

O. PEARL.

Improvement in Guide-Boards for Spinning-Machines.

No. 115,095.

Patented May 23, 1871.

Fig. 1.

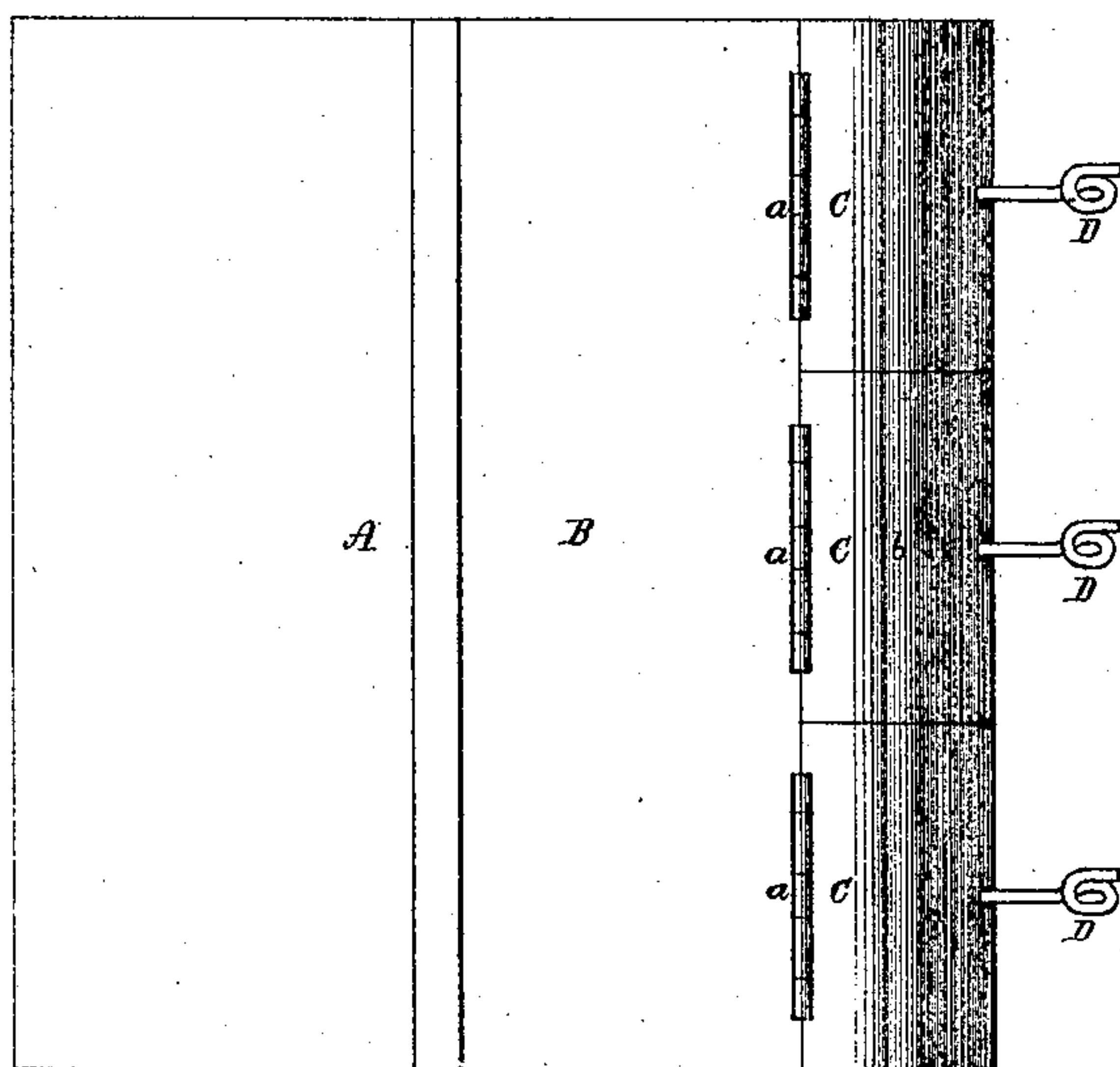
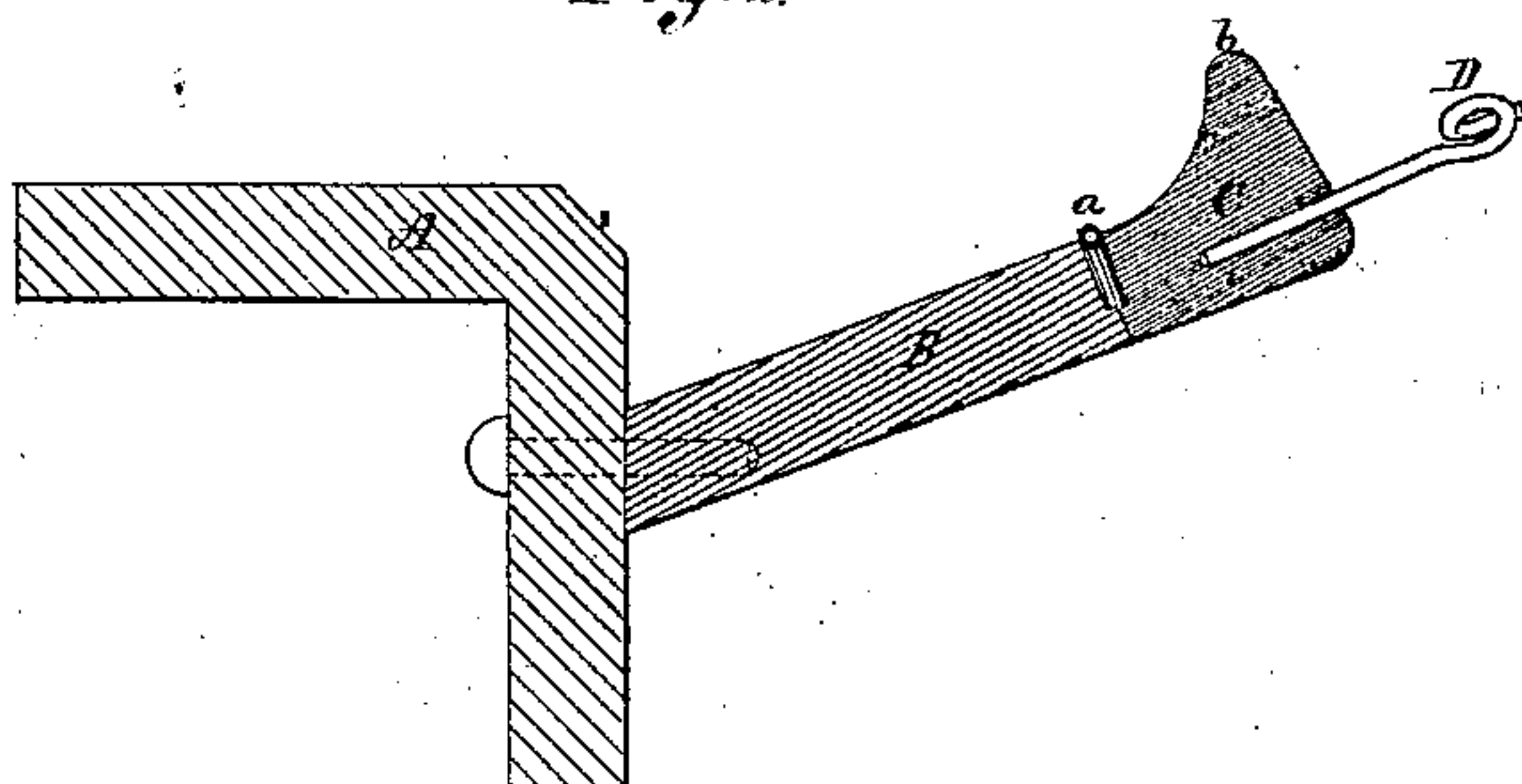


Fig. 2.



