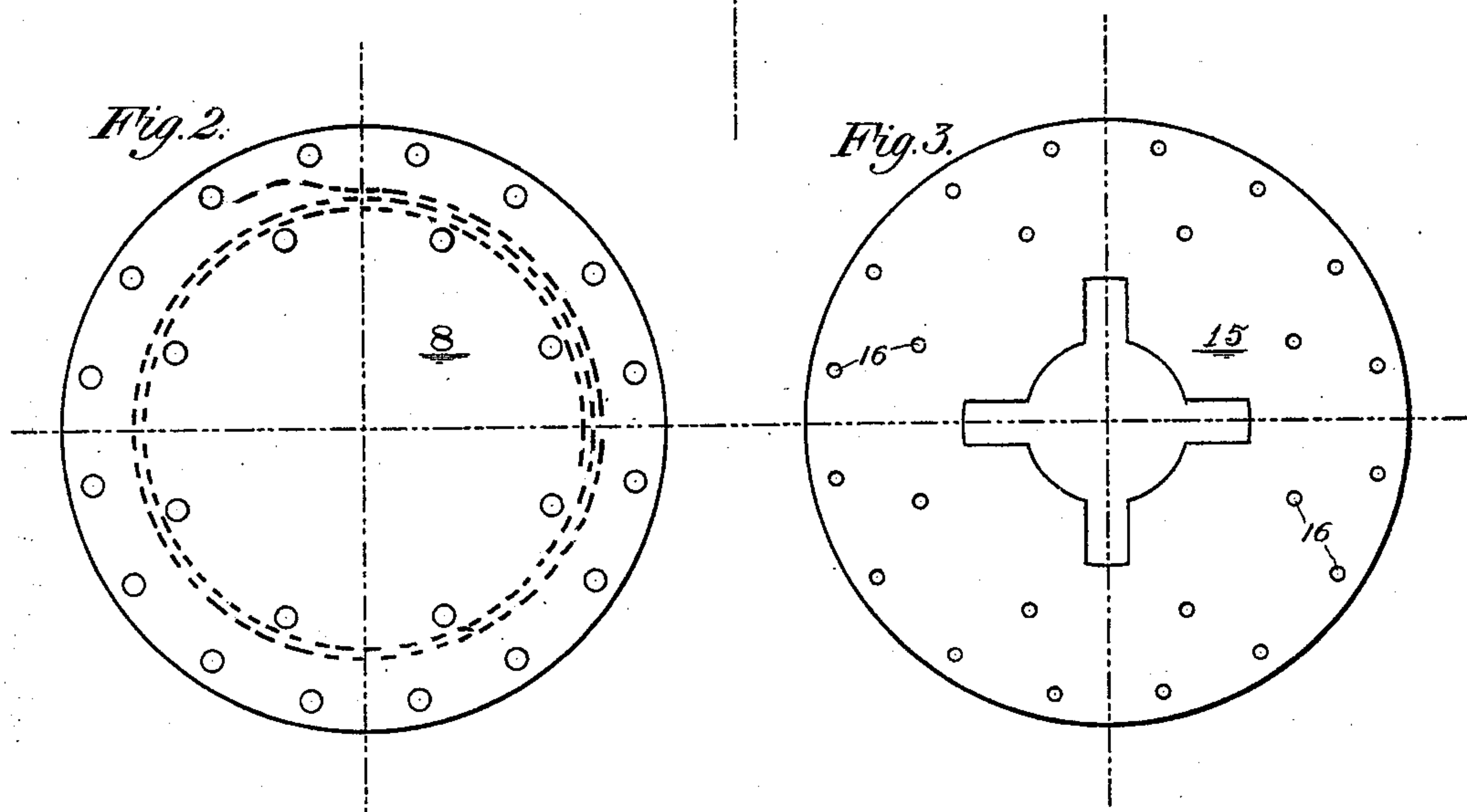
