(No Model.)

B. S. ROY.

Apparatus for Turning Cylinders of Carding Engines.

No. 229,844. **Patented July 13, 1880.**

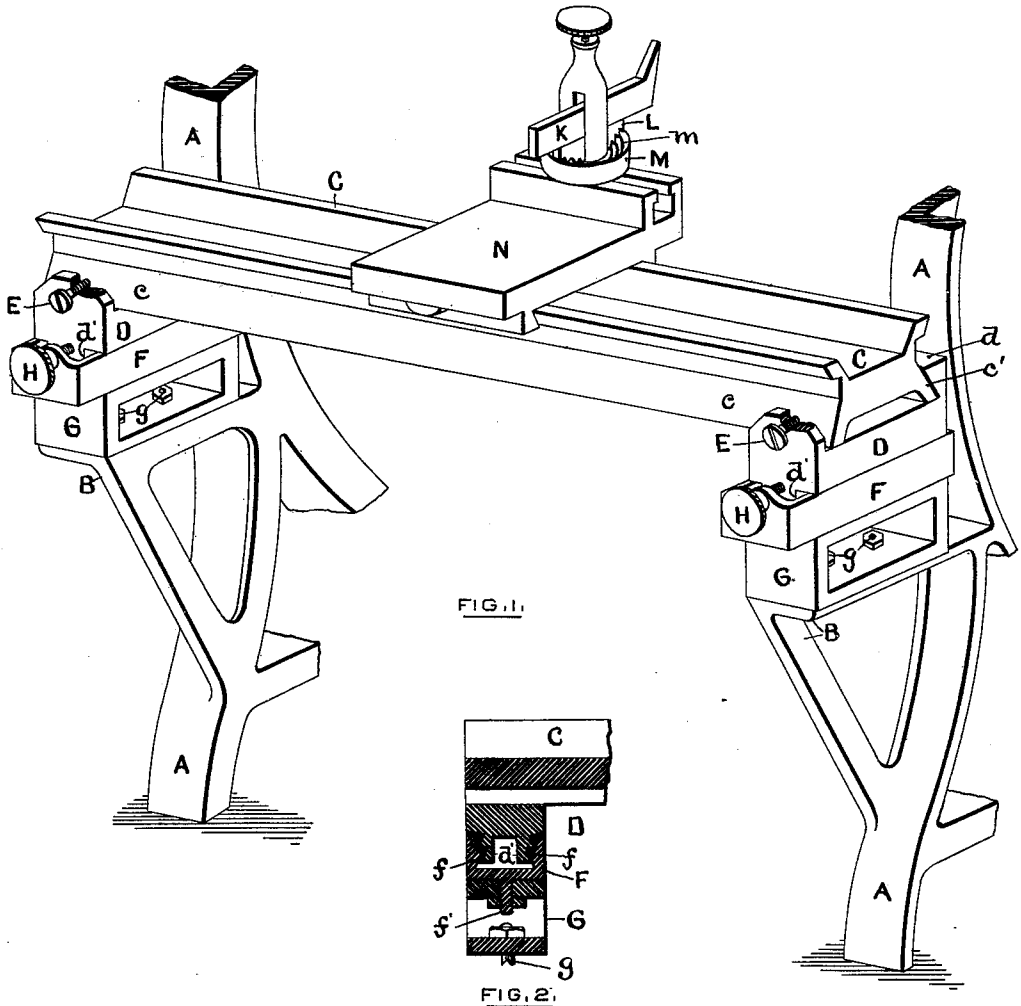

FIG. 1.

FIG. 2.

WITNESSES.

FIG. 3.

FIG. 4.

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APPARATUS FOR TURNING CYLINDERS OF CARDING-ENGINES.

SPECIFICATION forming part of Letters Patent No. 229,844, dated July 13, 1880.

Application filed April 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, BOZIL S. ROY, of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Apparatus for Turning Off the Cylinders of Carding-Engines; and I do hereby declare that the following specification, taken in connection with the accompanying drawings, forming a part of the same, is a full, clear and exact description thereof.

The invention hereinafter described relates to a portable lathe which is adapted to be secured to the frames of carding-engines for the purpose of turning off the lagging or wooden covering of the cylinders of said engines.

