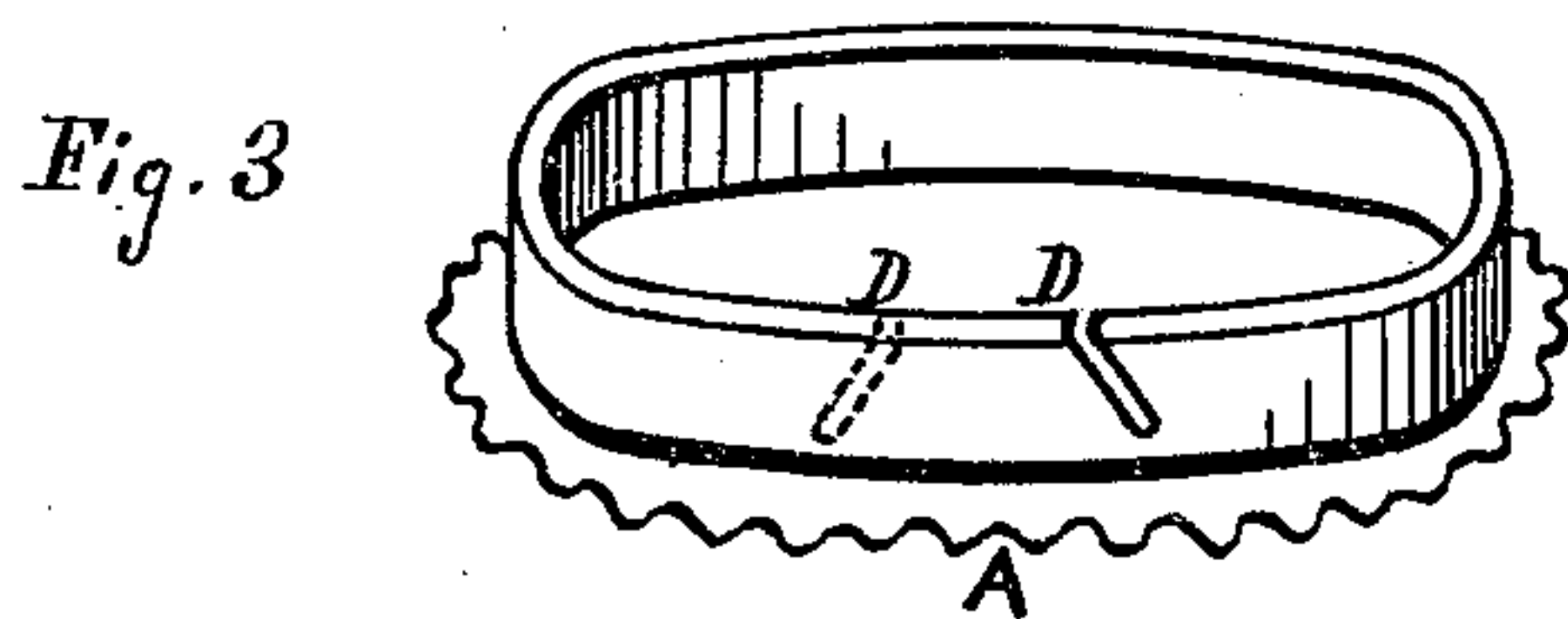
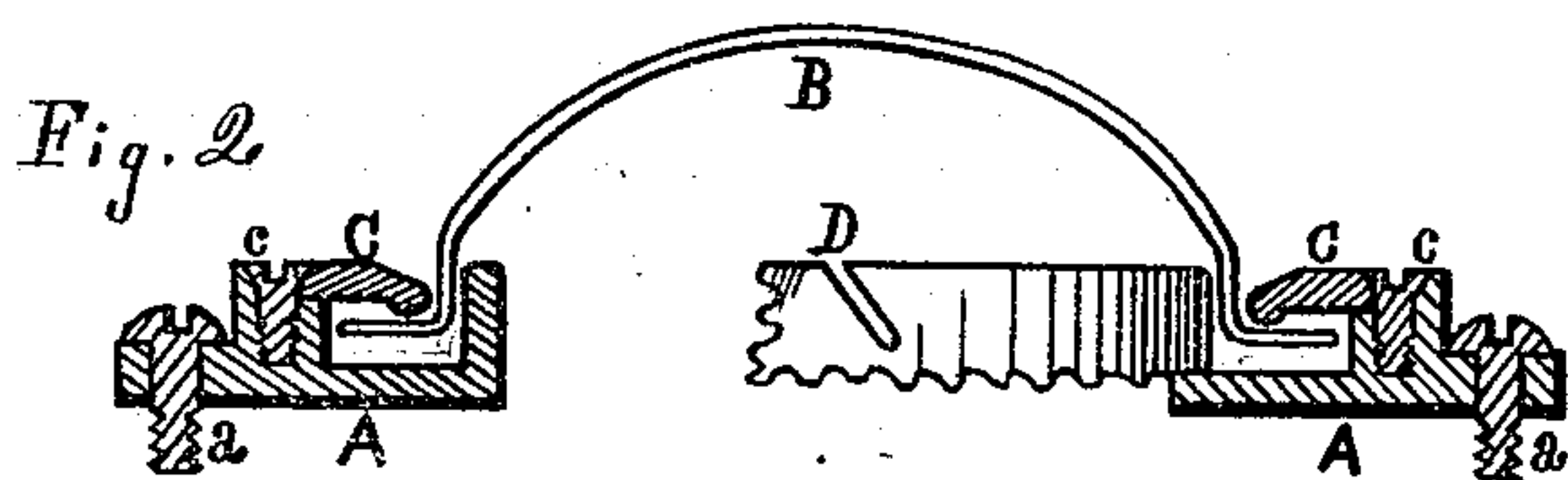
