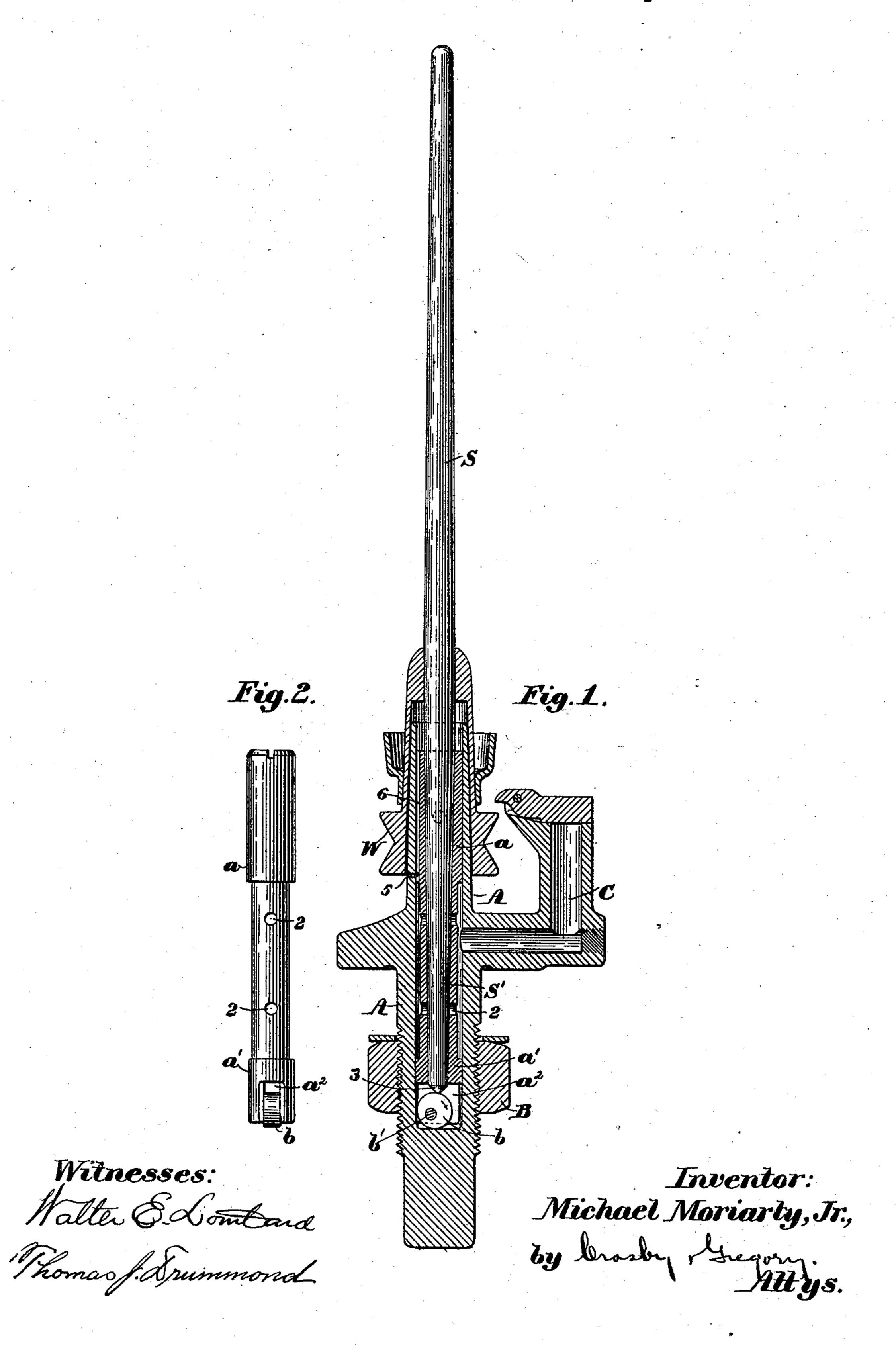
M. MORIARTY, Jr. SPINDLE AND BEARING.

