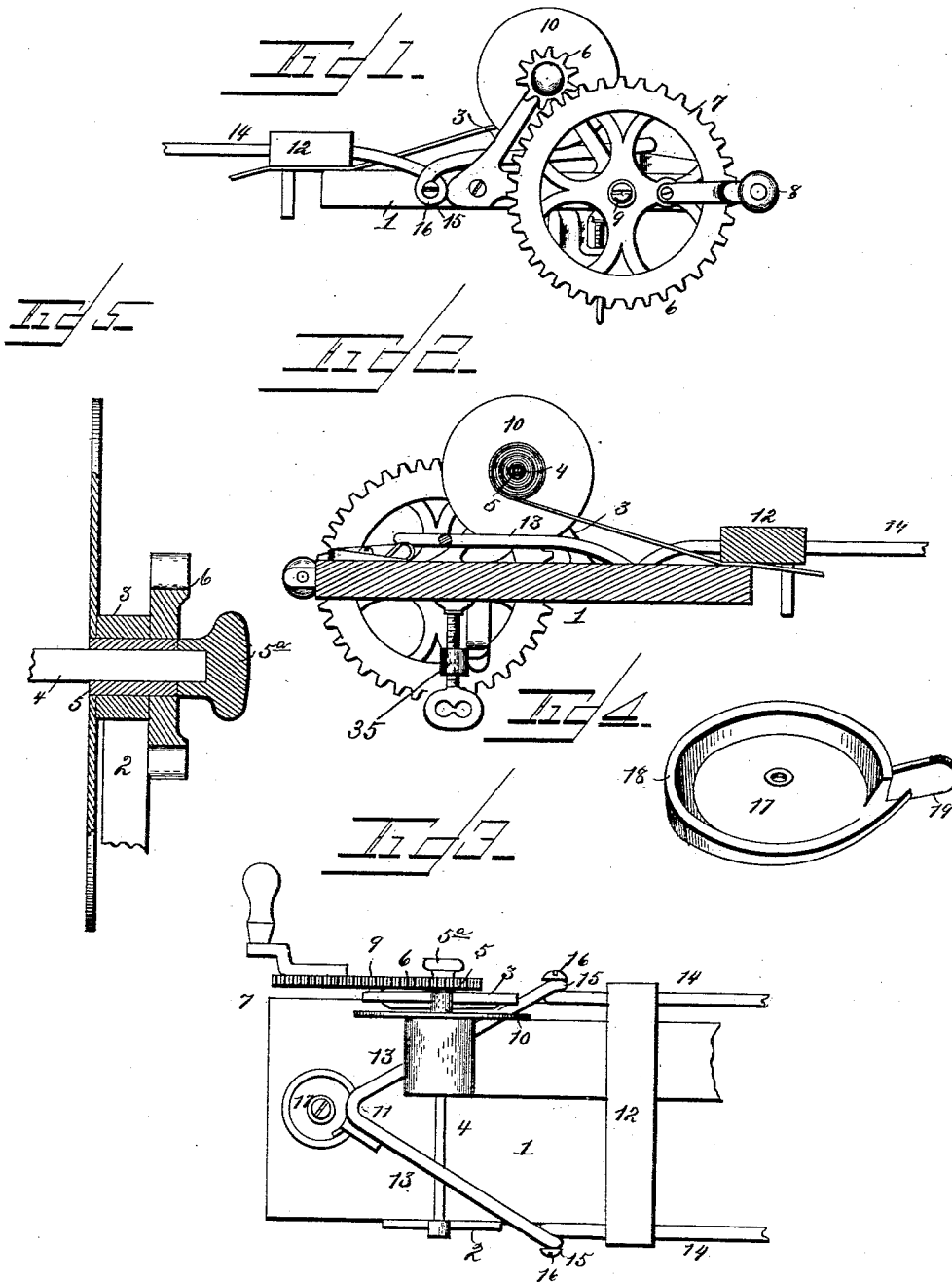


(No Model.)

C. MILLER.
MACHINE FOR WINDING BANDAGES.

No. 476,667.

Patented June 7, 1892.



WITNESSES:

F. L. Durand
J. L. Goussier

INVENTOR:

Charles Miller
J. Davis Rogers & Co.
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES MILLER, OF AUBURN, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO JAMES RICHENS, OF SAME PLACE.

MACHINE FOR WINDING BANDAGES.

SPECIFICATION forming part of Letters Patent No. 476,667, dated June 7, 1892.

Application filed July 29, 1891. Serial No. 401,088. (No model.)

