

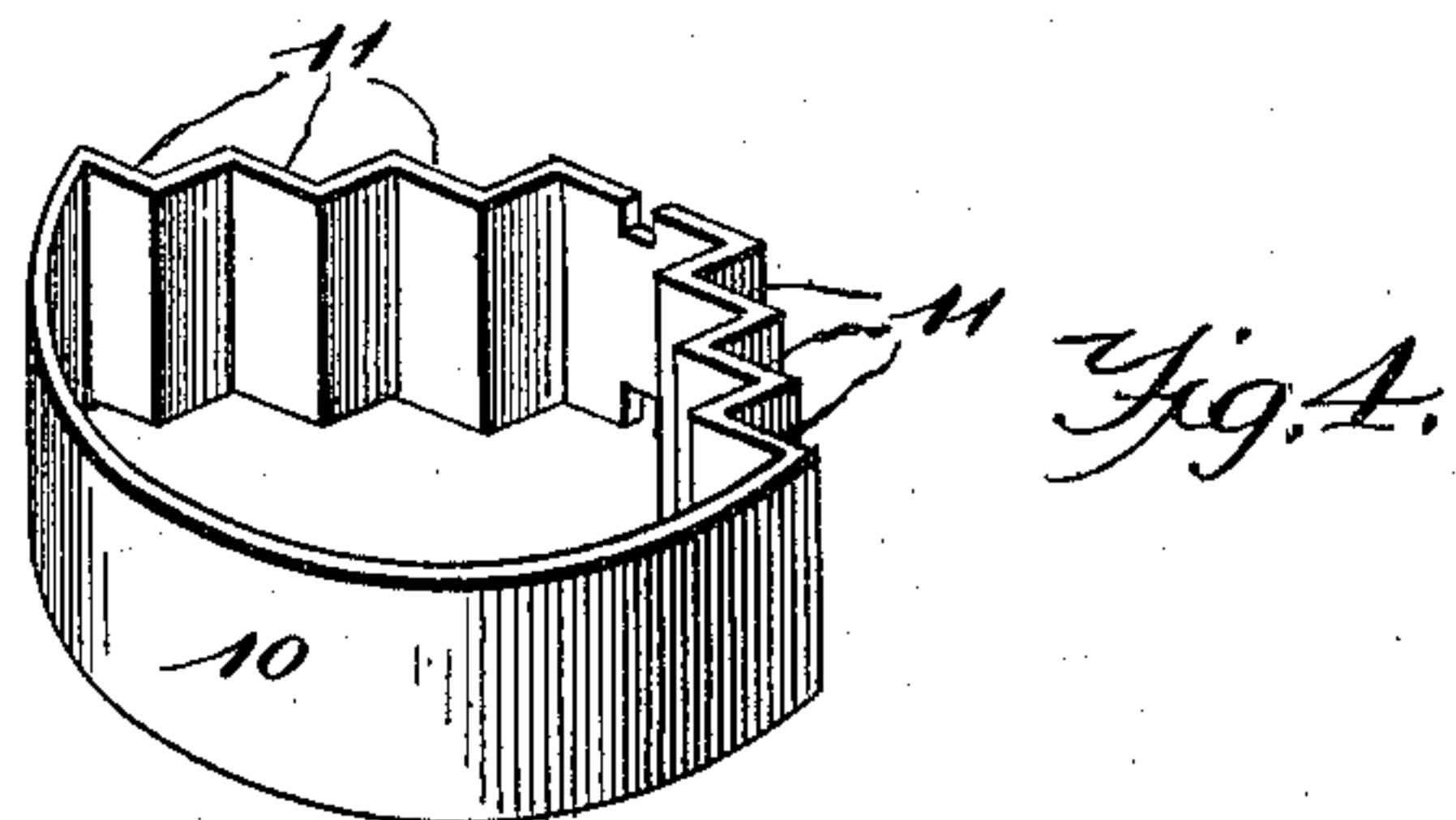
