

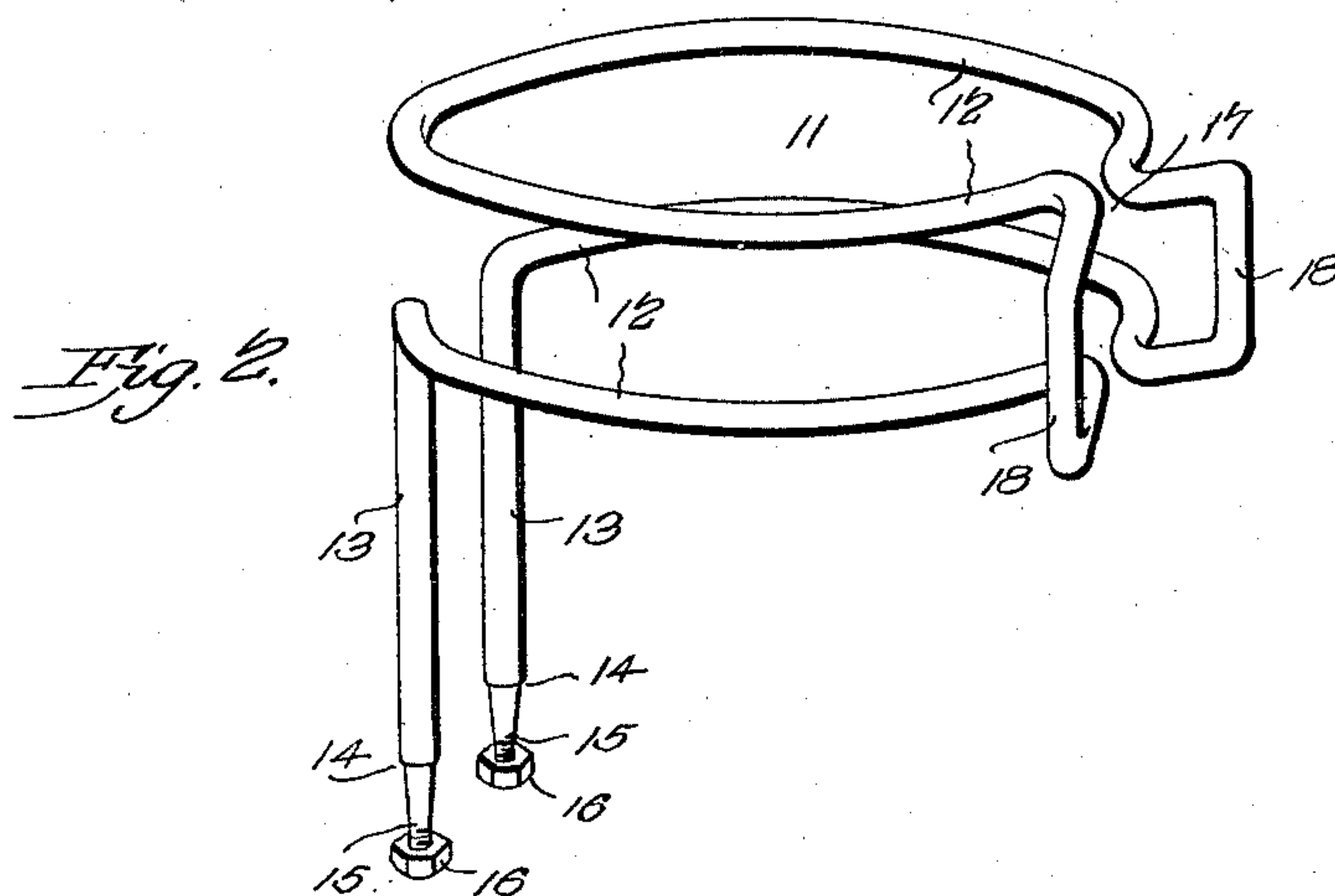
