2 Sheets—Sheet 1.

J. C. STANLEY.
Spinning Machine.

No. 201,130. Patented March 12, 1878.

Fig. 2.

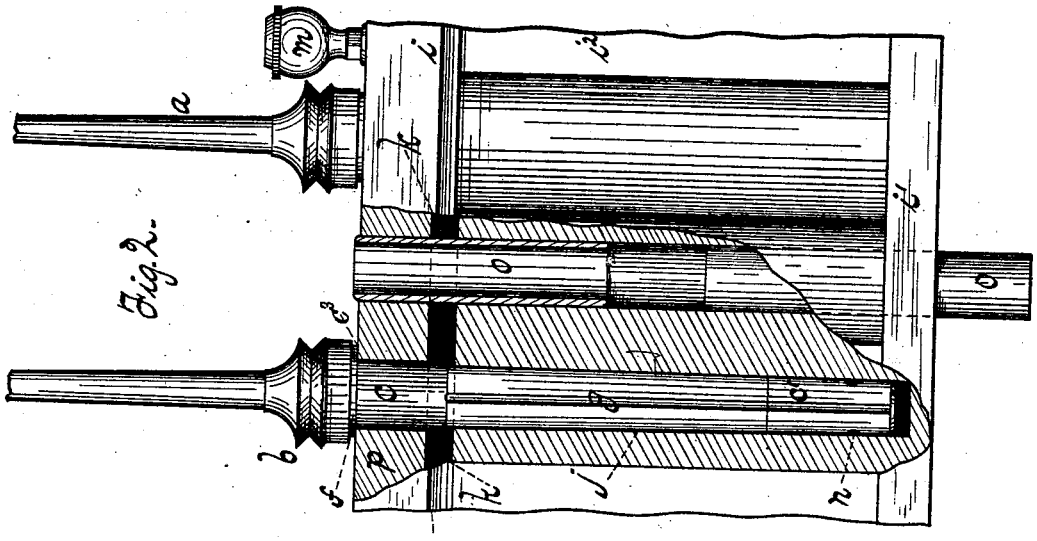
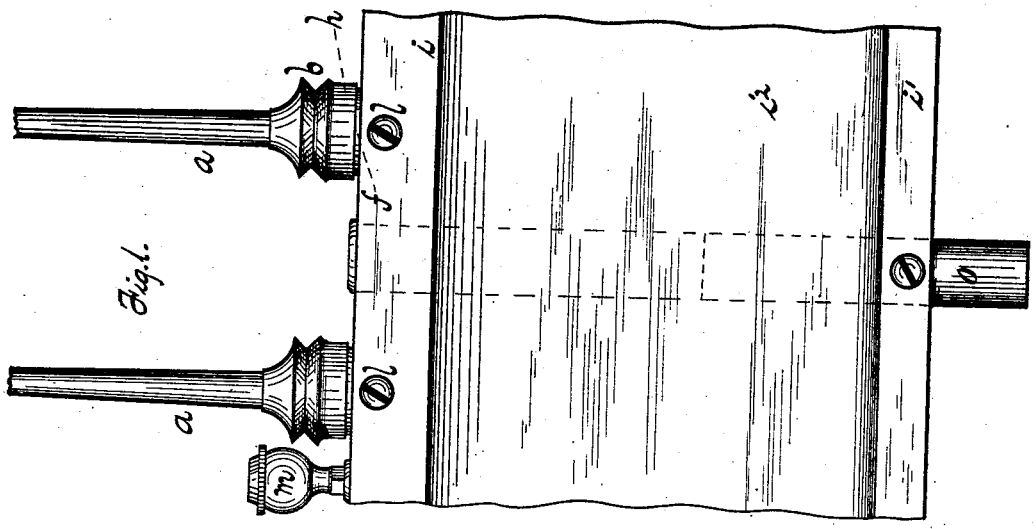


Fig. 1.



WITNESSES:

Robt. F. Gaylord

W. Mills

INVENTOR:

J. C. Stanley

By W. E. Simmons

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2 Sheets—Sheet 2.