Witnesses.

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OLIVER PEARL, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN GUIDE-BOARDS FOR SPINNING-MACHINES.

Specification forming part of Letters Patent No. 115,095, dated May 23, 1871.

To all persons to whom these presents may come:

Be it known that I, OLIVER PEARL, of Lawrence, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Spinning-Frames, such being specially applicable to what is termed the ring-and-traveler frame; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 denotes a top view, and Fig. 2 a transverse section of a portion of a spinning-frame thread-board and its hinged guide-carriers as provided with my improvement.

The nature of my improvement consists in the thread-board, as arranged below and inclined with respect to the bobbin-rail, as represented, and provided with a guide-carrier hinged to such board, and provided with a projecting lip, all as hereinafter described, and as shown in the drawing. The object of the improvement is to prevent the waste and loose filaments of fibrous material which usually gather upon the thread-board from getting upon or being moved or brushed upon the thread-guides by the attendant of the machine while in the act of cleaning the thread-board, for when such waste or loose fibrous material gathers or falls on a thread-guide it is liable to become taken up by the yarn while being spun, and to damage such for the purpose for which it may be afterward used.

The position of the thread-guide eye is a definite one, whether the thread-board be either inclined or horizontal; therefore, in order to use a thread-guide carrier with a projection of the necessary size for the purposes for which I employ it, it becomes essential to incline the thread-board with respect to the roller-beam and below it; otherwise the projection of the thread-guide carrier would be in the way of the thread or yarn in its passage from the draw-rollers—that is to say, it would come in contact with it, a matter to be avoided by all means.

The inclining of the thread-board and arranging it with the roller-beam, as shown, is

productive of other advantages, as it enables the guide-carrier, when thrown back so that its projection may rest on the thread-board, to be depressed lower than it would be were the thread-board horizontal, and thus brings the board more out of the way of the attendant during the process of “doffing.”

Furthermore, the space between the roller-beam and the projection of the guide-carrier forms a trough which not only secures the waste and prevents it from being thrown back upon the roller-beam, but over the projection and upon the yarns.

Again, the projection, by its size, prevents the attendant from inserting her hands between the yarns to clean off the thread-board, and renders it necessary to effect such by a brush passed longitudinally over the board, thereby saving injury to the yarns.

In the drawing, A denotes the roller-beam, and B the thread-board, the latter being inclined to the former, so as to form therewith a trough. To the front edge of the thread-board the series of guide-carriers C C C are hinged in the usual manner, as shown at *a*, each being provided with a thread-guide, D, formed and projecting from it as represented. Instead of making each of such guide-carriers flat on its upper surface in the ordinary way, I construct it with a lip, *b*, to extend up from it in manner as shown, and to project above the top surface of the thread-board.

The thread-board is arranged below and inclined relatively to the roller-beam in manner as exhibited in Fig. 2 of the drawing. Under such circumstances, the dirt and extraneous matters that may gather upon it will tend to work close up to the roller-beam, so as to be capable of being more easily or speedily removed therefrom by the attendant when such may be necessary.

The lips of the guide-carriers are effectual in stopping the waste from falling over or being brushed upon the yarn-guides.

I make no claim to a thread-board provided with a small finishing bead at its front edge, as shown in the British patent No. 1,865, for 1861; nor do I claim a thread-guide inclined and made as shown in the British pat-

ent No. 11,603, granted in 1847, such having no front lip, and having no such arrangement with the roller-beam as is the case with my thread-board.

I claim—

The thread-board B, arranged below the top of and inclined with respect to the roller-beam A, as described, in combination with the lip

b and its movable thread-guide carrier C, hinged to the board B, as specified, all being substantially as and for the objects or purposes as set forth.

OLIVER PEARL.

Witnesses:

R. H. EDDY,
J. R. SNOW.