

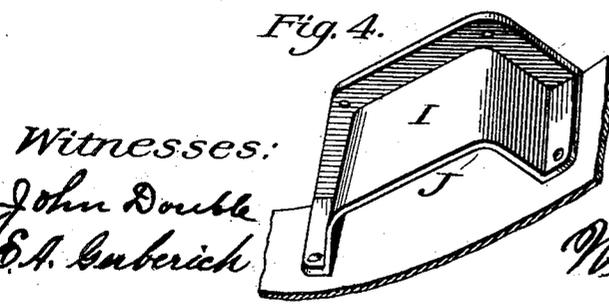
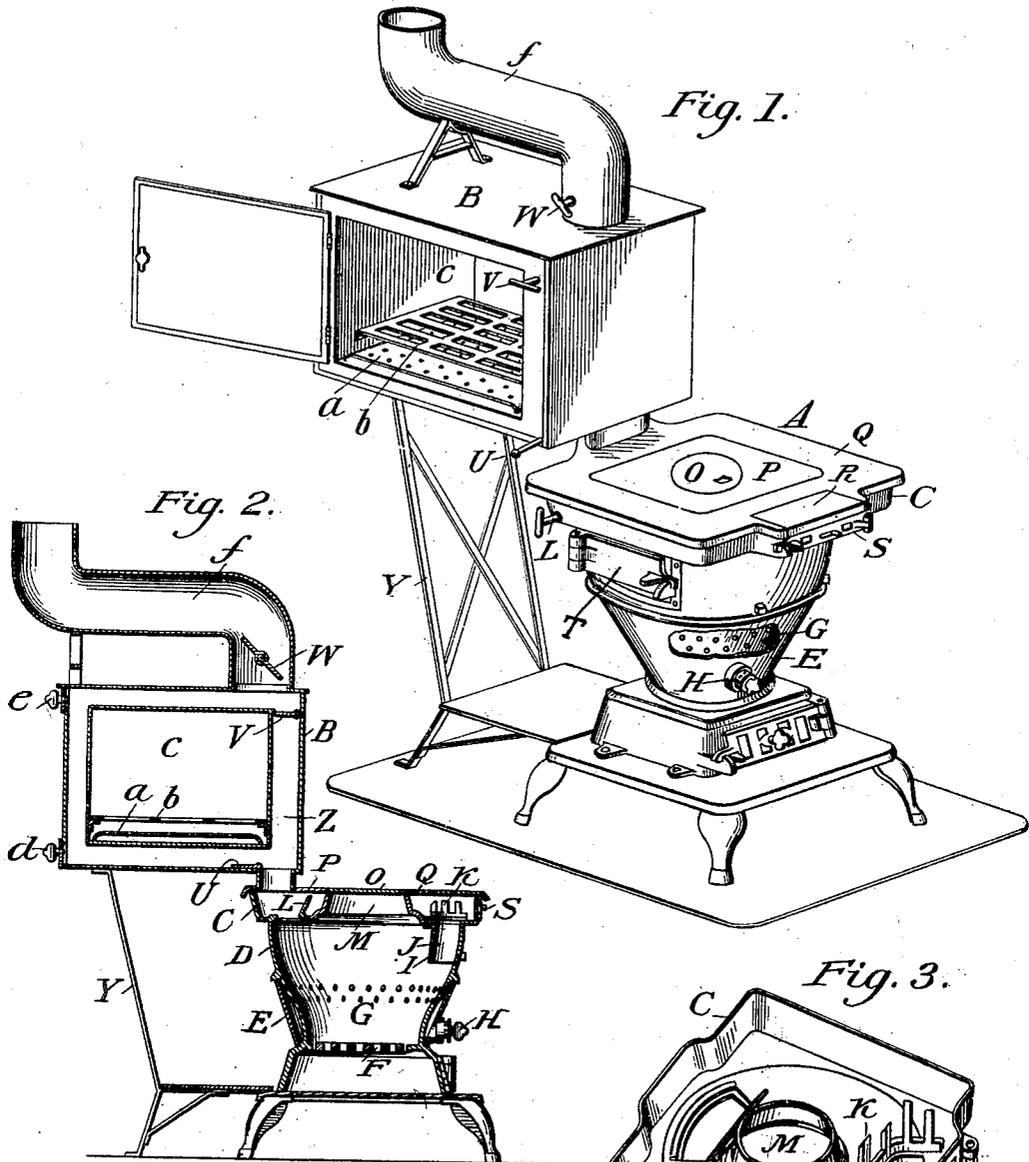
No. 697,091.

Patented Apr. 8, 1902.

W. F. KISTLER.
STOVE.

(Application filed June 14, 1901.)

(No Model.)



Witnesses:
 John Double
 E. A. Guberich

Inventor:
 Willoughby F. Kistler

UNITED STATES PATENT OFFICE.

