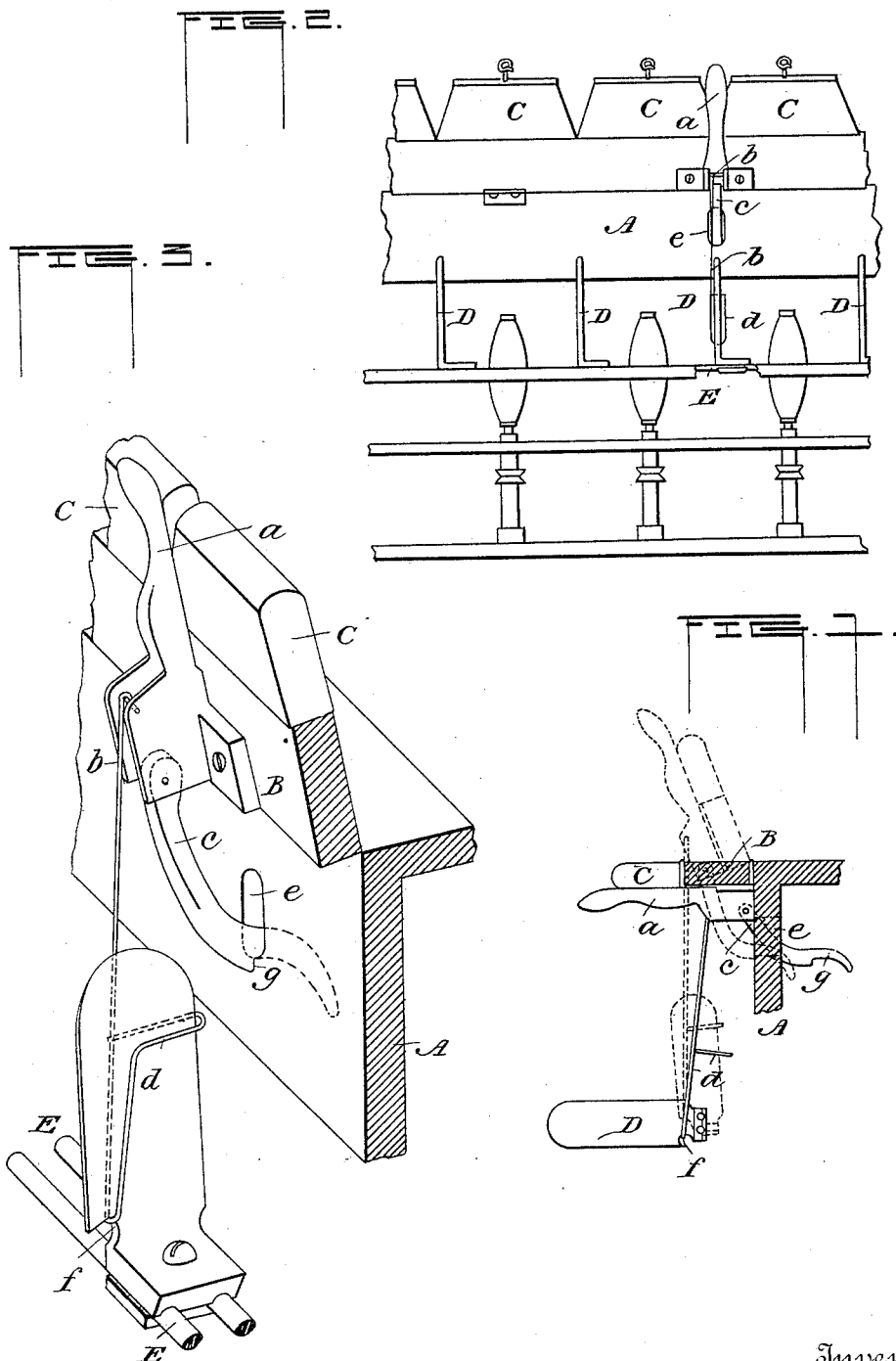


(No Model.)

J. A. BURKE & T. MORIARTY.
RING SPINNING FRAME.

No. 462,791.

Patented Nov. 10, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES A. BURKE AND THOMAS MORIARTY, OF FALL RIVER, MASSACHUSETTS.

RING-SPINNING FRAME.

SPECIFICATION forming part of Letters Patent No. 462,791, dated November 10, 1891.

Application filed March 27, 1891. Serial No. 386,697. (No model.)

To all whom it may concern:

Be it known that we, JAMES A. BURKE and THOMAS MORIARTY, citizens of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Ring-Spinning Frames; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to ring-spinning frames and has for its object the raising of the guide-board and guide-wire blocks hinged thereto and the separator-blades all at one time to permit the operation of doffing to be performed. When the bobbins are full and they are to be taken off the spindles and empty ones put on, the guide-wire blocks and the separator-blades must be raised out of the way. The guide-wire blocks may be raised singly but with much loss of time and various devices are in use to raise and lower the blocks in one section of the frame all at one time while other means are used to raise and lower the separator-blades.

By our improvement the guide-wire blocks and separator-blades are raised at one time and held until the doffing has been completed when they are all lowered into position together. We accomplish this by the mechanism illustrated in the accompanying drawing, in which Figure 1 is a sectional view of a part of a spinning-frame embodying our invention. Fig. 2 is a front view of the same raised in position to doff, and Fig. 3 is a perspective view of the same also raised.

Like letters refer to like parts.

C represents wire-blocks which are made and affixed to the guide-board as usual. B the guide-board, is made as usual, but instead of being fixed rigidly to the roller-beam is suitably hinged thereto, so that it will turn up as is now done in some instances. To the guide-board is suitably attached the handle *a*, which has attached loosely thereto at *b*, the latch *c* and the arm *d*. A hole *e* is made in the roller-beam, through which the latch

passes. The arm *d* is bent to pass around the base of the separator-blade D and through the notch *f* in it. Another bend at *d'* prevents the separator from going too far back when raised, and supports the separator. By raising the handle *a* the guide-wire board and the blocks attached thereto are raised to the position shown in Figs. 2 and 3, and to the dotted lines in Fig. 1, and are held there by the notch *g* in the latch automatically engaging on the roller-beam on the corner formed by the hole *e* through said beam. To lower the wire-block and separator-blades, the latch is disengaged from the roller-beam and is allowed to pass through the hole.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with a roller-beam provided with a suitable hole, of a guide-board hinged to said beam and having a series of wire-blocks, a series of separator-blades, a lifting-handle for the guide-board and separator-blades, a notched latch pivoted to the handle and passing through the hole in the roller-beam, and an arm connected with one of the separator-blades and pivoted to the handle, substantially as set forth.

2. The combination, with the roller-beam A, having the hole *e*, of the guide-board B, hinged to said beam and carrying the wire-blocks C, the handle *a*, secured to the guide-board, the latch *c*, attached to the handle and passing through the hole *e*, separator-blades D, one of which has a notch *f*, and an arm *d*, pivoted to the handle and engaging with said notch, substantially as set forth.

3. The combination, with the roller-beam, of the guide-board hinged thereto and provided with a series of wire-blocks, a handle secured to the guide-board, a series of hinged separator-blades, a lifting-rod pivoted to said handle and attached to one of said separator-blades, and having a loop to receive said blade when raised, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES A. BURKE.
THOMAS MORIARTY.

Witnesses:

JAMES SHAW,
JAMES G. MANCHESTER.