(No Model.)

W. WELLS.

OVEN FOR GASOLINE STOVES.

No. 386,676. Patented July 24, 1888.

Fig. 1.

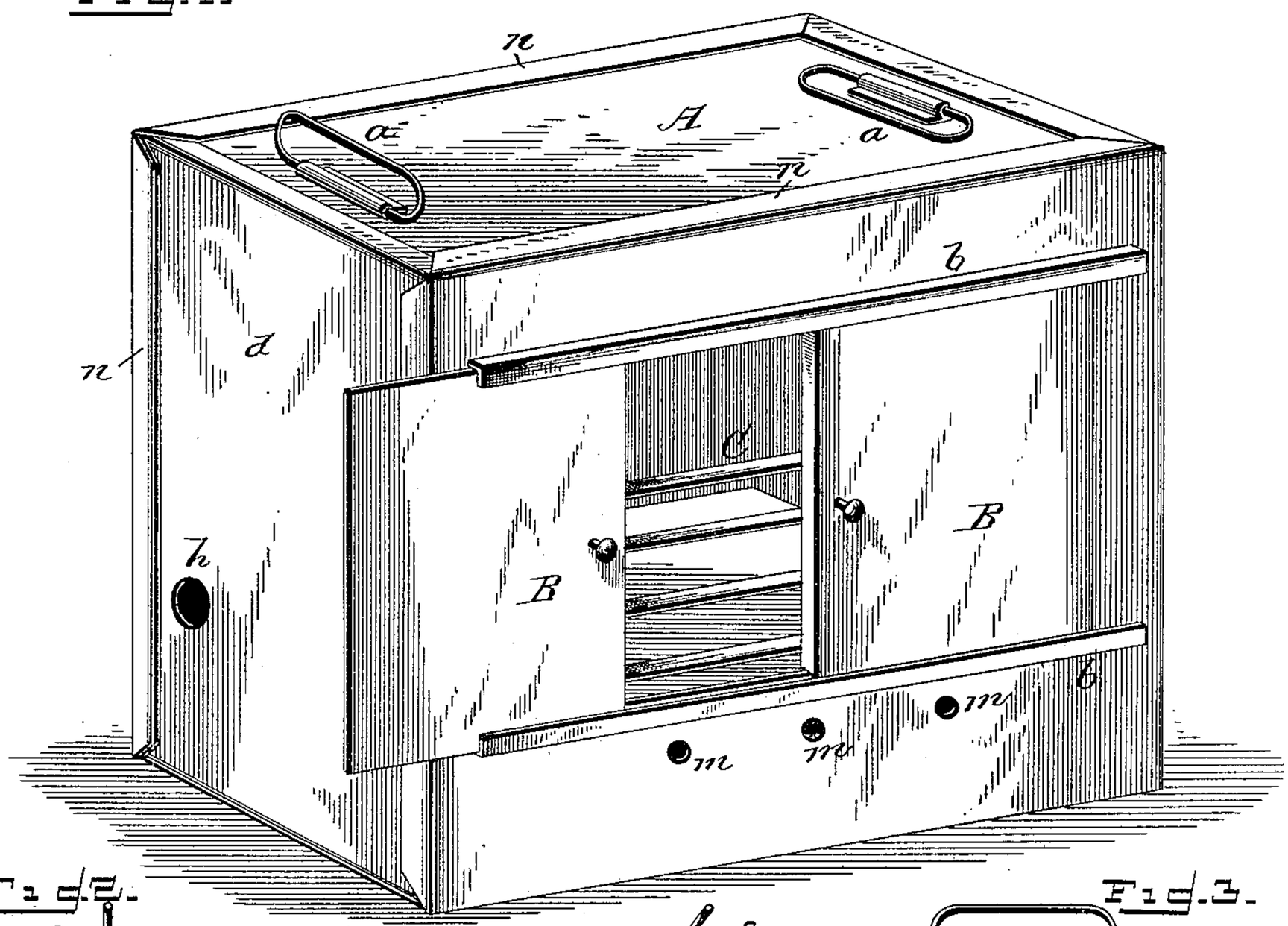


Fig. 2.