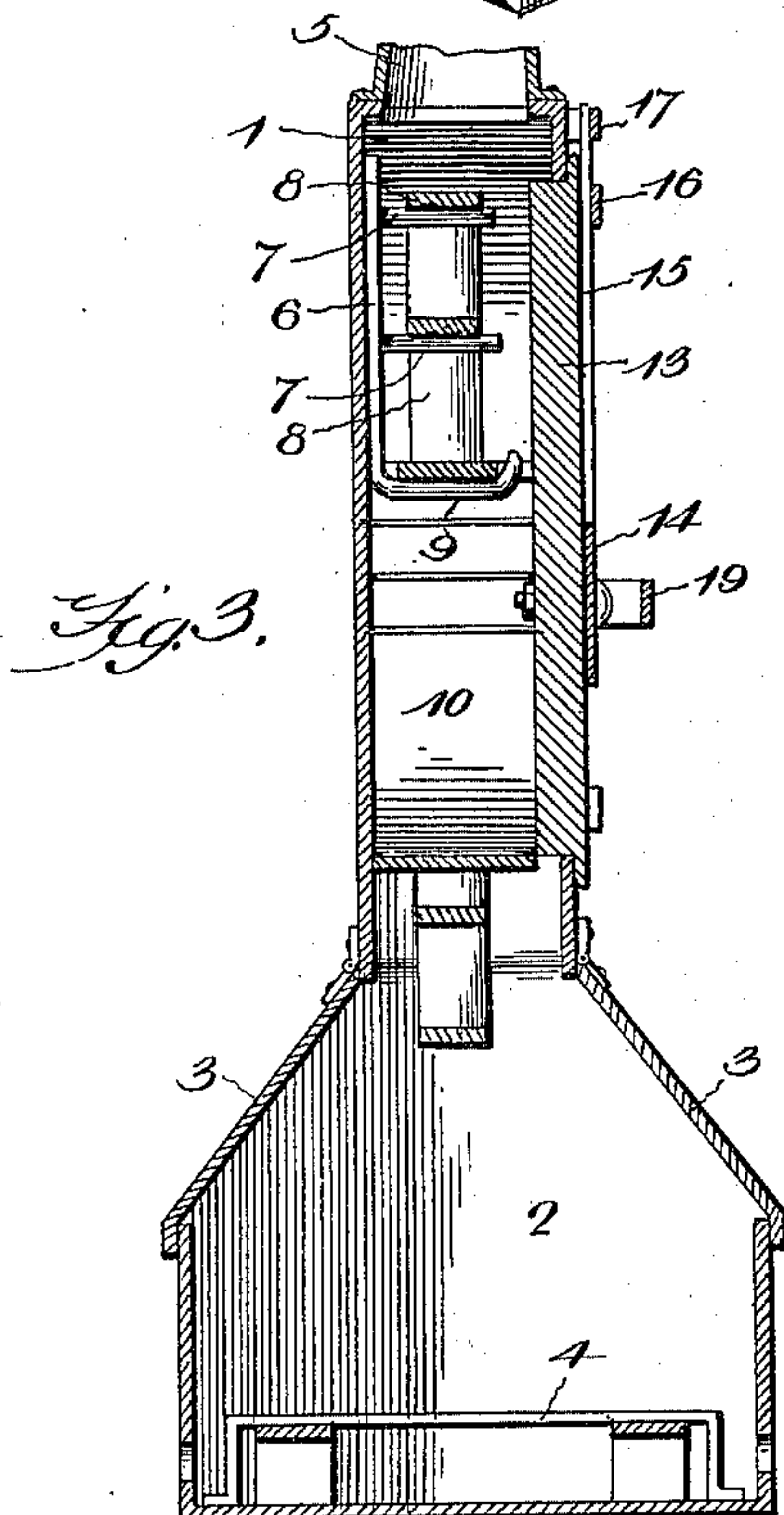
