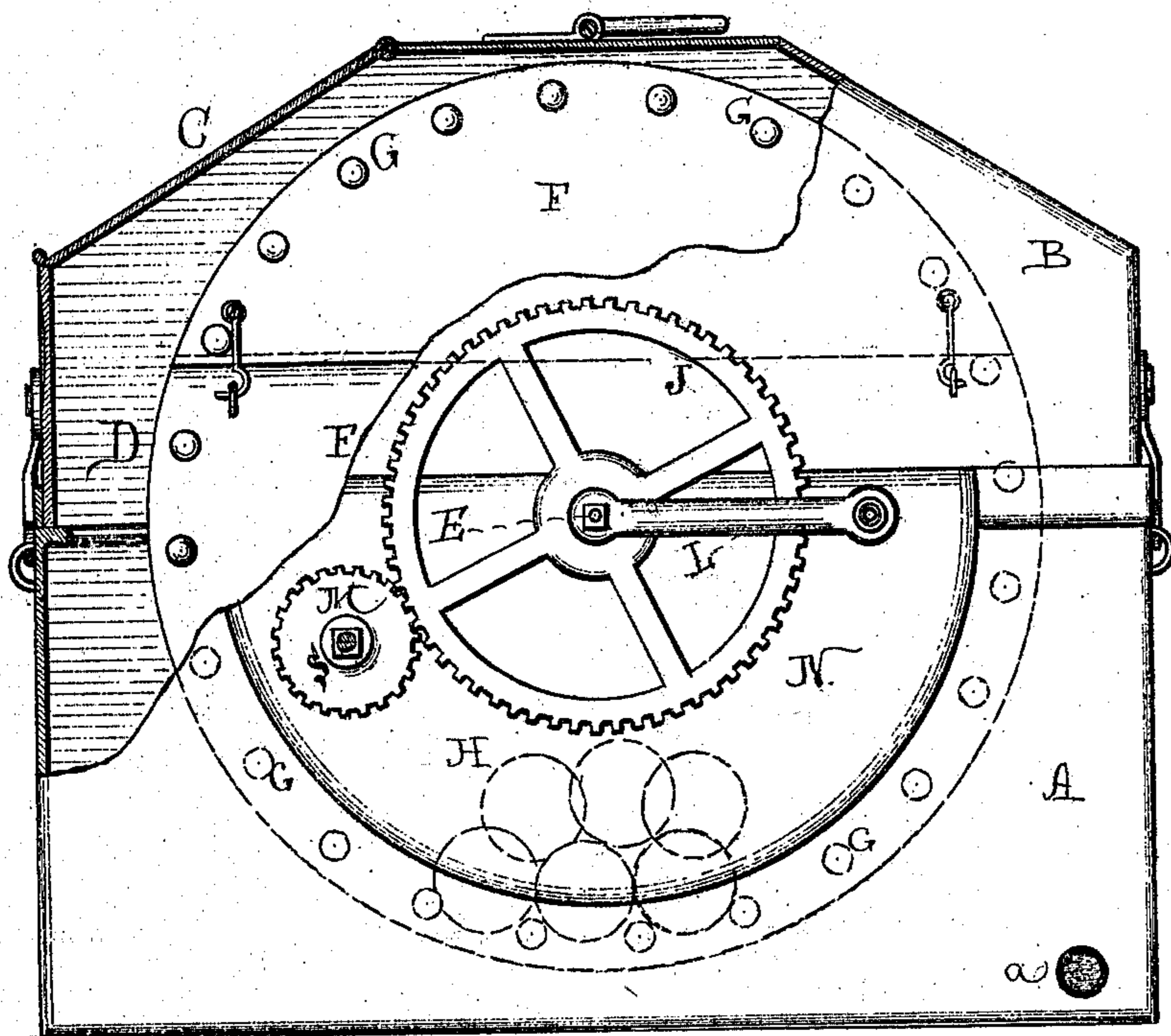


T. G. Hughes,

Wash Boiler.

No. 100402

Patented Mar. 1. 1870.



Witnesses

Adolphe Rock

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THOMAS G. HUGHES, OF ELYSIAN, MINNESOTA.

Letters Patent No. 100,409, dated March 1, 1870.

IMPROVED WASH-BOILER.

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

To all whom it may concern:

Be it known that I, THOMAS G. HUGHES, of Elysian, in the county of Le Sueur, and State of Minnesota, have invented certain new and useful Improvements in Wash-Boilers; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing making part of this specification, in which the figure is a side elevation of the device illustrating my invention, a portion thereof being broken away to expose its interior.

My invention consists in the peculiar construction, combination, and arrangement of parts to form an improved wash-boiler, as will be hereinafter more fully described.

In the drawings—

A represents a sheet-metal boiler, by preference of quadrilateral form. It is produced with a top or cover, B, of similar shape, and intended to form together a closed receptacle.

A lid, C, is made in said cover in order to admit of inspection of the interior of the boiler without removing the cover.

D represents the drum which is hung within the boiler A B, on a shaft, E, whose bearings are on the top of the body or boiler A. This drum consists of side disks or pieces F, united by transverse rods or bars G.

These side pieces F are formed in sections, and each section has a proper number of rods secured to it, in order that when said sections are brought together in place, a complete drum is formed.

Within this drum the clothes to be washed are placed, and there subjected to the action of balls or weights H on rotation of the drum.

Suitable catches, hooks, bolts, or other fastenings are connected to the sides of the drum, and also of the boiler A B, so that the parts constituting said drum and said boiler may be securely held together.

It will be seen that the weights and clothes are readily introduced within the drum by disengaging the sections constituting it, and the drum in return may be readily removed from the boiler by disengaging the cover B from the body A.

On the extension of shaft E, I secure a toothed wheel, J, the end of the shaft being "squared," to receive the crank-handle L, which communicates power to the wheel, and consequently rotates the drum D.

A spur-wheel or pinion, M, is mounted on the side of the body A and meshes with wheel J. The end of shaft S of pinion M is likewise squared, to receive the crank-handle L.

As it is well known that wash-boilers are not made of very heavy metal, the strain on the side of the boiler which has the gearing J M would soon cause said side to break, and thereby destroy the boiler. To prevent this I secure a strengthening or strong metal piece, N, to said side of the boiler, so as partly to bear the shafts of the gear-wheels, as also to stiffen the said side as stated.

It will be seen that when the clothes are placed in the drum, which is located within the boiler, and the boiler placed on the stove, the operation of washing commences.

The drum is now rotated through the medium of the crank-handle and one or both of the wheels J M. Should it be desired to cause a violent agitation of the water, the drum should be rapidly rotated. For this purpose the crank is applied directly to the shaft E. But if it be desired to rotate the drum less rapidly and cause less agitation, as will be necessary for washing fabrics of delicate texture, then the crank is applied to the pinion M. In either case the drum is as easily operated, but only at different degrees of speed.

The water should boil about twenty minutes and the clothes be constantly rotated, and thereby subjected to the agitation of the water and the pounding of the weights or balls. After this the dirty water and sediment are allowed to run out through a pipe or opening, a, in the side of the boiler, which is then closed up, and clean or fresh water afterward introduced into the boiler, and the clothes turned therein, when they are soon ready for the line. I produce thus a simple, cheap, and practical device.

Having thus described my invention,

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

The combination of the sectional boiler A B, lid C, sectional drum D, gearing J M, strengthening piece N, and squared shafts E S, as and for the purpose described.

To the above specification of my invention I have signed my name this day of June, 1867.

THOMAS G. HUGHES.

Witnesses:

G. H. STERLING.

I. C. SWAIN.