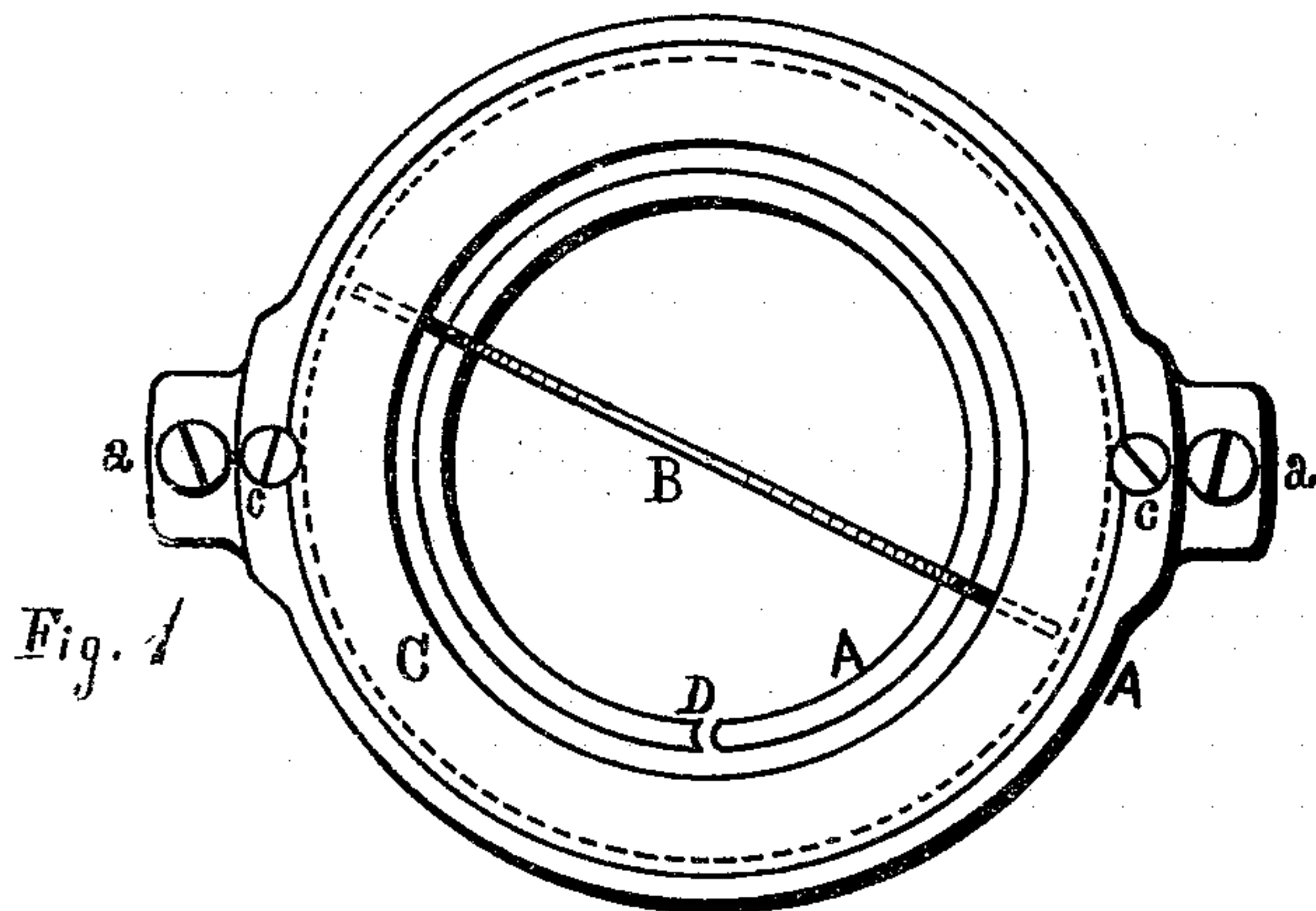