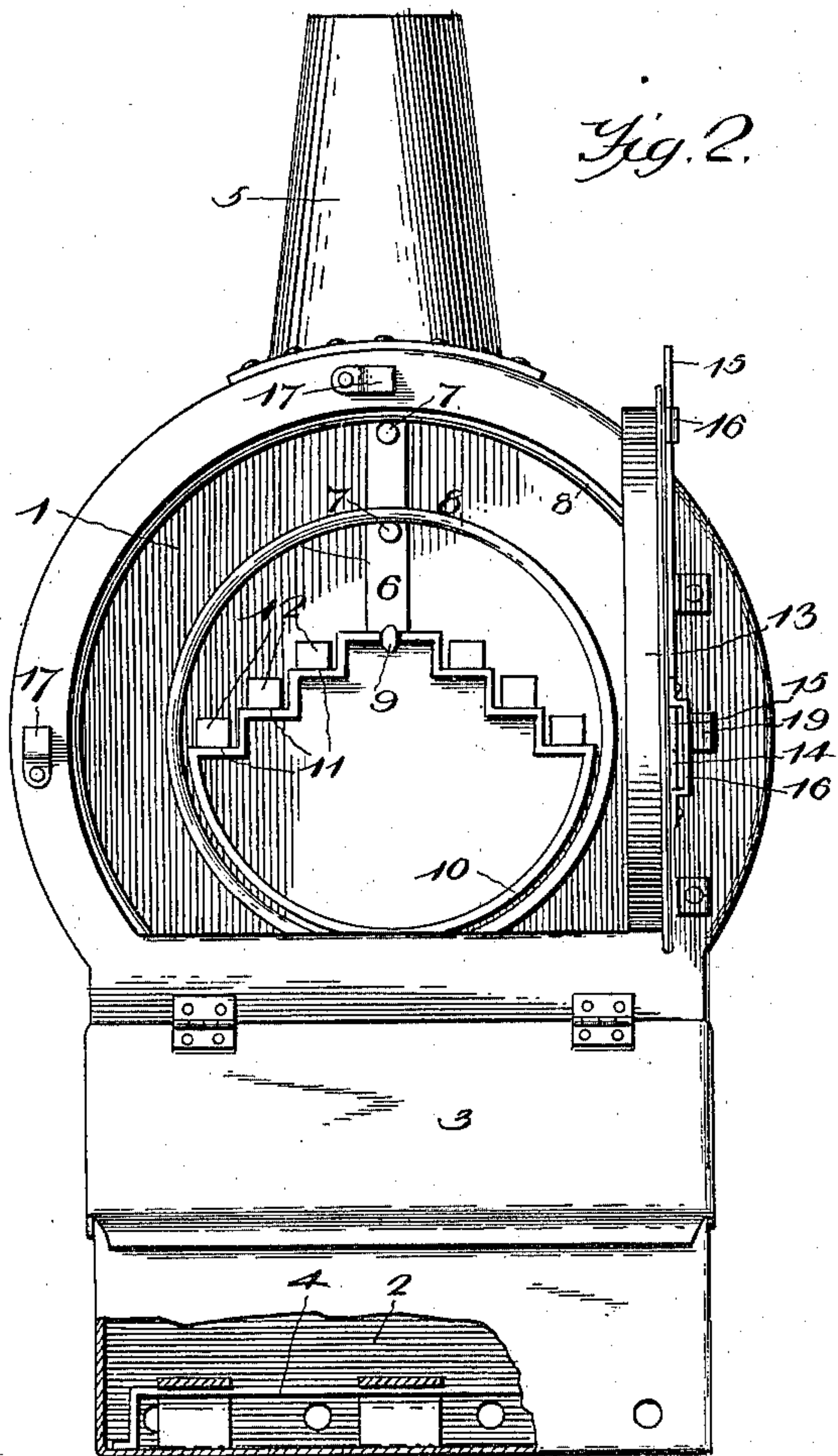