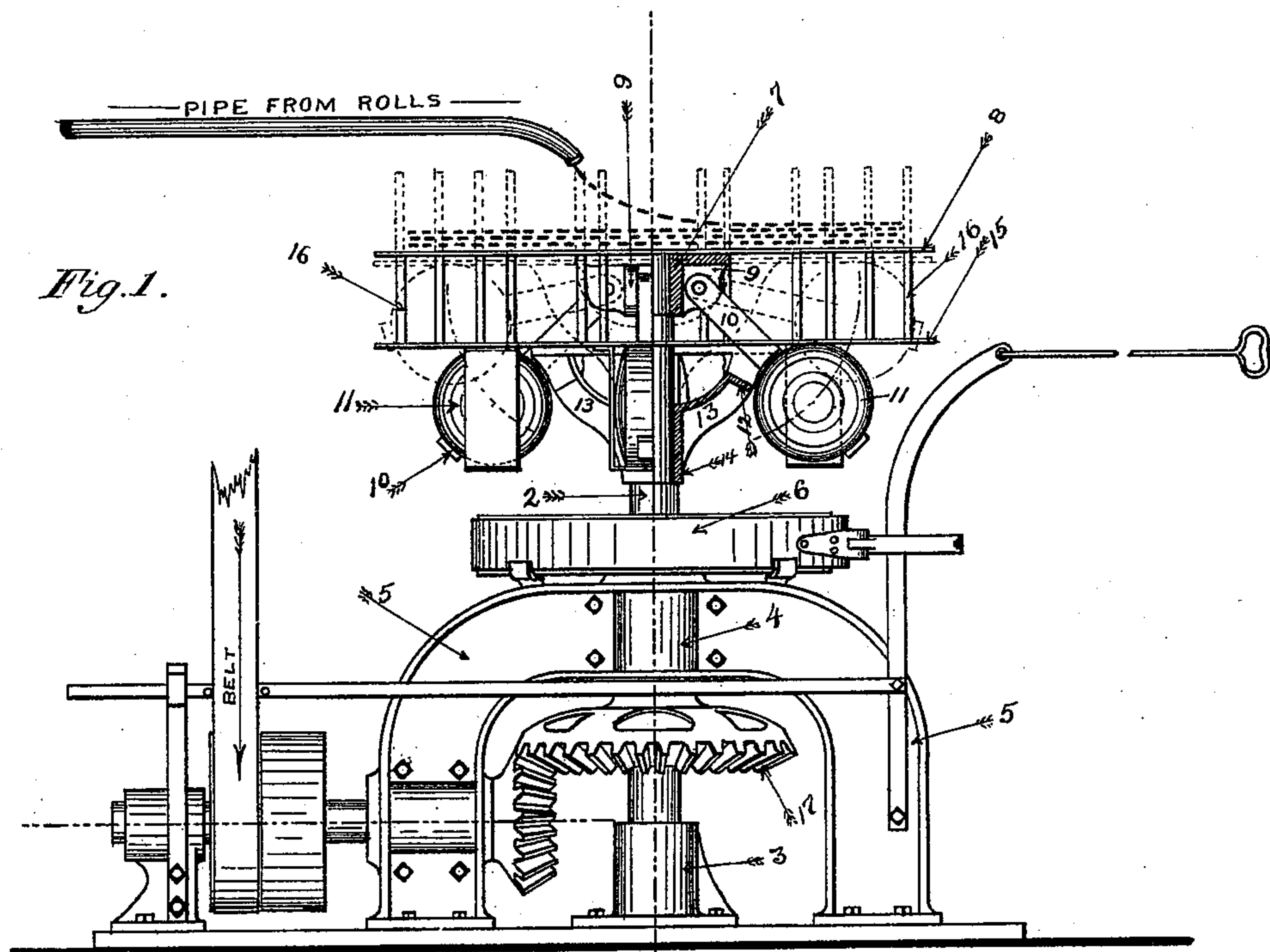