J. C. STANLEY.
Spinning Machine.

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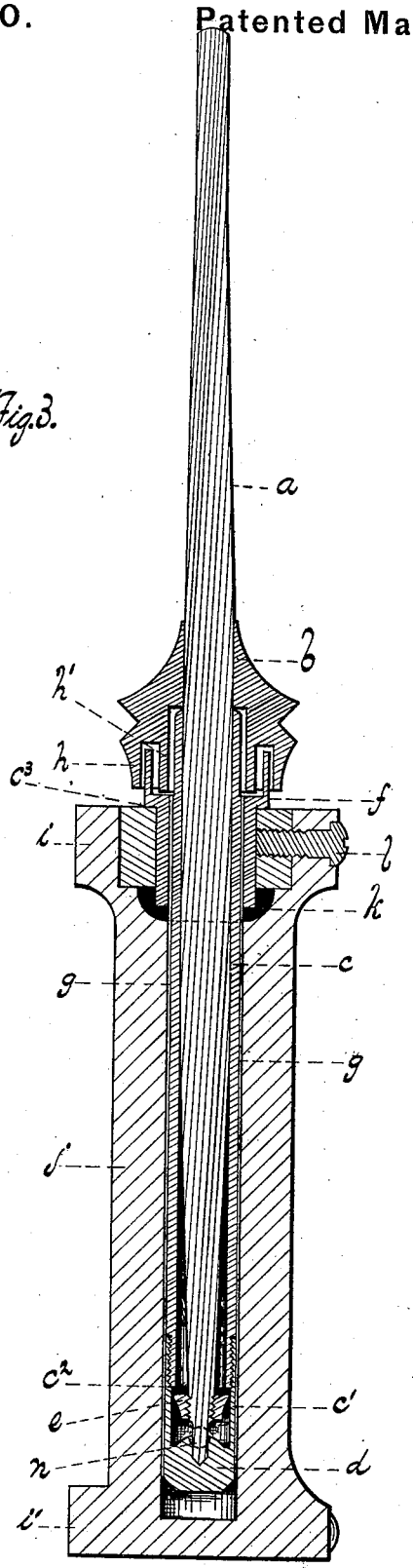
Fig. 3.



WITNESSES:

Robt. F. Gaylord,
W. E. Mills

INVENTOR:

J. C. Stanley,
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UNITED STATES PATENT OFFICE.

JAMES C. STANLEY, OF NEW HARTFORD, CONNECTICUT.

IMPROVEMENT IN SPINNING-MACHINES.

Specification forming part of Letters Patent No. **201,130**, dated March 12, 1878; application filed April 11, 1877.

To all whom it may concern:

Be it known that I, JAMES C. STANLEY, of New Hartford, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements pertaining to Spindle-Rails for Spinning-Machines, of which the following is a specification, reference being had to the accompanying drawings, where—

Figure 1 is a front view of spindles and a portion of the rail. Fig. 2 is a rear view of same, with a portion of the rail cut in vertical central longitudinal section. Fig. 3 is a view, in cross-section, of rail and spindle.

The invention relates to that class of cotton-spinning machines in which the spindles have no bearing above the whirl, meaning by "whirl" that small pulley on the spindle by which it is driven, and (when it has a petticoat) the petticoat which connects the pulley to the spindle.

The invention consists in a solid metallic spindle-rail for a series of spindles, containing wholly within itself a series of chambers for the reception of oil, for the reception of the bolsters, and for the reception of substantially the whole bearing length of the spindles, and an oil-duct communicating between all of said chambers, in combination with a series of bolsters, and with a series of spindles, as hereinafter set forth and claimed.

The letter *a* denotes the spindles; *b*, the whirls; *c*, the bolsters; c^1, the bolster ends screwing upon the bolsters; *d*, the step-bearings for the lower end of the spindles; *e*, collars screwing upon the spindles to prevent them, by contact with shoulders c^2, from unduly rising; *f*, an oil-cup at the top of the bolsters; *g*, ducts leading oil from cup *f* to the chamber below; *h h'*, a double-reversed cup, forming a part of the whirl, and preventing the escape of oil and the ingress of dust.

The letters *i* i^1 i^2 denote a rail situated below the whirl, forming part of the spinning-frame, cast of metal in one solid and continuous piece, and containing wholly within itself the series of chambers *j*, each of which forms an oil-chamber for substantially the whole bearing length of the spindle, and gives support to substantially the whole length of the bolster, and, through the medium of the bolster, to substantially the whole bearing length of the spindle. The bolsters rest by shoulders c^3 upon the top of this rail, and are held in position by set-screws *l*.

The letter *k* denotes an oil-duct, formed wholly within the rail, communicating with all the chambers; and the letter *m* denotes an oil-cup, communicating with the duct *k*, through which all the spindles may be oiled at once, whether at rest or in motion, and with quantity sufficient to last a long time. The oil finds access to the interior of the bolsters through the orifice *n*.

Between the spindles, at proper intervals, there are vertical holes through the rail, with bushings *o*, for the passage, movement, and direction of the rods which operate the lifting-rail. The duct *k* is closed on top by the covering-plate *p*.

I am aware that spindle-rails have been made solid and provided with chambers to receive the bolsters, and adapted for lubricating purposes; but I do not know of anything prior to my invention wherein the construction and combination are such as I herein claim.

I claim as my invention—

A solid metallic spindle-rail, *i* i^1 i^2, containing within itself the series of chambers *j* and the oil-duct *k*, the series of bolsters *c*, fitting into said chambers, and the series of spindles *a*, all combined and designed to operate substantially as shown and described.

JAMES C. STANLEY.

Witnesses:

W. E. SIMONDS,

ROBT. F. GAYLORD.