

No. 764,579.

PATENTED JULY 12, 1904.

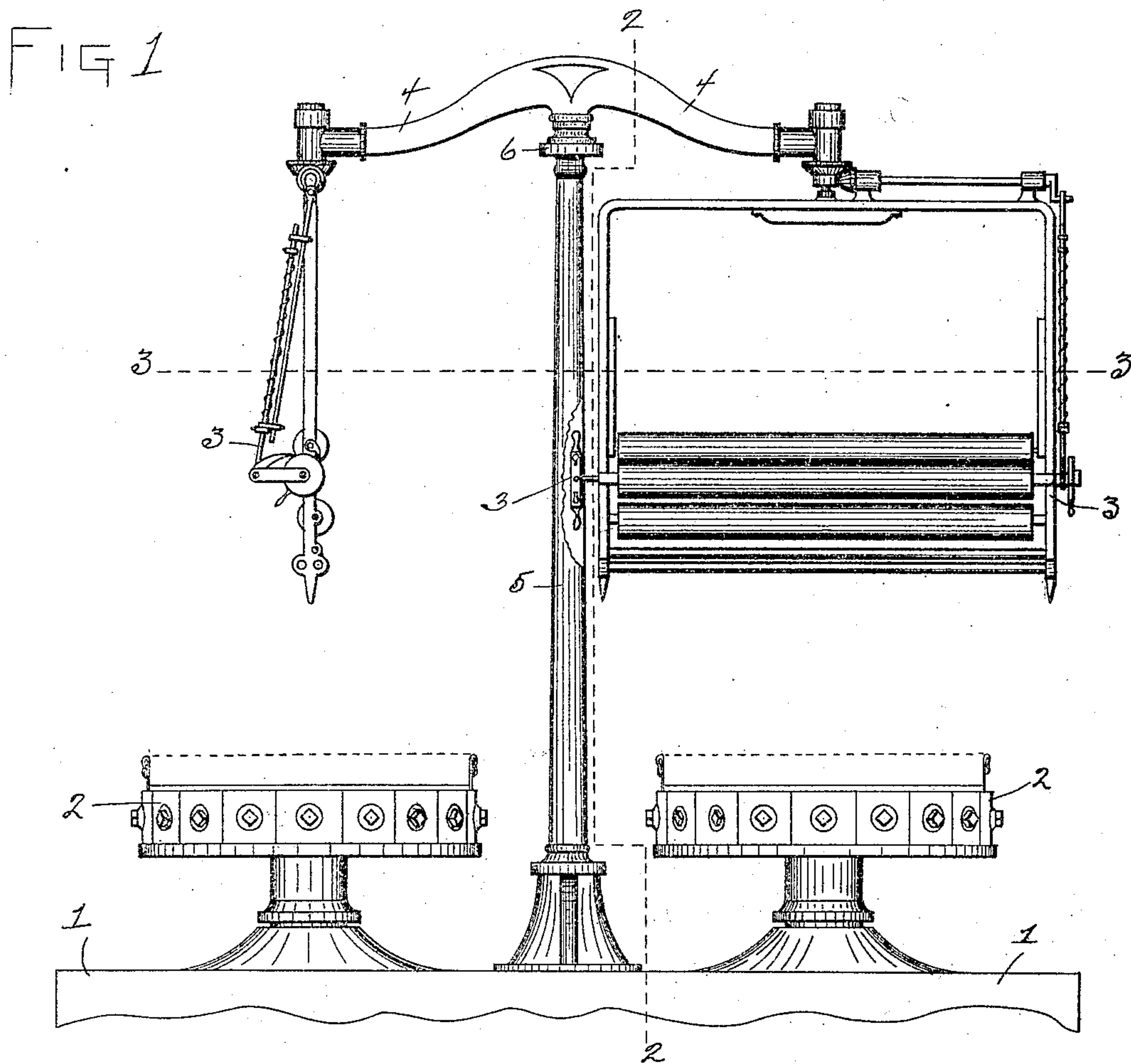
D. K. GORMLY.

SUPPORT FOR TAKE-UP MECHANISMS OF TWO-CYLINDER KNITTING
MACHINES.

APPLICATION FILED AUG. 14, 1902.

NO MODEL.

3 SHEETS—SHEET 1.



WITNESSES

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E. M. O'Reilly.

