No. 886,638. PATENTED MAY 5, 1908.

J. E. PREST.

THREAD GUIDE MECHANISM.

APPLICATION FILED SEPT. 17, 1906.

Fig. 2.

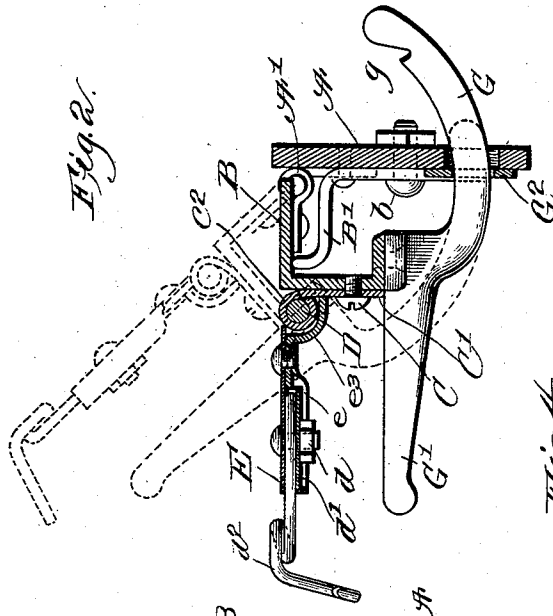


Fig. 4.

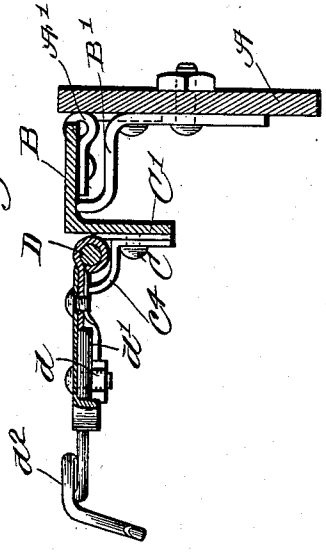


Fig. 1.

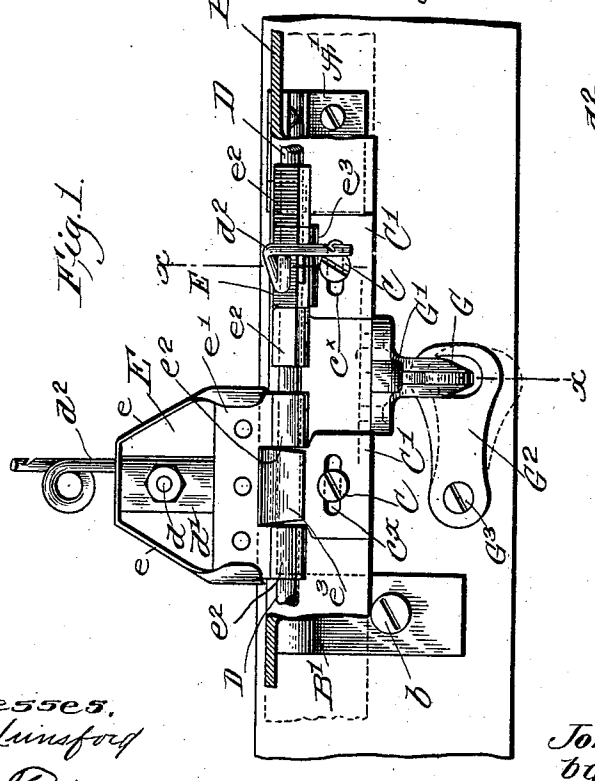
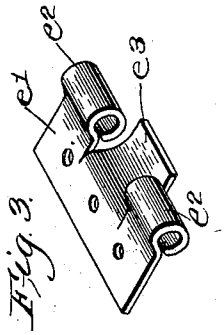


Fig. 3.



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THREAD-GUIDE MECHANISM.

No. 886,638. Specification of Letters Patent. Patented May 5, 1908.

Application filed September 17, 1906. Serial No. 334,834.

To all whom it may concern:

Be it known that I, JOHN E. PREST, a citizen of the United States, residing in Melrose, county of Middlesex, and State of Massachusetts, have invented an Improvement in Thread-Guide Mechanism, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention relating to thread guide supporting and operating mechanism has for its object to strengthen and increase the durability of the parts, my present invention being an improvement on that shown in my U. S. Patent No. 817,273, dated April 10, 1906.

