

O. C. SIDILAU.
 SPINDLE BASE.
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1,062,044.

Patented May 20, 1913.

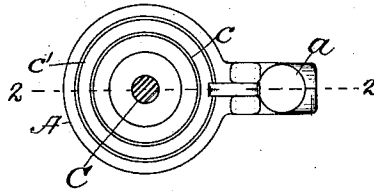


Fig. 1.

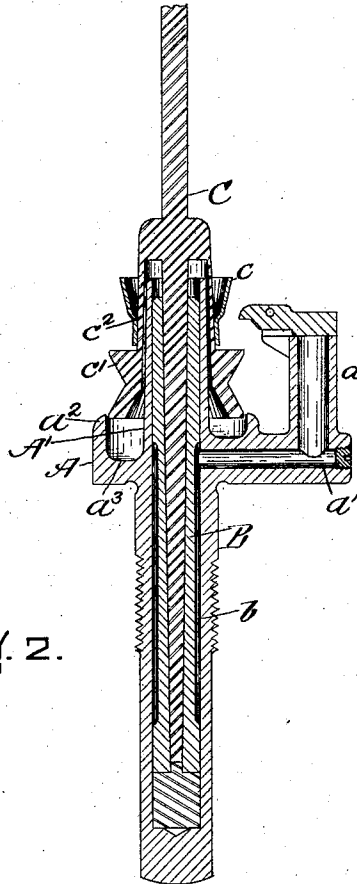


Fig. 2.

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OSCAR C. SIDILAU, OF SHIRLEY, MASSACHUSETTS, ASSIGNOR TO SAMSON CORDAGE WORKS, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

SPINDLE-BASE.

1,062,044.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, OSCAR C. SIDILAU, of Shirley, in the county of Middlesex and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Spindle-Bases, of which the following is a specification.

My invention relates especially to spindles to be used in coarse spinning where there is considerable lint and fly which gathers about the spindle and forms an increasing drag upon it so that considerable increased friction results, and frequent cleaning becomes necessary.

It consists in an improvement in the spindle base by which not only is the gathering of lint prevented but also the scattering of the oil which sometimes overflows the top of the base and when it reaches the bottom of the sleeve which carries the whirl is thrown off by the rapidly rotating spindle and discolors the yarn upon the neighboring spindles, and spatters the frame.

My invention will be understood by reference to the drawings, in which—

Figure 1 is a plan of a spindle embodying my invention, the top of the blade of said spindle being shown in section; Fig. 2 being a section on line 2—2 of Fig. 1.

A is the base in which is the bolster B which is suitably packed as at *b*.

C is the blade having the cap *c* and the whirl *c*¹ hanging from the sleeve *c*².

With the exception of the base A and its arrangement with the blade the parts as shown all represent a well known type of spindle and need no further description as to detail.

The base A has the usual oil tube *a* which is connected by the passage *a*¹ with the packing *b* about the bolster B. The upper surface of that portion of the base through which the oil is fed instead of being flat as is usual is flanged upwardly to form a cup, the flange *a*² of which is sufficiently high to form a guard to the lower edge of the sleeve *c*² which in spindle shown is formed by the whirl *c*¹ while the bottom of the cup *a*³ serves to catch any oil which may flow down around the tubular portion A¹ of the base which steadies the upper part of the bolster and the blade. The interior diameter of the portion *a*² of the base should be substantially the same as the exterior diameter of the whirl or other part which is to act as a guard

in order that there may be no opening or chance for lint to be caught and work its way into the oil cup within the flange or to collect so as to form a bearing constantly increasing in size which will add additional and undesirable friction to the rotating blade. The two parts, however, should of course be sufficiently loose with relation to each other to allow perfectly free rotation on the part of the spindle.

It is well known that when the spindle vibrates in the bolster, it frequently causes the oil to be pumped up around the bolster and over the top of the tubular portion of the base and down the interior of the sleeve carrying the whirl and is thrown out laterally by centrifugal force. The improvement above described prevents this as the flange of the base catches the oil and leads it to the bottom of the cup, but what is of equal importance is the fact that it protects the blade from collecting lint and fly which renders my construction a great improvement over any construction now known to me. It is evident that this construction may be utilized upon other forms of spindle than that shown, its novelty lying in the making of what may be termed a flush joint between the upper end of the flange and the sleeve whereby the two parts shall be as nearly in contact with each other as is practicable with a view to free rotation of the spindle and shall offer no edges for the collection of lint or fly. Thus the operation of the sleeve which lies within the mouth of the flange forms a close cover for the oil chamber and at the same time serves to prevent this lint collection.

It will be noted that the oil tube *a* and passage *a*¹ are not connected with the cup formed by the flange *a*² and this is of advantage because it enables the tube to be made sufficiently long to contain a fairly large supply of oil. If this tube were connected with the cup there would of course be an overflow until the supply in the tube reached a level rather than the top of the cup. If the construction of the spindle is such that oil cannot be thrown by the blade the cup form of the device may be changed, the cavity *a*³ being unnecessary, the flange *a*² being useful in this case to prevent the in-draft of lint.

As shown the whirl forms the lower edge of the sleeve but where the sleeve extends

below the whirl the flange may slightly overlap it or the whirl, as seems best, the purpose of my invention being to prevent the spattering of the oil and the indraft of lint, in
5 other words, to serve as a guard to the lower portion of the sleeve.

What I claim as my invention is:—

In a spindle, a blade having a downwardly projecting sleeve, a base having an upwardly
10 projecting flange surrounding and overlapping the lower edge of said sleeve and forming a cup, said sleeve forming a sliding fit with the interior edge of said cup, terminating just within said cup, and serving as a

closure therefor, a bolster to receive said 15
blade, said sleeve surrounding said bolster and receiving in its interior oil pumped up thereby and delivering it from the lower edge thereof to said flange, said base having
20 an oil passage communicating with said bolster and out of communication with said cup, and an oil reservoir communicating with said oil passage and extended above the level of said flange.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."