To all whom it may concern:

Be it known that I, CHARLES MILLER, a citizen of the United States, and a resident of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Machines for Winding Bandages; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to machines for winding bandages for physicians' use.

The object of the invention is to provide a simple, economical, and efficient machine for the above purpose, by which a strip of cotton, linen, woolen, or other fabric suitable for bandages may be wound into a roll which can be conveniently carried, and from which the required length to form a bandage can be readily cut.

The invention consists in the novel construction and combination of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of a machine made in accordance with my invention. Fig. 2 is a longitudinal vertical section thereof. Fig. 3 is a plan. Fig. 4 is a detail perspective view of the cam-disk. Fig. 5 is a detail sectional view of the shaft and its sleeve.

In the said drawings, the reference numeral 1 designates a rectangular board, which forms the base of the machine. To the sides of this board and in line with each other are two upwardly-extending brackets 2 and 3.

In the bracket 2 is journaled one end of a square or angular shaft 4, which passes through a sleeve or hub 5, having a correspondingly-shaped aperture, said sleeve or hub being journaled in the bracket 3. The shaft is provided with a knob 5^a for withdrawing it from the sleeve, as will be hereinafter more fully set forth. The hub or sleeve 5 is provided or formed with a cog-wheel 6, which meshes with a cogged driving-wheel 7, provided with a crank 8. This latter wheel is journaled on a pin or short shaft 9, formed

with or secured to bracket 3. The sleeve or hub 5 is also provided with a metal disk 10, which is securely fixed thereto so as to rotate with it. This disk forms a guide to the material while being wound on the shaft.

At one end of the machine is located a tension-block, consisting of a transverse block or strip 12, of wood or other suitable material, having apertures at each end, through which passes the tension-regulating device, which consists of a metal bar or rod bent over so as to form the diagonal arms 13 13 and the horizontal arms 14 14, the latter of which support the strip or block 12. At the junction of the diagonal and horizontal arms the bar or rod is formed with a loop 15, through which passes a pin or screw 16. At the end of the board opposite the strip or block 12 is a pivoted disk 17, which is provided at its periphery with an upwardly-projecting flange 18, which gradually increases in height. It is also provided with a finger-piece 19 by which it can be rotated. This disk acts as a cam to elevate and depress this end of the bar or rod, and consequently increase and decrease the tension upon the fabric, which passes between the strip or block 12 and the board 1. Upon its under side the board is provided with a clamping device 35, which is mortised therein and by which the winding device may be secured to a table or other support.

The operation is as follows: One end of the strip of fabric to be wound is inserted underneath the strip or block 12, which is horizontally slidable upon the arms 14 14 of the rod or bar 11. It is then carried to the angular shaft and wound several times thereon, so that it will bind sufficiently so as not to slip. The tension is then regulated by means of the cam-disk and the shaft is rapidly rotated by means of the cog-wheels 6 and 7, which will cause the fabric to be wound thereon. When the winding is completed, the shaft is withdrawn from the roll by grasping the knob on the end thereof and pulling the same out. The shaft can now be again placed in position for another winding.

Having thus described my invention, what I claim is—

1. In a machine for winding bandages, the

- combination, with the base, the upwardly-extending brackets, the slidable angular shaft having a guide-disk, and means for rotating the same, of the tension device consisting of the bent rod or bar having loops, the pins secured to the base passing through said loops, the slidable block or strip through which the ends of said rod pass, and the pivoted cam-disk, substantially as described.
2. In a machine for winding bandages, the combination, with the base, the upwardly-extending brackets, the slidable angular shaft, and means for operating the same, of the tension device consisting of the bent rod or bar having loops, the pins secured to the base passing through said loops, the slidable block or strip through which the ends of said rod pass, and the pivoted cam-disk, substantially as described.
3. In a machine for winding bandages, the combination, with the base, the upwardly-extending brackets, the slidable angular shaft, the hub or sleeve through which said shaft passes, the guide-disk, and means for rotating said hub, of the tension device consisting of the bent rod or bar having loops, the pins secured to the base passing through said loops, the slidable block or strip through which the ends of said rod pass, and the pivoted cam-disk, substantially as described.
4. In a machine for winding bandages, the combination, with a rotatable shaft, of the tension device consisting of the bent rod or bar having loops, the pins secured to the base passing through said loops, the slidable block or strip through which the ends of said rod pass, and the pivoted cam-disk, substantially as described.
- In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.
- CHARLES MILLER.
- Witnesses:
ORIN McCARTY,
GERRIT LOUGHBOROUGH.