

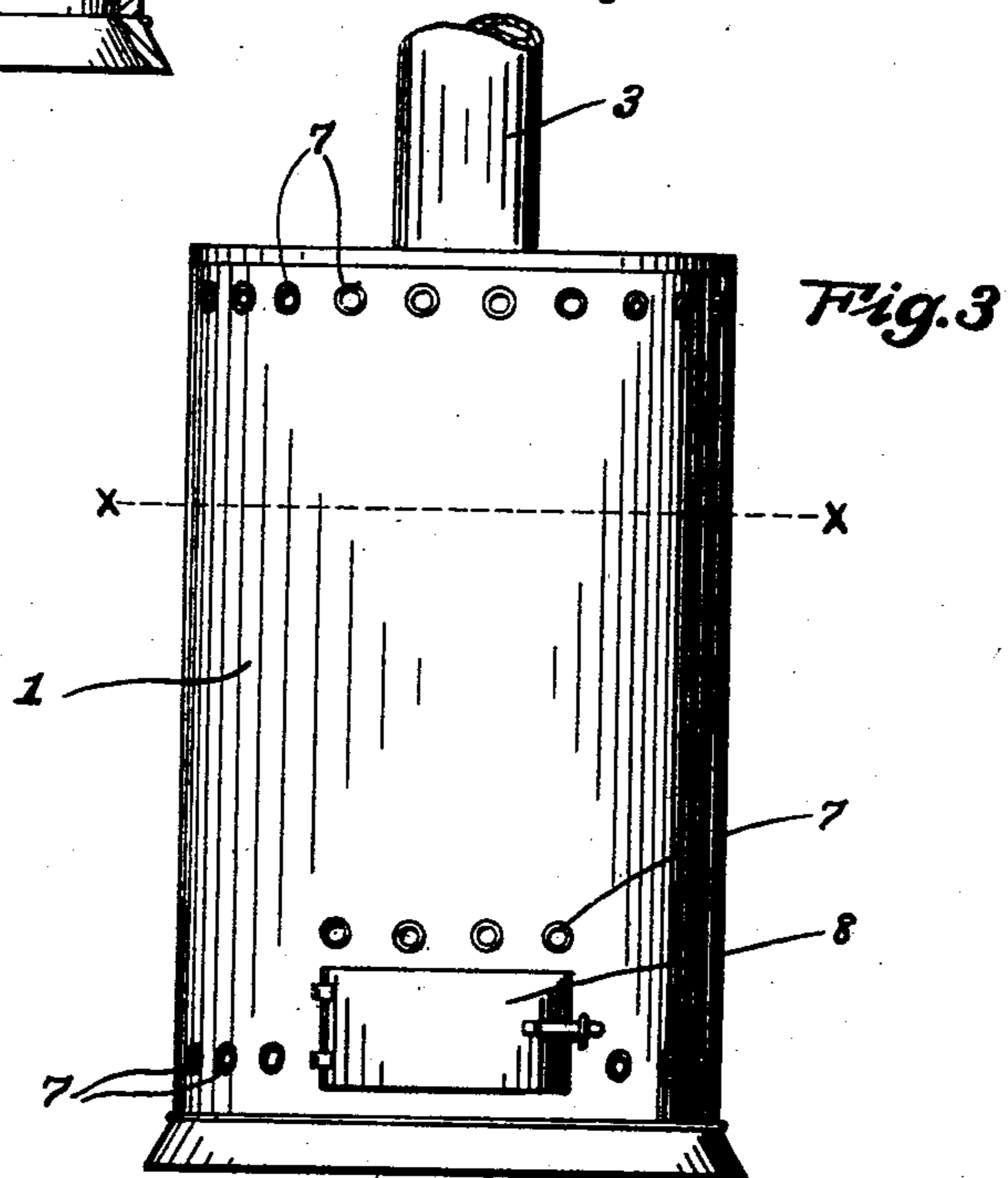
