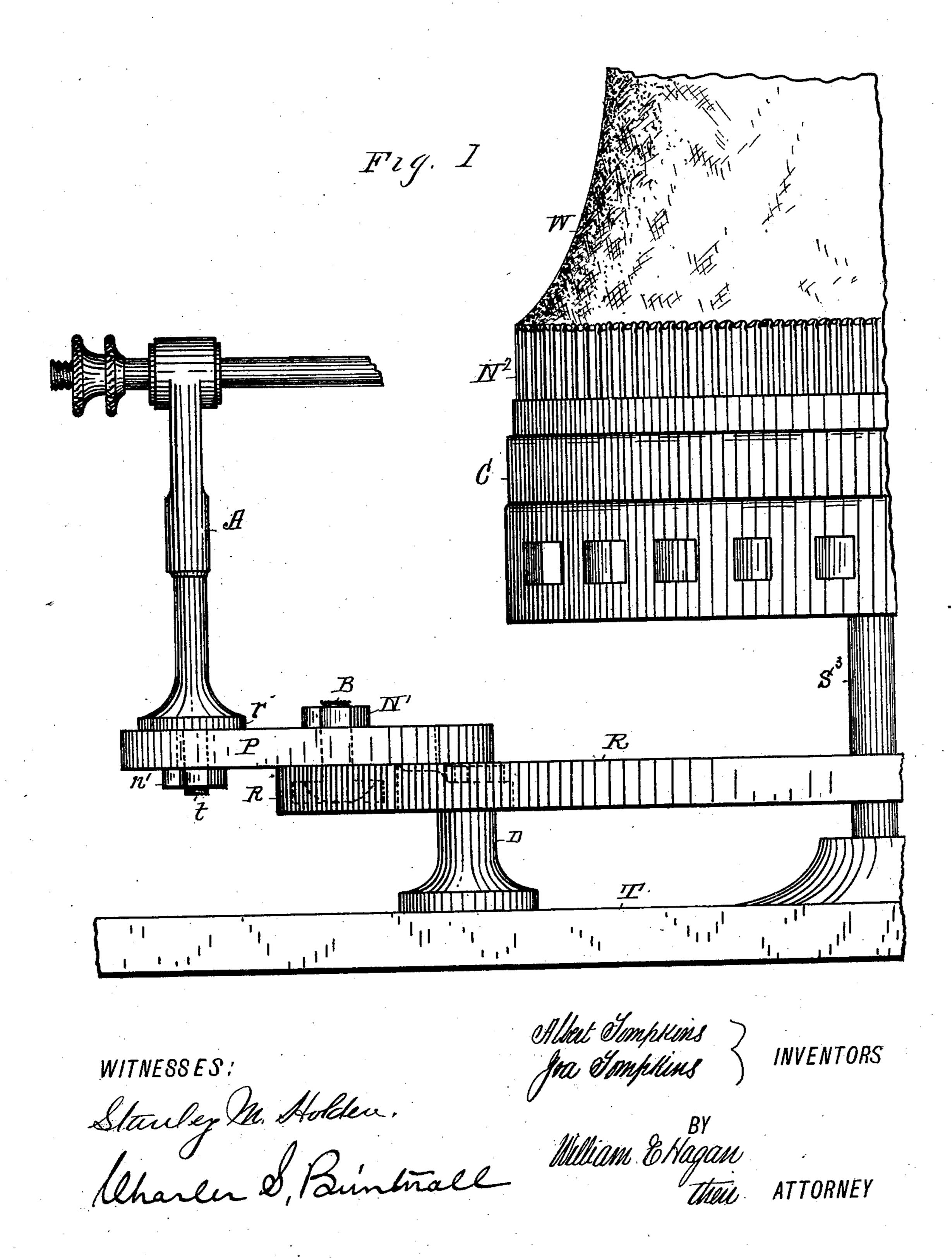
(No Model.)

A. & I. TOMPKINS.

CIRCULAR KNITTING MACHINE.

