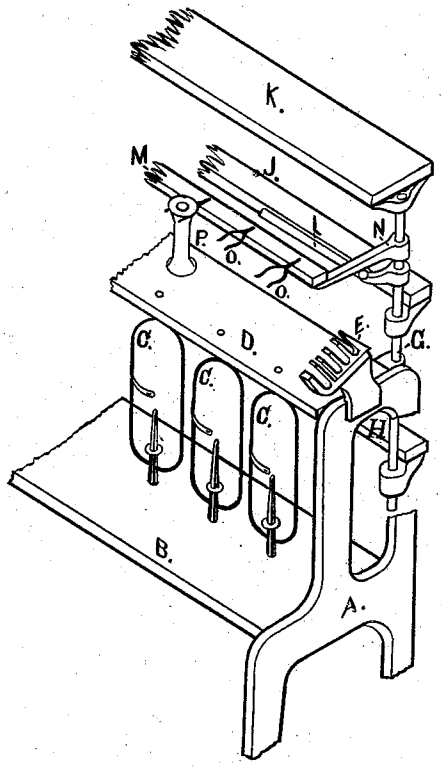
G. ESTES.

BOBBIN-SUPPORTS FOR SPINNING-FRAMES.

No. 194,298. Patented Aug. 21, 1877.




Witnesses.

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# UNITED STATES PATENT OFFICE.

GEORGE ESTES, OF LOWELL, MASSACHUSETTS.

## IMPROVEMENT IN BOBBIN-SUPPORTS FOR SPINNING-FRAMES.

Specification forming part of Letters Patent No. **194,298**, dated August 21, 1877; application filed May 7, 1877.

*To all whom it may concern:*

Be it known that I, GEORGE ESTES, of Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain Improvements in Bobbin-Supports for Spinning-Frames, of which the following is a specification:

My invention relates to an improved device for the better support of bobbins used in the spinning-machine; and consists of the combination, with a drawing or spinning frame, of a bracket-support, with the device herein described for holding the spare or empty bobbins in a convenient and safe position for use.

The accompanying drawing represents a perspective view of a portion of a spinning-frame embodying my invention.

A is the frame of a spinning-machine. B is a rail through which the fliers C extend. D is the upper rail. E is the support for the drawing-rolls. G is one of a number of vertical supports attached at the back of the frame. H is a rail secured by brackets to the post G, to support skewers carrying bobbins. J is a similar rail, secured to post G by bracket, affording a support for the filled bobbins to replace those removed. L is a bar secured to the bracket, over which the roving is drawn from the upper tier of bobbins. M is a rail supported upon bracket N, and to said rail is attached the bobbin-holders O. Heretofore, there ordinarily being no place especially designed to hold the empty bobbins to replace those in the fliers, the operator has been obliged to depend for their support on a place independent from the frame, which causes great inconvenience to the operator. If any empty bobbins are placed on the frames as now made they find a precarious support, and are liable to fall into the fliers or other motional parts of the machine when the same is in operation, thereby causing a great amount of damage. To obviate these difficulties, I provide a supplementary rail furnished with bobbin-supports O O O. These supports are constructed and arranged to receive the empty bobbins, (one of which is represented at P,) and hold them in a convenient position for use, and secure from misplacement by the jars incident to the operation of the machine. The bobbin-holders O O O are constructed of spring wire, in the form of a fork, and project over the edge of the rail. The body of the bobbin is placed in the fork and permitted to drop until the tapering head rests in the fork, the points of the fork being made slightly to approach each other, thereby securely holding the bobbin.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a spinning-frame, a supplementary bracket-support, provided with forked bobbin-holders, substantially as and for the purpose herein specified.

GEORGE ESTES.

Witnesses:

ABEL T. ATHERTON,

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