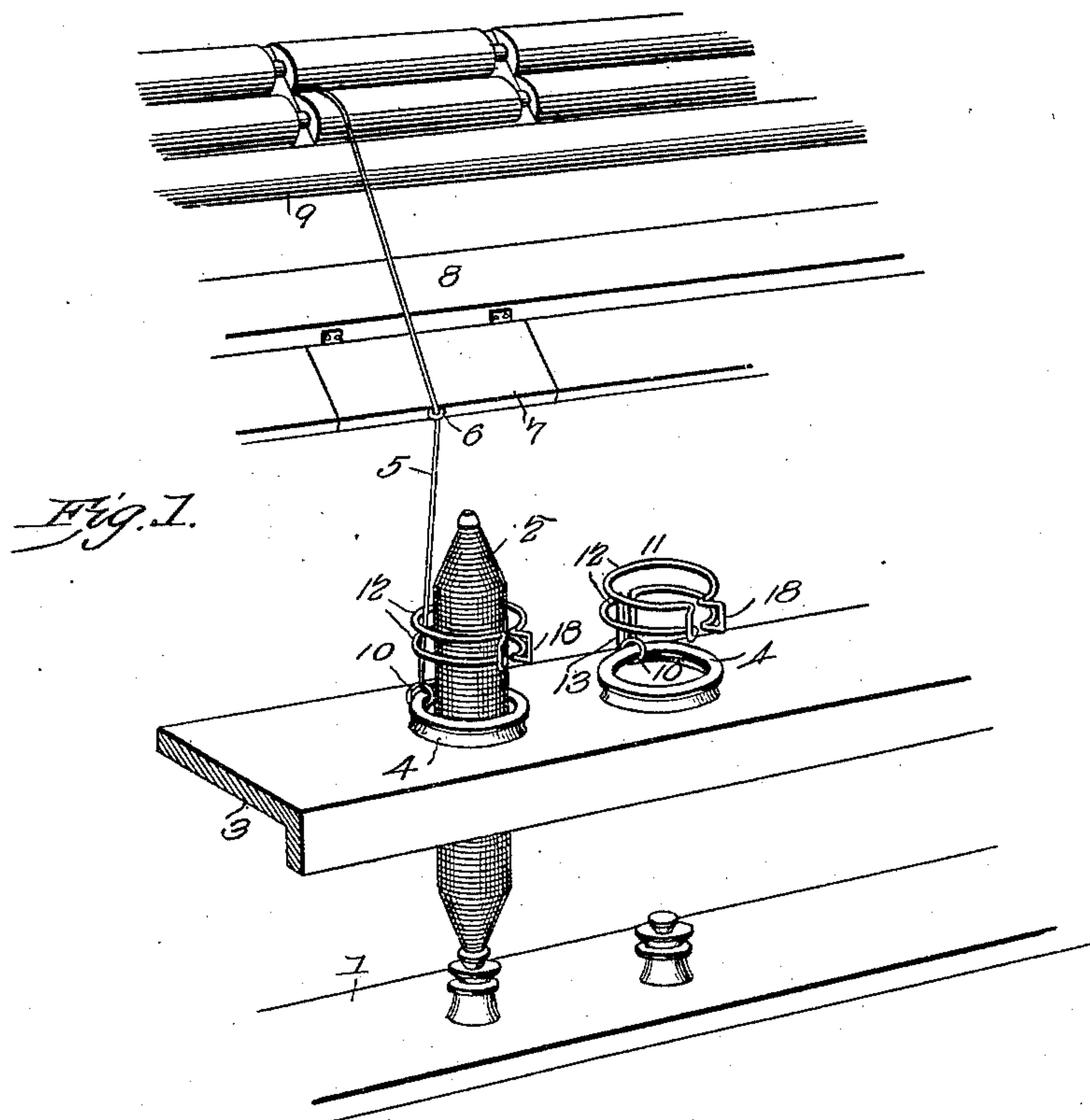
No. 695,876.