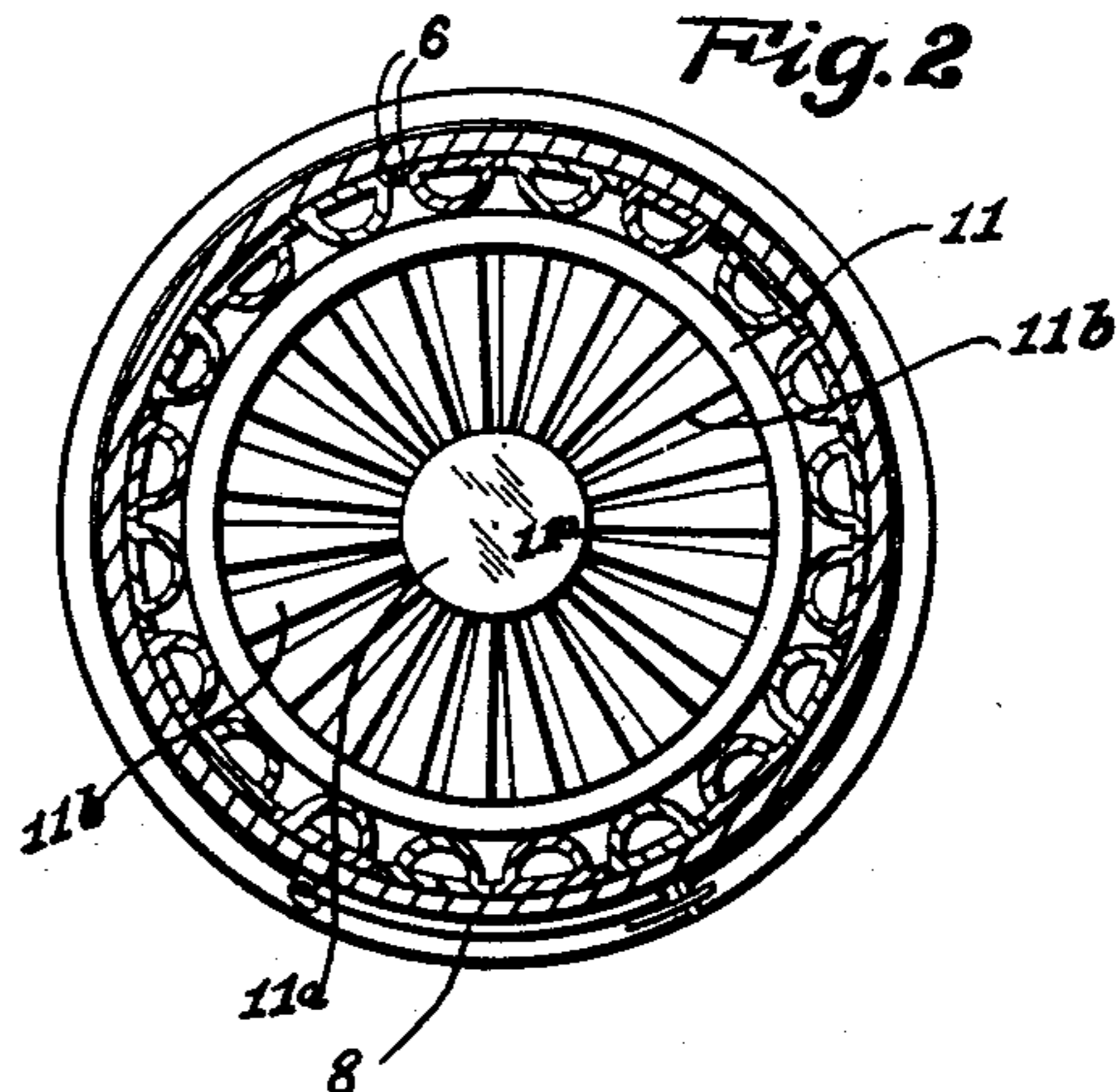
