(No Model.)

C. SPURLIN.

VENTILATING CANOPY FOR COOK STOVES OR RANGES.

No. 603,386. Patented May 3, 1898.

Fig. 3

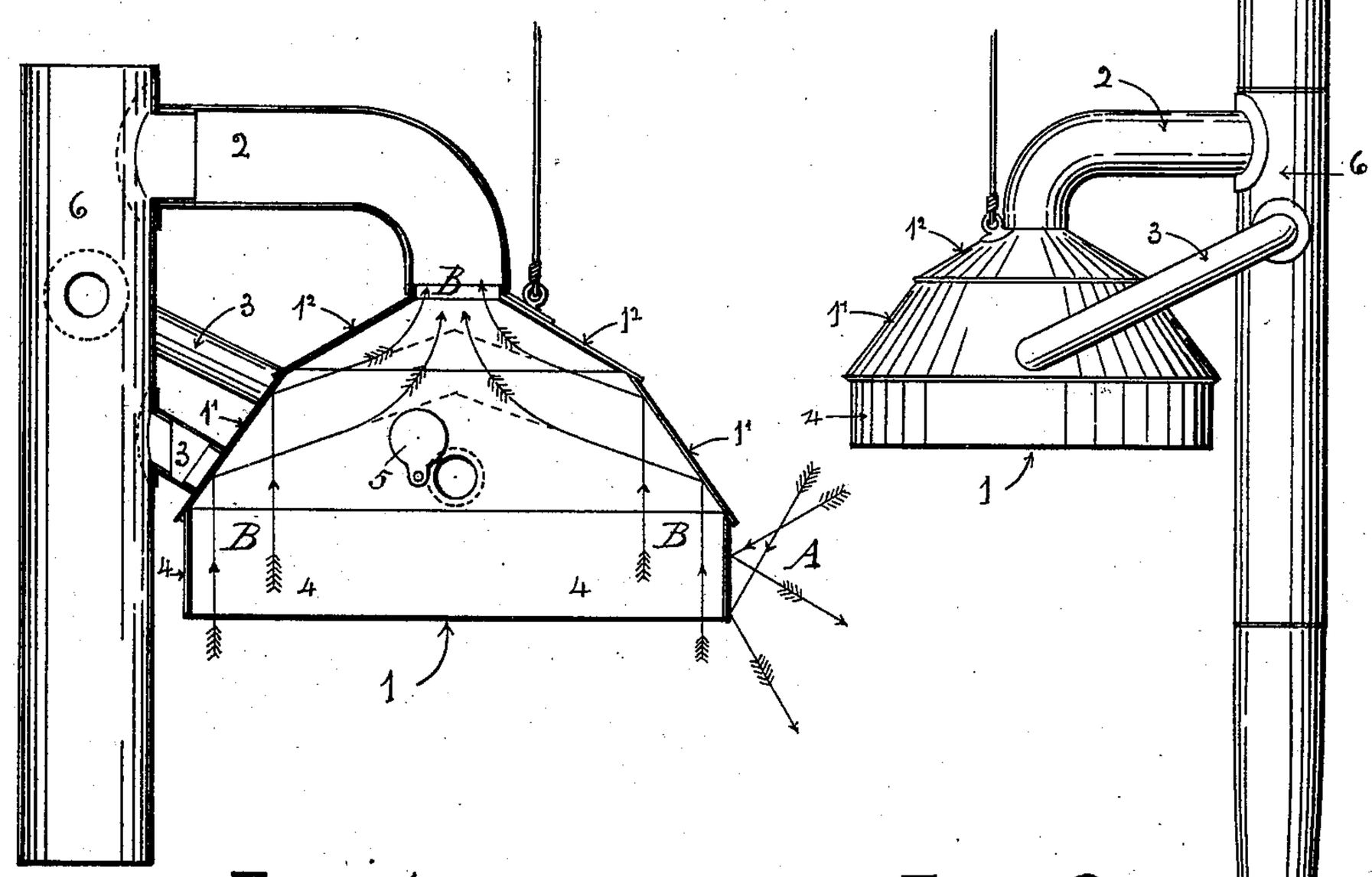

Fig. 1

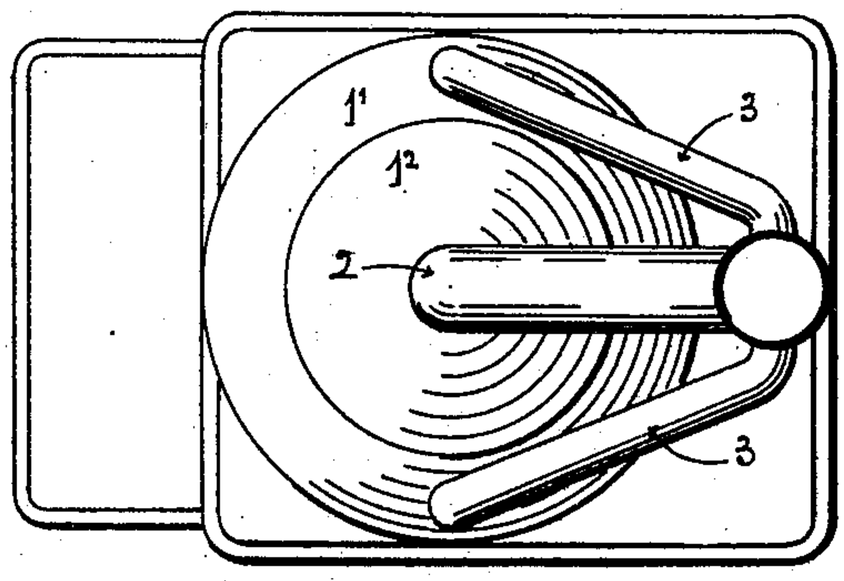

Fig. 2

WITNESSES:

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CRAWFORD SPURLIN, OF DENISON, TEXAS.

