plate of the oven, over which the products of combustion from the oven-burners *o* pass through the flue *a* to the escape-pipe *b* at the back part of the stove.

c is the top plate of the stove, provided with circular apertures and covers *d*, as usual.

Above the flue *a*, through which the products of combustion from the lower burner pass, is a chamber, *e*, projecting into the escape-pipe and forming two passages for the products of combustion of the lower and upper burner, hereinafter described. The top plate *f* of the chamber *e* is provided with apertures *g* beneath the openings in the top plate *c*. The space *l* between these two plates *c f* communicates at the back of the stove with the escape-pipe *b*. The plate *f* is formed at the edges of its openings *g* with depending flanges *h h*, within which are the gas-burners *i*, to which the gas is supplied by a pipe extending through the front plate of the stove. These gas-supply pipes are provided with suitable valves, as shown at *k*, for admission of pure gas or gas mixed with air, as described in my Letters Patent aforesaid.

It will be seen that the gas-burners are surrounded by a casing that prevents the heat from escaping directly to the flue *b* beneath the plate *f*, or, in other words, a downward draft is prevented by the flanges of the plate *f*, which inclose the burners. The burners being directly below the openings in the top plate *c*, and the openings being adapted for receiving sauce-pans, steamers, and other utensils used in boiling and steaming, the heat is utilized to the greatest possible extent. At the same time there is no space left open for escape of the products of combustion into the room, and they will pass through the escape-flue *b*. The space between the two plates *c f* thus becomes a heating-chamber, *l*, distinct from the combustion-chamber and flue-passages in the lower part of the stove, having also a separate exit to the chimney.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the gas cooking-stove herein described, provided with the burners *o*, the flue *a*, the escape-pipe *b*, and the apertured top plate *c*, of the chamber *e*, forming two passages for the escape of the products of combustion in pipe *b*, and provided with an apertured top plate *f*, having depending circular flanges *h*, upper burners, *i*, and auxiliary heating-chamber *l*, the whole constructed, arranged, and operated in the manner set forth.

WM. W. GOODWIN.

Witnesses:

WM. W. LUYSTER,

C. SEDGWICK.