B. HALL.

HOLDER FOR ROTARY SPINNING RINGS.

APPLICATION FILED JULY 22, 1909. Patented Mar. 22, 1910. 952,804. Fig. 1.4 Bicknett Hatt By Mift Brown Dunk May. Witnesses.

UNITED STATES PATENT OFFICE.

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HOLDER FOR ROTARY SPINNING-RINGS.

952,804.

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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 5 and useful Improvements in Holders for Rotary Spinning-Rings, of which the following is a specification.

This invention has relation to rotary spinning rings and has for its object to provide 10 a holder therefor which may be more readily attached to or detached from a ring rail than holders hitherto commonly used.

It has been the usual practice to attach the holders to the ring rail by screws extending 15 vertically into the upper face of the rail, two or more screws being necessary for each ring holder. When a series of rings and spindles are in working position, considerable inconvenience is found in attempting to 20 reach the attaching screws with a screwdriver for the purpose of removing a holder, as is frequently necessary in order to clean or replace the same.

The present invention seeks to avoid the 25 inconvenience of manipulating the attaching screws of a ring holder by arranging the screws in the rails so that they extend horizontally with their heads in the front edges thereof, and by forming the ring holders 30 with cylindrical portions adapted to fit in the ring rails so as to be engaged by the

screws. One form in which the invention may be embodied is illustrated upon the accompany-

35 ing drawings, in which— Figure 1 is a top plan view of a fragment of a ring rail equipped with a rotary ring and holder therefor. Fig. 2 is a section on line 2—2 of Fig. 1. Figs. 3 and 4 are re-40 spectively a perspective view and an eleva-

tion of a ring which may be employed. Figs. 5 and 6 are respectively a perspective view and an elevation of the supporting member for the ring. Figs. 7 and 8 are re-45 spectively a perspective view and an elevation of the base for the supporting member. Fig. 9 is a section on line 9-9 of Fig. 2.

The same reference characters indicate the

same parts wherever they occur.

In carrying out the invention, the ring holder is made in two parts, chiefly for the sake of avoiding, so far as possible, the expense of manufacture. For this reason, the two parts are preferably composed of sheet 55 metal cut and formed by dies and adapted

to be interlocked with each other so as to be

in effect integral.

In Figs. 1 and 2, a ring rail is shown at 10 and is presumably provided with a series of circular holes 11 for the reception of the 60 spindles. The ring, shown best in Figs. 2, 3 and 4, is formed with the usual traveler race 12, and below the traveler race the interior surface 13 is of frusto-conical formation converging downwardly.

14 and 15 represent respectively an annular ring-supporting member and an annular base member therefor. The ring-supporting member and the base member are formed with means whereby they may be inter- 70 locked without the use of screws, rivets or any other separate part. The locking means comprise tongues 16 formed on one member and notches 17 formed in the other member and adapted to receive the tongues. In this 75 form, the tongues are formed on the base member 15 and the notches are formed on the ring-supporting member 14. Before the members 14 and 15 are assembled, the tongues 16 may be bent to a perpendicular 80 position, as shown in Figs. 7 and 8, and, after they have been assembled, the tongues may be bent slightly farther, as shown by Fig. 2, so as to clench the member 14. The ring-supporting member is provided with a 85 plurality of spring tongues 18 formed on its inner edge for the purpose of holding the ring. The tongues 18 are bent upwardly, as shown by Figs. 2, 5 and 6, at an angle slightly more than ninety degrees, so that 90 the outer edges of their extremities are slightly more distant from the center than the lower edge of the surface 13 of the ring. The tongues are adapted to be displaced slightly when forcing the ring over them, 95 and to spring back to normal position in which they do not bind upon the surface 13 but fit so closely as to limit to a certain extent the lateral movement and axial movement of the ring. The member 14 may be 100 further provided with a raised seat 19 for the lower edge of the ring.

The base member 15 is formed with a cylindrical portion or neck 20 adapted to fit in one of the holes 11 provided in the 105 ring rail. At each spindle hole is a horiontal screw-threaded socket 22 extending from the front edge of the rail to the hole. As shown in Fig. 2, a screw 21, inserted in such a socket is adapted to engage the pe- 110 riphery of the cylindrical portion 20 so as to bind the base member in the rail. A single screw 21 is sufficient to bind a ring holder formed with a neck portion 20, whereas two screws are necessary for those ring holders which do not have a similar portion but which bear solely upon the top of the rail.

Freedom of manipulation of the screws is apparent, since neither the spindles nor any other part of a spinning machine may be an obstacle.

Having thus explained the nature of my said invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim is:

A holder for a rotary spinning ring, comprising two members, to wit; an annular 20 cylindrical neck extending vertically, and an annular supporting member for a spinning ring, said neck and supporting member having complemental portions adapted to be interengaged to lock them together, and 25 said supporting member having an annular seat for contact with a spinning ring, and upwardly extending tongues for loose engagement with the interior of the ring.

In testimony whereof I have affixed my 30 signature, in presence of two witnesses.

BICKNELL HALL.

Witnesses:

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A. L. Folsom, P. W. Pezzetti.