March 6, 1928.

E. E. GULLION

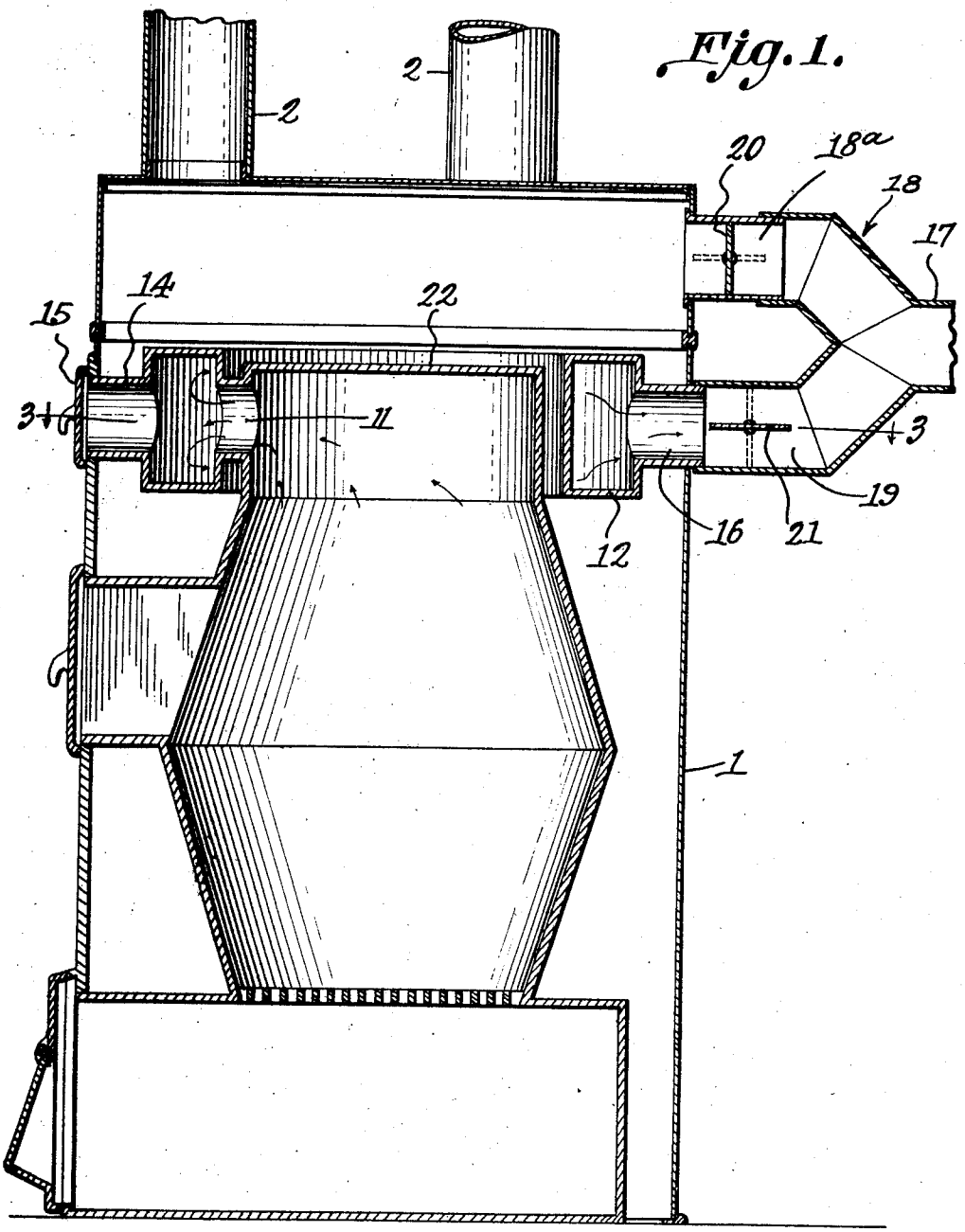
1,661,660

COLD AIR CONNECTION

Filed June 14, 1926

2 Sheets-Sheet 1

Fig. 1.



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Fig. 2.