The improvements consist, first, in mounting the bed of the lathe in blocks which can be moved longitudinally on the bed and secured thereto, thereby allowing the lathe to be applied to both narrow and wide frames; second, in arrangements for independently adjusting each end of the bed to and from the cylinder of the carding-engine, so that the said bed shall be parallel with the longitudinal axis of said cylinder; and, third, in the construction and arrangement of the tool-post block and its accompanying ring, whereby the tool is securely held in position at any desired angle, both in a horizontal and a vertical plane.

Referring to the drawings, Figure 1 represents, in perspective, a portion of the frame of a carding-engine with the lathe attached thereto. Fig. 2 shows, in vertical section, one end of the lathe-bed and the blocks in which said end is mounted. Fig. 3 represents, in perspective, one-half of the ring surrounding the tool-post, and Fig. 4 shows the tool-block in perspective.

As shown in Fig. 1, A A are portions of the ends of a carding-engine frame, and B B are brackets which form a part of said ends and are designed to support the lathe-bed C. The sides *c c'* of the base of this bed are beveled, and the said bed is secured upon blocks D D by means of screws E E, which bear against the side *c* and cause the side *c'* to engage beveled-faced studs *d* upon the rear ends of the blocks D.

Each of the blocks D has a dovetail spline, *d'*, and the said blocks are mounted in guide-blocks F F, which have dovetail slots *f*, as shown in Fig. 2. The blocks F F are pivoted to base-blocks G G by means of dowels *f'*, provided with nuts to retain them in vertical position, and the blocks G G are secured to the brackets B B by bolts *g g*.

For adjusting the lathe-bed C to and from the cylinder of the carding-engine the blocks F are supplied with screws H, which enter the blocks D. If both of the screws H are rotated equally and at the same time the whole of the bed C will be moved to or from the cylinder of the engine; but if the said bed should not be parallel to the axis of said cylinder either of the screws H may be separately turned and the result secured, since the blocks F are pivoted to allow of a swinging movement of the bed C.

Although I have shown and described the blocks F F as pivoted to blocks G G, and the latter secured to the brackets B B, yet I am aware that the blocks G G may be dispensed with, and the blocks F F be made deeper and pivoted to the brackets, and be retained in vertical position by a nut on the dowel *f'*, in a manner similar to that shown. The shape of the base of the bed C and the clamping portions of the blocks D D may also be varied, and other well-known constructions be employed.

Referring to Figs. 1, 3, and 4, my improvement in the means for securing the tool in its post at any desired angle, either in a vertical or a horizontal plane, will be readily understood. The tool K is mounted on a tool-block, L, whose under surface is curved and provided with ratchet-teeth.

The block L is mounted on a ring, M, which surrounds the tool-post, occupies a horizontal plane, and has its upper surface curved to correspond with the under surface of the block L, and said upper surface provided with circular ridges *m*, to engage the ratchet-face of the block. The tool-block having been adjusted to the required angle and the tool clamped thereto by the tool-post screw, the tool will be held in position by the engagement of its ratchet-face with the ridges *m* upon the ring M.

Although not shown in the drawings, the bed C is supplied with the usual screw to move the tool-post rest N along the bed.

From the foregoing description it will be seen that my improved portable lathe is adapted to be secured to the frame of any carding-engine supplied with the usual supporting-brackets B B, that each end of the lathe-bed can be independently adjusted to make the bed parallel with the engine-cylinder, and that the turning-tool will be retained in position at any desirable angle.

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

1. The combination, with the lathe-bed C, of the adjustable blocks D, provided with means for clamping them to the bed, and the blocks F, provided with pivotal dowels and adjusting-screws H, the whole being adapted to be applied to the frames of carding-engines, substantially as and for the purposes specified.

2. The combination, with the tool-post of a lathe, of a tool-block, L, having a curved and ratchet face, and a ring, M, surrounding said post, occupying a horizontal plane and having circular ridges *m* upon its curved engaging-surface, whereby the tool will be securely held at any desired vertical or horizontal angle when clamped to the block, substantially as set forth.

BOZIL S. ROY.

Witnesses:
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