J. Ashworth,

Spinning Machine.

No. 80,849. Patented Aug. 11. 1868.

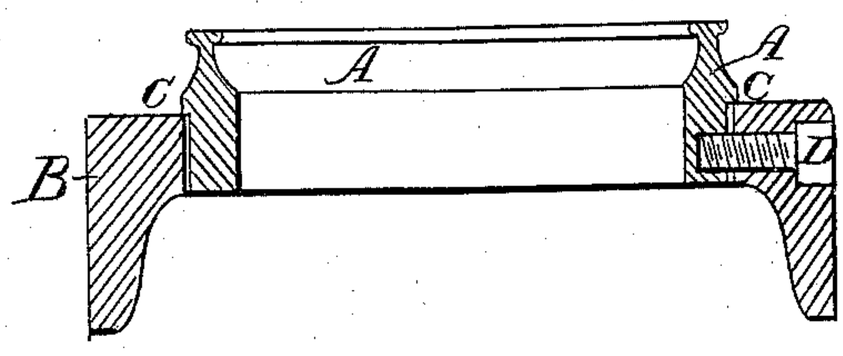

Fig. 3.

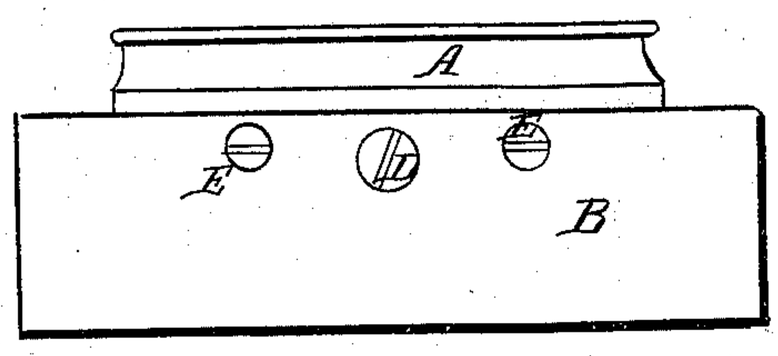

Fig. 2.

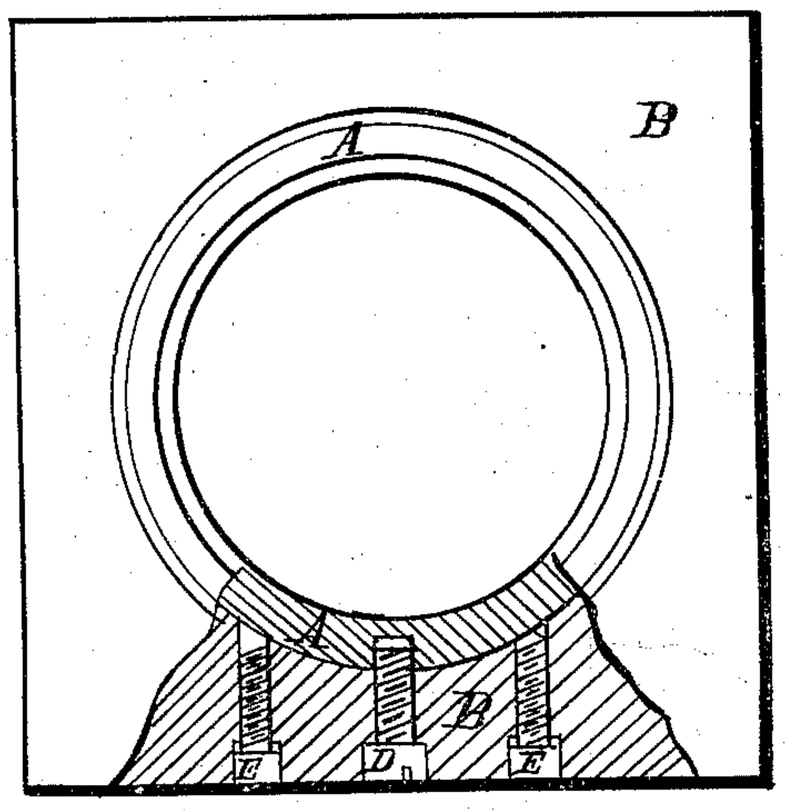

Fig. 1

Witnesses { J. H. Stone
Wm. C. Hildreth

John Ashworth Inventor

United States Patent Office.

JOHN ASHWORTH, OF NORTH ANDOVER, MASSACHUSETTS, ASSIGNOR TO GEORGE L. DAVIS, JOHN A. WILEY, AND JOSEPH M. STONE, OF SAME PLACE.

Letters Patent No. 80,849, *dated August* 11, 1868.

IMPROVEMENT IN RING-SPINNING FRAME.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN ASHWORTH, of North Andover, in the county of Essex, and State of Massachusetts, have invented an Improvement in the Mode of Constructing and Arranging Spinning-Rings in Ring-Spinners, so called; and I do hereby declare that the following is a full, clear, and exact description of the same, taken in connection with the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan of the ring and a portion of the copping-rail, with a part in horizontal section, to show the screws which confine the ring thereto.

Figure 2 is a front elevation of the same, and

Figure 3 is a vertical section through the centre of the ring, and transverse to the rail.

The subject-matter of my invention relates to the method of attaching and adjusting the rings of ring-spinners, so called, so that the ring may be readily and accurately set concentric with the spindle. In the construction of ring-spinning frames, when a long row of spindles is used, it is a matter of great nicety and difficulty to make all of the sockets for the rings in the copping-rail accurately concentric with their respective spindles, and if so made at first, they are liable to get out of adjustment by wear of the spindles or the springing of the rail, and therefore require some means of correcting the evil.

My invention consists in securing the ring to the rail by means of a clamping-screw and two set-screws, by the joint action of which the ring may be moved a short distance in any direction parallel to the plane of revolution of the spindle, by which means each ring may be brought to a position concentric with the spindle independently of the other.

In the drawings, A is the spinning-ring, made in the usual way, the lower part of which is set in a circular socket in the copping-rail B, which is made somewhat larger than the exterior diameter of that part of the ring which it encloses, and rests upon the top of the rail by means of the shoulder C. Through the front side of the rail, and opposite to the centre of the ring, is inserted a clamping-screw, D, the point of which screws into the ring, and the head of which rests upon the rail in a countersink.

Upon either side of the screw D are inserted two set-screws, E E, which screw into the rail, and the points of which bear against the outside of the ring, as shown in fig. 1.

By means of the screw D, the ring is drawn toward the front side of the socket, and by the set-screws it is set in the opposite direction, and by screwing in one of the screws E, and withdrawing the other, the ring may be swung to the right or left, pivoting upon the screw D in an obvious manner, and by setting up all of the screws, the ring is held firmly in either position.

The screws E are set in a higher place than the screw D, as seen in fig. 2, for the purpose of holding the opposite side of the ring down upon the rail. This mode of attaching the ring to the rail may obviously be employed if the ring is but partially embraced by the socket and operates in the same manner.

I do not claim broadly the employment of means for adjusting a spinning-ring in its rail, as that has heretofore been done in several ways; but

What I do claim, and desire to secure by Letters Patent, is—

The ring, secured to the rail, and adjustable to the spindle by the clamping-screw and two set-screws, substantially as described.

Executed, May 22, 1868.

JOHN ASHWORTH.

Witnesses:

J. H. STONE,

WM. C. HIBBARD.