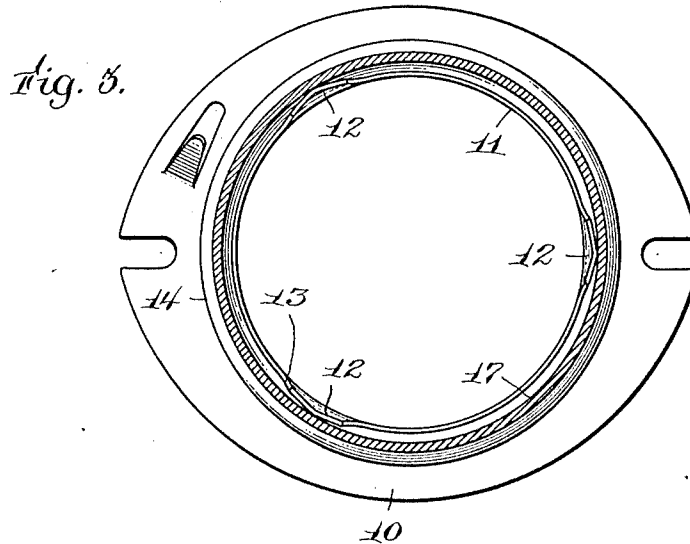
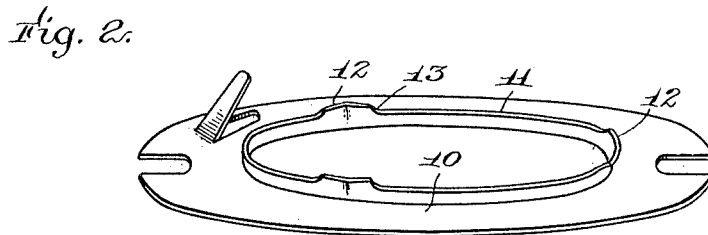
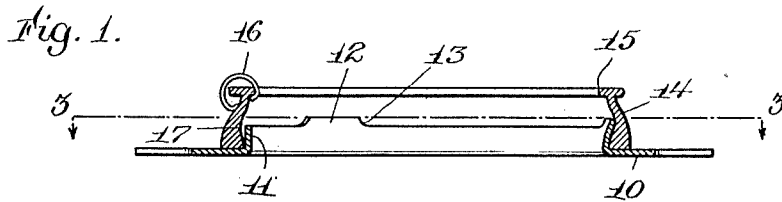


B. HALL.
 HOLDER FOR SPINNING RINGS.
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1,040,535.

Patented Oct. 8, 1912.



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UNITED STATES PATENT OFFICE.

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

HOLDER FOR SPINNING-RINGS.

1,040,535.

Specification of Letters Patent.

Patented Oct. 8, 1912.

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To all whom it may concern:

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

This invention relates to holders for spinning rings, and its object is to provide a device which will avoid the collection of lint.

Of the accompanying drawings: Figure 1 represents a vertical cross section of a holder embodying the invention, with a spinning ring mounted thereon. Fig. 2 represents a perspective view of the holder. Fig. 3 represents a horizontal section as indicated by line 3—3 of Fig. 1.

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

The holder is preferably made of sheet metal, because it can thus be made more readily, more accurately, and with the least expense. The holder comprises a substantially flat annular base 10 the inner edge of which is drawn upwardly to form a flange 11. The flange is preferably cylindrical, as shown at the left of Fig. 1. The upper end of the flange is provided with a plurality of lips 12 which extend upwardly. In the form illustrated there are three of such lips. The edges of the lips curve into the upper edge of the flange, as indicated at 13, for the purpose of avoiding angles in which lint may become caught. Hitherto, ring holders have been made with a flange such as that indicated at 11, but such holders have not been provided with lips at the upper end of the flange, and for this reason the upper end of the flange has been expanded to a diameter greater than the lower end of the flange and the holder split radially at one point in order to permit contraction, and in order that the flange might spring outwardly against the interior of a spinning ring. Other ring holders have been made with upwardly extending lips such as those indicated at 12, but without the flange 11. The lips of holders of the latter kind extend to the base upon which the spinning ring rests, and, being turned upwardly from the inner edge of the base, sharp roughened edges are formed at the junction of the lips with the base. In using holders of the character last described, it has been found that lint is

caught upon the cracked or roughened edges or angles and that when one fiber or piece of lint becomes caught others will adhere to it and accumulate to a degree which impairs the spinning operation. Then again, these sharp edges cut the yarn on the bobbin when the latter is full and when it is doffed. To avoid these bad effects it has been necessary to grind the rough and sharp edges to render them smooth. No cracked or roughened surface is produced by drawing up from the base a continuous annular flange, and no cracked or roughened surface is produced by forming the lips 12 so that they extend upwardly from the flange. Nor is it necessary to split the holder when the flange is provided with flexible lips. The curved portions 13 will not catch the particles of lint as do edges which rise abruptly from the base or from the flange, and there are no sharp edges to cut the yarn upon the bobbin.

The lips 12 are preferably bowed outwardly at their upper edges so that portions of them will stand in a circle of greater diameter than that of the flange 11. A vertical section through the middle of one of the lips 12 is represented at the right of Fig. 1. At this point the flange extends substantially vertically from the base, but the lip extends upwardly and outwardly from the flange. If desired, the entire upper edge of the lip may be pressed outwardly instead of only the middle portion of the lip; but when the lip is bowed as shown, there is less contact with the spinning ring and the ring may rotate more freely if it is adapted to rotate at all.

The holder described is designed for use with a spinning ring whose internal diameter is greater at a point above the lower end than at the lower end. A spinning ring of this character is shown by Fig. 1 and indicated at 14. It is provided with the usual traveler race 15, at its upper end, by which a traveler 16 is held. The lower end of the ring rests upon the base 10. The internal diameter at the lower end is less than the internal diameter at 17, at which level the internal diameter is greatest. The upper edges of the lips 12 are disposed in a circle of greater diameter than the internal diameter at the lower end of the ring and are adapted to engage the ring with slight tension. If it is desired to have the ring rotate in operation, the lips may be bent so

that there will be no tension upon the ring at 17, but the upper edges of the lips will nevertheless stand outside a circle commensurate with the internal diameter at the lower end of the ring.

When mounting or demounting the spinning ring it is not necessary to spring or contract the flange 11, but it is only necessary to flex the lips.

I claim:

1. The combination with a spinning ring, of a holder therefor, comprising a sheet-metal base having a flange extending upwardly from its inner edge, and a plurality of lips extending upwardly and outwardly from the upper end of said flange.

2. The combination with a spinning ring, of a holder therefor, comprising a sheet-metal base having a flange extending up-

wardly from its inner edge, and a plurality of lips extending upwardly and outwardly from the upper end of said flange, the edges of said lips curving into the edge of said flange to avoid angles.

3. The combination with a spinning ring, of a holder therefor, comprising a sheet-metal base having a flange extending upwardly from its inner edge, and a plurality of lips extending upwardly from the upper end of said flange, said lips being bowed outwardly at their upper edges to engage the interior of the ring.

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

BICKNELL HALL.

Witnesses:

PETER W. PEZZETTI,
E. BATCHELDER.

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