# J. Booth.

## Spinning Ring.

No. 88,840. Patented Apr. 13, 1869.

Fig. 1.

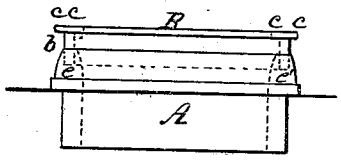



Fig. 2.

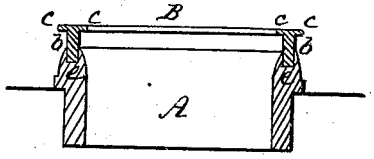



Fig: 3.

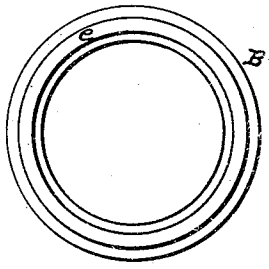



Fig. 4.




Fig: 5.

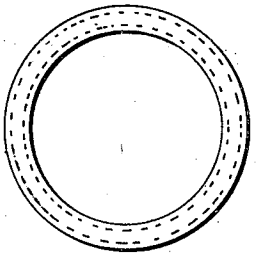


Fig. 6.

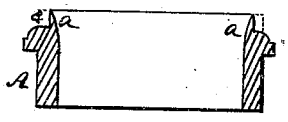
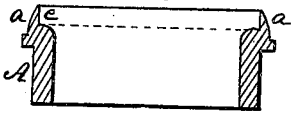



Fig. 7.




Witnesses.

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# UNITED STATES PATENT OFFICE

JOHN BOOTH, OF SMITHFIELD, RHODE ISLAND, ASSIGNOR TO ORVILLE PECKHAM, TRUSTEE, AND SAID TRUSTEE ASSIGNS TO JOHN BOOTH AND FALES, JENKS & SONS, OF SAME PLACE.

## IMPROVEMENT IN RING FOR SPINNING-MACHINES.

Specification forming part of Letters Patent No. **88,840**, dated April 13, 1869.

*To all whom it may concern:*

Be it known that I, JOHN BOOTH, of Smithfield, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Spinning-Rings; and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view, partly in perspective and partly in section, of the improved ring. Fig. 2 is a sectional view through its central axis. Figs. 3, 4, and 5 are a top, a side, and a transverse sectional view, respectively, of the ring proper. Figs. 6 and 7 are modifications of the holder.

Heretofore spinning-rings, or those devices which are attached to the rail of a spinning-frame to hold and guide the "traveler," have been forged from wrought-iron and case-hardened. The only portion of the ring which comes to any wear is the top lip, around which the traveler whirls, and by which it is sustained in place.

The very rapid rate of speed at which the travelers upon a ring-spinning frame are made to run causes the ring to be subject to great wear, and inasmuch as the frames are supplied upon the average with one hundred and forty-four, and often with as many as three hundred and thirty, rings, the expense of supplying a frame with new rings is a very considerable item in the cost of keeping this class of machines in repair.

My invention consists in making a spinning-ring in two parts, one of which is the holder or support for the ring proper, and may be made of cast-iron or other cheap material, and the other portion is the ring, which may be made of steel, and tempered, or of iron, and case-hardened, the two portions being held together as hereinafter shown.

A in the several figures is a holder, cast from a pattern and shaped in a lathe, so as to fit a cup or recess made in the rail of the spinning-frame, and is to be held in place in the rail by a set-screw or other suitable means. The top edge of the holder or base A is channeled, as shown at Figs. 1 and 2, or made with either an outer or an inner lip, *a*, as seen at Figs. 6 and 7. The ring B is made from steel or other suitable metal, in the form suitable for the office which it performs, which is that of a hoop, *b*, with a flange, *c*, projecting each way from its top edge, as shown in section, Fig. 2.

The hoop portion *b* should be of the proper size and diameter to fit the channel *e'*, or its equivalent rabbet *e*, in the top edge of the holder. After the ring has been hardened and tempered it should be seated upon the holder, as shown at Figs. 1 and 2, and it will be found that the slight deviation from a true circle which the operation of hardening it occasions will be corrected when it is driven to its seat in the holder, and the so springing it back to a true circle will enable it to be held as firmly in the base A as is required.

When the rings of a frame have become worn they can be replaced at a very inconsiderable cost, as compared with the cost of replacing a set of rings as heretofore made.

What I claim as my invention, and desire to secure by Letters Patent, is—

A spinning-ring constructed substantially as herein described.

JOHN BOOTH.

Witnesses:

ORVILLE PECKHAM,

CHARLES W. GREENE.