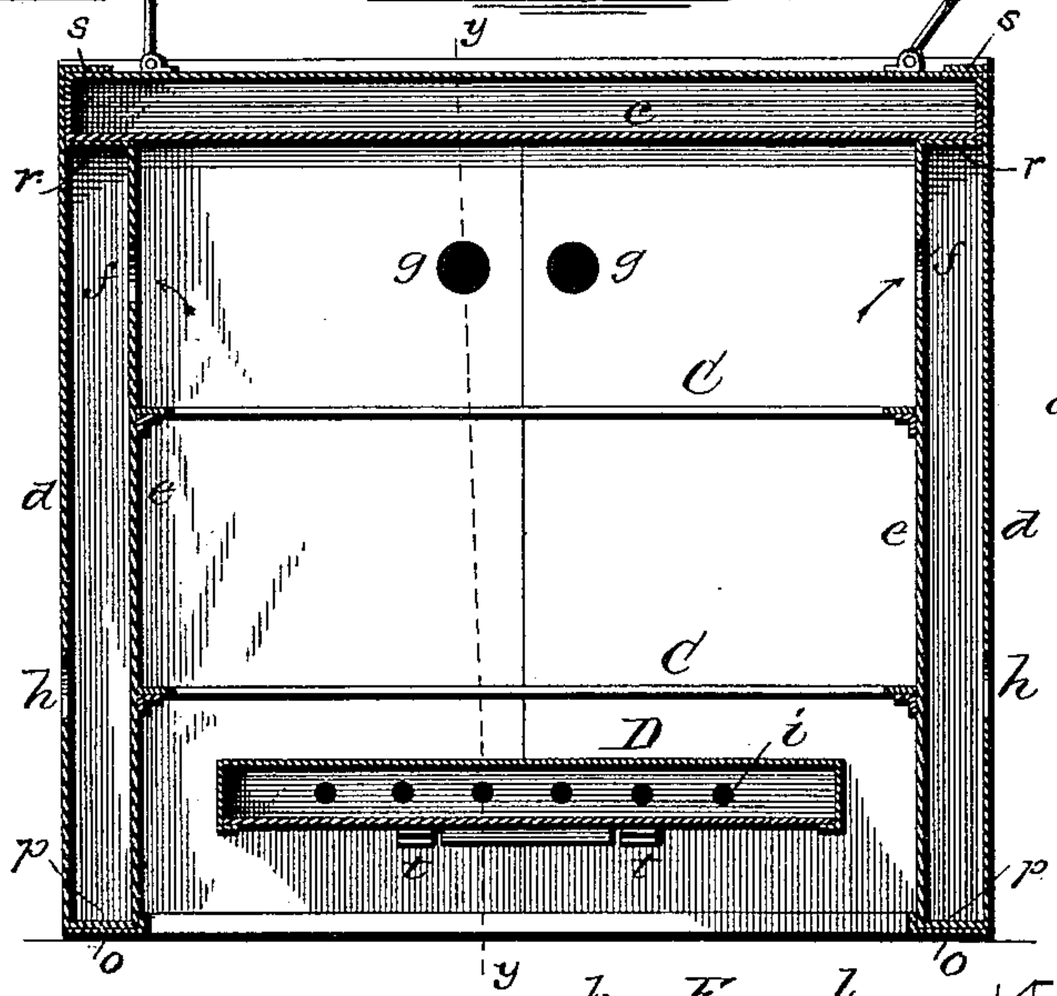


Fig. 3.

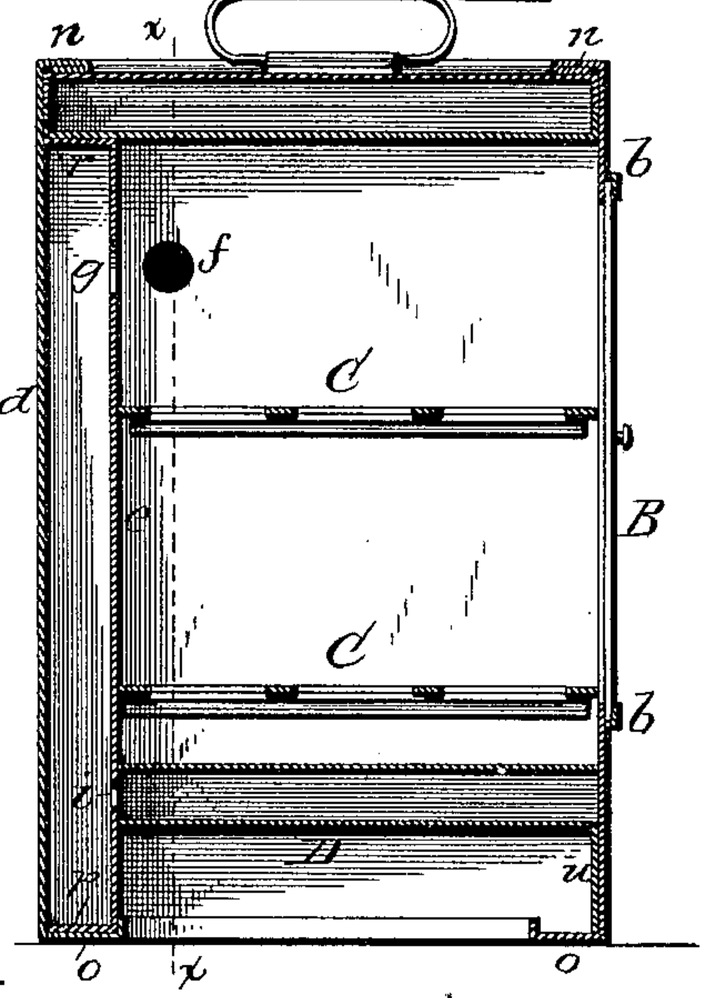
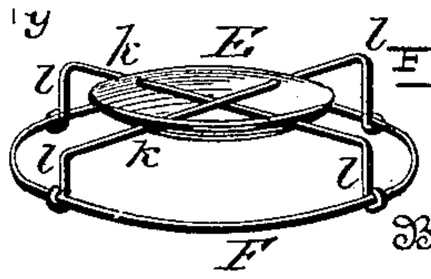


Fig. 4.