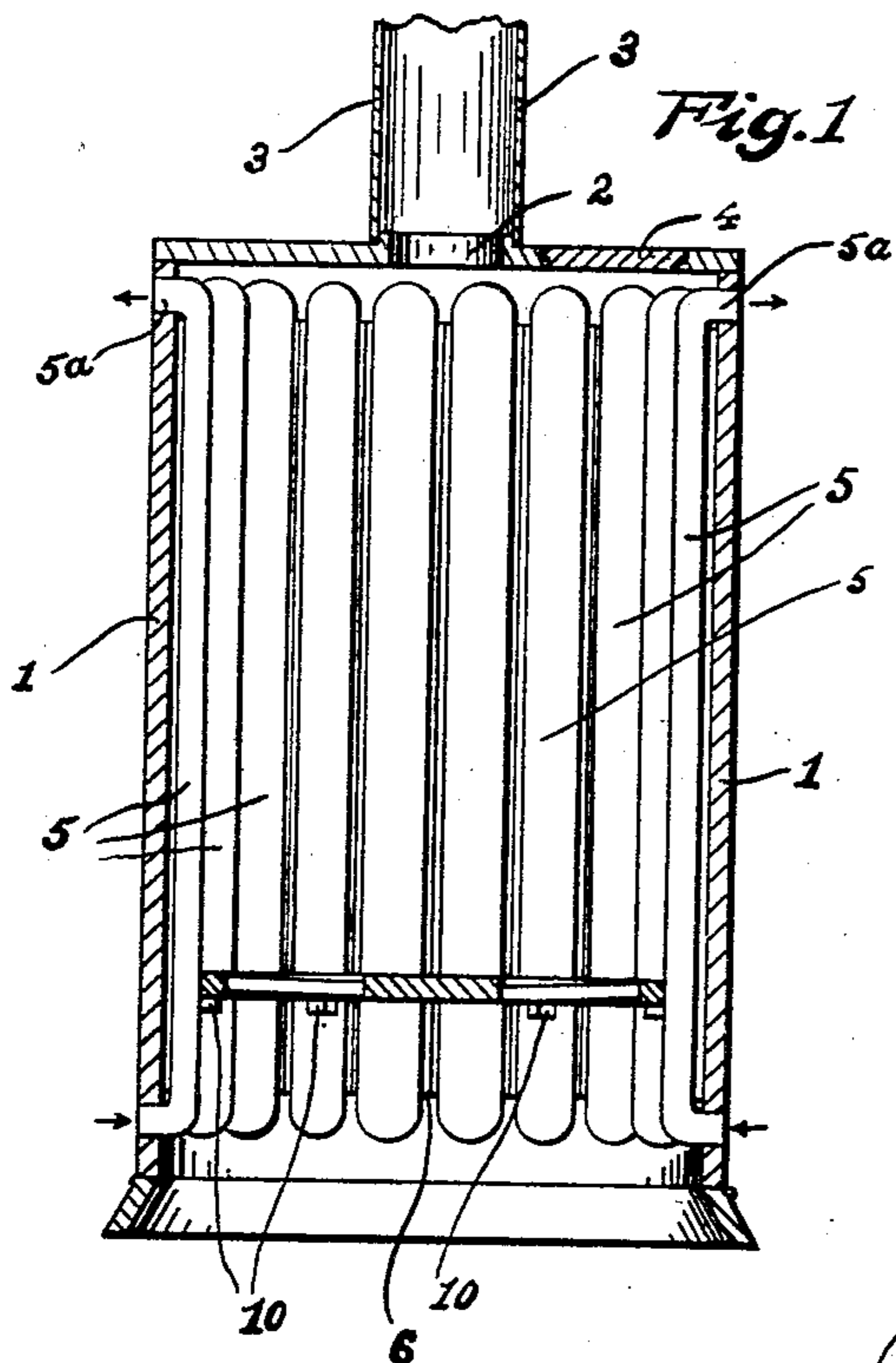
No. 702,984.