WILLOUGHBY F. KISTLER, OF BURBANK, OHIO.

STOVE.

SPECIFICATION forming part of Letters Patent No. 697,091, dated April 8, 1902.

Application filed June 14, 1901. Serial No. 64,609. (No model.)

To all whom it may concern:

Be it known that I, WILLOUGHBY F. KISTLER, a citizen of the United States, residing at Burbank, in the county of Wayne and State of Ohio, have invented a new and useful improvement in Stoves, of which the following is a specification.

My invention relates to cooking-stoves; and it consists in a stove having beneath the top an annular chamber, a passage leading thereto, and a direct flue-opening opposite said passage, whereby a direct or indirect passage of the products may be had and the central portion of the stove-top be exposed directly to the combustion-chamber.

It consists, further, in the addition to the above of a baking-chamber so arranged relatively to the stove that the greater part of the heat may be directed to the stove-top or to said chamber at will.

In the drawings, Figure 1 is a perspective view of the stove. Fig. 2 is a central vertical section thereof, and Figs. 3 and 4 are detail perspectives.

A is the stove, having the grate F, the firepot G, the combustion-chamber D, and the top Q. The last-named member has in its center an opening covered by a plate P, within which is a removable lid O. Below the top is an annular pan-shaped chamber C, communicating at opposite sides with the combustion-chamber G. This annular chamber forms with the stove-top an indirect flue, the products of combustion entering the chamber, where they divide, passing around in each side of the chamber to the opposite part, at which point they preferably join and emerge through a single flue. Depending from the chamber at the entrance thereto for the products is a guiding-flue J, the length of which depends on the height of the combustion-chamber, and partly surrounding said entrance is a grate K, which serves to retard the flame in order to heat that part of the stove-top which is immediately above the said entrance. At the point of exit of the products from the annular chamber is a damper L, located between the combustion-chamber and the exit-flue. When said damper is open, direct passage of the products is allowed to the exit-flue, while when that damper is closed

the gases are compelled to pass around in the annular chamber before leaving the stove, thus heating the stove-top more thoroughly than when the direct passage is open.

It will be seen from the foregoing and from Fig. 2 that the shape and disposition of the annular chamber leave a central portion M, which is always exposed directly to the heat of the combustion-chamber, this portion being normally covered by the lid O.

T is an entrance to the combustion-chamber, as shown in Fig. 1.

The products escaping from the stove need not pass directly to the chimney, and I prefer to attach to the exit-flue of the stove a casing B, in which is contained, for example, an oven c, spaced on four sides from the walls of the casing to allow passage of the products around the oven.

As shown in the drawings, I use a number of dampers U V W, located between the oven and the casing-wall and in the pipe f, leading to the chimney, to change the course of the products relative to the oven-walls and to regulate their amount.

The oven is shown as supported on a framework Y and as having shelves a b and the oven-casing as having clean-out openings d e.

The oven and casing need not be above the stove, as shown, but may be located in any convenient or desirable position relative thereto.

It will be seen that the arrangement of stove, oven, and dampers allows the heat to be largely confined to the stove-top for cooking material thereon or to be sent directly to one side Z of the oven or around the oven when a relatively large amount of heat is needed for the latter.

Air is fed to the stove in various ways in addition to that passing through the grate F. A chamber E, surrounding the lower portion of the combustion-chamber G, has perforations leading to the combustion-chamber, and air is supplied from without by means of the damper H. Air may also enter through the dampered grating S to complete the combustion of the gases rising from the combustion-chamber, and the plate R, which lies immediately above the passage, may be pulled forward about one-sixteenth of an inch. This

plate extends to a point beyond the grate K to furnish an additional supply of air at that point.

What I claim is—

- 5 1. In a stove, a top, an annular pan-shaped smoke-chamber immediately below said top, a direct flue-opening in said chamber provided with a damper, an indirect flue-opening in said chamber opposite the first-named
 10 opening, a member J forming a passage to the indirect flue-opening, said chamber forming with the stove-top an annular flue, and leaving the center of the stove-top exposed directly to the heat of combustion.
- 15 2. In a combined cooking and baking stove, a top, an annular pan-shaped smoke-chamber immediately below said top, a direct flue-

opening in said chamber provided with a damper, an indirect flue-opening in said chamber opposite the first-named opening, a
 20 member J forming a passage to the indirect flue-opening, said chamber forming with the stove-top an annular flue and leaving the center of the stove-top exposed directly to the heat of combustion, a casing connected
 25 to the exit-flue of the stove, an oven in said casing, and a smoke-pipe leading from the casing, whereby the greater part of the heat may be directed to the stove-top for cooking, or to the oven for baking.

WILLOUGHBY F. KISTLER.

Witnesses:

JOHN DOUBLE,

WM. B. GERBERICH.