(No Model.)

J. T. MEATS.

SPINDLE BEARING.

No. 342,873. Patented June 1, 1886.

Fig. 1.

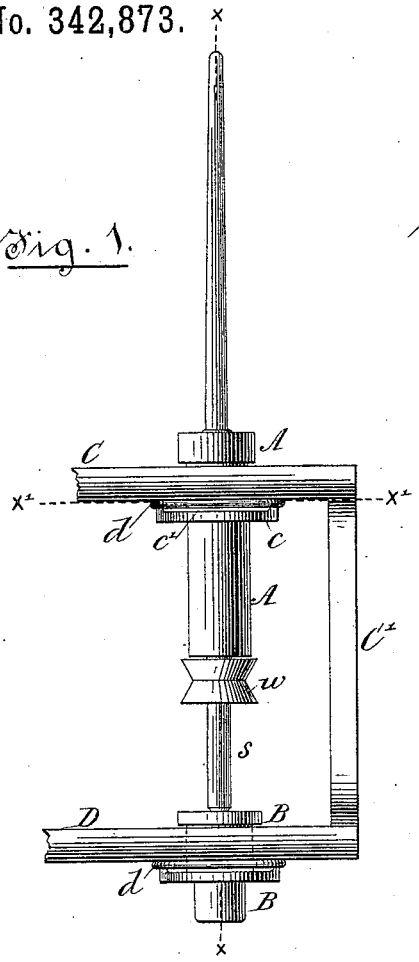


Fig. 2.

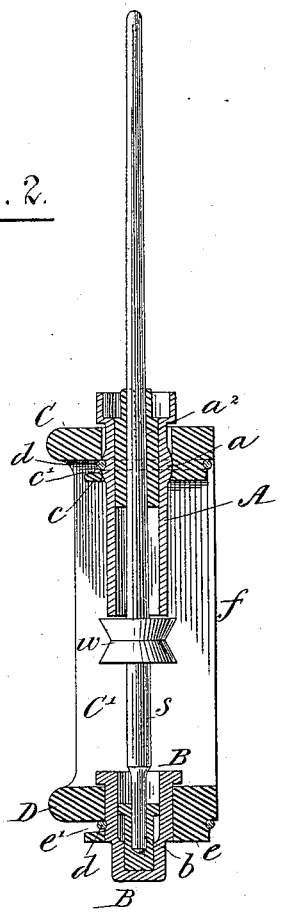


Fig. 3.

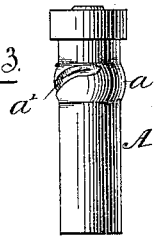


Fig. 4.

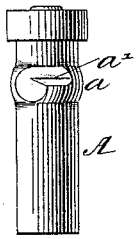
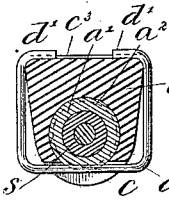


Fig. 5.



Witnesses;
Fred L. Emery.
John F. C. Printiss

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John T. Meats
per
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his Attys.

UNITED STATES PATENT OFFICE.

JOHN T. MEATS, OF TAUNTON, MASSACHUSETTS.

SPINDLE-BEARING.

SPECIFICATION forming part of Letters Patent No. 342,873, dated June 1, 1886.

Application filed June 15, 1885. Serial No. 168,731. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. MEATS, of Taunton, county of Bristol, and State of Massachusetts, have invented an Improvement in Spindle-Bearings, of which the following description, in connection with the accompanying drawings, is a specification, like letters in the drawings representing like parts.

This invention has for its object to improve and simplify the bearings for spindles, and at the same time cheapen the construction of the spinning-machine containing the spindles.

In accordance with my invention, the bolster-rail is provided at its under side, about the opening therein bored for the reception of the bolster, with a lug which is slotted at one side to intersect the bolster-receiving opening, the said lug supporting a holder, (herein shown as a wire loop pivoted upon the lug,) one side of the holder entering the slot of the lug and engaging a notch in the bolster, which in line with the said notch is enlarged or made spherical, to thereby permit the bolster to tip slightly, as may be required to secure proper alignment of the spindle. The step-rail has like lugs and holders to hold the step-case in the rail.

The particular features in which my invention consists will be pointed out in the claims at the end of this specification.

Figure 1 is a side elevation of a spindle mounted in accordance with my invention; Fig. 2, a vertical section thereof in the line x x, the spindle being, however, left in elevation, the said figure showing the vertical web, which is broken off from the left of Fig. 1, it being just like the one at the right of Fig. 1. Fig. 3 is a separate view of one of the bolsters detached. Fig. 4 is a view of a modified form of bolster; and Fig. 5 a section in the line x' x', Fig. 1, looking down.

The bolster A, made as a sleeve or tube, is provided with a spherical projection, a, which at one side is grooved or notched, as at a', the said groove being preferably somewhat spiral, as in Fig. 3; but, if desired, it may be as in Fig. 4. The tube of the bolster is provided with a bearing-piece, a^2, which may be a separate piece, as shown, fitted closely into the tube, or be integral therewith.

The step consists of a socket-like piece, B, provided at one side with a notch, (see Fig. 2,) and containing a step-bearing, b, preferably detachable therefrom.

The bolster and step are placed in openings bored in the bolster-rail C and step-rail D, they being herein shown made as a single casting, joined at proper distances by the web C'.

At the under side of the rail C, and at each opening therein, is a lug, c, slotted at one side, as at c', to receive the holder d, (herein shown as a piece of wire bent to resemble a bail,) its ends d' being entered into a groove, c^2, at the rear side of the lug c.

The rail D has at its under side a lug, e, slotted at e', to receive a like holder, d.

The spindle s and its whirl are of usual construction.

The double rail needs to be planed only at its rear side, f, where it is to meet the frame to which it is to be bolted.

To insert the bolster it will be dropped into the opening in the rail C until the enlarged or spherical part of the bolster meets the holder, and thereafter the bolster will be pressed down into the said opening and into the holder, and the latter, entering the groove a', will, as the bolster is rotated, draw the same down into the rail until the holder rests in the upper part of the said slot. The bolster may be quickly removed by a reverse rotation, coupled with a slight lift, to somewhat expand the holder, which is elastic to a certain extent. The lug retains the holder in place.

To insert the step B it is only necessary to force it down into the rail D and holder below it until the notch in the step engages the holder.

The bolster, held as described, may be quickly inserted or removed, and will readily align itself with the spindle.

I do not broadly claim a bolster having a spherical enlargement, or as having a slot or groove.

I claim—

1. The compound rail composed of the rails C D, connected by a web, C', and bored for the reception of the bolster and step, and provided each with a slotted lug, combined with two holders, d, and with a bolster and a step,

each provided with a notch which is engaged by the said holders, to operate substantially as described.

2. The rail C, bored for the reception of the bolster, and provided with a lug or projection, to hold the holder, having a spherical portion provided with a groove or notch, and with a holder, *d*, to engage the groove or notch of the bolster, substantially as described.

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

JOHN T. MEATS.

Witnesses:
G. W. GREGORY,
B. J. NOYES.