W. W. STEARNS.  
Spinning-Ring.

No. 164,492.

Patented June 15, 1875.



WITNESSES —

Webster Park  
A. Y. Park.

INVENTOR —

Willard H. Stearns.

# UNITED STATES PATENT OFFICE.

WILLARD W. STEARNS, OF NORWICH, CONNECTICUT.

## IMPROVEMENT IN SPINNING-RINGS.

Specification forming part of Letters Patent No. **164,492**, dated June 15, 1875; application filed October 21, 1874.

*To all whom it may concern:*

Be it known that I, WILLARD W. STEARNS, of Norwich, State of Connecticut, have invented certain Improvements in Rings and Travelers for Spinning, of which the following is a specification:

My invention has for its object to provide the quickest and most convenient means of replacing the traveler whenever broken or worn out, and also to cheapen the construction of the ring as much as possible; and it consists in cutting a slot through the inner ring, through which the traveler can be instantly sprung in.

Figure 1 is a top view of my improved ring. Fig. 2 is a vertical section through the center of the same, showing also a side view of a portion of the inner ring and the form and position of the slot. Fig. 3 shows the inner ring detached, with its slot inclined, as is preferable for spinning, the dotted lines showing the slot inclined the opposite way, as for twisting.

A is the base and main portion of the ring, which may be made of cast-iron, having a plain upright inner ring and an outer ring, which is provided with a shoulder, as shown by the dotted line in Fig. 1 and section in Fig. 2, for the washer-shaped upper part C to rest upon, *a a* being the screws by which the base A is secured to the rail of the machine. B is the improved form of traveler now in general use, and with which my invention is intended to be used. C is the upper portion of the ring, which may be cheaply punched out of wrought-iron or steel, in the form of a plain washer, except that its inner edge is pressed down

and finished into a rounded flange below, as shown in Fig. 2. This washer C, in consequence of the provision of the slot, it is never necessary to remove, except very seldom, for cleaning out the interior of the ring, so that it may be cheaply secured upon the base A by the countersunk screws *c c*. D is a narrow inclined slot cut through the inner ring, so that when one end of the traveler has been inserted under one side of the completed ring the other end may be instantly sprung back and inserted through the slot under the opposite side, thus obviating the necessity of removing the top portion of the ring. By inclining this slot one way for spinners, and the other way for twisters, the end of the traveler always passes the slot nearly at right angles to it, so that the traveler can never fly out.

It has been found in use that every thousand travelers must be replaced by new ones every two weeks, so that my construction saves much time in replacing the travelers.

I am aware of Potter's patent ring and traveler, and do not intend to claim anything shown in his patent; but

I claim as my invention—

A spinning-ring of the character shown and described, provided with the slot D through its inner part, substantially as and for the purposes herein set forth.

WILLARD W. STEARNS.

Witnesses:

ALBERT F. PARK,  
WEBSTER PARK.