No. 813,192. PATENTED FEB. 20, 1906.

S. W. WOMACK.

PLASTER KETTLE.

APPLICATION FILED AUG. 24, 1905.

Fig. 1.

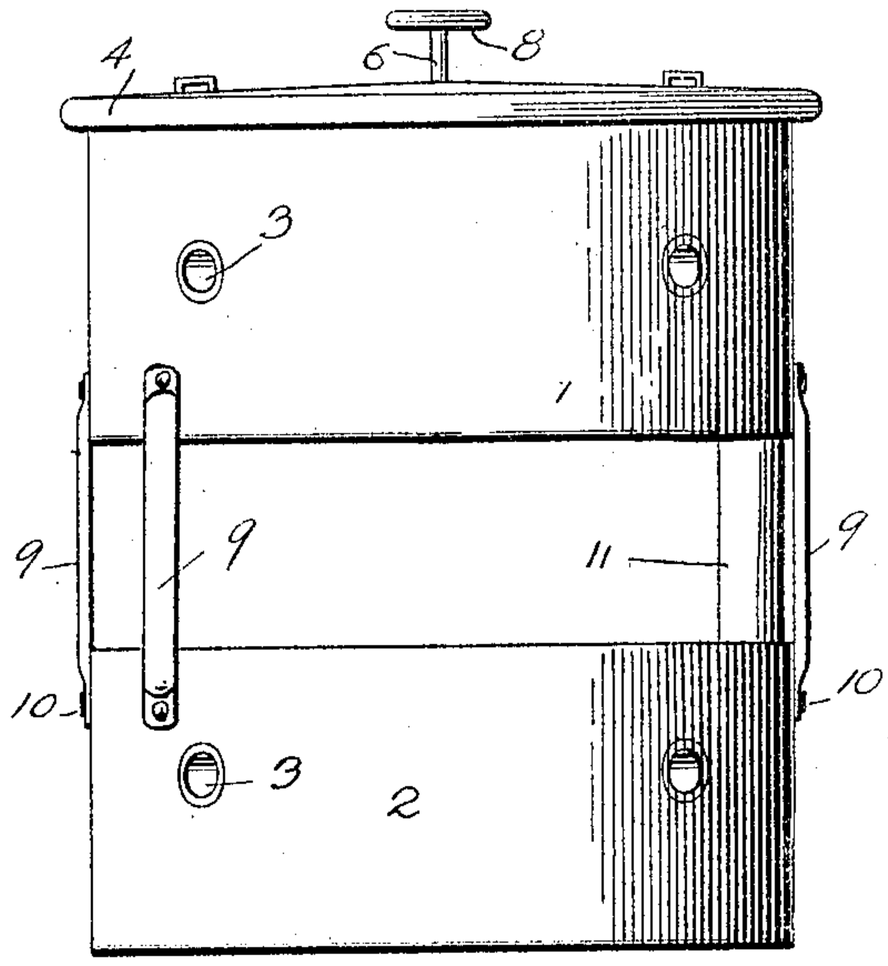
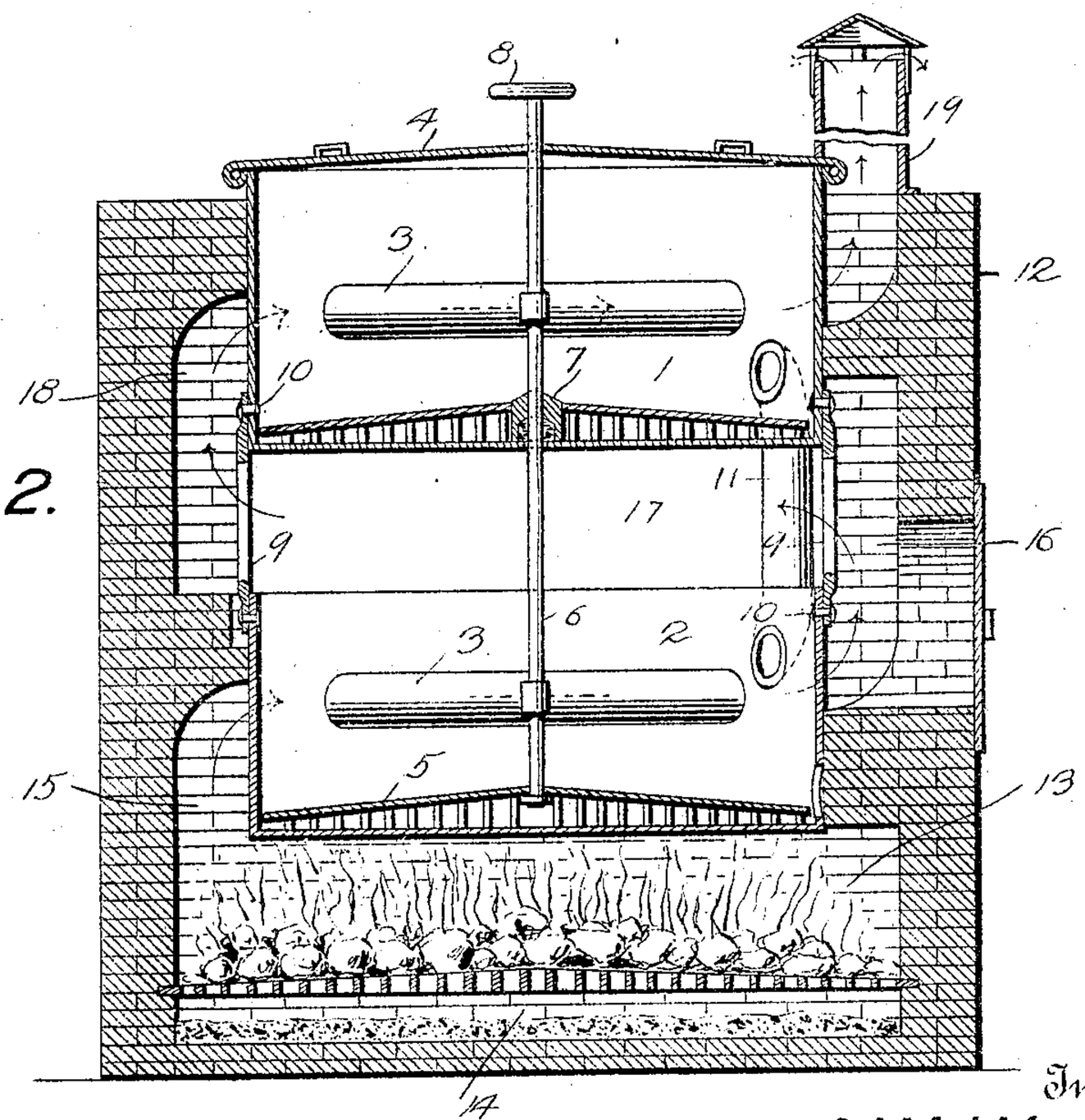


