No. 698,988. Patented Apr. 29, 1902.

A. E. MINNS.

VENTILATOR FOR FIRE SURFACES OF RANGES.

(Application filed May 15, 1901.)

(No Model.)

Fig. 1

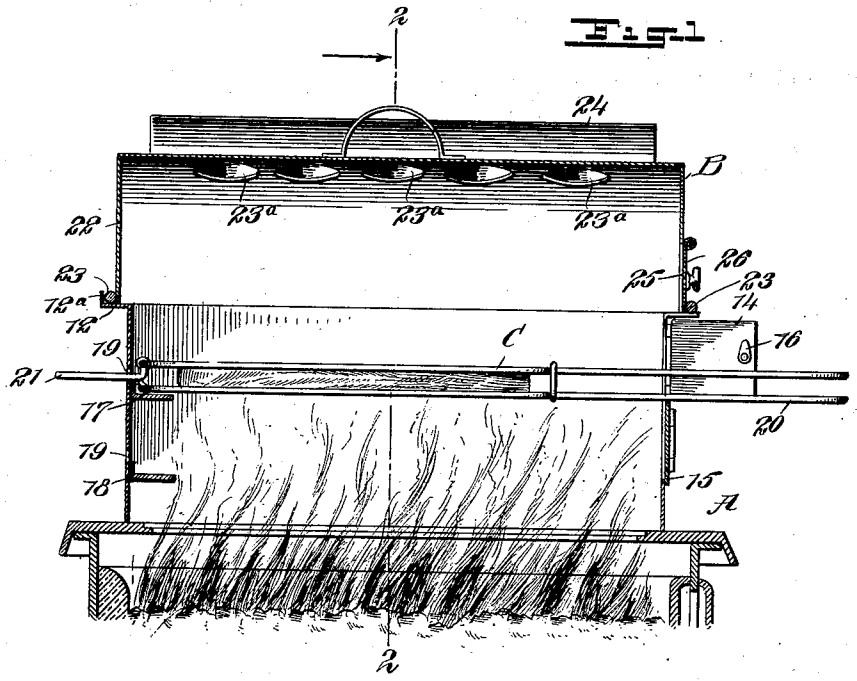
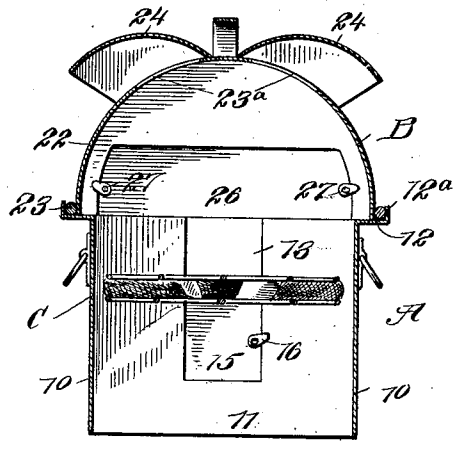


Fig. 2.



WITNESSES:

Geo. W. Naylor

J. Reed Hicks

INVENTOR

Arthur E. Minns

BY Munn & Co.

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ARTHUR EDWARD MINNS, OF BROOKLYN, NEW YORK.

VENTILATOR FOR FIRE-SURFACES OF RANGES.

SPECIFICATION forming part of Letters Patent No. 698,988, dated April 29, 1902.

Application filed May 15, 1901. Serial No. 60,332. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR EDWARD MINNS, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Ventilator for the Fire-Surfaces of Ranges, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a device to be placed upon the upper face of a stove or range over an opening made therein by the removal of one or more of the lids and the cross-piece when necessary, the construction of the device being such that in broiling, frying, or otherwise cooking food the smoke and odors will be compelled to pass down over the bed of fire and find an exit through the flue, thus effectually preventing odors and smoke from escaping into the room.

A further purpose of the invention is to provide means for turning a broiler in the device and holding it in desired position and to adjust the broiler for effective service to accommodate a high or a low bed of fire.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a vertical section through the top of a range or stove and through the device in position on said range or stove, and Fig. 2 is a transverse section taken practically on the line 2 2 of Fig. 1.

The device consists, preferably, of a base-section A and a cover-section B. The base A may be of any desired shape; but preferably it is of rectangular form, as shown, being of greater length than width, and the said base is open at top and bottom. This base is adapted to rest upon the upper face of a stove or range and is of such dimensions that it will inclose a line of openings covered by top plates and a division-plate or cross-piece, as is shown in Fig. 1. The base is preferably constructed of metal, although any fireproof material may be employed, and comprises sides 10 and end sections 11. At the top of the base-section A a horizontal outwardly-extending marginal flange 12 is formed, having an upwardly-extending marginal member 12^a, as is clearly shown in the drawings. The front end of the base-section is provided with an opening 13 at its center, the said opening being preferably vertically produced, and this opening may be closed by an upper door 14 and a lower door 15, both of the doors being provided with buttons 16 or their equivalents, so that the doors may readily be held closed when desired.