(No Model.)

E. JONES.
WIRE ROD REEL.

No. 536,632.

Patented Apr. 2, 1895.



WITNESSES:

O. L. White
E. W. Madison

Elias Jones INVENTOR

UNITED STATES PATENT OFFICE.

ELIAS JONES, OF BEAVER FALLS, ASSIGNOR TO THE CARNEGIE STEEL COMPANY, LIMITED, OF PITTSBURG, PENNSYLVANIA.

WIRE-ROD REEL.

SPECIFICATION forming part of Letters Patent No. 536,632, dated April 2, 1895.

Application filed July 30, 1891. Serial No. 401,161. (No model.)

To all whom it may concern:

Be it known that I, ELIAS JONES, of Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented a new and useful
5 Improvement in Wire-Rod Reels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 represents a side elevation partly in section of my improved reel. Fig. 2 is a plan view of the plate 8. Fig. 3 is a plan view of plate 15.

My invention relates to that class of reels
15 upon which wire rods are wound as they issue from the rolls, and it consists in a horizontal revolving plate having suitable holes therein, through which a series of pins, between which the wire is coiled, are automatically raised
20 and lowered by means of the centrifugal force exerted upon a series of weighted levers connected to the shaft carrying the plate.

In the drawings, in which similar numerals indicate similar parts, 2 represents the shaft
25 which carries the reel mechanism, this shaft being supported in a vertical position by the bottom step 3, and the encircling bearing 4 carried on the bent supports 5. Above the bearing 4, the shaft carries a brake wheel 6,
30 to which any suitable braking mechanism may be connected, and at its top the shaft carries a collar 7, which is rigidly attached thereto, and which carries the plate 8 upon which the wire is coiled.

35 Between integral lugs 9, extending from the sides of the collar 7, are pivoted the upper ends of levers 10 carrying thereon weights 11, which may be adjustable back and forth on the lever arms, if desirable. These levers
40 are shown as four in number, but it will be understood that any number may be used. When at rest, the weights 11 bear against projections 12 upon arms 13 rising from a sliding collar 14 surrounding the shaft and
45 moving freely thereon. At their upper ends these arms 13 carry a plate 15 rigidly attached thereto, and to the plate 15 are fastened two circular series of vertical pins 16, which pass

through registering holes in plate 8, and when the weights are at rest are flush with the sur- 50 face of such plate.

I show bevel gearing 17 for rotating the shaft 2, but it will be understood that I may use belting, friction gearing, rollers, or other
55 suitable mechanism for producing such rotation. I preferably rotate the disk at a speed corresponding with the speed of the periphery of the rolls employed in manufacturing the wire.

The operation is as follows: The shaft be- 60 ing rotated, the weights are raised by the centrifugal force acting thereon, and as they rise force the pins 16 up through the holes in the plate 8. The wire rods are delivered between the rows of pins preferably through a 65 tube, and when the coil is completed, the brake being applied, shifts the belt and stops the machine. The weights then drop into their lowermost position, and the pins are withdrawn, leaving a smooth surface from 70 which the coil may be withdrawn.

The advantages of my construction are obvious. The parts are simple, few in number, and form a perfect guide for the rod, while
75 no obstruction is presented to the withdrawal of the coil when finished.

Many changes may be made in the form and arrangement of the parts without departing from my invention.

What I claim is—

1. A reel comprising a rotary shaft carrying plate rigidly mounted thereon and having holes therein, pins movable in such holes, and mechanism actuated by said shaft for moving said pins; substantially as described. 85

2. A reel comprising a revolving shaft carrying a perforated plate, pins movable through said plate, and centrifugal weights arranged to actuate said pins; substantially as described. 90

3. A reel comprising a revolving shaft having rigidly attached thereto a perforated plate, a collar movable upon said shaft and carrying a series of pins, and weighted arms pivoted to the shaft and arranged to actuate 95 the pins; substantially as described.

4. A reel comprising a rotary shaft, having
at its upper end a perforated plate rigidly at-
tached thereto, a collar movable upon said
shaft, a plate carried by said collar, a series
5 of pins supported upon said movable plate,
and a series of weighted arms carried upon
the shaft and arranged to actuate said mov-
able plate; substantially as described.

In testimony whereof I have hereunto set
my hand this 25th day of July, A. D. 1891.

ELIAS JONES.

Witnesses:

F. L. WHITE,
L. W. PARK.