(No Model.)

W. MASON, Dec'd.,

F. MASON, Administrator.

CAP BAR SUPPORT FOR SPINNING MACHINES.

No. 318,385. Patented May 19, 1885.

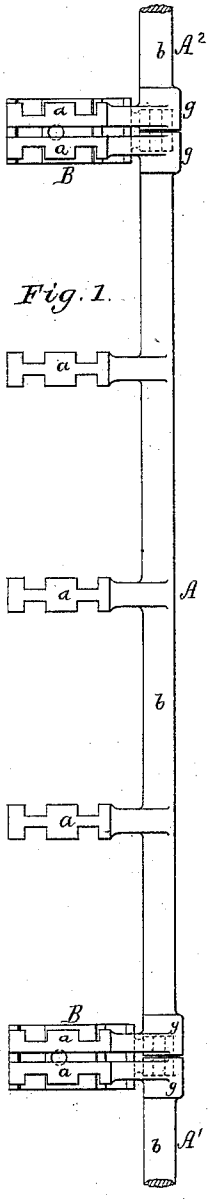


Fig. 1.

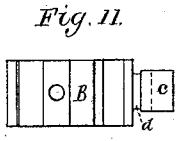


Fig. 11.

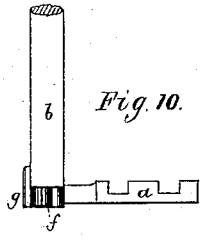


Fig. 10.

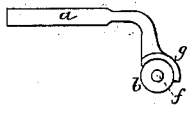


Fig. 9.

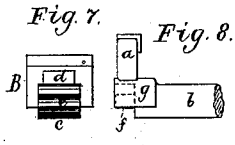


Fig. 7.

Fig. 8.

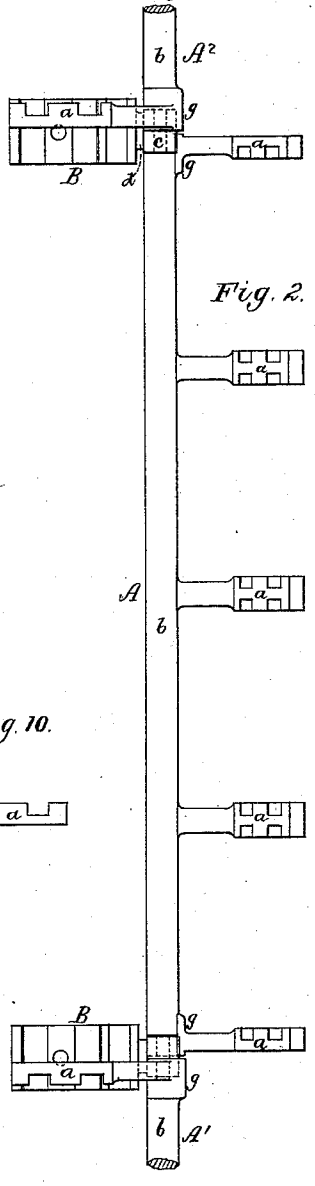


Fig. 2.

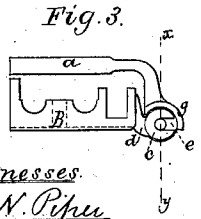


Fig. 3.

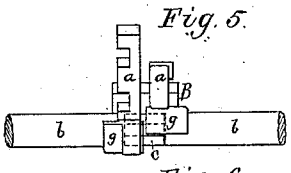


Fig. 5.

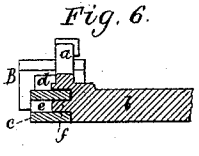


Fig. 6.

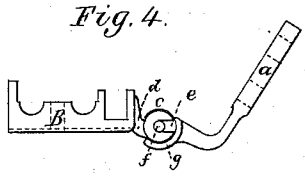


Fig. 4.

Witnesses.
S. N. Piper
E. B. Pratt

Frederick Mason, Administrator
of William Mason, dec'd,
by R. H. Ellis atty

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

FREDERICK MASON, OF TAUNTON, MASSACHUSETTS, ADMINISTRATOR OF WILLIAM MASON, DECEASED.

CAP-BAR SUPPORT FOR SPINNING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 318,385, dated May 19, 1885.

Application filed August 16, 1883. Renewed January 5, 1885. (No model.)