No. 558,828.

Patented Apr. 21, 1896.



United States Patent Office

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SPINDLE AND BEARING.

SPECIFICATION forming part of Letters Patent No. 558,828, dated April 21, 1896.

Application filed January 29, 1896. Serial No. 577,220. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL MORIARTY, Jr., of Fall River, county of Bristol, State of Massachusetts, have invented an Improve-5 ment in Spindles and Bearings, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to that class of spinning-spindles wherein the tapering pintle of the spindle enters a correspondingly-tapered bolster-bearing located in the bolster-case.

In order to insure steadiness of rotation 15 and equal distribution of wear of the parts, it is necessary to secure a uniform fit between the tapering exterior of the pintle and the interior of the tapering bore of the bolsterbearing. In this present invention the bol-20 ster-bearing is loose in the bolster-case, and it rests on an adjusting device, which is controlled by the spindle in such manner that when the fit between pintle and bolster-bearing becomes loose the spindle will act upon 25 the adjusting device to automatically lift the bolster-bearing and thereby restore the proper fit of the pintle therein.

Figure 1 is a vertical sectional view of a spindle-bearing embodying my invention, the 30 spindle being shown in elevation; and Fig. 2 is a side elevation of the bolster-bearing detached.

The spindle S, having a tapering pintle S', the bolster-case A, having its lower end 35 threaded to receive the usual nut B to retain it upon the rail, (not shown,) and the whirl W, attached to the spindle, may be and are of usual construction.

The bolster-bearing a, fitting loosely in the 40 casing A, has the usual tapering bore to receive snugly the pintle S', holes 2 admitting oil thereinto from the reservoir or chamber C.

In order to prevent the bolster-bearing afrom rotating in the casing, a pin or other 45 projection 5, Fig. 1, extends from the interior of the casing into a longitudinal groove 6 in

the bearing.

The lower end a' of the bearing, enlarged to snugly fit the casing A, is transversely 50 slotted at a^2 to receive therein the spindlestep and adjusting device, (herein shown as a roll b,) preferably of hardened steel, eccen-

trically mounted to rotate on a stud b' at one side of the longitudinal axis of the spindle, the conical end 3 of the pintle, extended 55 through the tapering bore of the bearing a, resting on the periphery of the cam-roll b.

In Fig. 1 the parts are shown in substantially normal position, with the end of the spindle resting on the roll b at one side of its 60 axis b', said roll resting on the bottom of the casing A and supporting the bolster-bearing a at or near its lowermost position. Now when by use the fit between the pintle and the bore of the bolster-bearing becomes loose, 65 the weight of the spindle acting on the roll tends to turn the same in the direction of the arrow, Fig. 1, to thereby raise the bolsterbearing, restoring the fit between it and the pintle. The greater the wear the more will 70 the roll b be turned, and correspondingly the greater the elevation of the bolster-bearing ato restore the fit between pintle and bearing, so that the fit is automatically maintained uniform.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A case, a bolster-bearing loose therein having a tapering bore, a spindle having a 80 tapering pintle to enter therein, and an eccentric roll mounted on the lower end of and to vertically adjust the bearing, said roll forming the spindle-step and being controlled by the spindle to regulate the adjustment 85 of the bolster-bearing, substantially as described.

2. A case, a bolster-bearing therein having a tapering bore, a spindle having a tapering pintle to enter therein, and a rotatable eccen- 90 tric spindle-step pivoted to the bolster-bearing, its pivot being eccentric to the longitudinal axis of the spindle, the weight of the spindle upon said step turning it to adjust the bolster-bearing and thereby maintain 95 uniformity of fit between it and the pintle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MICHAEL MORIARTY, JR.

Witnesses:

DANIEL MORIARTY, WILLIAM F. STOREY.