

J. W. COLE.

Machines for Forming, Shaping, and Dressing
Journal-Boxes.

No. 139,773.

Patented June 10, 1873.

Fig:1

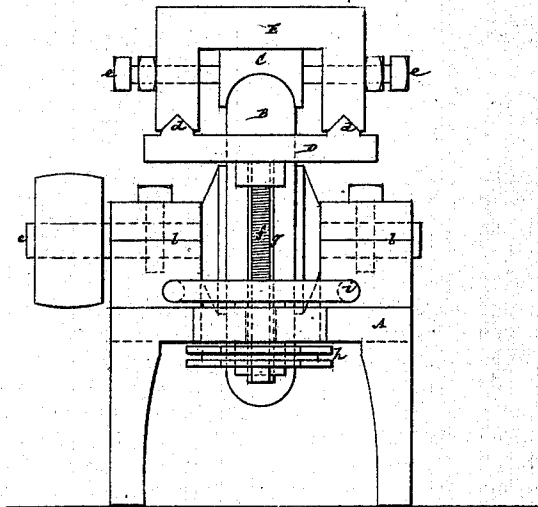
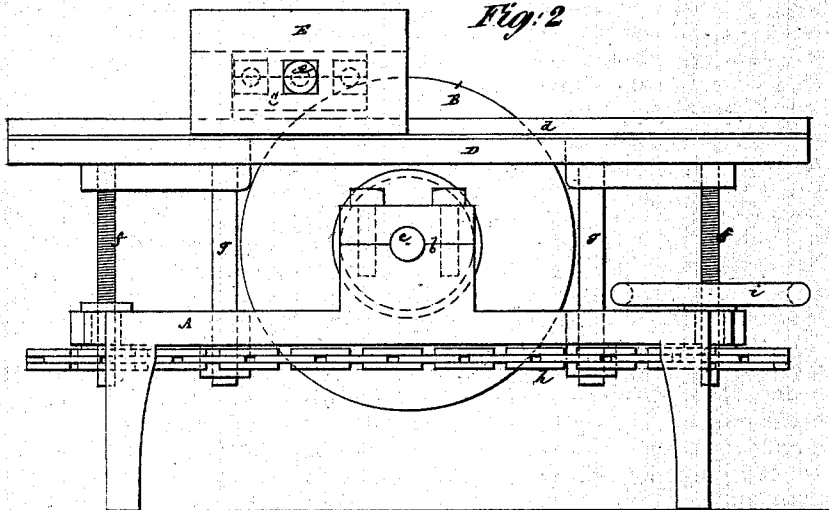


Fig:2



Witnesses:
Michael Ryan
Fred Hornum

J.W. Cole

UNITED STATES PATENT OFFICE.

J. WENDELL COLE, OF BROOKLYN, NEW YORK, ASSIGNOR TO "THE TANITE COMPANY," OF STROUDSBURG, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR FORMING, SHAPING, AND DRESSING JOURNAL-BOXES.

Specification forming part of Letters Patent No. **139,773**, dated June 10, 1873; application filed December 7, 1872.

CASE B.

To all whom it may concern:

Be it known that I, J. WENDELL COLE, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Machines for Forming or Shaping and Dressing Journal-Boxes, of which the following is a specification:

This invention consists in a machine for forming or shaping and dressing the interior or working surfaces of journal-boxes by means of an emery or grinding wheel of a transverse curvature on its periphery corresponding with that of the shaft designed to work in said box. To this end, the wheel is made to revolve in suitable bearings, and the journal-box to be dressed adjusted within a clamping-carriage, which is fitted to slide upon ways over the wheel in a transverse direction to its axis, subject to adjustment of certain parts whereby the contiguity of the box to the wheel may be regulated as required. By this machine journal-boxes may be ground perfectly true and without grooves or ridges to fit the shafts they are designed to receive.

In the accompanying drawing which forms part of this specification, Figure 1 represents an end view of a machine for grinding journal-boxes, in illustration of my invention, and Fig. 2 a side view of the same.

Similar letters of reference indicate corresponding parts in both figures.

A is a frame of any suitable description having bearings *b b* on either side for the shaft *c* of a revolving emery or other grinding wheel, B, which is of transverse curvature on its periphery corresponding with the outline of the interior of the journal-box C to be ground. D is a table arranged over the frame A, and through an opening in which the wheel B projects. This table is provided on its upper surface with parallel ways *d d* for a work-clamping carriage, E, to slide along in transverse relation to the axis of the wheel, but

above it, or in direction of the plane of rotation of the wheel, and which may either be done automatically or by hand. C is the journal-box clamped by adjusting-screws *e e* within the sliding carriage for passage over and against the transversely-curved periphery of the revolving wheel B in direction of the length of the box by the sliding of the carriage along the ways *d d*. The table D is adjustable up or down (to regulate the contact of the journal-box with the wheel as the former is slid over the latter) by means of adjusting-screws *f f* and guides *g g* connecting said table with the frame A, the screws *f f* being coupled by a chain, *h*, to work in unison, and being operated by a hand-wheel, *i*.

Any other suitable means, however, may be employed for effecting the adjustment, and instead of the table D being made adjustable, the wheel B may be adjusted to meet like requirements, and, if desired, instead of the carriage E having a sliding motion, the wheel B may be carried by a sliding device and the journal-box be stationary. Either of these I regard as the equivalents of the devices and combinations shown, and furthermore do not restrict myself to an upper position of the work-clamping carriage E relatively to the wheel, as the same might be arranged below the wheel or in any other intermediate position.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination of the revolving emery or grinding wheel B, of transverse curvature on its periphery, with the journal-box clamping-carriage E, arranged for operation and adjustable in relation with each other, substantially as and for the purpose herein set forth.

J. W. COLE.

Witnesses:

MICHAEL RYAN,
FRED. HAYNES.