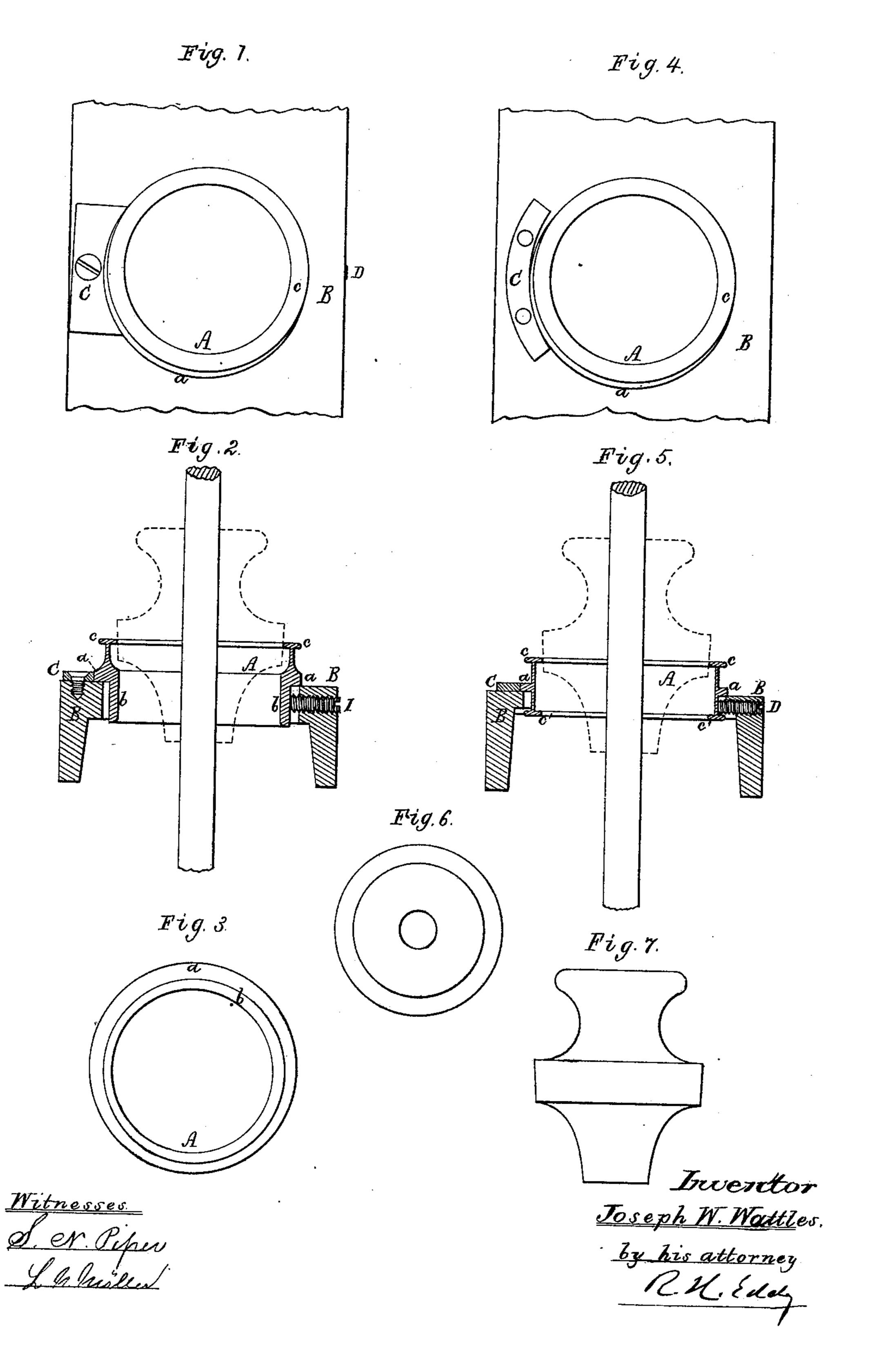
## J. W. WATTLES. Spinning Frame Ring.

No. 206,755.

Patented Aug. 6, 1878.



## UNITED STATES PATENT OFFICE.

JOSEPH W. WATTLES, OF CANTON, MASSACHUSETTS.

## IMPROVEMENT IN SPINNING-FRAME RINGS.

Specification forming part of Letters Patent No. 206,755, dated August 6, 1878; application filed November 20, 1877.

To all whom it may concern:

Be it known that I, Joseph W. Wattles, of Canton, of the county of Norfolk and State of Massachusetts, have made a new and useful invention having reference to Spinning-Frame Rings and their supports, whereby a ring can be readily adjusted and clamped into concentricity with its spindle; and I do hereby declare the same to be described in the following specification and represented in the

accompanying drawings, of which-

Figure 1 is a top view, and Fig. 2 a transverse section, of a single-race ring and the supporting-rail thereof as provided with my invention. Fig. 3 is an under-side view of the ring. Fig. 4 is a top view; and Fig. 5, a transverse section of a duplex-race ring and the supporting-rail thereof as provided with my invention. In Figs. 2 and 5 the spindle is also represented with a ring "centralizer" applied to it and the ring, the centralizer being shown in dotted lines. Fig. 6 is a top view, and Fig. 7 a side elevation, of such centralizer, which is a device well known and in common use for centralizing spinning-rings.

In carrying out my invention, the ring is to be provided with an eccentric flange, such flange being eccentric with respect to the race or races of, and to extend around, the ring.

In the drawings, the ring is shown at A, and its eccentric flange at a. With the single-race ring the eccentric flange is below the race  $c_{i}$ extends from the shank b, and rests directly upon the top of the ring-rail B. The socket for the reception of the said shank has a diameter greater than that of the shank and less than that of the eccentric flange.

In Fig. 5 the eccentric flange a is shown as arranged midway between the two races c c', and when the ring is in the socket of the rail

the flange rests upon the top of the rail, the socket having a diameter just large enough to allow of the race being inserted in it. This socket, however, should not be so deep as to prevent the ring from being moved in a direction laterally or radially from the spindle.

In further carrying out my invention, there should be extended up from the rail and adjacent to the eccentric flange an abutment, C, which I prefer to have concave at its edge next to the periphery of the flange. There should also be a set-screw, D, which should be screwed into the rail opposite to the abutment, and arranged to screw against the ringshank, or the part between the eccentric flange and the lower race.

Should the ring require to be adjusted into concentricity with the spindle, the centralizer is to be placed on the spindle concentric therewith and dropped into the ring, which by it will at once be brought into concentricity with the spindle. Next, the ring should be turned around until the periphery of the eccentric flange may bear against the abutment, after which the screw should be screwed up tightly to the ring, so as with the abutment to hold such ring firmly in its adjusted position.

I claim—

The spinning-frame ring A, provided with an eccentric flange, a, and applied to the rail B so as to be adjustable therein, as set forth, in combination with the abutment C and the clamp-screw D, applied to the rail and arranged with such ring and flange in manner and to operate therewith substantially as specified.

JOSEPH W. WATTLES.

Witnesses:

R. H. Eddy, JOHN R. SNOW.