INVENTOR

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By Mosher & Curtis
attys.

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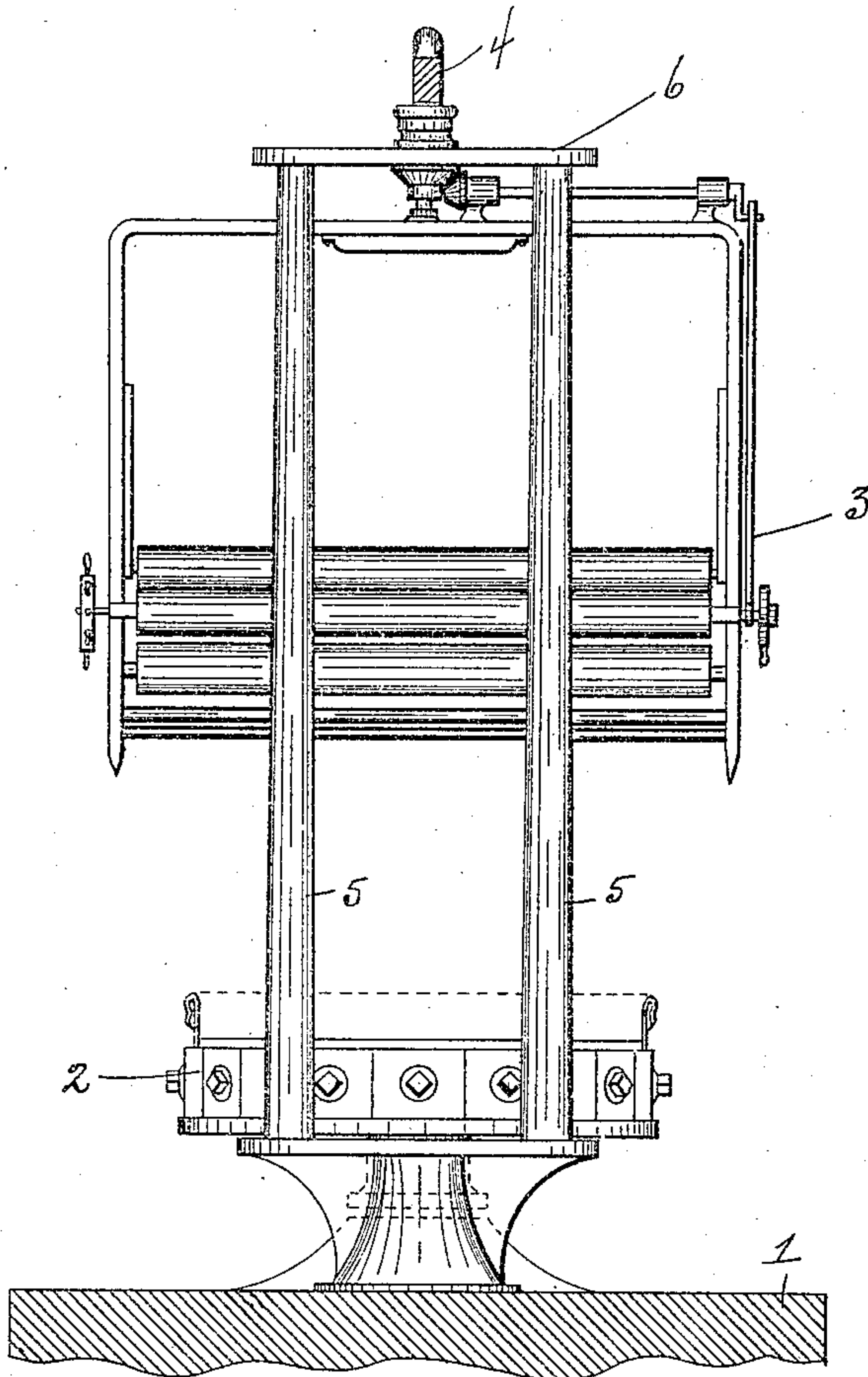
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FIG 2



