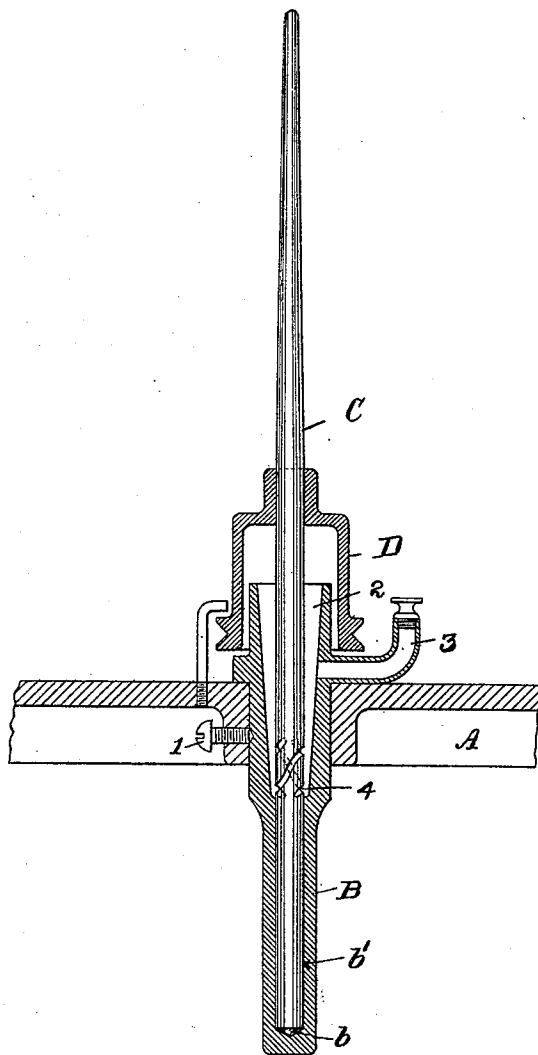


(No Model.)

A. SCHEID.
SPINDLE SUPPORT.

No. 583,089.

Patented May 25, 1897.



WITNESSES:

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ADAM SCHEID, OF HARRISON, NEW JERSEY.

SPINDLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 583,089, dated May 25, 1897.

Application filed October 22, 1896. Serial No. 609,739. (No model.)

To all whom it may concern:

Be it known that I, ADAM SCHEID, a citizen of the United States of America, and a resident of Harrison, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Spindle-Supports, of which the following is a specification.

The object of my present invention is to provide a spinning-spindle which, notwithstanding that its supporting-bolster is securely mounted on the spindle-rail, has sufficient yielding motion to adjust itself to an unbalanced load.

The invention consists in the improved spindle and support and in the combination and arrangement of the various parts thereof, substantially as will be hereinafter more fully described, and finally embodied in the clauses of the claim.

In the accompanying drawing, which represents a central vertical section through my improved spindle and its support, A is a spindle-rail, and B a tube penetrating said rail and secured thereto by means of the set-screw 1. The tube B is provided in its upper portion with an annular downwardly-tapering channel 2 and in its lower portion with the step and bolster bearings *b* and *b'*, respectively. The annular chamber 2 communicates with the oil chamber or cup 3, as clearly shown.

In the step and bolster bearings of the tube B is arranged a spindle C, provided with the sleeve-whirl D, through which latter motion is imparted to the said spindle. The spindle C is provided below the sleeve-whirl and above its bolster-bearing with one or more spiral grooves 4, adapted to weaken the said spindle at that place and to thus form the center of oscillation, as will be manifest. From the

foregoing it can be seen that a spindle provided above its bolster-bearing with spirally-arranged grooves will have sufficient yielding motion to adjust itself to an unbalanced load.

What I claim as new is—

1. The combination with the spindle-rail, of a tube mounted in said rail and provided with step and bolster bearing, and a whirl-driven spindle in said tube and having the portion above its bolster-bearing provided with one or more spiral grooves, adapted to form the center of oscillation, substantially as described.

2. The combination with the spindle-rail, of a tube mounted in said rail and provided with step and bolster bearing and having a cylindrical chamber formed in its upper portion, and a whirl-driven spindle penetrating said cylindrical chamber and arranged in said tube and provided above its bolster-bearing with one or more spiral grooves adapted to form the center of oscillation, substantially as described.

3. The combination with the spindle-rail, of a tube mounted in said rail and having an outwardly-tapering annular chamber arranged in its upper portion, a spindle in said tube and provided at a place within said chamber with one or more spiral grooves, and a sleeve-whirl on said spindle and above the rail, all said parts, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 21st day of October, 1896.

ADAM SCHEID.

Witnesses:

A. FABER DU FAUR, Jr.,
EUGENIE A. PEESIDES.