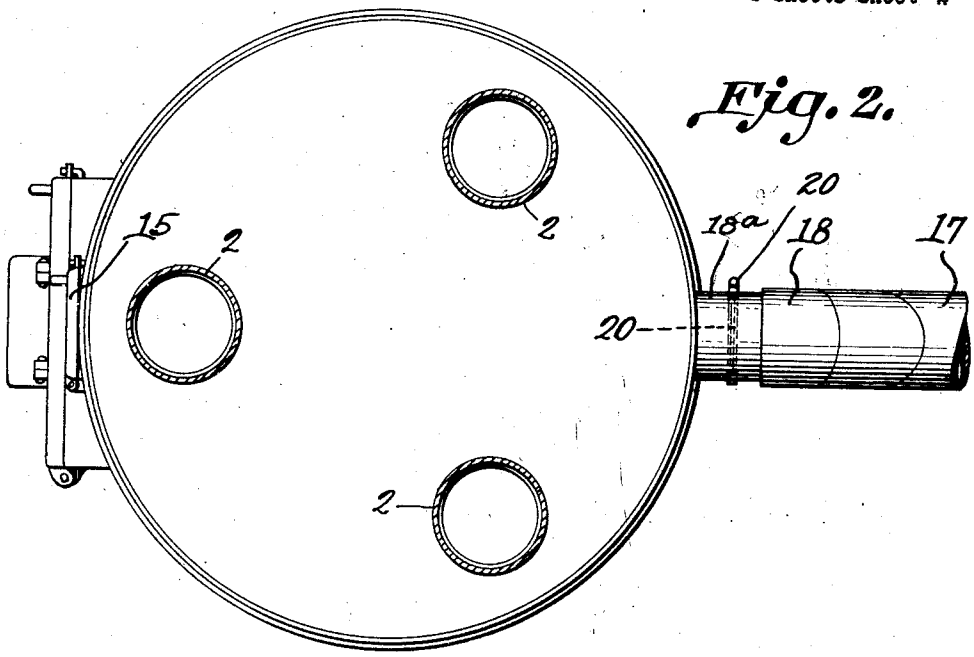
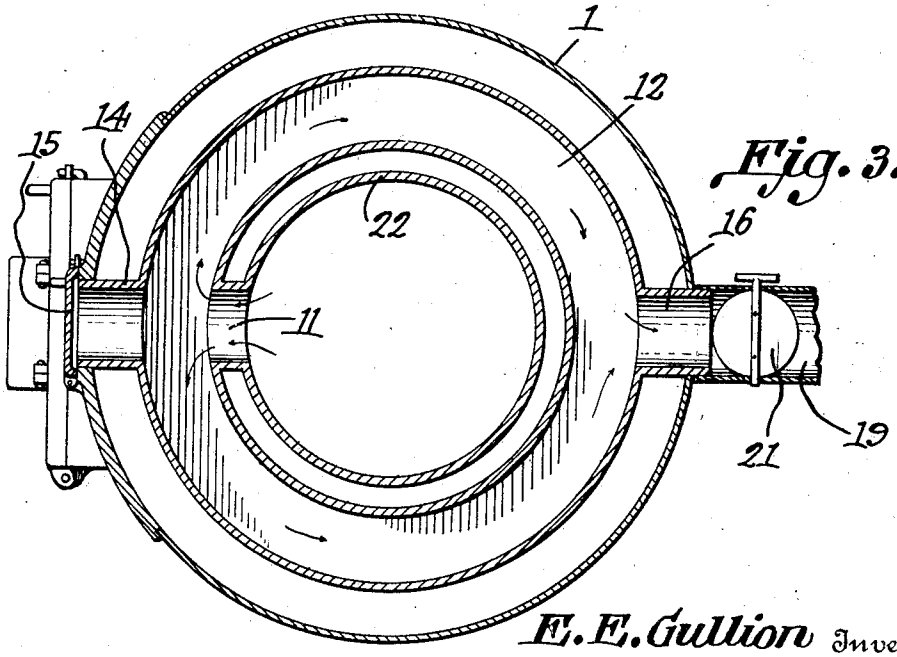


Fig. 3.



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Patented Mar. 6, 1928.

1,661,660

UNITED STATES PATENT OFFICE.

ELMER E. GULLION, OF KOKOMO, INDIANA.

COLD-AIR CONNECTION.

Application filed June 14, 1926. Serial No. 115,958.

The purpose of this invention is to provide a connection for heaters so made that the heater may be used, when the fire is out, as a means for cooling a room in the summertime.

In the drawings:—

Fig. 1 shows, in vertical section, a device wherein the claimed improvements are embodied.

Figure 2 is a top plan;

Figure 3 is a horizontal section on the line 3—3 of Figure 1.

The invention can be used on almost any kind of a heater, but as a guide to a tinsmith in setting up the article, there is shown in the drawings, a heater which has a casing 1 with flues 2, leading to the rooms. The drum 22 is the dome of the furnace located above the combustion chamber and remote from the fire pot, which is not described. A radiator ring 12 is disposed about the drum 22 in spaced relation thereto, and a tube 11 forms a communication between the radiator ring and the drum 22. A tube 14 communicates with the radiator ring 12 and extends outwardly through the casing 1. The outer end of the tube 14 is closed by a clean-out door 15 which is mounted on the casing 1. A nipple 16 opens into the radiator ring 12 at one end, and the opposite end of the nipple extends outwardly through the casing 1.

The numeral 17 denotes an outlet pipe for the products of combustion. The pipe 17 has branches 18 and 19. The branch 18 includes a nipple 18^a which opens into the casing 1 at a point above the furnace, and the branch 19 is connected to the nipple 16. There is a space of considerable extent within the casing 1, above the furnace, and the branch 18 of the pipe 17 communicates with the aforesaid space. A damper 20 is placed in the nipple 18^a of the branch 18, and a damper 21 is placed in the branch 19.

When the heater is in use, the damper 20 is shut, and the damper 21 is open. Then air is heated by the furnace and the drum 22 and the radiator ring 12, the air leaving through the flues 2 or through any other suitable means. The smoke from the furnace passes into the drum 22 and by way of the tube 11, moves into the radiator ring 12, and passes out by way of the nipple 16, the branch 19 and the pipe 17.

When the fire is out and when the house is to be cooled off, the damper 21 is shut and the damper 20 is opened. Then the hot air will be drawn out of the room or rooms, by way of the flues 2, the branch 18 and the pipe 17.

What is claimed is:—

In a device of the class described, a hot air heater comprising a casing, a furnace in the casing and provided at its upper end with a drum, a radiator ring disposed about the drum in spaced relation thereto, a connection establishing communication between the drum and the radiator ring, the casing being provided with an internal space located above the radiator ring and above the drum, a hot air delivery flue connected to the casing and communicating with the aforesaid space, an outlet pipe for the products of combustion, the outlet pipe having short branches, one branch being slightly longer than the other, the longer branch communicating with the radiator ring through the casing, the other branch being joined to the casing and being in communication with the aforesaid space, and dampers controlling the branches of the outlet pipe.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

ELMER E. GULLION.