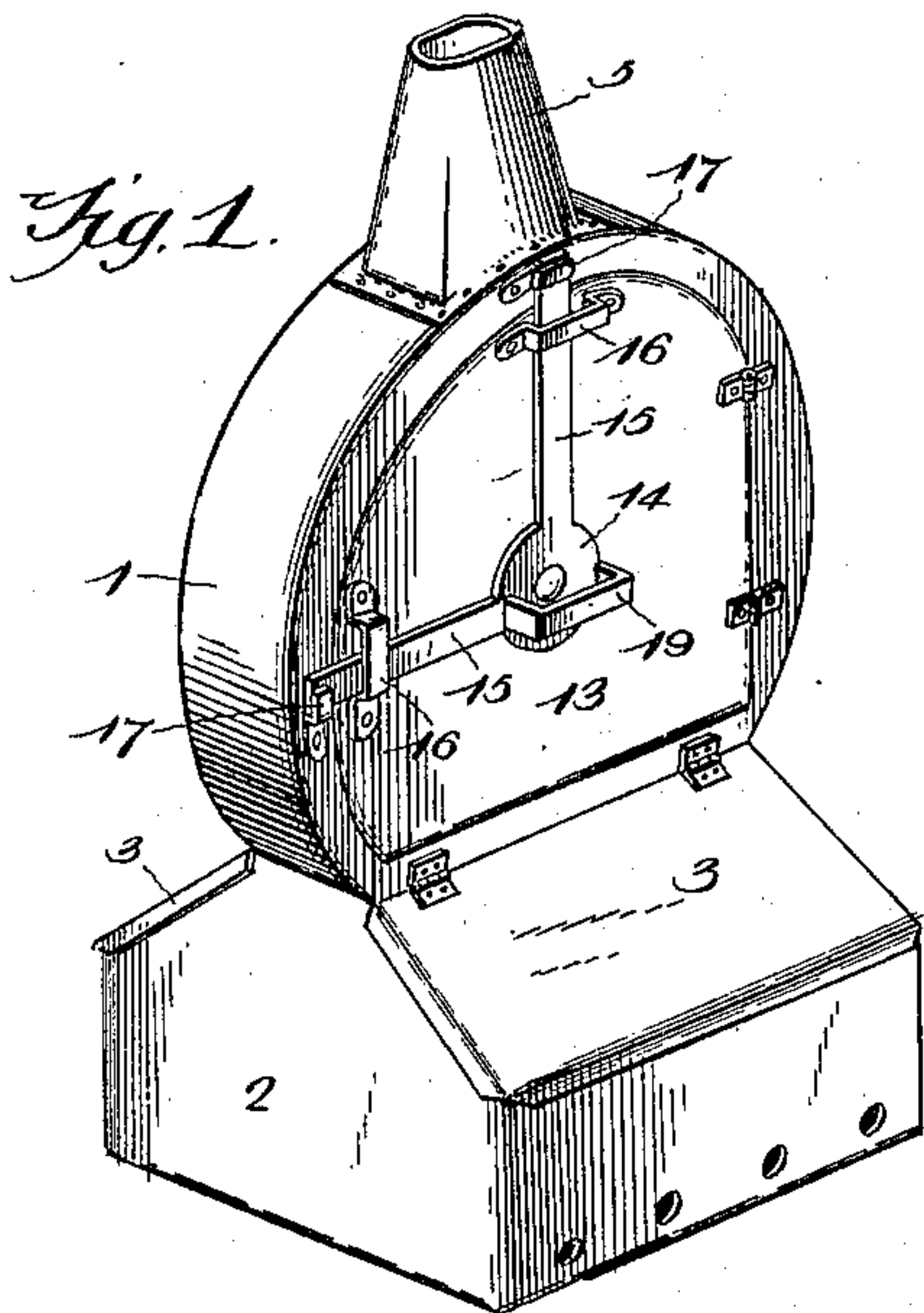
No. 609,055.

