

(No Model.)

W. HINCHLIFFE.
SPINDLE BEARING OR SUPPORT.

No. 577,553.

Patented Feb. 23, 1897.

Fig. 1.

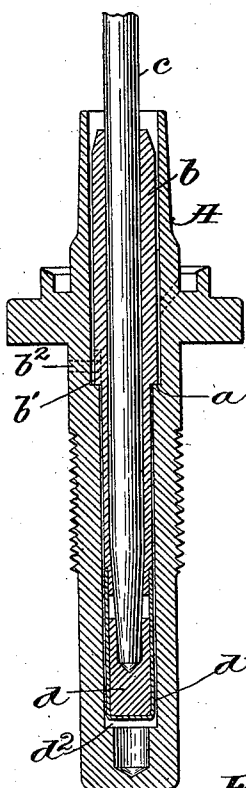


Fig. 2.

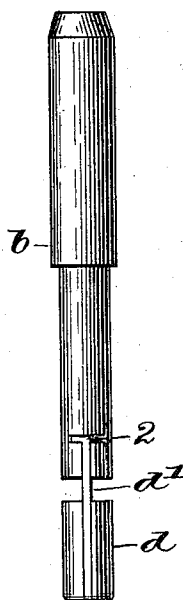


Fig. 3.

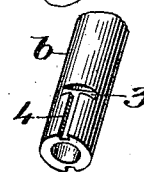


Fig. 4.

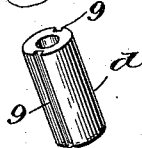


Fig. 7.

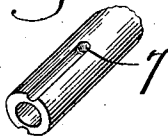
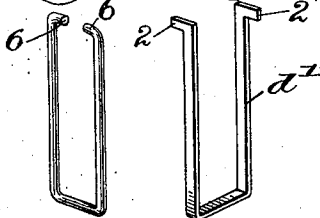


Fig. 6. *Fig. 5.*



Witnesses:

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Inventor.

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attys.

UNITED STATES PATENT OFFICE.

WILLIAM HINCHLIFFE, OF HUNTSVILLE, ALABAMA, ASSIGNOR TO THE
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SPINDLE BEARING OR SUPPORT.

SPECIFICATION forming part of Letters Patent No. 577,553, dated February 23, 1897.

Application filed October 22, 1896. Serial No. 609,651. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HINCHLIFFE, of Huntsville, in the county of Madison and State of Alabama, have invented an Improvement in Spindle Bearings or Supports, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to support the step for a spindle in a novel manner.

In my invention I employ a loose bolster, and to enable the foot of the spindle to have greater freedom of motion than it could have due to the movement of the bolster alone I have made the step separate from the bolster and have suspended it from the lower end of the bolster, so that it may swing in the space in the bolster-case below the lower end of the bolster, the swinging connection referred to being effected by a bale or loop in which the step is set.

My invention consists, essentially, in a spindle-supporting case, containing a loosely-supported bolster and a step sustained below said bolster by a loop or stirrup, as will be described.

Figure 1, in section, represents part of a spindle and its bearings embodying my invention. Fig. 2 shows the bolster and its connected step removed. Fig. 3 shows the lower end of the bolster. Fig. 4 shows the step detached. Fig. 5 shows one form of loop. Fig. 6 shows a modified form of loop, and Fig. 7 the lower end of a bolster to be engaged by it.

The supporting-case A, adapted in practice to sit on a rail, as usual, has an internal bore provided with a shoulder *a*, on which rests the shoulder of a bolster *b*, entering said bore loosely and adapted to move laterally on said shoulder *a* in said bore. The bolster is provided with a groove *b'*, which may be entered by a suitable pin or projection *b''* to restrain the rotation of the bolster in the case. The spindle *c*, of any usual or suitable construction, enters the bolster, and its foot extends below said bolster, and in this my invention this foot enters a step *d*, which sits in a loop or stirrup *d'*, said loop or stirrup suspending the said step below the bolster in the bottom

of the space *d''* of the case, the loop forming a yielding connection and support for said step.

In Figs. 1 to 5 this loop is shown as having projections 2, which enter external cross-slots 3, made across the exterior of the bolster near its lower end, other intersecting vertical slots 4 receiving the vertical sides of the loop.

The link shown in Figs. 1 to 5 works very satisfactorily, yet this invention is not limited to the exact shape or construction shown for said loop, as, for instance, it may have the ends of its arms bent inwardly at 6, Fig. 6, and enter holes 7, made in the bolster, as shown in Fig. 7, the arms of the loop entering the slots.

The step is grooved, as at 9, to receive the arms of the loop.

The step is suspended loosely in the space *d''*, and the arms of the loop are preferably out of contact with the interior of the bore in the bolster.

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

1. The bolster-case and loose bolster therein, and the step suspended in the bore of the said case below the said bolster by a loop, substantially as described.

2. The bolster-case, a shouldered bolster mounted therein loosely and a step, combined with a loop connected to and suspended below the lower end of said bolster, said loop wholly supporting said step in the said bore loosely, whereby the foot of the spindle and its step are permitted freedom of motion, substantially as described.

3. A spindle, a bolster-case, and the bolster sustained loosely therein, combined with a loop having its ends bent to enter notches in the bolster, and a step sustained by said loop, and receiving the foot of the spindle, substantially as described.

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

WILLIAM HINCHLIFFE.

Witnesses:

D. L. DAWSON,
WALTER VINSON.