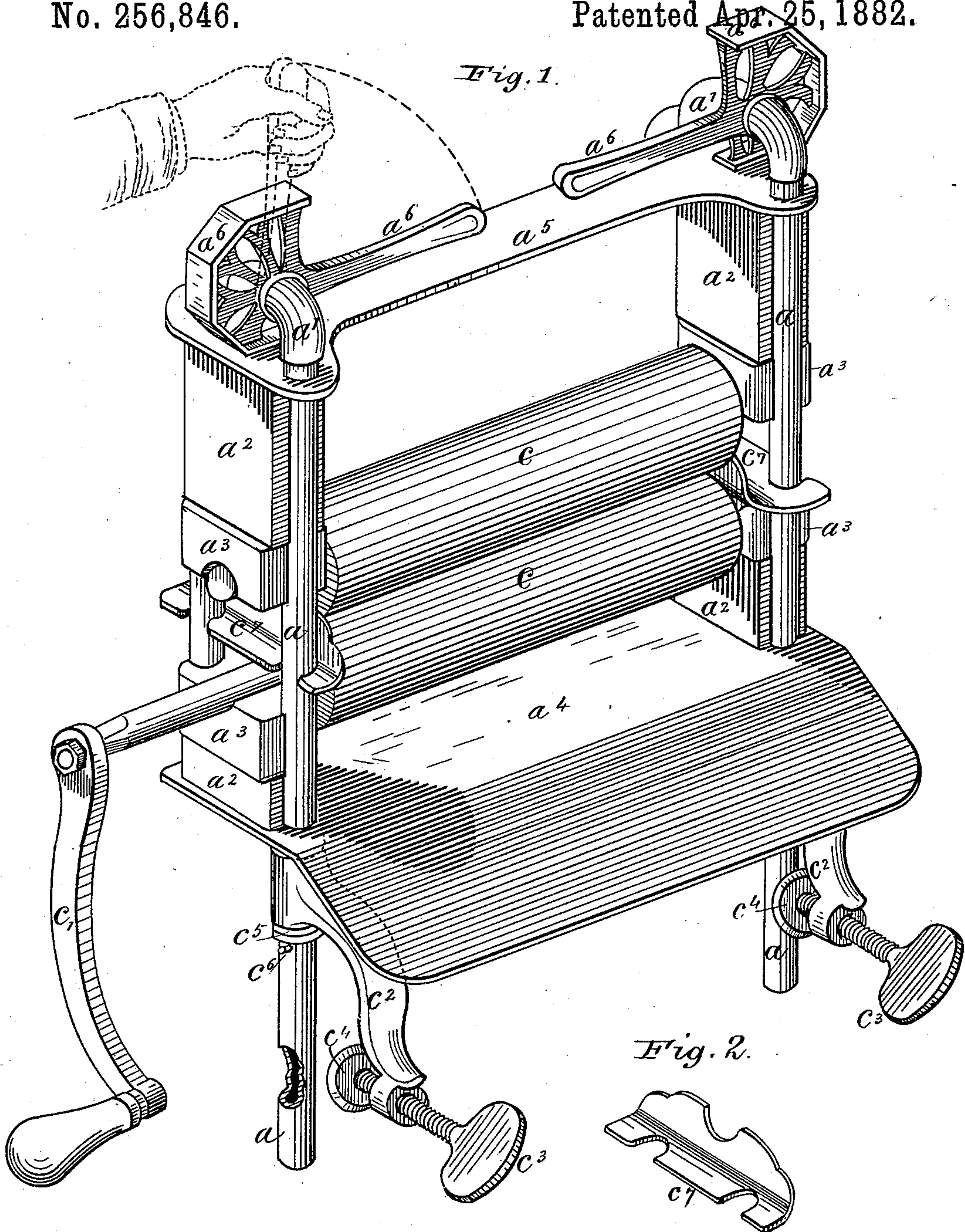


(No Model.)

T. J. MAYALL.  
WRINGING MACHINE.

No. 256,846.

Patented Apr. 25, 1882.



Witnesses:  
Ch. Houghton  
J. L. Houghton

Inventor:  
Thos. Mayall



# UNITED STATES PATENT OFFICE.

THOMAS J. MAYALL, OF READING, MASSACHUSETTS.

## WRINGING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 256,846, dated April 25, 1882.

Application filed March 24, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS J. MAYALL, of Reading, in the county of Middlesex and Commonwealth of Massachusetts, have invented a new and useful Improvement in Wringing-Machines, (so called,) of which the following is a specification.

My invention relates to the construction of the machine and the materials of which its parts are made.

In the accompanying drawings, Figure 1 is a perspective view of the wringing-machine with my improvements, and Fig. 2 a detail view of the guard used in connection with the pressure-rolls.