Patented Aug. 16, 1898.

J. SANFORD.
TIRE FURNACE.

(Application filed Mar. 30, 1898.)

(No Model.)



Witnesses

J. Gauffelverwill

By *His* Attorneys,

Joseph Sanford, Inventor.

[Signature]

C. Snow & Co.

UNITED STATES PATENT OFFICE.

JOSEPH SANFORD, OF ELYSIAN, MINNESOTA.

TIRE-FURNACE.

SPECIFICATION forming part of Letters Patent No. 609,055, dated August 16, 1898.

Application filed March 30, 1898. Serial No. 675,780. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH SANFORD, a citizen of the United States, residing at Elysian, in the county of Le Sueur and State of Minnesota, have invented a new and useful Tire-Furnace, of which the following is a specification.

My invention relates to tire-furnaces, and has for its object to provide a simple, inexpensive, and economical furnace capable of being heated through the use of fuels of different kinds and adapted to so distribute the heat as to uniformly affect a plurality of tires inclosed in the drum.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a tire-heater constructed in accordance with my invention. Fig. 2 is a front view, partly in section, of the same. Fig. 3 is a transverse vertical section. Fig. 4 is a detail view of the spreader or distributor detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a drum of a suitable diameter and depth from front to rear to accommodate tires of the desired size, and in communication with the drum at its lower side is a fire-box 2, having a fuel-door 3 and an inclosed grate 4 of any suitable construction. Also communicating with the drum at its top is a flue 5. The drum preferably rises from the longitudinal center of the fire-box, and in the construction illustrated the latter is provided with a plurality of fuel-doors, said fire-box forming a suitable base for the furnace or heater adapted to be used at any desired point, either in or out doors.

Arranged within the drum, preferably in contact with its rear wall, is a bracket 6, having a plurality of pegs or studs 7 for supporting tires 8 of different diameters, the lower end of the bracket having a peg or hook 9 to support a spreader or distributor 10 of segmental construction and of a depth equal with the interior of the drum, whereby the front and rear edges thereof bear, respectively,

against the inner surfaces of the door and rear wall. This spreader serves to maintain the heat in an annular chamber between its periphery and the annular side wall of the drum, and in order that kerosene or other oil may be used as a fuel the upper side of the spreader or distributor is provided with a series of stepped seats 11, forming rests for fuel-saturated bricks 12. Other fuel-saturated bricks may be arranged in the fire-box, or other fuel may be used, as preferred. The advantage in constructing the spreader or distributor to support fuel-saturated bricks or other equivalent mediums is that the heat due to the combustion of the fuel contained therein is applied to the upper portions of the tires. With this arrangement of parts it is possible to uniformly heat a complete set of tires without the necessity of turning or revolving them at intervals to bring different portions of the circumferences thereof adjacent to the fire-box.

In the construction illustrated the entire front wall of the drum consists of a hinged door 13, to the center of which is pivoted a spider 14, having a plurality of arms 15, which fit in guides 16 and are adapted to engage catches 17 on the rim of the drum-wall. The spider is provided at its center with a grip or handhold 19, whereby both of the latch-arms may be operated simultaneously to either secure or release the drum-door.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. In a tire-furnace, the combination with a drum having inclosed tire-supporting devices, of a spreader or distributor removably suspended in the drum, and provided at its upper side with seats for fuel-saturated absorbent blocks, substantially as specified.

2. In a tire-furnace, the combination with a drum and inclosed tire-supporting devices, of a spreader or distributor suspended within the drum and provided at its upper side with a plurality of stepped seats for absorbent bricks, substantially as specified.

3. In a tire-furnace, the combination of a

fire-box, a drum rising from the longitudinal center of the fire-box and communicating interiorly therewith, said drum being provided at its top with an outlet-flue, fuel-doors at opposite sides of the plane of the drum, and a tire and spreader or distributor supporting bracket arranged in the drum, the latter being provided in its front wall with a hinged door, and a spider mounted centrally upon said drum-door and provided with a plurality of radial arms fitting in guides on the door

for engagement with stationary catches on the drum, said spider having a central grip or handhold, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOSEPH SANFORD.

Witnesses:

W. K. WILCOX,
JNO. O'TOOLE.