VENTILATING-CANOPY FOR COOK STOVES OR RANGES.

SPECIFICATION forming part of Letters Patent No. 603,386, dated May 3, 1898.

Application filed March 18, 1897. Serial No. 628,166. (No model.)

To all whom it may concern:

Be it known that I, CRAWFORD SPURLIN, a citizen of the United States, residing in Denison, in the county of Grayson and State of Texas, have invented a new and useful Ventilating-Canopy for Cook Stoves or Ranges, by which all smell, steam, and hot air arising from the cooking or boiling on the stove are taken up and carried off through the smoke-flue of the stove, of which the following is a specification.

My invention consists in a canopy attached to the smoke-pipe of the stove or range and having ventilating-pipes leading from the said canopy to the smoke-pipe. The canopy is circular in horizontal section, and its sides are formed by intersecting surfaces, as and for the reasons hereinafter described.

The ventilating-canopy the object of my invention is illustrated by the accompanying drawings, of which the following is a description.

Figure 1 is a top view of the canopy as applied to a common cook-stove. Fig. 2 is a side view of said canopy applied to a common cook-stove. Fig. 3 is a vertical longitudinal section of the canopy and smoke-pipe of the stove.

In the accompanying drawings the same reference-numbers represent the same parts.

The canopy is made of tin, zinc, sheet-iron, or other suitable material and is composed of a dome 1, an upper ventilating-pipe 2, and side ventilating-pipes 3, which connect with the smoke-pipe of the stove, and of a vertical flange 4 around the lower part of the dome.

The dome is circular in plan and is formed of two intersecting surfaces, the slanting surface 1′, which sets at an angle of about fifty-two and one-half degrees with the horizontal plane, and of the inclined surface 1^2, set at an angle of about thirty degrees with the horizontal plane. The vertical flange and the inclined surfaces forming the dome are fastened together by soldering, riveting, or in any other proper and mechanical way. The flange and intersecting surfaces forming the dome are necessary for the proper working of the canopy. The vertical flange 4 deflects the air-currents outside of the canopy, as shown by the direction of the arrows in A, and prevents them from entering the canopy, thus allowing free passage to the air coming directly from the stove. The slanting surface 1′ reflects the warm-air current from the stove in a plane above the horizontal, as indicated by the arrows B and the dotted lines, and in the direction of the outlet-pipe 2, to which it is carried by the central portion of the warm-air column.

The stove-canopies as now made have a single straight surface slanting to the outlet and at an angle below forty-five degrees. This surface reflects the hot air rising from the stove in a plane below the horizontal and in a downward direction, thus impeding the ascent of the hot-air column. Further, the canopies as now made have no vertical flange. Consequently side air from the room passes through the canopy to the detriment of the hot-air draft. The round form or plan is also an advantage, inasmuch as the different parts of the hot-air column are reflected from the sides toward the center and upward, and the distances traveled being alike they meet near the center from all opposite sides and mutually deflect and push each other up toward the outlet, and the hot-air column rises smoothly and swiftly.

The upper pipe 2 takes the hot air from the top of the dome and discharges it into the smoke-pipe of the stove. The joint of stove-pipe into which the upper and side pipes discharge is provided with proper openings fitted with collars having shoulders to receive the ventilating-pipes.

The side pipes 3 prevent the formation of eddies in the lower part of the dome. The openings of these pipes are provided with pivotal disks 5 to close them partially or totally to check the draft.

In operation when the stove is in use my ventilating-canopy carries off all smoke, steam, and odor from the cooking and the heat from the stove. It keeps the ceiling of the room clean, and even the dust arising from the sweeping of the room goes through it. The draft of the stove is increased by it and has sometimes to be checked.

Having thus described my invention and stated its way of working, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. A ventilating-canopy for cook stoves and

ranges composed of a dome built with intersecting surfaces and of a vertical flange fitted around the lower part of the dome; such dome being directly connected with the smoke pipe or flue of the stove or range by an upper pipe 2 and lower side pipes 3 leading from the dome to the smoke pipe or flue of the stove or range; substantially as described and for the purposes set forth.

2. In a ventilating-canopy for cook stoves and ranges, the combination with the ventilating-pipes connecting the dome with the smoke pipe or flue of the stove or range at top and sides of the canopy of pivotal disks 5 placed at the openings of said connecting-pipes inside of the dome and adapted to close them partially or totally to regulate the draft; substantially as described and for the purposes set forth.

Denison, March, 15, 1897.

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Witnesses:
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