Fig. 2.



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PLASTER-KETTLE.

No. 813,192. Specification of Letters Patent. Patented Feb. 20, 1906.

Application filed August 24, 1905. Serial No. 275,625.

To all whom it may concern:

Be it known that I, SAMUEL WILEY WOMACK, a citizen of the United States, residing at Laramie, in the county of Albany and State of Wyoming, have invented certain new and useful Improvements in Plaster-Kettles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improved plaster-kettle; and it consists of the construction, arrangement, and combination of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of my improved plaster-kettle; and Fig. 2 is a sectional view of the same, showing the kettle in a furnace or brickwork.

In the embodiment of the invention I provide an upper kettle 1 and a lower kettle 2. Each is formed or provided with flues 3, which extend transversely therethrough and the ends of which are open. The upper kettle 1 is provided with a removable flat cover 4. An agitator 5 is placed in the lower kettle and is carried by a vertical shaft 6, which has its bearings in a backing-box 7 in the bottom of the upper kettle and is packed with asbestos. At the outer end of the said shaft is a hand-wheel 8, whereby the said shaft may be turned to turn the said agitator. The upper and lower kettles are suitably spaced apart and are connected together by rods 9, which are bolted thereto, as at 10. The upper kettle is provided at its lower side with a spout 11 to discharge its contents into the lower kettle.

In use the upper and lower kettles are incased in a brickwork or furnace 12, of which 13 is a fire-box, and 14 is an ash-pit. A flue 15 leads from the back of the fire-box and discharges into the rear ends of the flues 3 in the lower kettle. The front ends of said flues communicate with flues 16 in the front wall of the furnace, which discharge into the space 17 between the upper and lower kettles. A flue 18 in the rear wall of the furnace leads upwardly from the space 17 and discharges into the rear ends of the flues 3 in the upper kettle, said flues 3 of the upper kettle discharging into the smoke-escape flue 19 at the front of the furnace.

Heretofore, so far as I am aware, only a single kettle has been employed for heating and in the preparation of plaster, which results in a great waste of the heat and of fuel. In accordance with my invention I provide a plurality of kettles disposed one above another and spaced apart, so that the heated product of combustion from the furnace passes successively under and through the flues and kettles, thereby utilizing the heat in the furnace to a very much greater extent than is possible when only a single kettle is used. As material is taken from the lower kettle after it has been heated to the requisite extent its place is taken by only a partially heated or treated material from the upper kettle. Hence the material is successively treated in the kettle.

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

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A furnace of the class described having a plurality of kettles, disposed one above another and spaced apart, and means to cause the heated products of combustion to continue to pass under and through the heated kettles.

2. A furnace of the class described having a plurality of kettles, disposed one above another and spaced apart, means to cause the heated products of combustion to continue to pass under and through the heated kettles, and means to discharge the material from the upper kettle into the lower kettle.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SAM. WILEY WOMACK.

Witnesses:
D. L. KIBLER,
FRED A. BROWN.