To all whom it may concern:

Be it known that WILLIAM MASON, deceased, formerly a citizen of the United States of America, and a resident of Taunton, in the county of Bristol, of the Commonwealth of Massachusetts, invented while living a new and useful Improvement in the Cap-Bar Supports of Spinning-Machines; and I do hereby declare that the same is described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view of a cap-bar, its supports, and portions of two contiguous cap-bars, such figure exhibiting the notched arms of the cap-bar as in their inner positions. Fig. 2 is another top view of such cap-bar and its supports and portions of two contiguous cap-bars, the medium cap-bar being represented in such figure as "turned back" or in its other extreme position. Fig. 3 is an end view of the cap-bar and one of the "slides" or bottom-roller bearings to which it is applied, such figure exhibiting the said parts in the positions in which they are shown in Fig. 1, while Fig. 4 is an end view representing them in the positions in which they are shown in Fig. 2. Fig. 5 is a rear elevation of portions of two contiguous cap-bars, with one turned forward and the other backward. Fig. 6 is a vertical section on the line *x y* of Fig. 3. Fig. 7 is a rear view of the cap-bar bearing. Fig. 8 is a rear view, Fig. 9 an end view, and Fig. 10 an under side view, of the end portion of a cap-bar. Fig. 11 is a top view of one of the slides.

The improvement is not only to prevent the cap-bar from being accidentally detached from or forced from its sustaining-slides, but to admit of it being readily removed therefrom or applied thereto when it may be in or about in a position midway between its two extreme positions.

In Figs. 1 and 2 of the drawings, A denotes a "cap-bar," and A' A^2 portions of the two next adjacent cap-bars, while B B are their two supporting-slides or "bottom-roller" bearings, such cap-bar and slides serving to support the journals of the drawing-rolls of a spinning-machine. Each cap-bar consists of a cylindrical shaft, *b*, and a series of notched arms, *a*, formed and extending from such shaft in manner as represented.

Prior to the making of the present herein-described invention most methods in use for hinging or pivoting a spinning-machine cap-bar to its sustaining-slides have been more or less objectionable in view of the difficulties incident to each in maintaining it in place as well as in separating it from or applying it to its supports, such application or separation of it generally requiring either a detaching of some portion or parts of the connection or some one or more of the adjacent cap-bars, all of which is avoided by the present improvement. In the said improvement each cap-bar bearing is a short cylinder, *c*, connected with the slide B by means of an arm, *d*, extending therefrom, and joined to the cylinder, whose ends are at equal distances from such arm. In this cylinder there is a substantially horizontal notch, *e*, which extends from the circumference of the cylinder, and is formed in end view, as shown in Fig. 3. Furthermore, the cap-bar at each end is provided with a journal, *f*, to enter the notch, such journal having a length half or somewhat less than half that of the cylinder, and being concentric with the end of the shaft. Besides the said journal, there is extended from the cap-bar shaft, at each end of it a lip, *g*, that is curved concentrically with the journal to fit to and lap upon the circumference of the cylinder *c*, and to extend from one end to or nearly to the middle of the cylinder. The inner end of the lip, when the cap-bar is in the position as shown in Figs. 1 and 3, projects to or nearly to the arm *d*, or beyond the vertical line *x y*, Fig. 3, and toward such arm far enough to prevent the cap-bar from being detached from its bearing-cylinder *c*. The lip *g* extends in the opposite direction beyond the line *x y* to or a little beyond the lower side of the horizontal notch *e*. When the cap-bar is turned wholly back into the position shown in Figs. 2 and 4, its curved lips *g* bring up against the arms *d* of the slides B, and in so doing not only constitute with such arms stops to arrest the bar in such position, but serve as means of preventing the bar from being detached from the cylinder *c*. The curve of each lip is that of

the arc of a semicircle, or an arc a little less but not more than that of a semicircle, whereby, when the cap-bar is brought into or about into a vertical position between its two extreme positions, its detachment from or application to its supporting-cylinders can easily be effected.

From the above it will be seen that while the cap-bar may be in either of its extreme positions it cannot be accidentally or otherwise detached from its sustaining bearing-cylinders. When it is in the positions shown in Figs. 1 and 3 or in that shown in Figs. 2 and 4, an accidental blow or a sudden pressure upon it in any direction will not suffice to detach it from the sustaining-cylinders.

What, therefore, is claimed as the invention of the said WILLIAM MASON is—

The spinning-machine cap-bar slides B, provided with the bearing-cylinders *c*, having horizontal notches *e* in them, as set forth, in combination with the cap-bar provided with the journals *f* and lips *g*, extending from it, and each lip curved transversely, as described, to or about to but not more than the arc of a semicircle, all being substantially as represented.

FREDERICK MASON,

Administrator of the estate of William Mason, deceased.

Witnesses:
H. T. MONTGOMERY,
ELISHA T. JACKSON.