

W. L. & W. E. G. ROBINSON.
SPINDLE.

APPLICATION FILED JUNE 24, 1911.

1,037,324.

Patented Sept. 3, 1912.

Fig. 1.

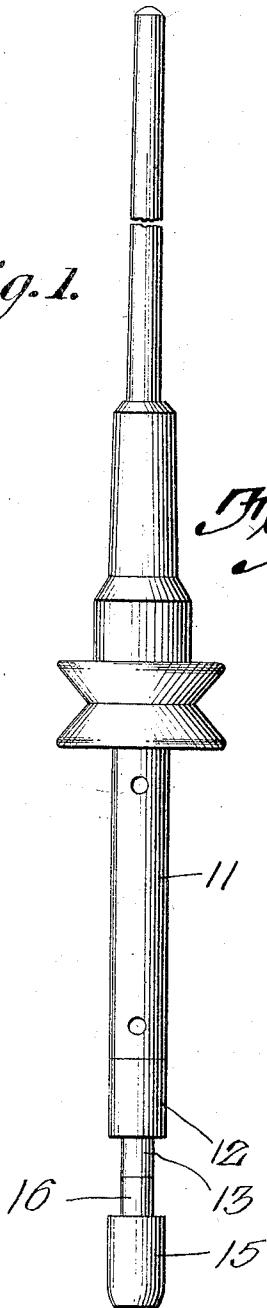


Fig. 2.

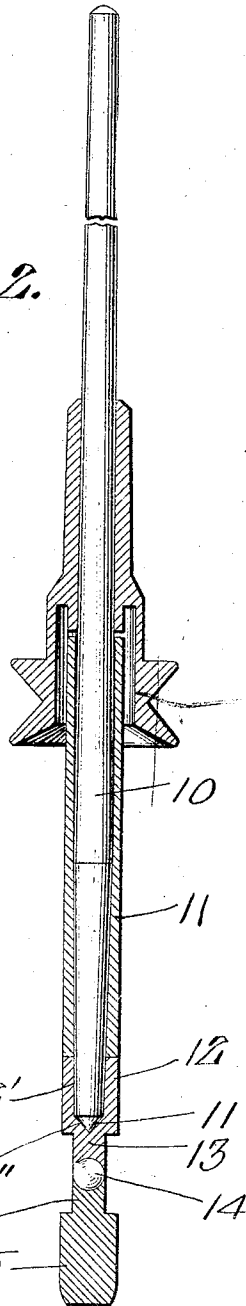
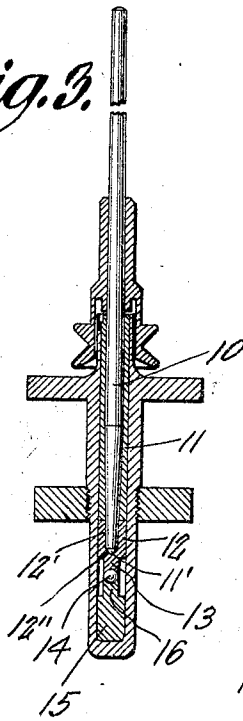


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM LAFAYETTE ROBINSON AND WILLIAM EDWARD GRAHAM ROBINSON, OF
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SPINDLE.

1,037,324.

Specification of Letters Patent.

Patented Sept. 3, 1912.

Application filed June 24, 1911. Serial No. 635,057.

To all whom it may concern:

Be it known that we, WILLIAM L. ROBINSON and WILLIAM E. G. ROBINSON, citizens of the United States, residing at Concord, in the county of Cabarrus, State of North Carolina, have invented a new and useful Spindle, of which the following is a specification.

This invention relates to an improvement in spindles for spinning machines.

The primary object of the invention is to so construct a spindle and its supporting mechanism as to reduce friction, the various parts of the supporting mechanism being such that the same may readily be replaced when they become worn.

In the drawings:—Figure 1 is a view in elevation of the spindle and its supporting mechanism removed from the rail base. Fig. 2 is a similar view, the bolster and supporting mechanism being shown in section. Fig. 3 is a sectional view showing the mechanism positioned within a bolster case.

In the drawings 10 designates the spindle, the tapered pintle of which extends within the tapered bore of a bolster 11 which is seated in the bolster case 11' the case being fixed with respect to the bolster as shown in Fig. 3 of the drawings or in any suitable manner. The pintle extends beyond the bolster and its end portion 11' is tapered and is supported by a socket 12 which forms a continuation of the bolster 11, this socket being formed with the bore 12' and the tapered seat 12''. The socket is provided with a reduced extension 13, the end of which is dishd to form a seat for a ball 14. This ball is supported by a base member 15 which is formed with an extension 16 similar to the extension 14, the two extensions 13 and 15 being so constructed as to prevent the displacement of the ball 14. It will be noted from the foregoing that this peculiar mounting of the spindle provides a support which greatly reduces friction, it being noted that when the parts become dry from lack of oil, binding is absolutely prevented, the ball bearing and the support for the end of the pintle being in alignment, the spindle thus being allowed to revolve freely.

Particular attention is called to the peculiar construction and arrangement of the

members 12 and 15, the three members which support the spindle, that is the sleeve or bolster 10, and the members 12 and 15, being readily replaced should the same become worn, each part being easily removed from the others.

It will be noted that when the spindle becomes dry, the absence of oil may be readily detected by reason of the peculiar constructed support, the spindle turning freely however, regardless of the fact that the same is dry.

The many advantages of a support of this character are clearly apparent as it will be noted that the various parts of the supporting mechanism may be easily and cheaply manufactured, and that said supporting mechanism may be readily assembled.

What is claimed is:—

1. In a spindle support, a tapered bolster arranged to receive the tapered pintle of the spindle, said pintle extending beyond said bolster, a sleeve arranged on the end of said pintle, said sleeve being formed with an extension, the face of which is concaved, a base member, said base member being provided with an extension, the end portion of which is concaved and a ball arranged between said extensions.

2. In a spindle support, a tapered bolster fixedly mounted in the bolster case and arranged to receive the tapered pintle of the spindle, said pintle extending beyond said bolster, a sleeve receiving the end of said pintle, said end being tapered, the sleeve being formed with a seat to receive said tapered end, said sleeve and bolster being co-terminous, said sleeve being formed with an extension the face of which is concaved, a base member, said base member being provided with an extension the end portion of which is concaved, and a ball arranged between said extensions.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

WILLIAM LAFAYETTE ROBINSON.
WILLIAM EDWARD GRAHAM ROBINSON.

Witnesses:

R. E. CLINE,
J. ALEX. CATON.