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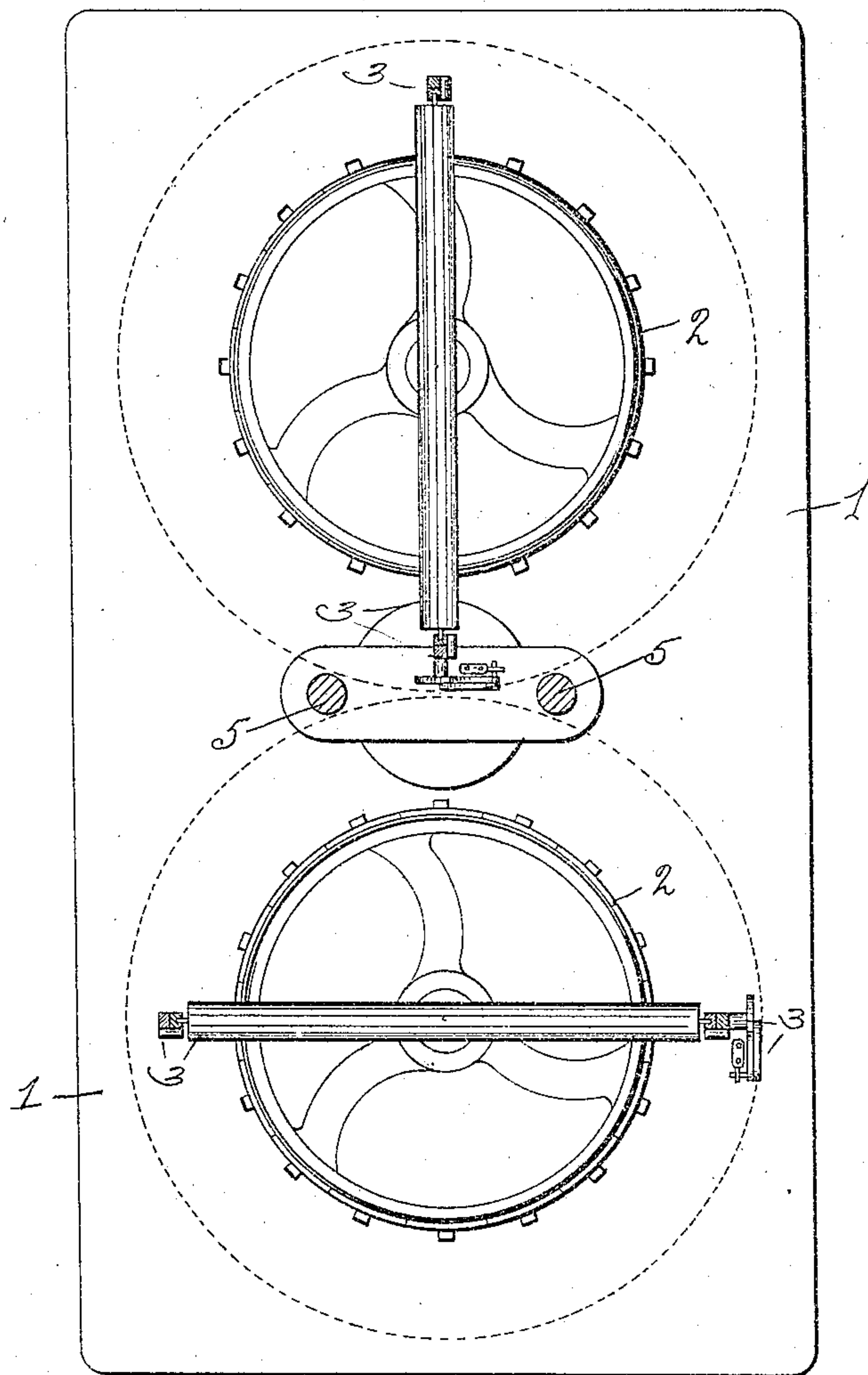
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3 SHEETS—SHEET 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

DAVID K. GORMLY, OF TROY, NEW YORK, ASSIGNOR TO ROBERT W. GORMLY & CO., OF TROY, NEW YORK, A FIRM.

SUPPORT FOR TAKE-UP MECHANISMS OF TWO-CYLINDER KNITTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 764,579, dated July 12, 1904.

Application filed August 14, 1902. Serial No. 119,603. (No model.)

To all whom it may concern:

Be it known that I, DAVID K. GORMLY, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Supports for Take-Up Mechanisms of Two-Cylinder Knitting-Machines, of which the following is a specification.

The invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this specification.

Similar characters refer to similar parts in the several figures.

