

O. PEARL.

Spindle-Bolsters for Spinning-Machines.

No.150,076.

Patented April 21, 1874.

Fig. 1

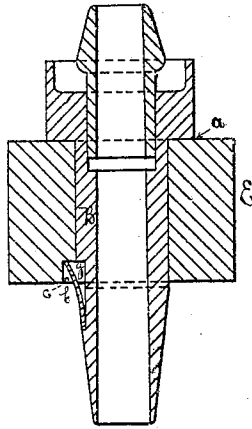
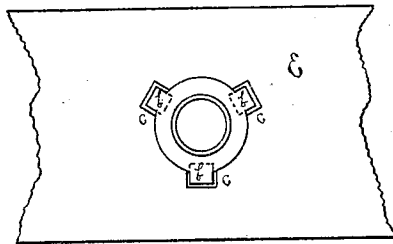


Fig. 2



Witnesses
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OLIVER PEARL, OF LAWRENCE, MASSACHUSETTS, ASSIGNOR TO HIMSELF
AND JOSEPH P. BATTLES, OF SAME PLACE.

IMPROVEMENT IN SPINDLE-BOLSTERS FOR SPINNING-MACHINES.

Specification forming part of Letters Patent No. **150,076**, dated April 21, 1874; application filed
March 31, 1874.

To all whom it may concern:

Be it known that I, OLIVER PEARL, of Lawrence, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Spinning-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a cross-section of the bolster-rail, embodying my improvement. Fig. 2 is a bottom plan of Fig. 1.

This invention relates to and consists of an improvement in the bolsters which are used as the upper bearings of the spindles in spinning-machines, and has for its object to simplify and cheapen the means of applying and holding the bolsters in the rail, to retain the spindles each in a vertical and easy-running position, and to prevent the lower ends of the spindles binding in their steps, or the upper bearings in the bolsters; as, also, to facilitate the application, removal, and adjustment of each bolster, all as hereinafter described.

The common mode of securing the bolsters in the rails of spinning-machines is by set-screws passing through the rail, with their ends against the side of each of the bolsters, and screwed in tightly.

By reason of inequalities in the density of the metal bolster-rail, it is nearly or quite impossible to bore all the bolster-holes true, or in line with each other. For the same reason it is seldom that all the bolsters are turned true and straight, and, as a consequence, when the set-screws are screwed in against the side of each bolster, these bolsters will each assume or be pressed into a different position, relatively, with the top or face of the rail and the step below, which not only throws the bolsters out of line with each other, but also the spindles, causing the latter to bind both in the bolsters and in the steps at the lower ends of the spindles, and requiring considerable time, trouble, and expense to adjust them into working position; and the same difficulty occurs when temporarily removing and re-

placing a single bolster, or any number of them.

To obviate the aforesaid difficulties I fit the bolster as closely as may be in the rail E, with a shoulder, *a*, on each, fitting fair on the top or face of the rail, so that when the spindles are applied they shall all stand vertically, and run freely, without binding in their bearings or steps; and to secure the bolsters in the rail I apply a spring, *b*, to the side of each bolster B, previously recessed or flattened behind the spring at *g* to receive it, and at the side of each bolster-hole in the rail, and in the substance of the rail I form a seat or notch, *c*, to receive the spring, about as shown in the drawings.

The springs prevent the bolsters rising or revolving, but they furnish easy and convenient means for removing the bolsters by simply pressing against each spring, to carry its upper end into the recess behind it, and beyond the line of the bolster-hole, and by lifting the bolster, which, when replaced, is inserted in the hole, where it readily finds its position, when the spring catches in the seat and suitably secures the bolster.

When applied and secured as described, the bolster may be removed and replaced as often as desired without the least liability of disturbing the vertical line of the spindles, or of causing them to bind in their bearings; and the means are cheaper and more simple than the old method of securing the bolsters by set-screws, which are wholly dispensed with, leaving the edge of the rail perfectly free from screw heads or projections, which are liable to catch and break the threads, and tear the garments of the operators.

I claim as new and my invention—

The bolster, provided with the spring *b* and recess *g*, in combination with the rail provided with the stop-notch *c*, substantially as described.

OLIVER PEARL.

Witnesses:

JOHN E. CRANE,
WM. S. BROWN.