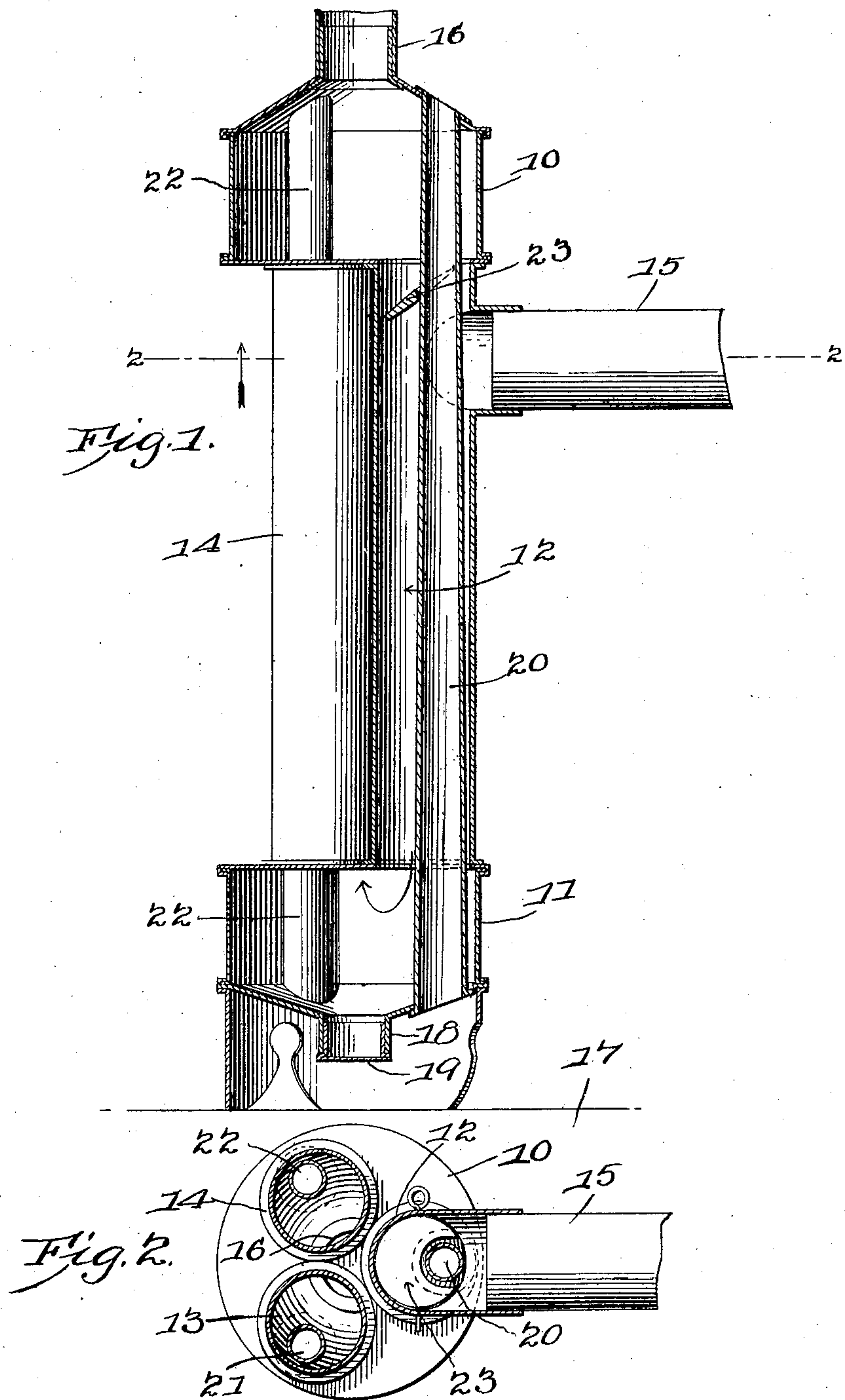


No. 861,933.

PATENTED JULY 30, 1907.

C. E. ANDERSON.
HEATING DRUM.

APPLICATION FILED JAN. 24, 1906.



WITNESSES:

C. N. Woodward.

Christian E. Anderson, INVENTOR

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ATTORNEYS

UNITED STATES PATENT OFFICE.

CHRISTAIN EMIL ANDERSON, OF ANETA, NORTH DAKOTA, ASSIGNOR OF ONE-HALF TO
WALLACE E. SMITH, OF ANETA, NORTH DAKOTA.

HEATING-DRUM.

No. 861,933.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed January 24, 1906. Serial No. 297,618.

To all whom it may concern:

Be it known that I, CHRISTAIN EMIL ANDERSON, a citizen of the United States, residing at Aneta, in the county of Nelson and State of North Dakota, have invented a new and useful Heating-Drum, of which the following is a specification.

This invention relates to heating drums, more particularly drums connected with the smoke flues of stoves of various kinds, and has for its object to improve the construction and increase the efficiency of devices of this character.

With these and other objects in view which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction as hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that various changes in the form, proportion and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention within the scope of the appended claims.

Figure 1 is a longitudinal sectional elevation. Fig. 2 is a transverse section on the line 2—2 of Fig. 1.

The improved device comprises two shells or drums 10—11 spaced apart and connected by a plurality of flues, preferably three as at 12—13 and 14, and with the pipe 15 from the stove leading into the flue 12, and the discharge flue 16 leading from the drum or shell 10. The shell 11 is spaced above the floor or other support 17, and is hopper shaped at the lower side and provided with a central discharge 18 covered with a detachable cap 19, to enable the soot and ashes to be removed. Connected through the drums or shells 10—11 are air

flues or conductors 20—21 and 22 one for each of the flues 12—13 and 14 and extending respectively through the same, the air conductors being tapered longitudinally with the larger ends downward. A damper 23 is disposed in the flue 12 between the intake flue 15 and the drum 10. By this simple arrangement the smoke and heated gases entering the flue 12 by the pipe 15 pass directly to the outlet 16 through the drum 10, if the damper 23 is open, and are deflected downwardly in the flue 12 if the damper be closed in the flue 12, and into the drum 11 and thence upwardly through the flues 13—14 into the drum 10 and out through the discharge 16.

The heat radiating from the smoke and other products of the combustion is imparted to the air within the conductor flues 20—21 and 22 and creates rapid upward currents therethrough, and thus produces a rapid circulation of the air in the vicinity of the device.

The device may be constructed in any required size or capacity, and of any suitable material.

Having thus described the invention, what is claimed is:—

A heating drum comprising upper and lower shells, said lower shell having a normally closed outlet, and said upper shell having a smoke outlet, tubes connecting the shells and opening thereinto, one of said tubes having a smoke inlet, tapered tubes extending through the shells and disposed eccentrically within and extending longitudinally of the first mentioned tubes, said tapered tubes opening through the bottom and top of the lower and upper shells respectively, and a damper interposed between the smoke inlet and the upper shell, said damper having a recess to receive the adjoining tapered tube.

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

CHRISTAIN EMIL ANDERSON.

Witnesses:

HENRY CARLSON,
M. A. SHIRLEY.