Patented June 24, 1902.

G. R. MOON.
HEATING STOVE.

(Application filed Jan. 29, 1902.)

(No Model.)



WITNESSES:

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HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 702,984, dated June 24, 1902.

Application filed January 29, 1902. Serial No. 91,664. (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. MOON, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Heating-Stoves, of which the following is a specification.

My invention relates to the improvement of heating-stoves; and the objects of my invention are to provide an improved heating-stove of superior construction and arrangement of parts, to so construct the same as to subject air-conducting flues to a constant heat, and to produce certain improvements in details of construction, which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section of my improved stove. Fig. 2 is a transverse section of the same on line *xx* of Fig. 3, and Fig. 3 is a view in elevation.

Similar numerals refer to similar parts throughout the several views.

1 represents the upright cylindrical body or casing of my improved stove, the upper end of which is formed with a central smoke-outlet 2, with which may be connected an outlet-pipe 3. I also provide in the upper side of the stove a feed-opening, which may be normally closed by a lid or cover-plate 4. On the inner side of the stove casing or body and adjoining the inner surface thereof I provide a plurality of vertically-arranged air-flues 5, each of these flues consisting of a pipe-like body of a substantially **D** shape in cross section, which is adapted to have its laterally-extending flanges 6 riveted or otherwise secured to the body of the stove. As indicated in the drawings, the flues 5 extend from the lower to the upper end portion of the casing or body 1, and at their extremities said flues terminate in outwardly-projecting pipe-like extensions 5^a, which project within openings 7, formed through the casing 1. In the lower portion of the stove body or casing 1 I provide a doorway adapted to be closed by a hinged door 8. As indicated by the upper row of lower openings 7 in Fig. 3 of the drawings, those flues 5 which would otherwise intersect or cross the doorway are formed

somewhat shorter than the remaining flues, thus causing them to terminate above said door. In their lower portions the flues 5 or a desirable number of the same are formed with inwardly-projecting lugs 10, on which may rest the outer ring of a circular grate-bar frame 11. This grate-bar is preferably formed with a solid disk-like center 11^a, from which bars 11^b radiate to meet said outer frame-ring.

In utilizing my improved stove the fuel is introduced through the feed-opening at the top and is lighted from beneath the grate-bar by opening the lower door 8. It will be understood that the vertical flues, or those portions thereof which are above the grate-bar, will be subjected to the direct heat of the fire upon the grate-bar frame, with the result that the air contained in said flues will be heated and rapidly discharged through the upper openings 7 and with the further result that a supply of fresh or cold air will be constantly drawn from the room in which the stove is contained through the lower openings 7. In this manner it will be seen that the continuous currents of air passing through said flues will be heated and discharged into the room and that owing to the cooling influence on the flues of the incoming air the "burning out" of the stove-body or the injurious effects of the direct heat on the metal thereof will be to a great extent obviated.

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

1. In a heating-stove, the combination with an upright cylindrical casing having smoke-outlet in its top, of a plurality of vertically-arranged air-flues within said casing, said flues being substantially **D**-shaped in cross-section with lateral extending flanges abutting each other and secured to the inner wall of said casing, said flues having their upper and lower ends terminating in lateral extensions fitted in openings at the upper and lower portions of said casing.

2. In a heating-stove, the combination with an upright cylindrical casing having smoke-outlet in its top, of a plurality of vertically-arranged air-flues within said casing, said flues being substantially **D**-shaped in cross-

section with lateral extending flanges abut-
ting each other and secured to the inner wall
of said casing, said flues having their upper
and lower ends terminating in lateral exten-
5 sions fitted in openings at the upper and lower
portions of said casing, said flues being pro-
vided at their lower ends with inwardly-pro-

jecting lugs, and a grate supported upon said
lugs.

GEORGE R. MOON.

In presence of—

A. L. PHELPS,

W. L. MORROW.