$a a$  are the frames of the machine, one at each end of the rollers, sustaining and confining the several parts of the machine in their proper relative positions, and are made of tubes of suitable metal—iron or brass.

$a' a'$  are hollow elbows, into the lower opening of which the frame-pieces  $a$  are inserted, and held by screws on the pieces  $a a$  running into a thread cut on the inside of the elbows  $a' a'$ . These elbows are joined to each other at the top of the machine by being screwed together.

$a^2 a^2 a^2 a^2$  are blocks of elastic rubber, confined in the frame of the machine above and below the journal-bearings of the rolls, which will yield and allow the passage of articles of considerable thickness between the rolls.

$a^3 a^3 a^3 a^3$  are blocks of rubber and graphite compound made under Patent No. 140,208, issued to me June 24, 1873, which constitute the bearings of the roller-journals.

$a^4$  is a metal plate with four holes, one in each corner of it, through which the frame-pieces  $a$  pass, and upon which the lower elastic rubber blocks  $a^2$  rest. It has on one side a leaf or apron placed at an angle with the plate, over which articles going between the rolls pass.

$a^5$  is a plate at the top of the machine, with four holes in it, one in each corner, through which the frame-pieces  $a$  pass, and against the under side of which the upper elastic rubber blocks  $a^2$  press.

$a^6 a^6$  are two levers, one at each end of the machine, having the hollow elbows  $a' a'$  for fulcrums, and on their shorter ends cams with

several flat sides, each of the flat sides being at different distances from the fulcrum, the second at a little greater distance than the first, and so on to the last. The flat sides of these cams press against the upper side of the plate  $a^5$ , holding and forcing it, when desired, down against the upper elastic rubber blocks  $a^2$ , thus forcing the rolls closer together, the movement of these levers serving to increase or diminish the distance between the rolls, as the use of the machine may require.

$c c$  are the rolls, made of elastic rubber, vulcanized onto iron shafts passing through the whole length of them, and forming journals at each end outside of the rubber, the lower one extending far enough to receive a crank with a handle, by which the rolls are revolved.

$e'$  is the crank and handle.

$c^2 c^2$  are loose brackets at the bottom of the machine, on the portion of the frame  $a a$  which extends below the plate  $a^4$ , having the thumb-screws  $c^3 c^3$  passing through the outer end of the arm of the bracket.

$c^4 c^4$  are loose buttons on the inner end of the thumb-screws  $c^3$ .

$c^5 c^5$  show two washers loose on the extension of the frame  $a a$ , below the plate  $a^4$ , and below the brackets  $c^2 c^2$ .

$c^6 c^6$  are pins through the extension of the frame-pieces  $a a$  below the plate  $a^4$  and the brackets  $c^2 c^2$ , to hold and keep the brackets  $c^2 c^2$  and the plate  $a^4$  in their proper positions in the machine.

$c^7 c^7$  are guards at each end of the rolls, consisting of a horizontal plate having openings for the frame-pieces  $a a a a$ , and a perpendicular plate with openings in it for the shafts through the rolls. The object of these guards is to keep articles passing between the rolls from becoming entangled with the frame-pieces or the roll-journals.

The plate  $a^4$  is firmly fixed to the shorter frame-pieces  $a a$  by a screw having a square head passing through it into the lower end of the frame-piece, there running into a screw-thread cut to receive it. The brackets  $c^2$ , thumb-screws  $c^3$ , loose buttons  $c^4$ , and the extension of the frame-pieces  $a a$  below the plate  $a^4$ , and the brackets serve together to clamp the machine to a tub or box where it is to be used.

The manner of using the wringing-machine is so obvious and well known that it does not seem necessary to describe it here.

I claim as new—

5 1. In a wringing-machine, the frame composed of two continuous tubular arches, between and by which all the parts of the machine are supported, substantially as described.

10 2. The combination of the tubular frame, movable top plate, through perforations in which pass the side pieces of said frame, cam-levers acting on said top plate, elastic blocks supported in said frame, and pressure-rolls, substantially as described.

15 3. In a wringing-machine, the combination, with the supporting-frame composed of two tubular arches, of a movable top plate, through holes in which pass the uprights of said frame,

and by which the two portions of said frame are united, as set forth. 20

4. The tubular frame-pieces supporting between them the bearings for the rolls, and connected at the top by curved pieces which carry adjusting devices, substantially as described.

5. A wringing-machine comprising the following elements in combination: a tubular frame, a movable top plate, cam-levers supported by said frame and acting upon said plate, pressure-rolls, elastic blocks supported in said frame below said plate, and guards operating in connection with said rolls, all substantially as described. 25 30

THOS. J. MAYALL.

Witnesses:

CHAS. HOUGHTON,

F. L. HOUGHTON.