

(No Model.)

A. F. BENTLEY.

RING RAIL FOR SPINNING AND TWISTING MACHINES.

No. 460,247.

Patented Sept. 29, 1891.

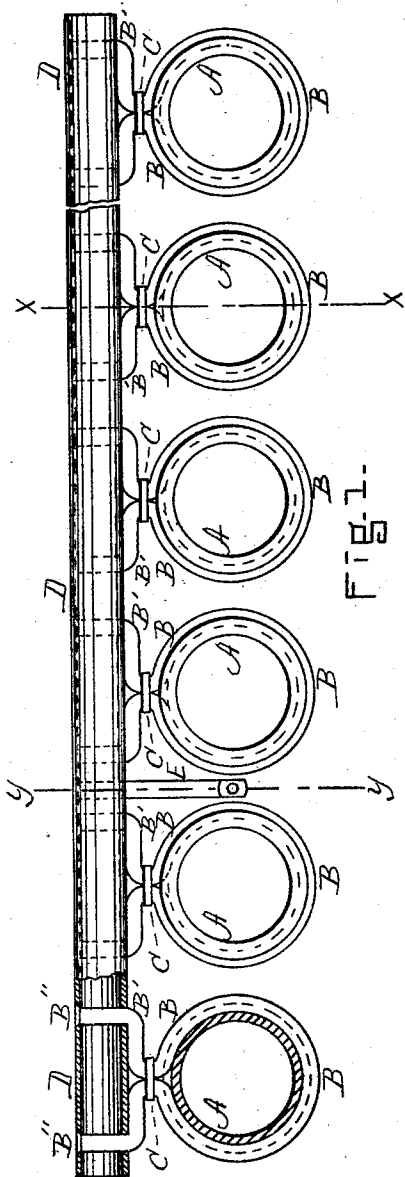


FIG. 1.

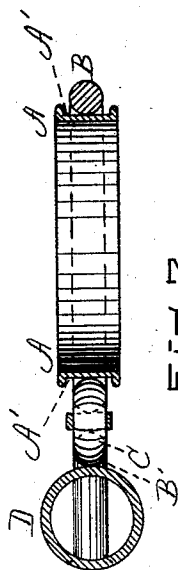


FIG. 2.

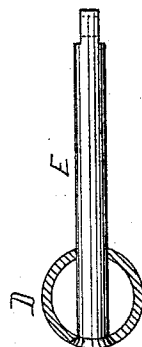


FIG. 3.

WITNESSES.

W. H. Hartnett.
A. C. Williams

INVENTOR.

Albert F. Bentley

By his Atty

Henry Williams

UNITED STATES PATENT OFFICE.

ALBERT F. BENTLEY, OF FALL RIVER, MASSACHUSETTS.

RING-RAIL FOR SPINNING AND TWISTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 460,247, dated September 29, 1891.

Application filed May 18, 1891. Serial No. 393,073. (No model.)

To all whom it may concern:

Be it known that I, ALBERT F. BENTLEY, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Ring-Rails for Spinning and Twisting Machines, of which the following is a specification.

This invention relates to twister and spinning frame ring-rails; and the principal advantages possessed by the improvement are that the rail, being a skeleton rail, collects practically no dirt or oil and cannot rust from the constant dripping of water upon it. Another advantage over the old style box-rail is that there is no opportunity for oil to get on the yarn from a broken end whipping against it.

The nature of the invention is fully described below and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view, partly in horizontal section, of a portion of a rail for a twister or spinning machine embodying my improvement. Fig. 2 is a cross-vertical section on line *x*, Fig. 1. Fig. 3 is a cross-vertical section on line *y*, Fig. 1.

Similar letters of reference indicate like parts.

A A represent the rings, made of polished steel, hardened and provided with the annular peripheral grooves A'. Around each ring within the groove A' is closely bent a brass wire B, say three-sixteenths of an inch in diameter. The two meeting portions of the wire are firmly secured together, as shown, by a brass clasp C, and the ends of said wire are spread at B' and bent so as to enter the pipe

or tube D at two points, and, extending through the center thereof, are headed in the farther side at B'', all substantially as shown in Fig. 1. This pipe or tubular rod D is made of, say, three-fourths inch brass piping. The whole constitutes a skeleton rail, on which practically no oil or dirt can collect and which cannot rust by reason of the dripping of water upon it. Furthermore, there is no chance for oil to get on the yarn from the whipping against it of a broken end.

E is one of two rods riveted to the brass piping D, and adapted to rest on the lifter-rod of the twister, thus making the rail complete. By means of these rods the rail is rendered reversible.

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

In a rail for twisters and spinning-machines, the combination of the following parts, viz: the rings A, provided with the annular peripheral grooves A', the wires B, secured around said rings, clasps C, securing said wire, the tubular rod D, and the rods E, whereby said tubular rod is secured to the lifter-rod, said wires B having their ends secured centrally in said rod, as described, the whole constituting a skeleton rail, substantially as and for the purpose set forth.

ALBERT F. BENTLEY.

Witnesses:

EDWARD POWERS,
JOHN W. ESTY,
JOHN F. GAMAGE.