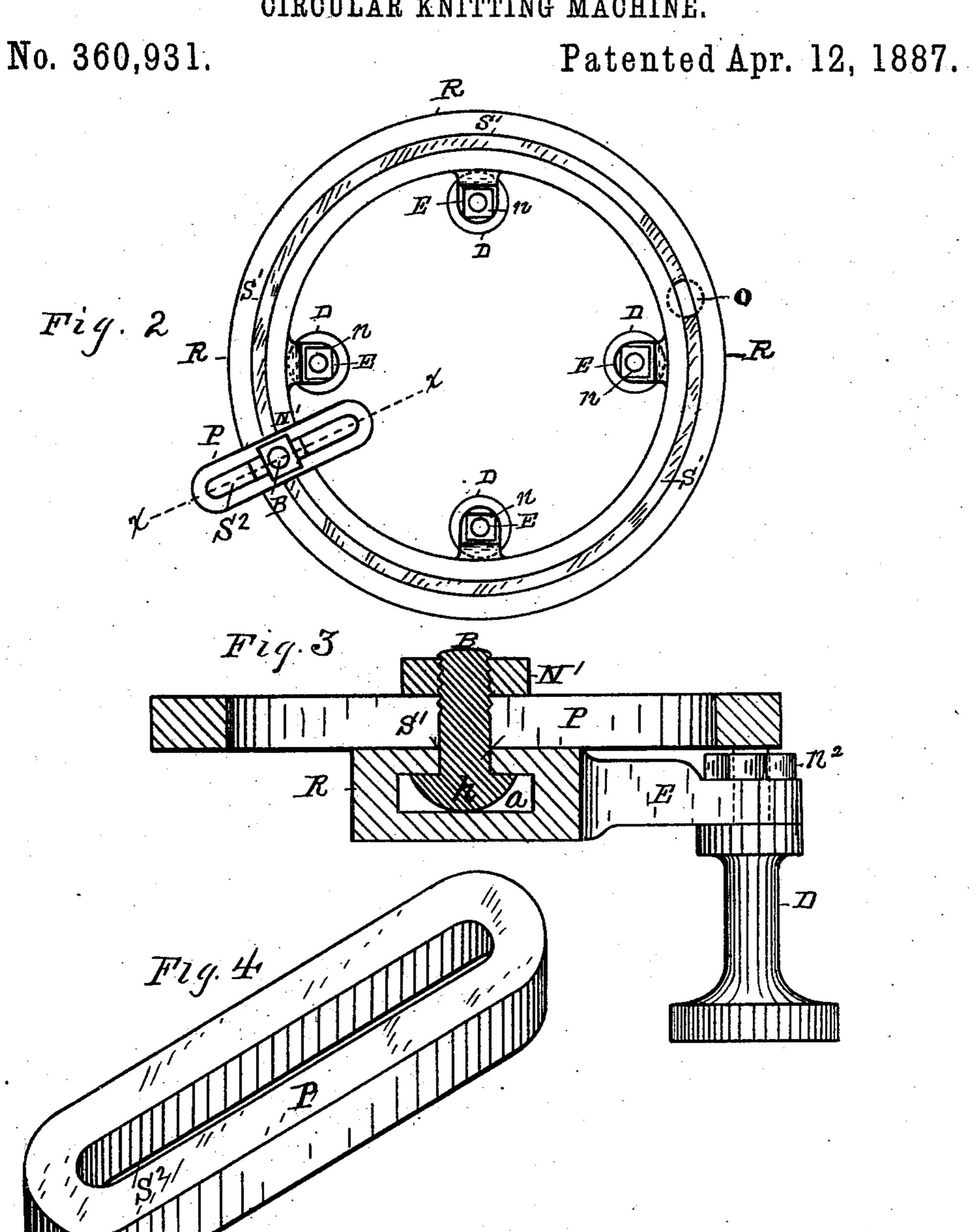
No. 360,931.

Patented Apr. 12, 1887.



A. & I. TOMPKINS.

CIRCULAR KNITTING MACHINE.



WITNESS ES: Stauley M. Holden. Alharler D. Buntmall

United States Patent Office.

ALBERT TOMPKINS AND IRA TOMPKINS, OF TROY, NEW YORK.

CIRCULAR-KNITTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 360,931, dated April 12, 1827.

Application filed July 1, 1886. Serial No. 206,756. (No model.)

To all whom it may concern:

Be it known that we, ALBERT TOMPKINS and IRA TOMPKINS, of the city of Troy, county of Rensselaer, State of New York, have jointly invented a new and useful Improvement in Circular-Knitting Machines, of which the fol-

lowing is a specification.

Our invention relates to that part of a circular or rotary knitting-machine that is used to to attach thereto the burr-holder and presserwheel standards. As circular or rotary knitting-machines have heretofore been generally constructed, a table-plate was arranged around the vertical shaft of the machine below the 15 cylinder to receive the burr-holder and presserwheel standards. This table-plate was radially slotted to receive the standards, the lower ends of the latter being passed through the slots to rest on a rim formed on the standard, with the 20 lower end of the latter, where passed through the slot and below the table, being adapted to receive a nut, by which said standard was kept in position. As thus made the relative position of the burr-holder and presser-wheel standards 25 was arbitrarily limited to that of the slots, and where the machines were required to knit differing kinds of work that called for a change in the relative position of the burr-holders and presser-wheels, that could not be had by a 30 slotted plate adapted for ordinary work, then the table-plate had to be changed, there being required several kinds of plates having different arrangement of radial slots to condition a knitting-machine for different kinds of work. 35 To adapt a knitting-machine for any radial arrangement and location of burr-holders and presser-wheels, and without the use of a series of the table-plates, is the object of our invention.