In that patent the finger boards when in their operative positions rested upon the upper side of a lifting board pivotally mounted at the front of the roller beam. In my present invention I connect with the roller beam by suitable hinges a thread board made angular in cross section so as to present a down-turned flange that sustains suitable bearings for the reception of the rod which constitutes a pivot for the series of finger boards sustaining the thread guiding eyes, the finger boards being stopped and maintained in their operative position with their upper sides practically at the level of the thread board by stops located at the front side of the thread board, instead of being stopped by the upper side of the lifting board.

Figure 1 in front elevation shows part of a roller beam and connected thread board, the latter being partially broken out, one of the finger boards being shown as turned upwardly away from its adjacent finger board; Fig. 2 is a section on the line x, Fig. 1, with the finger board shown in Fig. 1 as elevated, turned down, the thread board and finger board being shown by dotted lines as in their elevated position; Fig. 3 shows the plate carrier detached; and Fig. 4 a modification of my invention.

Referring to the drawing, A represents part of the usual roller beam of a spinning or twisting machine to which I have united by hinges A′ a thread board B, and to the front side of the roller beam by a screw b I connect a thread board stop B′, the latter sustaining the board when in its operative position, Figs. 1 and 2.

To the front side of the thread board I attach by screws C a series of rod sustainers C′, the upper ends of the sustainers being bent into circular form as at c^2 to receive and fit a rod D, the part of the sustainer receiving said screw being slotted as shown at $c^\times$ that the sustainer may be adjusted longitudinally of the thread board.

The finger boards E one for each spindle of the machine comprise a piece of sheet metal having flanged edges e to stiffen the same, the sheet metal piece receiving between its flanges at its inner or wider end a plate carrier e' composed of metal stronger and stiffer than the metal of the plate e, said plate carrier shown detatched in Fig. 3 having two eyes e^2 to embrace the rod D and a stop lip e^3 between said eyes. Each finger board has attached to it by a clamp d the usual box d' in which is adjustably held the rear end of the usual guide-eye d^2.

In the modification Fig. 4, the screw C besides passing through a slot in a sustainer, also enters a threaded hole in a stop c^4 and a threaded hole in front of the thread board.

It is of advantage to employ the thread board between the roller beam and the finger boards as said thread board affords a surface on which the lint may rest and from which it may be readily removed. When the finger boards occupy their operative positions they are arrested with their upper sides in practically the plane of the top side of the thread board by a stop C^4 in front of the thread board.

To elevate the thread board and finger boards together that a set of bobbins may be doffed, I have connected with the thread board a catch G having a handle G′, the catch having a notch g that will be caught by latch G^2 pivoted at G^3 at the front of the roller beam, the notched end of the catch being shown as extended through said latch and a hole made in the roller beam. To raise the thread board and finger boards, the end G′ of the catch may be engaged by hand and lifted, thus raising said parts, causing the curved notched end G of the catch to be drawn to the left until said notch comes in line with the latch when the latter immediately drops into its dotted line position Fig. 1, enters the notch g and holds the thread board and finger boards in the position shown in Fig. 2 by dotted lines. In assembling the parts, a rod sustainer C′ will be inserted between the eyes e^2 of a finger board, and each finger board and sustainer will be sprung on the rod D and

then the rod will be placed in front of the down turned flange of the thread board and the screws C will be inserted through the slots in the rod sustainers and entered into threaded holes in the thread board. After this the finger boards are adjusted on said rod to place each guide eye in just the proper position with relation to the tip of the usual spindle. This adjustment of the finger boards takes with them the rod sustainers, and when the adjustment has been effected the screws C are turned in to hold the rod sustainers and finger boards in exactly their proper places.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In apparatus of the class described, a roller beam having a pivoted latch, a thread-board hinged to said roller beam, a series of finger-boards pivotally mounted on said thread-board, and a thread-board lifting device connected rigidly with said thread-board and having a notched arm extended through and beyond the rear side of the roller beam, the outer end of said lifting device being adapted to be engaged by the hand of the operator when the thread-board and finger-boards are to be lifted, the notch in said device, when the thread-boards and finger-board are elevated being engaged by said latch.

2. In a machine of the class described, a roller beam having a pivoted latch, a thread board hinged to the roller beam, a series of finger boards hinged to said thread board, and a device connected rigidly with said thread board and extended across the roller beam, one end of said device being adapted to be engaged to lift the thread board and finger boards, the opposite end of said device being engaged by said latch to retain the thread board and finger boards in their elevated position.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JOHN E. PREST.

Witnesses:
GEO. W. GREGORY,
EVANGELINE C. BROWN.