

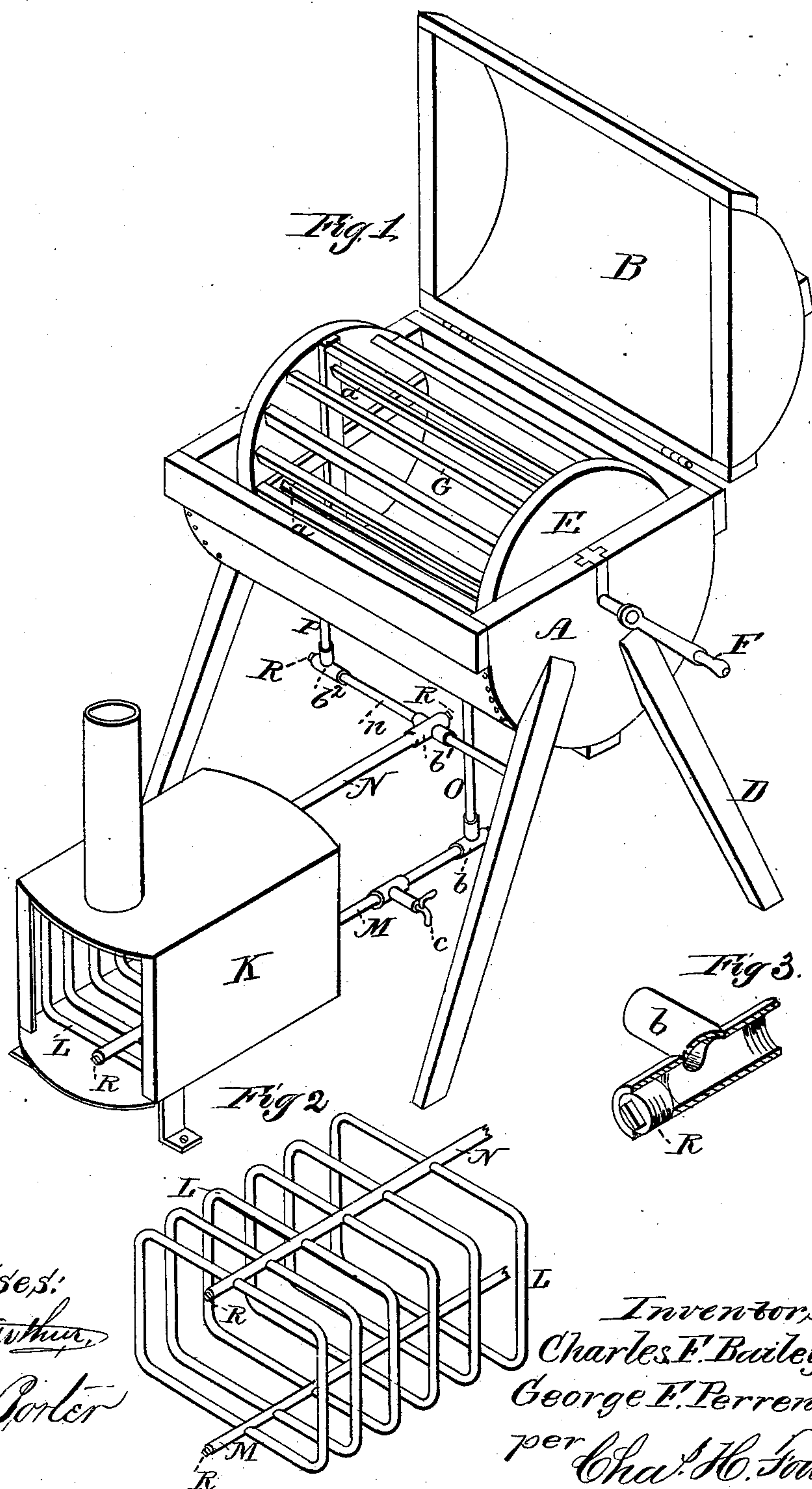
(No Model.)

C. F. BAILEY & G. F. PERRENOT.

Water Heater for Washing Machines.

No. 243,348.

