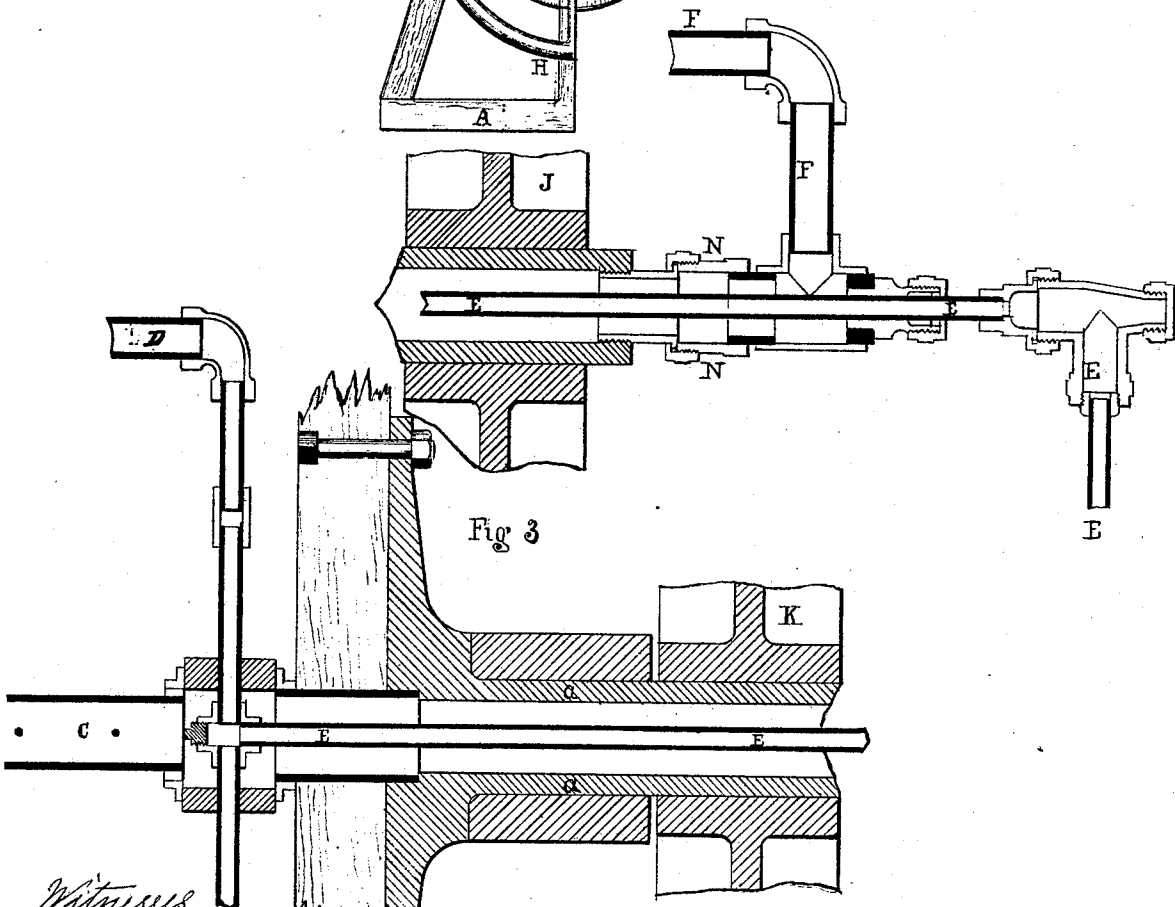
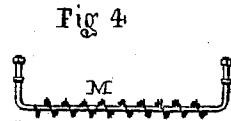
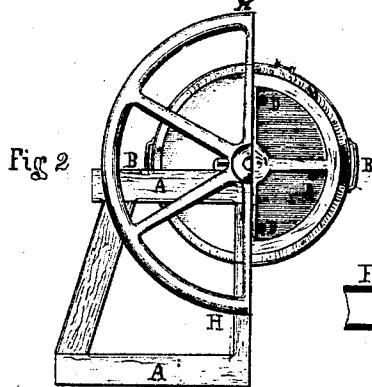
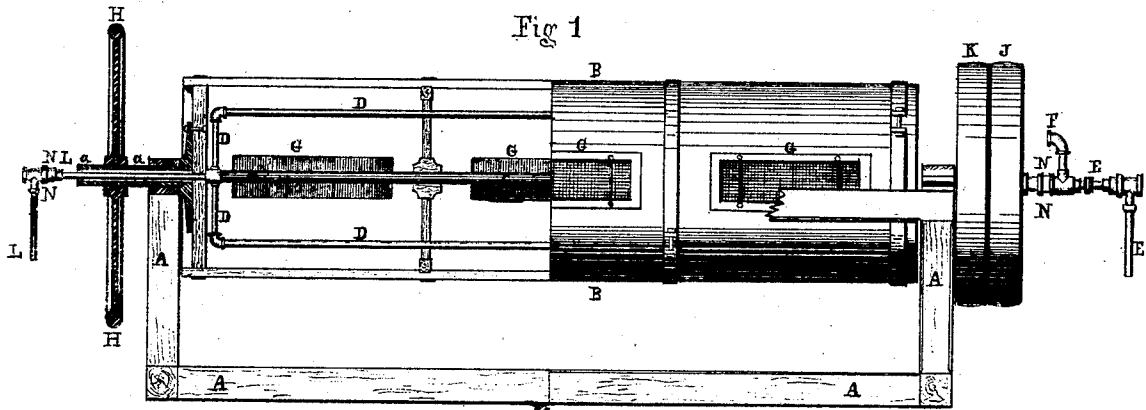


S. THOMPSON.
Coffee Cleaner.

No. 108,407.