Horizontal shelves 17 and 18 are secured to the inner face of the rear end member 10 of the base-section A, and above each shelf 17 and 18 an aperture 19 is produced in the said rear end section of the base. A broiler C is used in connection with the base, and the handle 20 of the broiler when the upper door 14 is open will rest upon the lower door 15, and a pin 21, extending from the hinged portion of the broiler, will be passed through the upper aperture 19 at the back of the base.

The broiler occupies the position above described when the bed of the fire is high, and when the broiler is in position for use its hinged portion will practically rest upon the upper shelf 17, as shown in Fig. 1. When the broiler is to be turned, it is simply necessary to draw the broiler outward until the hinged portion thereof clears the shelf 17, whereupon the broiler may be turned and then pushed rearward to the position over the shelf 17, and the broiler will be held in this position as long as desired.

When the bed of the fire is low, the lower door 15 is opened, as well as the upper door 14, if desired, and the handle of the broiler will then rest upon the bottom wall of the slot 13 at the front end of the base, and the pin 21 will be made to enter the aperture 19 above the lower shelf 18. The manipulation of the broiler in its lower position is identical with that in its upper position.

The cover-section B consists, preferably, of an arched body 22, provided with a marginal strengthening-rib 23, which rib when the cover is in position on the base rests upon the upper marginal flange 12 of the base. The body 22 of the cover-section is provided with series of apertures 23^a, longitudinally arranged at each side of its upper central

portion, and over each series of apertures a hood 24 is secured, closed at its ends and open at its lower longitudinal portion, the hoods 24 being preferably curved in a downward and outward direction, as is especially shown in Fig. 2.

An opening 25 is made in the front end of the cover-section, and this opening is normally closed by a cover 26, preferably hinged in a manner to be swung upward and provided with suitable buttons 27. When the cover is on the base-section of the device and the stove-plates within the base have been removed, the smoke and odors from the meat broiling within the device will be forced down to the bed of the fire by the air rushing into the device at the top through the openings 23^a, and therefore all odors and smoke will be carried off to the flue, as the tendency of the incoming air will be entirely in direction of the flame or fire.

When articles are to be boiled, they may be placed in suitable pots, preferably with detachable handles, and these pots are located within the device. One or more openings are then provided in the top of the stove to permit the odor and steam to pass over the bed of the fire.

When articles are to be fried in a pan, the base-section may be dispensed with and the cover-section be brought in direct engagement with the top of the cover of the stove or range, the handle passing out through the opening 25, normally closed by the door 26.

It will be observed that this device is exceedingly simple, durable, and economic, that it may be used with comfort and to great advantage, and will keep the room entirely free from obnoxious odors and smoke consequent upon the cooking of meats and vegetables.

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

1. A ventilator for the fire-surfaces of stoves and ranges, consisting of a base-section open at its top and bottom and having an opening at one end, doors normally closing said opening, apertures at the opposite end one above the other, and a shelf below each aperture, the shelves being adapted to support one end of a broiler and the apertures to receive a pin at the said end of the broiler and which is of a length to permit the broiler to be rotated after it is moved from the shelf, and an arched cover for the base, said cover being provided with a series of apertures on each side of its longitudinal center and downwardly-curved hoods secured to said cover over said apertures, the lower portions of which hoods are open though otherwise closed, as described.

2. The combination, with a base-section open at its top and bottom and provided at one end with an opening, doors normally closing said opening, the opposite end of the base being provided with interior shelves one above the other and an aperture above each shelf, and a broiler adapted to rest at its hinged end upon one of the shelves and provided with a pin at said hinged end adapted to enter either one of the said apertures and of a length to allow the broiler to be rotated after its end is moved from the shelf, the handle of the broiler being adapted to extend through the opening normally closed by the doors, of an arched cover-section provided with a series of openings in its upper portion on each side of its longitudinal center, and downwardly-curved hoods extending over the said openings at the exterior of the body of the cover-section, which hoods are open at their lower portions though otherwise closed, and means for removably supporting the cover-section on the base-section, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARTHUR EDWARD MINNS.

Witnesses:

A. J. DOOHER,

ELLIE MULCAHY.