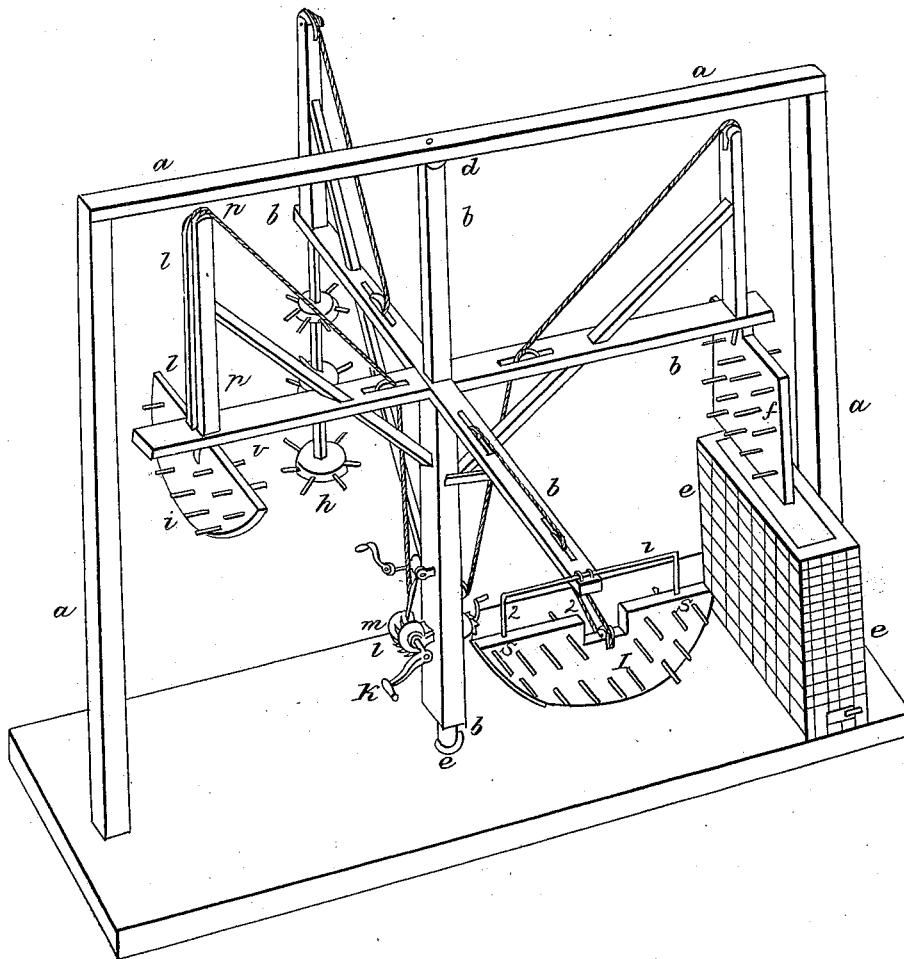


G. M. JOHNSON.  
Brushing and Finishing Hats.

No. 1,454.

Patented Dec. 31, 1839.



# UNITED STATES PATENT OFFICE.

GEO. M. JOHNSON, OF PORT DEPOSIT, MARYLAND.

## MACHINE FOR COLORING HATS.

Specification of Letters Patent No. 1,454, dated December 31, 1839.

*To all whom it may concern:*

Be it known that I, GEORGE M. JOHNSON, of Port Deposit, Cecil county, Maryland, have invented a new and useful Improvement on Hat-Coloring Machines; and I do hereby declare that the following, with the accompanying drawing, is a full and exact description.

*a, a, a*, represents a frame (which may be dispensed with, if we choose to place the top journal of the crane in the joist or the ceiling,) which supports the crane *b, b, b, b, b*, which sets in a step at *c*, and is held upright by the journal *d*, in the plate *a, a*.

*e, e*, is the kettle.

The object of the crane is to immerse into the kettle and raise from it a suit of hats and swing them around out of the reach of the steam of the kettle, giving them a perfect chance to cool. These suits are placed or arranged upon the pins in the plates *f, g, h*, or *i*, which are 4 forms exhibited to show that the principle is applicable to any form of kettle which the manufacturer may already have set.

The hats are designed to be colored on the blocks, and these to be placed on the pins, the pins passing through the middle of the blocks.

*k, l, m*, show one of the 4 sets of handles, windlasses, ratchets, hands and drums. The rope from the drum passes over the arm of the crane at a roller *o*; and the top of the upright *p, p*, after passing over the roller or pulley at *p*, the rope is attached to a slide *q, q*, which plays in a groove in the upright *p, p*, and passes through the horizontal piece *b, b*, and is attached to the plate *i*, on which the hats are placed. This plate may consist of boards battled together. I have just described one form of the plate and mode of raising it and lowering it straight by means of the slide and groove *q, q*, and the tackle, &c., but I have contemplated various forms of implements for raising and lowering the suits.

Instead of the slide and groove just described I propose the plan represented at *z, z*, where a bent piec of metal is attached to the arm *b*, of the crane and bent so as to pass into 2 holes at *s, s*, so that the plate *s*, may be guided up and down straight and not to rub the hats against the sides of the kettle.

I could describe other plans which would do equally well but I consider it useless, as I cannot describe them all.

I would recommend the use a square or oblong kettle.

I consider any further description unnecessary, as the principle is perfectly intelligible and consists in the use of a crane and accompanying tackle and its appendages for letting the suits vertically into and taking them out of the kettle and swinging the suits around out of the way of the kettle, so that they may speedily cool while other suits are coloring.

The crane may have 2, 3, 4 or more arms and suits attached.

By this means I can color a double number of hats in the same kettle in the same time and it will admit double the quantity of ingredients in the kettle. By the double strength of the liquor and perfect cooling, the color will be more durable. I can immerse one suit every 15 minutes making 4 suits to the hour. It will take less ingredients to the same number of hats by coloring double the number of hats in the kettle.

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

The method of putting the suits in and out of the kettle, and swinging the suits around so as to let them cool while other suits are coloring, by means of the apparatus before described.

GEORGE M. JOHNSON.

Witnesses:

JOHN W. POST,  
LEMUEL S. JOHNSON.