

(No Model.)

A. GARTNER.
MAGNETO SPINDLE.

No. 586,790.

Patented July 20, 1897.

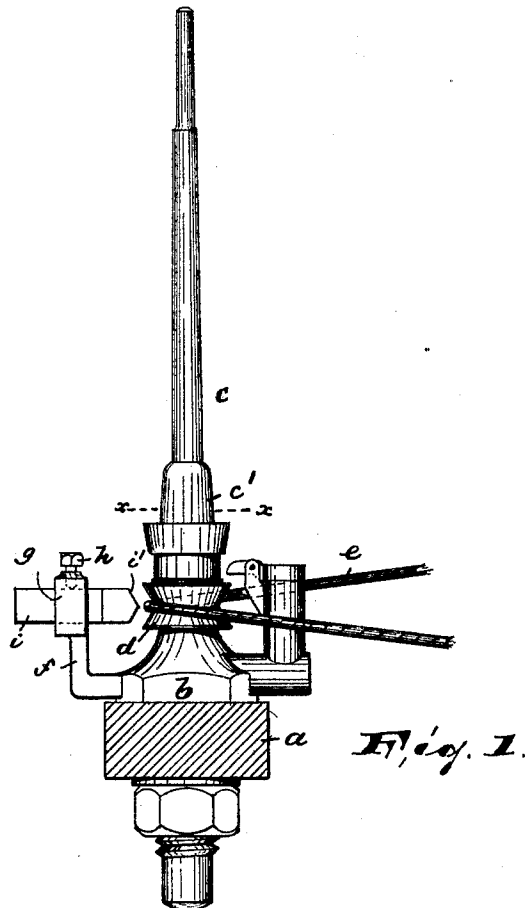


Fig. 1.

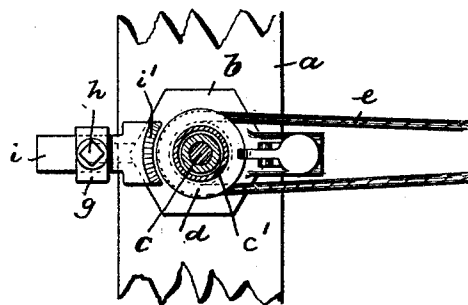


Fig. 2.

WITNESSES:

Wm. J. Nell.
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INVENTOR:

Alfred Gartner

BY Gartner & Co. ATTY'S.

UNITED STATES PATENT OFFICE

ALFRED GARTNER, OF PATERSON, NEW JERSEY, ASSIGNOR TO THE DRAPER COMPANY, OF PORTLAND, MAINE.

MAGNETO-SPINDLE.

SPECIFICATION forming part of Letters Patent No. 586,790, dated July 20, 1897.

Application filed May 3, 1897. Serial No. 634,799. (No model.)

To all whom it may concern:

Be it known that I, ALFRED GARTNER, a citizen of the United States, residing in Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Magneto-Spindles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to spinning-spindles for silk, cotton, and other filaments; and its object is to provide such spindles with means for overcoming or counterbalancing the strain exerted by the driving band or belt upon the whirl.

The invention consists in the arrangement of a magnet in close proximity with the sleeve-whirl of a spindle and opposite the driving means, substantially as will be hereinafter more fully described, and finally embodied in the clauses of the claim.

In the accompanying drawings, Figure 1 is a side elevation of an ordinary spinning-spindle provided with my improvements, the rail being shown in section; and Fig. 2, a sectional view on the line *xx* of Fig. 1.

The base *b*, which is mounted in the spindle-rail *a* in the usual and well-known manner, contains step and bolster bearing for the spindle *c*, provided with the sleeve *c'* and whirl *d*, the latter in frictional contact with the driving band or belt *e*, as clearly shown in the drawings.

From one side of the base *b* projects an arm or bracket *f*, provided at its upper portion with a sleeve *g*, arranged substantially horizontal and carrying a magnet *i*, secured to and within said sleeve by means of the set-screw *h*.

That end or pole of the magnet which is adapted to attract the whirl *d* is cut or formed, as at *v*, to conform to the shape of the groove in the whirl *d*, by which arrangement a greater area of the whirl is subjected to the attracting force or power of the said magnet.

It must be remarked that the magnet is arranged at or near that portion of the whirl *d* which is engaged by the driving band or belt

e, and thus will counterbalance the action of the said band or belt—that is to say, the band or belt *e* endeavors to pull or draw the whirl *d* in one direction, while the magnet will pull or draw the said whirl in the opposite direction.

It will be manifest that in place of the permanent bar-magnet a horseshoe-magnet or an electric magnet may be employed, and that the shape of said magnets can be varied and modified without changing the scope of my invention.

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

1. The combination with a base, of a sleeve-whirl spindle mounted in said base, driving means for operating said sleeve-whirl spindle, and a magnet carried by said base and in close proximity with that portion of the sleeve-whirl which is in engagement with the driving means, substantially as and for the purposes described.

2. The combination with a base, of a sleeve-whirl spindle mounted in said base, driving means for operating said sleeve-whirl spindle, a bracket or arm projecting from said base, and a magnet adjustably arranged in said bracket or arm and in close proximity with that portion of the sleeve-whirl which is in engagement with the driving means, substantially as and for the purposes described.

3. The combination with a sleeve-whirl spindle and with the driving means, and of a magnet adjustably and suitably supported and in close proximity with that portion of the sleeve-whirl which is in engagement with the driving means, substantially as and for the purposes described.

4. The combination with a whirl-driven spindle, of a driving-band for actuating the same, a base for supporting said spindle and a magnet carried by said base on the side of the spindle opposite to the pull of the driving-band, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of April, 1897.

ALFRED GARTNER.

Witnesses:

WM. D. BELL,
LOUISE SNYDER.