

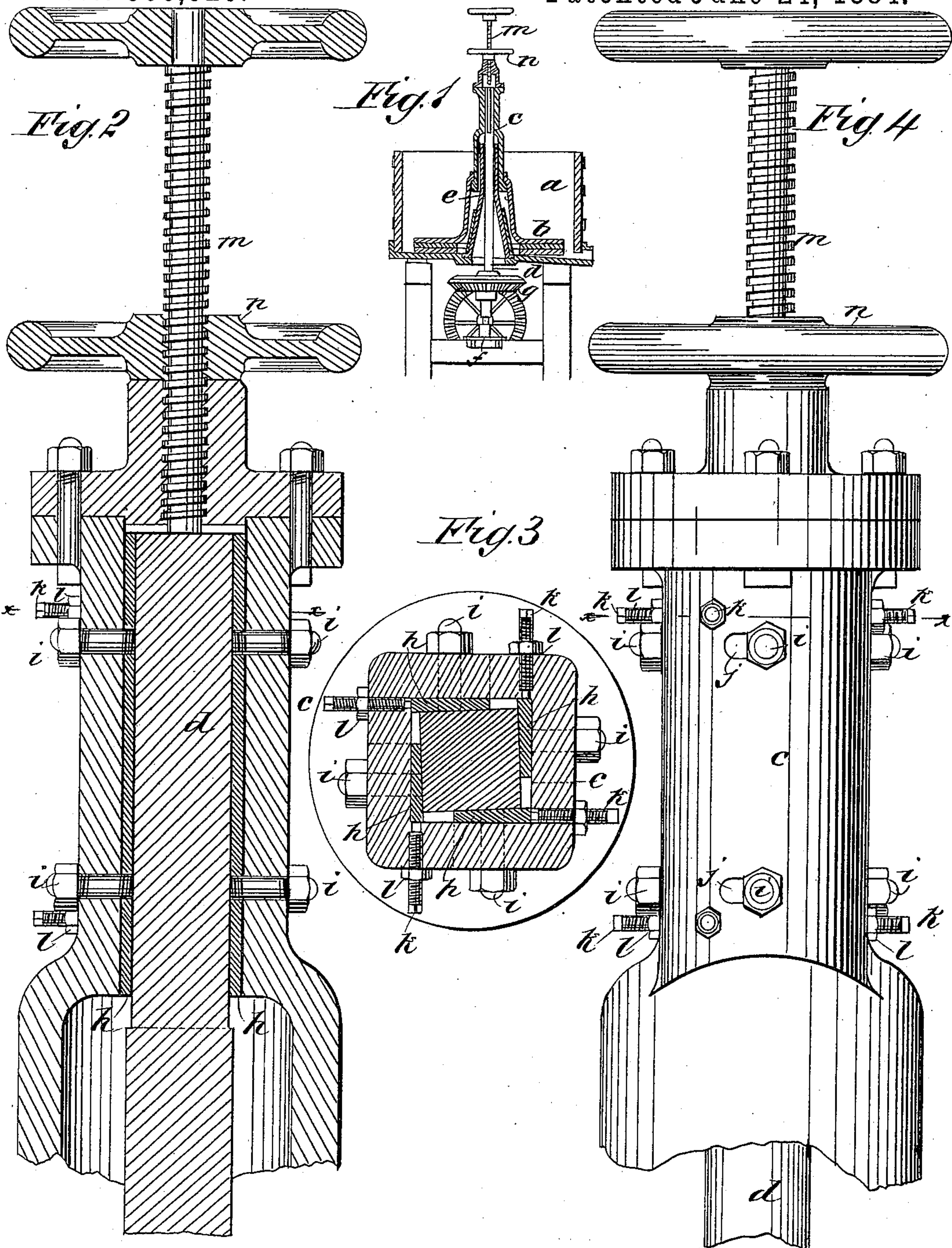
(No Model.)

A. WALLACE.

BEARING FOR THE SPINDLES OF AMALGAMATING PANS.

No. 300,920.

Patented June 24, 1884.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ANDREW WALLACE, OF LEADVILLE, COLORADO.

BEARING FOR THE SPINDLES OF AMALGAMATING-PANS.

SPECIFICATION forming part of Letters Patent No. 300,920, dated June 24, 1884.

Application filed December 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, ANDREW WALLACE, of Leadville, in the county of Lake and State of Colorado, have invented a new and useful Improvement in Bearings for the Spindles of Amalgamating-Pans, of which the following is a full, clear, and exact description.

My invention consists of an improved contrivance of devices for centering and tightening the sliding jackets of the grinding-mullers of amalgamating-pans on the spindles for driving them, the said contrivance being an angular or flat-sided shape of the spindle, and the hollow space of the jacket fitting thereon, together with an arrangement of adjusting wedges and screws, whereby the jackets may be readily and accurately centered and tightened on the spindles for being run truly thereby, all as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of an amalgamating-pan of the kind to which my invention applies. Fig. 2 is a sectional elevation of the driving-spindle and the jacket of the driven muller, together with my improved arrangement of adjusting devices. Fig. 3 is a transverse section on the line *x x* of Figs. 2 and 4, and Fig. 4 is a side elevation.

In Fig. 1, which represents the application of my invention to an amalgamating-pan, and is drawn to a smaller scale than the other figures, *a* represents the pan; *b*, the grinding-muller; *c*, the jacket for connecting the muller to the driving-spindle; *d*, said spindle; *e*, the conical upright bearing for the upper support of the spindle; *f*, the step for the lower support for the driving-spindle, and *g* the driving-wheels for revolving the grinding-muller by means of the spindle on which the muller is mounted by the jacket *c*.

It is important for the successful operation of these machines that the jacket *c* be so mounted on the spindle that it will run truly,

and at the same time the jacket must fit the spindle, so that there shall not be any slack; and it is desirable to be able to adjust the jacket on the spindle to correct any variation there may happen to be in it when first fitted up, or that may subsequently occur from any cause, as by the springing of the shaft or the bottom of the pan supporting the bearing *e*. I therefore make the socket of the jacket square or of other form affording plane sides, and shape the spindle *d* with corresponding sides, but sufficiently smaller to enable wedges *h* to be used between the sides of the spindle and the side walls of the socket of the jacket, as represented in Figs. 2 and 3. To facilitate the application of these wedges, I connect them to the sides of the walls of the socket by stud-bolts *i*, projecting out through slots *j* of the jacket, to hold the wedges in place after the jacket has been adjusted to the shaft; and to set up the wedges for adjusting the jacket I have fitted adjusting-screws *k* through the jacket against the backs of the wedges, and provided jam-nuts *l*, to hold them in position after being adjusted. The jacket is suspended from the top of the spindle by the adjusting-screw *m*, for regulating the position of the muller, and said screw is fitted with a check-nut, *n*, to secure it in position after being adjusted. The wedges *h* are to be sufficiently slack to enable the jacket to be shifted up and down on the spindle, according as it is desired to adjust the muller. It will be seen that by means of these wedges the jacket may be set to run true, even though the spindle may vibrate to some extent.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The jacket *c*, having a plane-sided socket and the slots *j*, the stud-bolts *i*, the wedges *h*, and the adjusting-screws *k*, in combination with the driving-spindle *d*, having plane sides, substantially as described.

ANDREW WALLACE.

Witnesses:

ALEXANDER B. ELIEL,
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