Accompanying this specification, to form a part of it, there are two plates of drawings containing four figures illustrating our invention, with the same designation of its parts by letter reference used in all of them. Of these illustrations, Figure 1 shows a side elevation of a part of a knitting-machine with our improved mechanism for attaching a burr-holder or presser wheel standard applied thereto. Fig. 2 illustrates a plan view of the mechanism as detached from the table, with a single burr-holder or presser-wheel holding plate attached. Fig. 3 shows an enlarged section taken through

the line x x of Fig. 2, and connectedly a side elevation of one of the standards by which the mechanism is supported on the machine-table. 55 Fig. 4 illustrates in perspective one of the slotted plates forming a part of our invention.

The several parts of the mechanism containing our invention and those of a circular or rotary knitting machine with which it conects are designated by letter reference, and the function of the parts is described as follows:

The letter T indicates the table on which our mechanism is supported; S^3 , the shaft of 65 the knitting-machine; C, its cylinder; N^2 , its needles; W, the web, and A a burr-holder or presser-wheel standard, made with the threaded end t adapted to receive a nut, n'.

The letter R indicates a ring formed with 70 an annular T-shaped groove, a, in its upper face. The letter S' designates the neck of this groove, and O a passage-way made in the bottom of said ring and extending upwardly into the annular groove, for the passage of a bolt-75 head, and as designated in part by a dotted line at Fig. 2.

The letter P designates a plate made with a longitudinal slot, S²; B, a bolt, which is inserted in the annular groove a through the 80 opening O, and is arranged in said groove with its threaded stem projected through the slot S² in the plate P, and is provided with a threaded nut, N', which is made broad enough to set over the edges of the plate, and, being 85 turned down, serves to clamp the plate P to the ring.

The letters E indicate ears on the inner rim of the ring R, and D standards, to the tops of which the said ears are adapted to connect by 9° means of nuts n^2 , the standards being attached to the table T by any well-known means, so as to secure the connected ring R in a position concentric with the knitting-machine cylinder.

The parts thus illustrated and described are attached and made applicable as follows: The slotted plate P, of which any number may be employed that the circumference of the ring R will receive, is adapted to have the lower end of the burr-holder or presser-wheel standard passed through it, and to be secured therein by a nut, n', on the bottom end of the standard, which nut engages with the under side of

said slotted plate at each side of the slot S2, and by a flange or ring, r, on the standard, which flange is wide enough to straddle the said slot S² and rest on the top of said plate P 5 at each side of the slot, and by which connection the burr-holder or presser-wheel standard may be secured in the slot S2 of the plate P at various points between the ends of the latter. The slotted plate P is adjustably attached to to the ring R by means of the bolt B, the head of which is passed up through the opening O, and the bolt is then moved around with its head h in such part of the annular groove a as it may be desirable to secure the bolt and slot-15 ted plate to the ring, the head of the bolt at its edges and where wider than the slot S2 engaging with the interior upper surface of the annular groove a and the shank of the bolt in the slot S2, in which position the plate P is 20 then passed on over the bolt through the slot S' and the nut N' screwed on to the bolt, so as to straddle the slot S² and connect the slotted plate to the ring.

As thus made any number of slotted plates 25 like that indicated at P may be applied by means of nuts or bolts to the ring R that the circumference of the annular groove a will contain, and they may be secured at any point in the circumference of the said ring relatively 30 to the machine cylinder that may be desired, said ring being arranged on the machine-table concentrically to the said cylinder. As thus made and applied the burr-holder or presser-

wheel standards may be adjustably attached to the said slotted plates and the latter adjust- 35 ably attached to the ring R, and all the advantages which could be had by a series of tableplates are obtained without the inconveniences of the latter.

Having thus described our invention, what 40 we claim, and desire to secure by Letters Patent, is—

1. The combination of the ring R, formed with the annular T-shaped groove a and opening O, with the plate P, formed with the slot 45 S², and the bolt B, provided with the nut N', all constructed and arranged substantially as

and for the purposes specified.

2. The combination, with the cylinder of a knitting-machine and supports arranged con- -o centric thereto, of the ring R, arranged on said supports and formed with an annular T-shaped groove, a, in its upper face, and opening O, the plate P, formed with slot S2, the bolt B, and nut N', the standard A, made with the base- 55 ring r and threaded stem t, and the fasteningnut n', all substantially as described.

Signed at Troy, New York, this 15th day of October, 1884, and in the presence of two witnesses whose names are hereto written.

> ALBERT TOMPKINS. IRA TOMPKINS.

Witnesses:

CHARLES S. BRINTNALL, · William Cox.