Patented Mar. 18, 1902.

J. C. WALL & M. E. SCHEDLBAUER, JR.
PROTECTOR FOR RING SPINNING FRAMES.

(Application filed June 27, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JOHN C. WALL AND MICHAEL E. SCHEDLBAUER, JR., OF AMSTERDAM, NEW YORK, ASSIGNORS TO THE RING FRAME THREAD PROTECTOR COMPANY, OF AMSTERDAM, NEW YORK.

PROTECTOR FOR RING-SPINNING FRAMES.

SPECIFICATION forming part of Letters Patent No. 695,876, dated March 18, 1902.

Application filed June 27, 1901. Serial No. 66,282. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. WALL and MICHAEL E. SCHEDLBAUER, Jr., citizens of the United States, residing at Amsterdam, in the
5 county of Montgomery and State of New York, have invented a new and useful Protector for Ring-Spinning Frames, of which the following is a specification.

This invention relates to thread-protectors
10 for ring-spinning frames; and the object of the same is to provide a simple and effective device of this class which is so constructed as to allow the thread or yarn to enter the center of protecting circular members and be
15 carried within the same to prevent ballooning, and also to provide a protector which will permit the thread or yarn to enter the same from either direction, according to the direction of drive of the spindle to produce a
20 right or left twist.

The invention consists in improvements on the protectors disclosed in Patents Nos. 628,875 and 649,186, respectively, issued to us on July 11, 1899, and May 8, 1900.

25 In the drawings, Figure 1 is a perspective view of a portion of a spinning-frame, showing the improved protector applied to the ring-rail. Fig. 2 is a detail perspective view of the improved protector.

30 Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a spindle-rail; 2, an ordinary bobbin or quill, which is fitted
35 on a spindle that is carried by the spindle-rail; 3, the ring-rail, and 4 the ordinary traveler-ring, which loosely circumscribes the bobbin or quill of the spinning-frame. The thread or yarn 5 is led to the bobbin or
40 quill by an ordinary guide-eye 6, attached to the hinge-block 7 on the guide-board 8, the latter being arranged below the sets of drawing-rolls 9. All of these parts are of the usual or any preferred construction.

45 The traveler 10 fits loosely to the traveler-ring 4, and this traveler is engaged with the thread or yarn, and conjointly operating with these devices, and particularly the bobbin or quill, the traveler, and the traveler-ring, is
50 the improved attachment.

The protector is indicated in its entirety by the numeral 11 and comprises parallel annular guards 12, having vertically-disposed supporting-stems 13, which are formed with shoulders 14 at their lower ends, and screw-
55 threaded shanks 15, adapted to be engaged by nuts 16. The shanks 15 are inserted through the ring-rail 3, close to the traveler-ring in each instance, and firmly secured by the nuts 16, the shoulders 14 bearing against the up-
60 persurface of the said rail. The guards each have an entrance-throat 17, and common to both guards are reversely-inclined outwardly-extending guard-lips 18, forming guiding
65 means to the said throats. The upper and lower guards lie parallel to and concentric with each other, and said guards are preferably uniform in diameter, so that they occupy, essentially, the same circular plane.
70 The stems 13 are also parallel to each other, with an intermediate space between the same. The protector is formed from a single piece of wire of suitable gage, the stems extending downwardly from the lower guard and the upper and lower guards connected by the guard-
75 lips, which are disposed at points diametrically opposite the said stems. The arrangement of the guards as set forth prevents the thread or yarn from being whipped out of the protector, and, furthermore, the improved attachment
80 operates on the thread or yarn in such manner as to always maintain the same in a taut condition during both the upward and downward travel of the ring-rail, and hence the thread or yarn restricts the oscillation or wobble of
85 the traveler on the traveler-ring, with a resulting reduction in the friction and wear of the traveler on the ring 4 by reason of the traveler being held in a perpendicular position. The main advantage of the improved
90 attachment, however, in view of the fact that it includes all the advantages of the previously-patented devices, is the capability of use of the same on ring-spinning frames wherein the yarn is spun with either right or left
95 hand twist and the simplicity of the general construction, whereby applications of the improved device can be made of the same. The entrance-throats to the guards will be positioned as shown in Fig. 1, or the said throats
100

and the guard-lips therefor may be at the front and the stems at the back. The change of position will be governed by the character of the work to be performed, and it will be understood that it is proposed to use the improved attachment on all classes of spinning-frames to which it is applicable and also to use it in operation with any kind of thread or yarn.

10 Having thus described the invention, what is claimed as new is—

1. A protector for ring-spinning frames comprising parallel annular guards joined or connected at one point by outstanding reversely-inclined lips, and attaching-stems at diametrically opposite points.

2. A protector for ring-spinning frames comprising parallel annular guards having entrance-throats at one point, and reversely-in-

clined, outwardly-extending guard-lips common to both guards. 20

3. A protector for ring-spinning frames comprising parallel annular guards having entrance-throats at one point, reversely-inclined, outwardly-extending guard-lips common to both guards and forming guiding means to the said throats, and depending stems diametrically opposite the lips and having lower shouldered terminals. 25

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses. 30

JOHN C. WALL.

MICHAEL E. SCHEDLBAUER, JR.

Witnesses:

HARVEY BOOK,

GEORGE S. COOPER.