

(No Model.)

J. A. COLLINS.
SPINNING MACHINE.

No. 500,318.

Patented June 27, 1893.

Fig. 1.

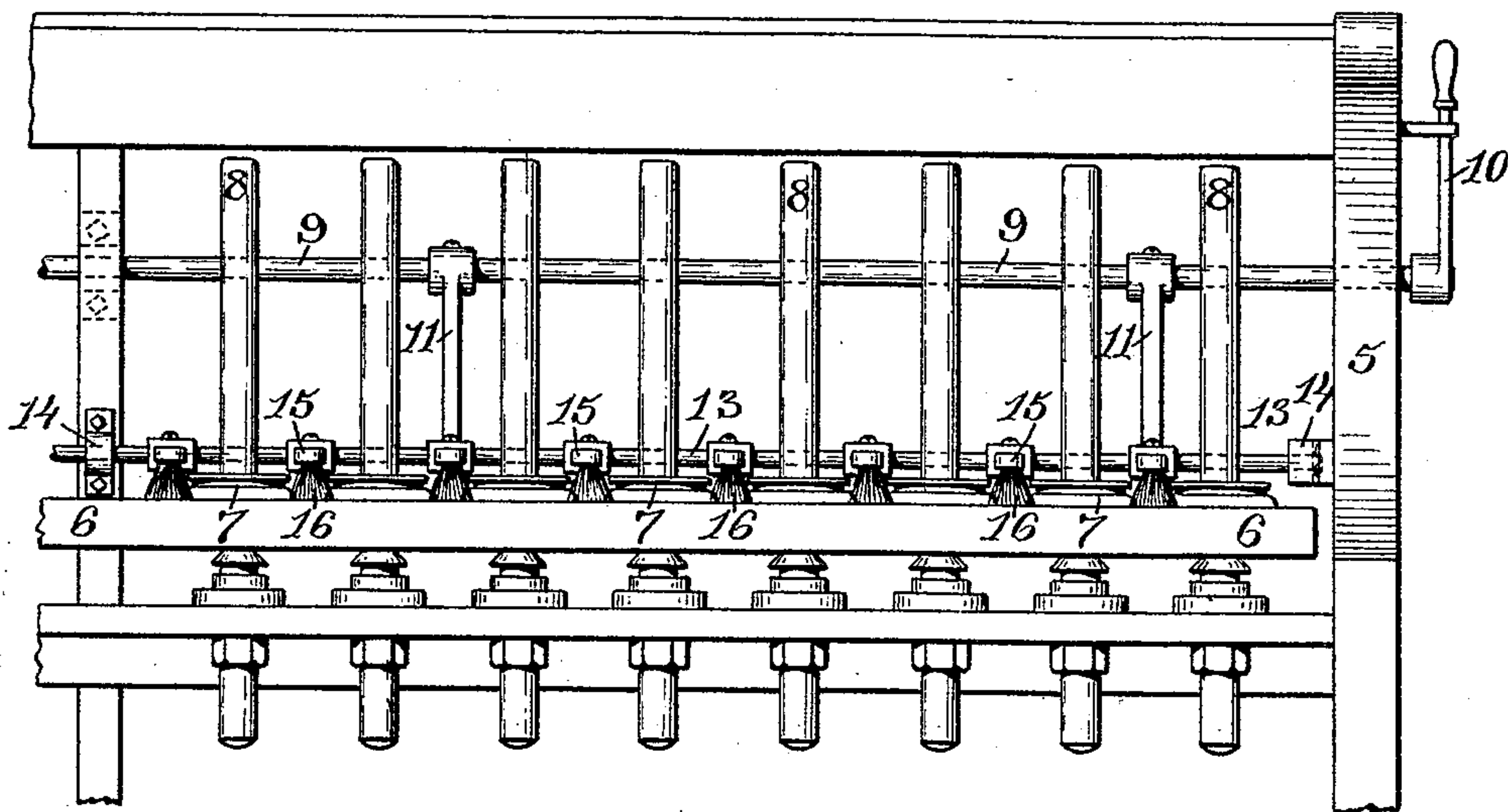
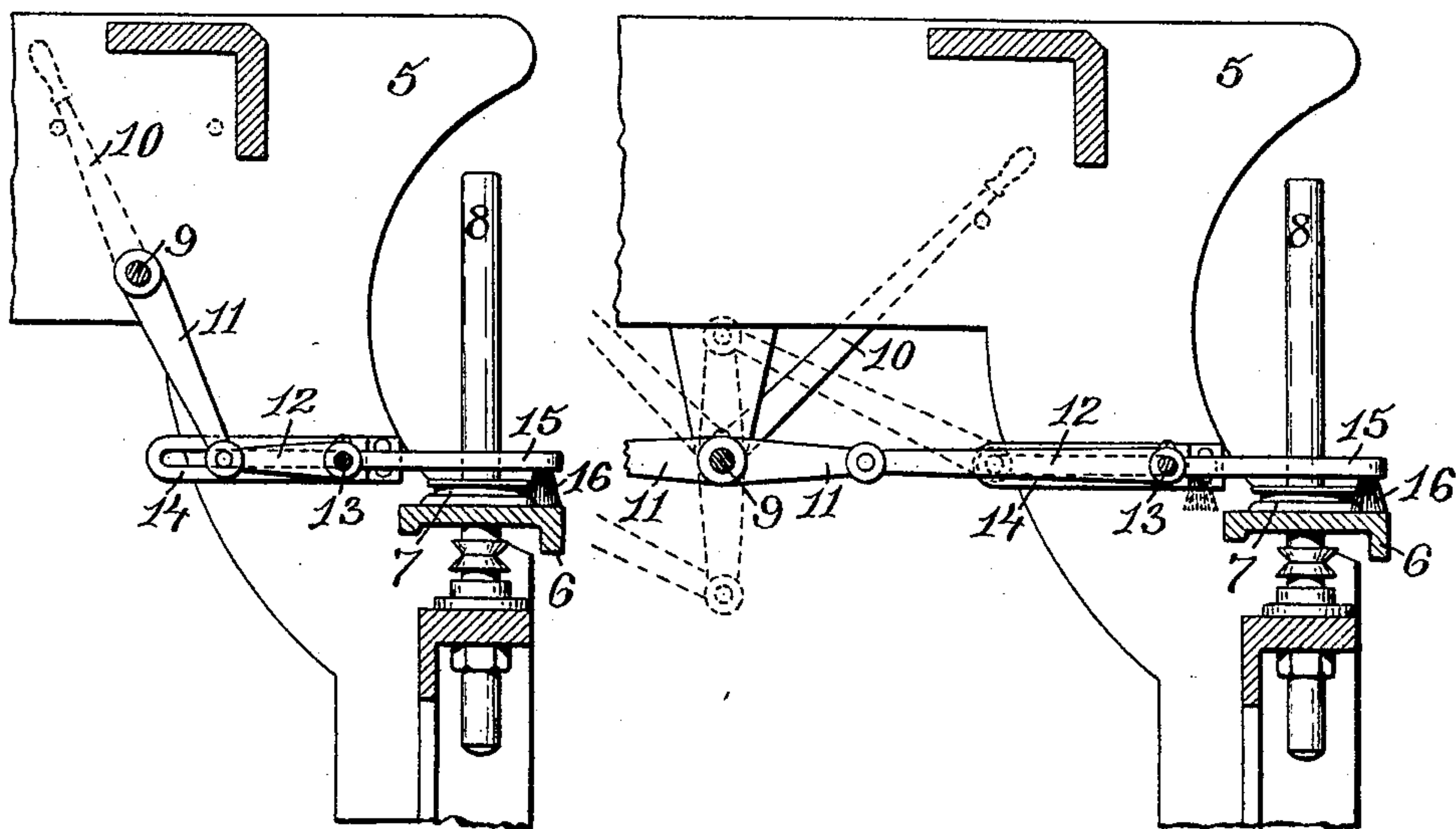


Fig. 2.

Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN A. COLLINS, OF FALL RIVER, MASSACHUSETTS.

SPINNING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 500,318, dated June 27, 1893.

Application filed December 29, 1892. Serial No. 456,619. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. COLLINS, of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Spinning-Machines; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has particular reference to improvements in ring-cleaners for spinning-machines.

The object of the invention is to produce a cleaning device by which the rings, the portions of the ring-rail between the rings, and the travelers may be cleaned.

Another object of the invention is to produce a cleaning device which may be carried by the spinning-machine and one which can be operated to clean all the rings and travelers of the machine at one time.

The invention consists in the combination with the spinning-machine of a series of brushes which may be reciprocated by the throwing of a lever.

The invention also consists in the means for supporting and operating the brushes, as will be more fully described hereinafter and pointed out in the claims.

Figure 1 represents a front view of a portion of a spinning-machine showing the brushes between the rings and the rock-shaft by which the brushes are operated. Fig. 2 is a sectional view of the same to more clearly show the means for supporting and operating the brushes. Fig. 3 represents a sectional view of parts of a spinning-machine having a double row of spindles indicating a modification of the brush-operating mechanism by which two series of brushes may be operated at the same time.

Similar numbers of reference designate corresponding parts throughout.

In the drawings 5 indicates the end frame of a spinning-machine, 6 the ring-rail, 7 the rings which surround the spindles 8 and carry the travelers.

Journaled in the end-frames 5, or in brackets supported thereby, is a rock-shaft 9 furnished with a handle 10, or other means, for

rocking the same. This shaft generally extends the full length of the machine and, at intervals, is connected, by the levers 11 and pivoted-arms 12, with a rod 13 which is mounted in slides similar to those marked 14. Extending from this rod 13, in either or both directions, are brush-handles 15 carrying brushes 16 of a suitable size and shape to pass between the rings 7 and to brush the sides of the same. The brush-handles 15 are rigidly clamped to the rod 13, and the guides 14 are generally located slightly above the lowest traverse of the ring-rail, so that it may be cleaned before moving upward,—the location of the brushes and their supporting and operating mechanism may, however, be as desired.

When both sides of the machine are to be provided with brushes, I prefer to locate the rock-shaft 9 as shown in Fig. 3 and to form the levers 11 as cross-bars, as therein, the arms 12 being of sufficient length to connect the ends of the levers with the rods 13.

In place of the handle 10 for operating the rock-shaft, any other suitable and well-known device may be used and this may be automatic, if desired. By the use of this device the ring-rail, the rings and the travelers are all cleaned from lint and dust at one operation. This cleaning may be repeated as often as desired owing to the short time necessary for it.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a spinning-machine, the combination with the ring rail and rings carried thereby, of a rock-shaft, reciprocating mechanism operated thereby and a series of brushes carried in a pendent position by said mechanism, as described.

2. The combination with a spinning-machine, the rings and ring-rail thereof, a rock-shaft journaled in the machine, and levers clamped to the rock-shaft, of guides a rod movable in the guides, arms pivoted to the rod and to the free ends of the levers, and a series of brushes carried by the rod.

3. The combination with the end-frames of a spinning-machine, the ring-rails, the rings mounted in the ring-rails, the rock-shaft 9

supported by the end frames and the cross-
bar levers 11 clamped to the rock-shaft, of
the rod 13, guides in which the rod 13 is mov-
able, a series of brushes 16 carried by the
5 rod, and the arms 12 pivoted to the rod 13
and to the levers 11, as and for the purpose
described.

In witness whereof I have hereunto set my
hand.

JOHN A. COLLINS.

Witnesses:

HENRY J. MILLER,
M. F. BLIGH.