

G. W. SPAULDING & W. T. CARROLL.
Ring-Rails and Holders for Spinning.

No. 135,944.

Patented Feb. 18, 1873.

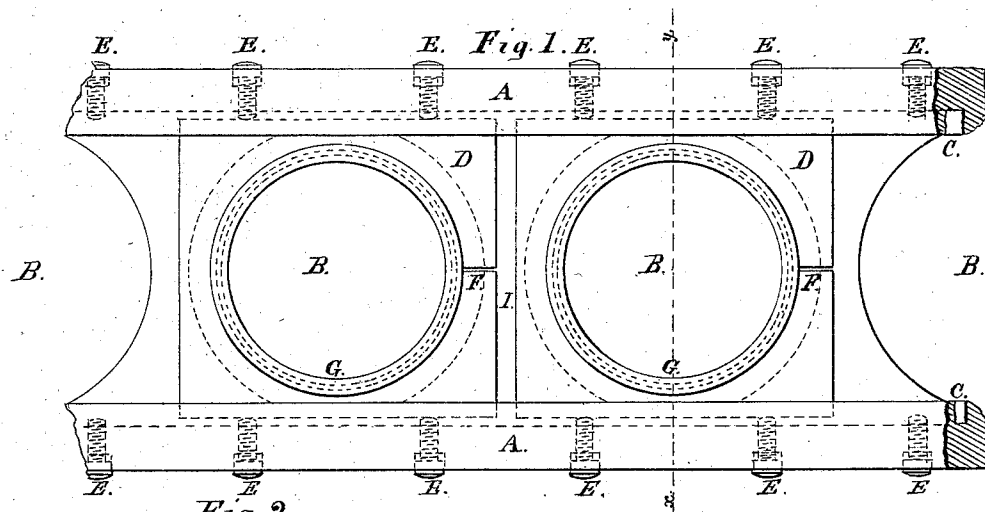


Fig. 2.

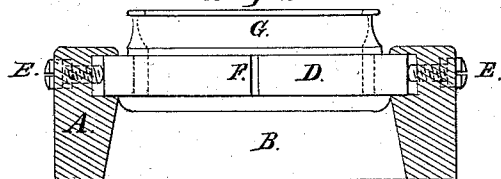


Fig. 3.

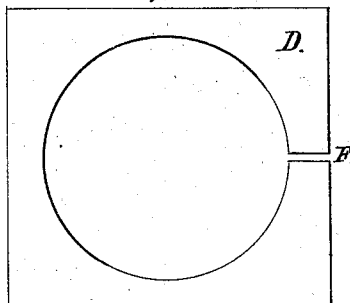


Fig. 4.

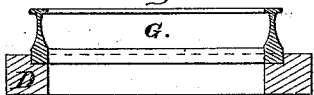


Fig. 5.

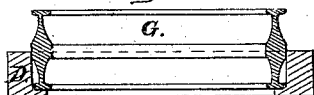
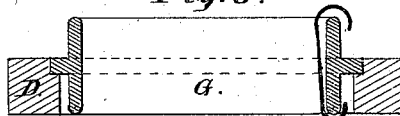


Fig. 6.



WITNESSES:

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INVENTORS:

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UNITED STATES PATENT OFFICE.

GEORGE W. SPAULDING AND WILLIAM T. CARROLL, OF WOONSOCKET, R. I.

IMPROVEMENT IN RING RAILS AND HOLDERS FOR SPINNING.

Specification forming part of Letters Patent No. 135,944, dated February 18, 1873.

To all whom it may concern:

Be it known that we, GEORGE W. SPAULDING and WILLIAM T. CARROLL, of Woonsocket, Providence county, State of Rhode Island, have invented certain Improvements in Ring-Rails of Spinning or Twisting Machines, of which the following is a specification:

Our invention relates to an improvement in the ring-rail of a spinning or twisting machine.

Figure 1 shows the ring-rail A, adjustable ring-holder D, and ring G connected. Fig. 2 shows ring G, adjustable ring-holder D, and cross-section of ring-rail A through *xy*. Fig. 3 is a plan of the adjustable ring-holder D. Figs. 4 and 5 show sections of different kinds of rings and how applied to ring-holder. Fig. 6 shows twister-ring and traveler combined with adjustable ring-holder.

The rail A, shown in Fig. 1, is of iron, cast with the holes B. It has the grooves C planed so as to receive the adjustable ring-holder D. This holder is made narrower than the space between the grooves, which renders it adjustable by the screws E, and it is also shorter than the distance between the centers of the rings, which renders it adjustable lengthwise of the rail. We, therefore, can adjust the ring in any direction that may be desired.

An important feature of this adjustable ring-holder is the slot F. When the sides of the holder are not pressed by the screws the slot is open and will allow the putting in or taking out of the ring readily. When the ring is in the holder the screws are set up sufficiently to hold the ring fast, and the holder may then be adjusted as required.

By simply loosening one of the screws nearest the slot the ring can be removed or replaced; but the holder can be used with or without the slot F and can be adapted to any kind of ring that is desired to be used, as shown in Figs. 4

and 5. This arrangement is particularly well adapted to the twister-ring and traveler, as shown in Fig. 6.

The old method of making the rails without the holder requires great accuracy in drilling the holes for the rings, and bringing them concentric with the spindles requires expensive and nicely-constructed tools for doing the work and skilled and high-priced workmen to construct this part of the machine; but by this construction the nicety of workmanship and expense is not required.

It is also well known among manufacturers and operators of ring-spinning machines that the ring-rail causes more trouble than all the rest of the machine, in consequence of the spindles getting out of the center of the rings, thereby causing the ring to wear out fast and the travelers to fly off, thus making uneven yarn. Various methods of adjusting the rings in the rail are employed, such as two and three screws pressing against the rings; but with this method the adjustment can be but slight.

With our method, as described, the adjustment can be made to any required amount.

Claims.

We claim—

1. The rail A, constructed substantially as described.
2. The combination of the adjustable holder D, with or without the slot F, with the ring-rail A, substantially as described.
3. The adjustable ring-holder D, constructed as described.

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Witnesses:

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