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UNITED STATES PATENT OFFICE.

WALTER WELLS, OF OSKALOOSA, IOWA.

OVEN FOR GASOLINE-STOVES.

SPECIFICATION forming part of Letters Patent No. 386,676, dated July 24, 1888.

Application filed February 23, 1888. Serial No. 265,016. (No model.)

To all whom it may concern:

Be it known that I, WALTER WELLS, a citizen of the United States, residing at Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Ovens for Gasoline-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of my improved oven adapted for gasoline-stoves; Fig. 2, a longitudinal section taken on line *x x* of Fig. 3; Fig. 3, a transverse section taken on line *y y* of Fig. 2, and Fig. 4 a detail view in perspective of the flame-deflector.

The present invention has relation to that class of ovens especially adapted for use on gasoline-stoves; and it consists in the details of construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents my improved oven provided with the sliding doors B, and at its top with handles *a*, the interior of the oven having the usual removable racks, C. The two sliding doors B are provided with suitable handles for operating them, and are connected to the front side of the oven by guides *b*, which are preferably formed from the same piece of metal that forms the front of the oven, said guides serving as tracks upon which the doors work.

The top of the oven is provided with an air-space, *c*, and the sides and top thereof have double walls *d e*, to form a space for the heat as it enters the interior of the oven to pass therefrom into the space through the openings *f*. The heat as it enters the interior of the oven passes in its course through the openings *f* in interior side wall, and thence out through the openings *h* in the outer side walls.

Within the oven, a suitable distance above the bottom thereof, is a hollow heating-plate, D, which communicates with the hot-air space at the back of the oven by means of perforations or openings *i* in the back inner wall. The deflector for the flame consists of a convex disk, E, which is provided with wire braces *k*, extending through the disk, as shown, said braces at their extremities being bent downwardly, as shown at *l*, and are connected to a ring, F. The ring F sets over the burner of the stove to retain it in position, and by the bend at the end of the braces *k* brings the disk the required distance above said ring to properly deflect and spread the flame, so that it will not be concentrated on any one portion of the hollow heating-plate D, but be distributed over its entire surface. When the deflector is in position and the oven placed over it on the stove, the heat from the flame will circulate around the interior of the oven, pass through the openings *f g* into the space formed by the double walls heretofore described, and after circulating around the space at the sides of the oven it will escape through the openings *h*. It will be noticed that the openings *h* are on a line with the lower one of the racks C, so as to keep as much heat from the bottom of the oven as possible and secure a uniformity of heat both at the top and bottom of the oven, thereby preventing the danger of baking too fast at the bottom rack.

In order to prevent the bottom of the oven from baking too fast, I also form the heating-plate D hollow, as shown, and make provision for the heat that is generated therein escaping, which is attained by means of the perforations *i* in inner back wall of the oven, the heat escaping from the hollow plate through said perforations into the space formed by the double walls, thence escaping through the perforations *g* at the top of the inner back wall into the top of oven, and finally escaping through the openings *h*. The perforations *m* are for the purpose of supplying air to create a circulation to carry the heat back and up to top of oven. These perforations in front of the oven may, if desired, be dispensed with and other means employed for supplying to the oven the required quantity of air to produce circulation.

The oven is what is termed a "knockdown" oven—that is to say, it can be taken apart for the purpose of transportation or for storing away when not required for use; and to provide for this I construct the sides at both the front and back with flanges *n*, which are bent over and against the walls *d* to hold them in

place. The sides above described are formed at their lower ends with inwardly-bent seats *o*, to form a support for the flanged ends *p* of the inner walls, *e*. The upper ends of these walls, like the lower ends, are bent outwardly to form a supporting-flange, *r*, for the hollow top which forms the air-space *c*, to retain the heat in the top of oven. The walls *d* of the oven have flanges *s*, which are bent over said top to secure it in place, the flanges *n* also being bent over the hollow top to secure it at its top and back sides. By bending these flanges outwardly the several sections of the oven may be taken apart and packed for transportation, the racks C being first removed, also the hollow plate D, the latter simply resting on the supports *t u*.

In an oven constructed as above described a very simple, practical, and effective oven is provided which will do its baking thoroughly and uniformly.

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

1. In an oven for gasoline-stoves, the combination, with the double walls thereof at the back and sides, as shown, the escape-openings, and the openings through the inner ones of the double walls, of the hollow heating-plate and the deflector, the former communicating with the air-space back of the oven, and the outer wall provided with perforations *m*, communicating with the space within the hollow plate, substantially as and for the purpose set forth.

2. An oven for gasoline-stoves, formed in detachable sections provided with passages for the heated air at the sides and back thereof, and communicating with the interior of the oven and with perforations *m*, in combination with the hollow heating-plate communicating with the passages, and a deflector consisting of a convex disk provided with wire braces and a connecting-ring, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WALTER WELLS.

Witnesses:
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