

B. HALL.
 HOLDER FOR ROTARY SPINNING RINGS.
 APPLICATION FILED NOV. 28, 1911.

1,034,790.

Patented Aug. 6, 1912.

Fig. 1.

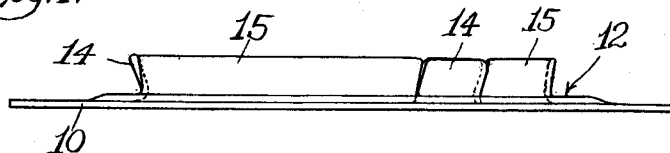


Fig. 2.

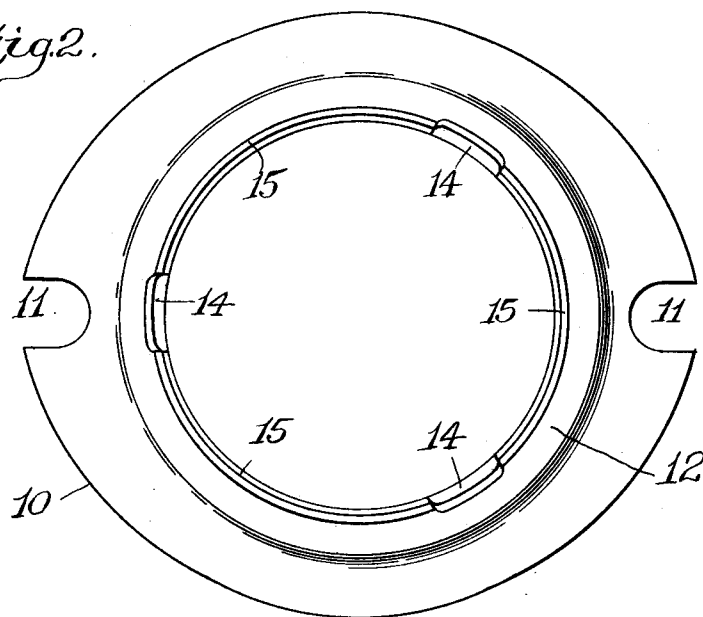
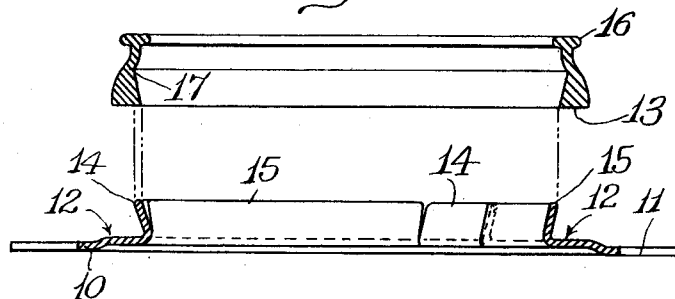


Fig. 3.



Witnesses:
P. W. Foy
 W. P. Foy

Inventor:
 Bicknell Hall
 by *Wright & Boudin*
 Attys.

UNITED STATES PATENT OFFICE.

BICKNELL HALL, OF TAUNTON, MASSACHUSETTS, ASSIGNOR TO ROTARY RING SPINNING COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF DELAWARE.

HOLDER FOR ROTARY SPINNING-RINGS.

1,034,790.

Specification of Letters Patent.

Patented Aug. 6, 1912.

Application filed November 28, 1911. Serial No. 662,792.

To all whom it may concern:

Be it known that I, BICKNELL HALL, of Taunton, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Holders for Rotary Spinning-Rings, of which the following is a specification.

This invention relates to rotary spinning rings, and its object is to provide an improved holder therefor which will avoid the accumulation of lint. To this end the holder is provided with retaining tongues and flanges which extend upwardly from the inner edge of the base or support. The retaining tongues extend outwardly as well as upwardly, so that their upper ends will be in a circle larger than that of their lower ends, whereby they will be adapted to overlie an internal flange or rim at the lower end of the spinning ring and prevent accidental removal of the ring from the base. The flanges and retaining tongues form an endless circular series, the flanges and tongues being arranged in alternate order. The flanges stand in a circle slightly smaller than that of the upper ends of the retaining tongues, so that they may freely enter the lower end of the spinning ring. The upstanding edges of the tongues and flanges are contiguous or nearly so, although slightly offset with relation to each other by reason of the slight outward bending of the tongues. The function of the flanges is to prevent the accumulation of lint on the edges of the tongues. Such accumulation is prevented because the flanges fill the space between the tongues and deflect the lint away from the tongues.

Of the accompanying drawings which illustrate the present invention: Figure 1 represents an edge elevation of the improved holder. Fig. 2 represents a top plan view thereof. Fig. 3 represents, on a larger scale, a vertical section of the holder and of a detached spinning ring.

The same reference characters indicate the same parts wherever they occur.

As previously stated, the holder is composed of sheet metal. A disk 10 of sheet metal is formed to give the usual outline and the usual opening in the center for the reception of a bobbin. The disk is provided with slots 11 for the reception of screws (not shown) for securing it to the ringrail (not shown). The inner portion of the disk

is preferably raised very slightly as indicated at 12, the raised portion constituting a ring-supporting annulus upon which the lower rim 13 of a spinning ring may rest. A flange is turned upwardly from the inner edge of the ring-supporting annulus. This flange is slit at a number of points—six in the present instance—to form retaining tongues 14 and intermediate segmental portions 15. The tongues 14 are thereafter bent outwardly so that their free ends will stand in a circle of slightly greater diameter than that of the upper edge of the portions 15. (See Figs. 2 and 3).

The rotary spinning ring shown by Fig. 3 is provided with a traveler race 16 at its upper end. The interior diameter of the ring is greater between the upper and lower ends than at the lower end, as indicated at 17. In forming the holder, the circles of the tongues 14 and flanges 15 are determined by the diameters of the ring at the lower end and at the point 17. The circle of the flanges 15 is slightly less than the interior diameter of the spinning ring at its lower end. The spinning ring may therefore be slipped freely upon the holder, so far as the flanges 15 are concerned. The upper ends of the tongues 14, however, are normally in a circle which is larger than the interior of the ring at the lower end. It is therefore necessary to flex the tongues 14 toward the center of the ring in order to place the lower end of the ring upon the annulus 12. The tongues 14 normally spring out again into their larger circle and thereby hold the spinning ring upon the base. The tongues do not engage the ring with any degree of tension, but, on the other hand, they leave the ring entirely free to rotate and to move slightly both horizontally and vertically. The intermediate flanges 15 play no part in retaining the ring. Their function is to cover the upstanding edges of the retaining tongues so that particles of lint cannot lodge on said edges. Incidentally, however, the flanges 15 are a means of protecting the retaining tongues from injury during handling and shipment.

I claim:

1. A holder for a rotary spinning ring, comprising an annular supporting member having an endless series of retaining tongues and segmental flanges in alternate order extending upwardly from its inner edge, said

flanges being in a circle and extending throughout the distance between the tongues, and said tongues extending outwardly so that their free upper ends stand in a circle
5 larger than that of the flanges.

2. A holder for a rotary spinning ring, comprising an annular supporting member having an endless circular series of retaining tongues and segmental flanges extending up-
10 wardly from its inner edge, the upper ends of said tongues standing in a circle larger

than that of the lower ends, and the upper ends of said flanges standing slightly within the circle of the upper ends of the tongues, the side edges of said tongues and flanges 15 being contiguous.

In testimony whereof I have affixed my signature, in presence of two witnesses.

BICKNELL HALL.

Witnesses:

MARCUS B. MAY,
JOHN E. POVEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."