Figure 1 of the drawings is a view in side elevation of a knitting-machine provided with my improved support for the take-up mechanisms. Fig. 2 is a vertical cross-section of the same, taken on the broken line 2 2 in Fig. 1. Fig. 3 is a horizontal cross-section of the same, taken on the broken line 3 3 in Fig. 1.

My invention relates to circular-knitting machines wherein two rotary cylinders are mounted upon the same bed or table and provided with rotary take-up mechanism above the respective cylinders. In such machines it has been the common practice to erect from the bed or table between the cylinders a post or standard occupying the same vertical plane which passes through the axes of the cylinders and take-up mechanisms. This post has necessarily a diameter of several inches, and such a post must be maintained outside the path of rotary movement of the take-up mechanisms. In such machines it is desirable to secure economy in both space and cost of construction by locating each cylinder and its take-up mechanism in as close proximity to the other cylinder and its take-up mechanism, respectively, as possible without interfering with the free movements of the several parts. It will thus be seen that in such machines the presence of such a post or standard directly between the cylinders necessitates the further separation of the cylinders and of the take-ups

by a distance equal to the diameter of said post in addition to the distance of separation necessary to prevent interference of the parts of one cylinder and its take-up with those of the other cylinder and its take-up.

The object of my invention is to permit the respective take-ups as well as the respective cylinders to be brought into the closest proximity to each other possible without interference of the parts of one cylinder and take-up with those of the other. To this end I erect from the table a supporting-standard for the cross-head, upon which the respective take-ups are mounted, which standard is offset out of the vertical plane extending through the axis of said take-up mechanisms and their cylinders.

Referring to the drawings, 1 represents the bed or table, 2 2 a pair of rotary cylinders mounted thereupon, and 3 3 a pair of rotary take-up mechanisms supported directly above the respective cylinders, the several parts above named being similar in construction and operation to those commonly employed in the well-known type of rotary spring-needle knitting-machines.

The feed-stands, thread-guides, cams, &c., are omitted from the drawings, as the same form no part of my invention and representation of the same is unnecessary for a complete understanding of the nature of the invention, it being sufficient for the purposes of this specification to merely call attention to the fact that the several cylinders are rotated by suitable mechanism and that each take-up mechanism is similarly rotated by connection with its cylinder through the web of fabric or other mechanism, all in the manner well understood by those skilled in the art. Each of said take-up mechanisms is rotatably mounted upon one arm of the cross-head 4. This cross-head is preferably supported by means of a pair of posts or standards 5, erected from the bed of the machine and connected at their upper ends by the cross-plate 6, to the middle of which said cross-head is fixedly secured.

The vertical posts 5 5 are offset to opposite sides of the vertical plane extending through the axis of said take-ups and cylinders wholly

beyond the radius of movement of the parts of the several take-up mechanisms, as shown in Fig. 3. I am thus able to bring the cylinders and also the take-ups into closer proximity to each other, being able to lessen their necessary distances of separation by a distance equal to the diameter of the post heretofore employed and located in the vertical plane passing through the axes of the cylinders and take-ups. I am thus able to secure a greater range of adaptation for different sizes of cylinders with a table of given size or to employ a smaller table for a given range of adaptation for different sizes of cylinders than has heretofore been possible.

One of the posts or standards may be omitted, if desired; but I prefer the construction shown on account of the increased rigidity of the support, the essential feature of the invention being only that the supporting-standard should be offset opposite the take-up mechanism out of the vertical plane extending through the axis thereof.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a circular-knitting machine, the combination with a table; and two cylinders

mounted thereupon; of a cross-head; two rotary take-up mechanisms supported by said cross-head above the respective cylinders; and a cross-head-supporting standard erected from said table and offset opposite the take-up mechanisms out of the vertical plane extending through the axes thereof, substantially as described.

2. In a circular-knitting machine, the combination with a table; of a pair of rotary cylinders mounted thereupon; a pair of posts erected from said table and located on opposite sides of the vertical plane extending through the axes of said cylinders; a connection between the upper ends of said posts; a cross-head mounted upon said connection; and a pair of take-up mechanisms rotatively mounted upon said cross-head with their axes in line with the axes of the respective cylinders, substantially as described.

In testimony whereof I have hereunto set my hand this 15th day of July, 1902.

DAVID K. GORMLY.

Witnesses:

CHARLES C. COZZENS,
WALTER ODELL.