Patented Oct. 18, 1870.



Witnesses
Olando F. Bump
Abraham Sharp

S. Thompson

United States Patent Office.

SAMUEL THOMPSON, OF BALTIMORE, MARYLAND.

Letters Patent No. 103,407, dated October 18, 1870.

IMPROVEMENT IN MACHINES FOR WASHING AND CLEANING COFFEE.

The Schedule referred to in these Letters Patent and making part of the same

Be it known that I, SAMUEL THOMPSON, of the city of Baltimore, in the State of Maryland, have invented a new and useful Machine for the purpose of Washing and Drying Coffee; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing making a part of this specification.

Figure 1 represents a perspective view of one portion of the apparatus, together with a central longitudinal and vertical section through the remaining portion of the same.

Figure 2 represents an end view of the apparatus, and of one-half of the fly-wheel. One portion of the end is represented as uncovered.

Figure 3 represents a central, longitudinal, and vertical section through one of the hollow journals.

Figure 4 represents the brush.

Similar letters of reference, where they occur in the separate figures, denote like parts of the machine in all of them.

To enable others skilled in the art to make and use my machine, I will proceed to describe the construction of the apparatus and the mode of using the same.

A represents the frame of the machine, upon which the cylinder B is supported by the hollow journals *a a*.

The cylinder B is a hollow cylinder, with closed heads, and may be made of wood or iron, or any other suitable material, but wood is preferable, inasmuch as metal is apt to discolor the coffee. When made of wood, it should be strengthened by iron bands.

C represents the central water-pipe, connecting with the hollow journals *a a*, and so with the water-pipe F.

The central water-pipe C is evenly perforated with small holes, so that the water may be evenly distributed through the coffee in the cylinder B.

The cylinder B is provided with three sets of doors, G, diametrically opposite to each other, on opposite sides of the cylinder, which are screen-doors, being covered with a wire screen, so that the fine material, which is rubbed off from the coffee, may pass out.

D represents a set of steam-pipes, connecting, by means of the central water-pipe C, with the steam-pipe E.

There should be three sets of these steam-pipes distributed evenly through the cylinder, at equal distances from each other.

The steam is admitted through the steam-pipe E, and passes, by means of a pipe, through the center of the water-pipe C, and thus enters the steam-pipes D.

H represents the fly-wheel, a half section of which is seen in fig. 2.

J represents a fixed pulley.

K represents the movable pulley, to which the power used for revolving the cylinder may be applied.

L represents the exhaust-pipe, through which the water that accumulates from the steam is allowed to pass off.

M represents the brush. This brush is made by placing bristles crosswise between a number of wires of suitable length, and then twisting the wires firmly together, and, when thus twisted, the bristles and wires will have a spiral arrangement.

These brushes are similar to those now used to clean the flues of boilers, and are made of a proper and convenient length.

These brushes are fastened to the sides of the cylinder B, and placed at convenient intervals from each other, for the purpose of scouring and rubbing the coffee.

The cylinder B is a revolving cylinder. The water-pipe F and the exhaust-pipe L are connected with the movable hollow journals *a a* by steam-joints N, as shown in the figures, so that the journals may turn therein, and be steam-tight.

The process of washing and drying coffee by the use of the apparatus above described is as follows:

The cylinder, being charged with coffee, (a charge in an ordinary cylinder being twelve bags of coffee, each bag weighing one hundred and sixty pounds,) is put in motion and allowed to revolve until the dust or other foreign matter is ejected from the coffee.

Water is then admitted to the cylinder through the water-pipe F and the central water-pipe C, and applied to the coffee until the coffee is thoroughly washed and cleaned.

As soon as this is accomplished, the water is withdrawn, and steam is admitted through the steam-pipe E to the steam-pipes D, and applied until the coffee in the cylinder is completely dried.

Having thus fully described my machine for washing and drying coffee, I would state that I do not lay any claim to the several parts of which this machine is composed, when used separately and independently.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the cylinder B, provided with the brushes M, with water-pipe C and steam-pipes D, constructed and arranged substantially as shown, and for the purpose set forth.

2. The apparatus herein described, consisting of the cylinder B, sieves G, brushes M, water-pipe C, steam-pipes D and E, fly-wheel H, and pulleys K and J, when all constructed and arranged substantially as shown, and for the purpose set forth.

SAML. THOMPSON. [L. S.]

Witnesses:

ORLANDO F. BUMP,
JOHN B. MCGRAW.