Patented June 28, 1881.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES F. BAILEY AND GEORGE F. PERRENOT, OF ROCKPORT, TEXAS.

WATER-HEATER FOR WASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 243,348, dated June 28, 1881.

Application filed November 17, 1880. (No model.)

To all whom it may concern:

Be it known that we, CHARLES F. BAILEY and GEORGE F. PERRENOT, citizens of the United States, residing at Rockport, in the county of Aransas and State of Texas, have 5 have invented certain new and useful Improvements in Water-Heaters for Washing-Machines; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed 10 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to that class of washing-machines in which a rotary slatted cylinder 15 for holding the clothes and a coil of pipe for supplying the drum with hot water are employed; and it consists in certain improvements in the construction and arrangement of the heater and pipes for conveying water to 20 and discharging it from the drum, as and for the purposes hereinafter fully described.

In the drawings, Figure 1 represents a perspective view of our improved device. Fig. 2 25 shows the water-heating coil detached; and Fig. 3 represents in section a pipe-coupling and screw-plug.

A represents the drum or box, B the lid, and D the legs or supports.

30 E is the cylinder into which the clothes to be washed are placed. It is rotated by a crank, F, or other suitable means, and is provided with slats or bars G, as usual.

35 a a show four additional slats or bars, which form stops or shelves with which the clothes will come in contact during the revolution of the cylinder.

40 K represents the furnace, which is of square or oblong form, and is surrounded on all four sides of its interior by a frame-work of pipes, L, in the form of a parallelogram, and consisting of a succession of short lengths of U form, one end of each section connecting with the supply-pipe N, while the other end of each section connects with the exhaust-pipe M. The 45 return-pipe passes longitudinally through the heater and connects at its extended end by means of a union, b, with a vertical pipe, O, which enters the drum at its bottom or side

and automatically withdraws the cooler water 50 therefrom and conveys it to the heater for reheating. The upper horizontal pipe, N, extends out from the heater and has connected to its outer end by other union joints, b', a transverse pipe, n, to the ends of which are connected, by 55 unions b², short lengths of pipe P, which extend upwardly and enter the side or bottom of the drum, and through which the hot water is supplied to the cylinder. The pipe M is provided with a tap or cock, c, for the purpose 60 of drawing off the water within the coil and drum when necessary for the purpose of changing the water or cleaning the pipes or drum. Each end of the pipes M, N, and O is screw-threaded and fitted with a screw-plug, R, to 65 admit of access to said pipes for the purpose of cleaning, as hereinafter described. This construction of pipes is very advantageous, as it admits of their ready and expeditious cleaning 70 from all sediment resulting from the use of soap or other materials in the washing process and from the dirt deposited from the clothing washed, it being necessary to simply remove the plugs R, and insert in said pipes a mop or 75 similar article and pass it along the pipes to secure the ready removal therefrom of all the sediment and dirt therein.

By constructing our water-heating pipes of square or parallelogram form the sediment produced by the disintegration from the soap of 80 the rosin used in its manufacture, and by the removal from the clothing of the grease and dirt therein, will not have the same opportunity to lodge as where the pipe is of spiral form, but will fall to the horizontal pipes, from 85 whence it can readily be removed by passing a mop through the ends, thereof, as before explained. Another advantage secured by our peculiar form of pipes over a spiral or worm coil is that in case any part wears away or becomes 90 damaged it can readily be replaced without necessitating the replacement of the entire coil, as would be usually necessary if a worm were used.

Having thus described our invention, what 95 we claim, and desire to secure by Letters Patent, is—

The combination, with a washing-machine,

of the heater L in the form of a parallelogram,
and composed of short lengths of pipe of U
form, connected at their ends to the horizon-
tal pipes M and N, having screw-threaded ends,
5 screw plugs or caps R, tap or cock c, unions b,
transverse pipe n, and vertical pipes O P, sub-
stantially as and for the purposes described.

In testimony that we claim the above we have

hereunto subscribed our names in the presence
of two witnesses.

CHARLES F. BAILEY.
GEO. F. PERRENOT.

Witnesses:

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