

(No Model.)

J. J. HOEY.
CARDING ENGINE.

No. 420,795.

Patented Feb. 4, 1890.

Fig. 1.

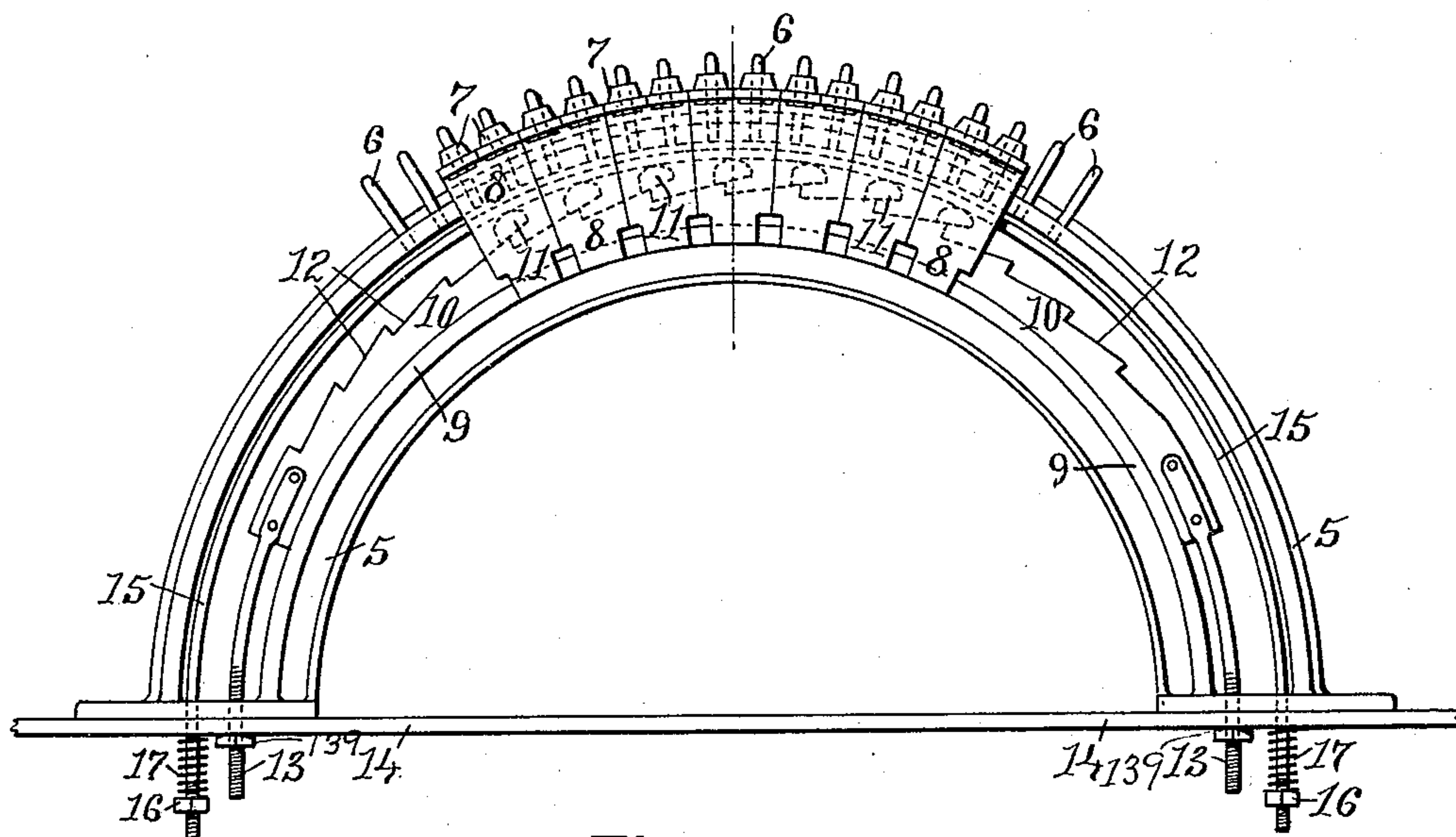
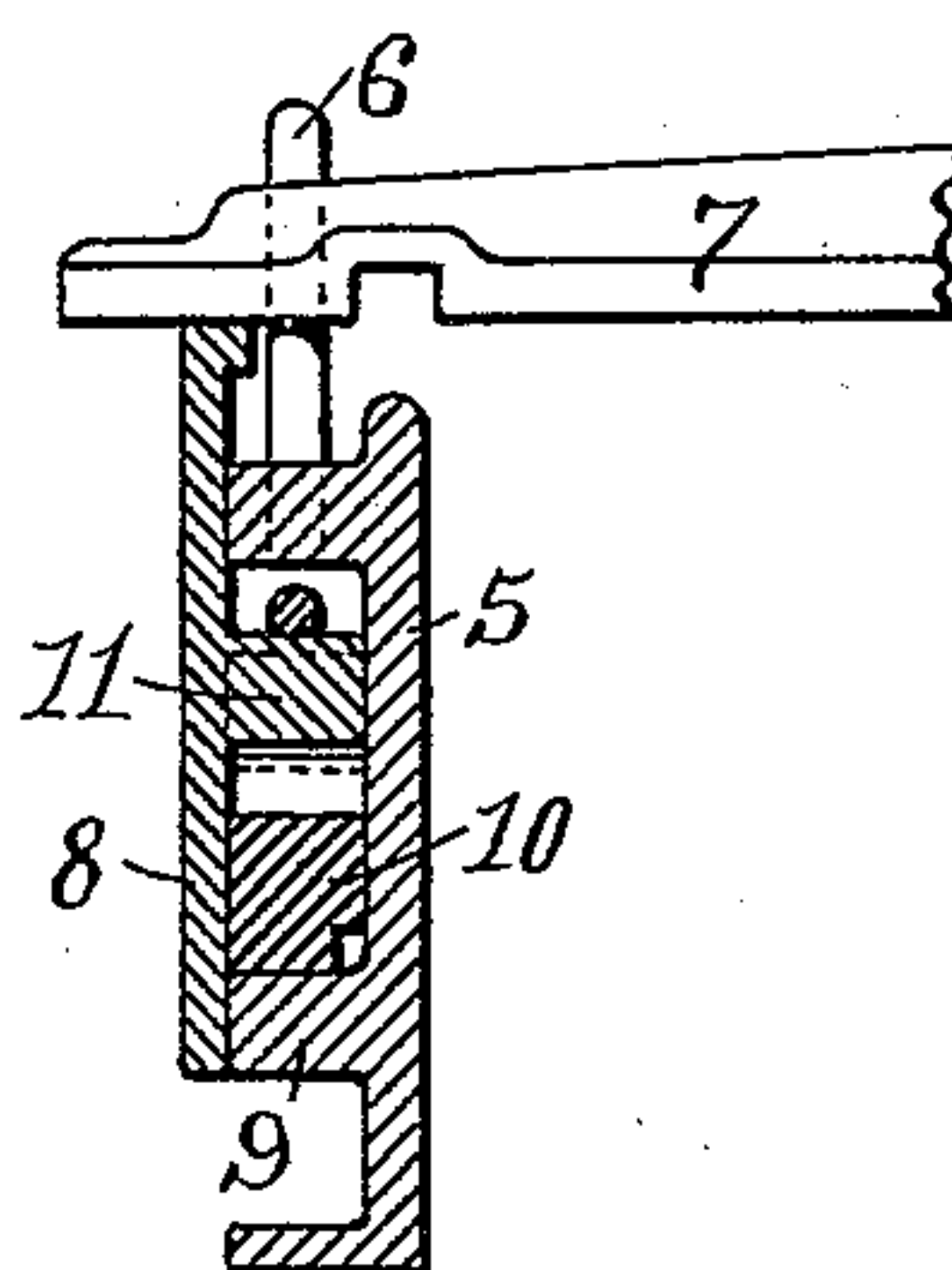


Fig. 2.



WITNESSES:

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JOHN J. HOEY, OF PROVIDENCE, RHODE ISLAND.

CARDING-ENGINE.

SPECIFICATION forming part of Letters Patent No. 420,795, dated February 4, 1890.

Application filed December 26, 1888. Serial No. 294,648. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. HOEY, of the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Carding-Engines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 This invention has reference to an improvement in carding-engines; and it consists in the novel arrangement for adjusting the top-flats of a carding-engine with reference to the main cylinder, as will be more fully set forth hereinafter.

15 In carding-engines it is essential that the top-flats be accurately adjusted with reference to the main carding-cylinder. To facilitate this adjustment to the greatest nicety and adjust all the top-flats simultaneously is the object of my invention.

20 In the drawings, Figure 1 is a view of the upper half of a carding-engine provided with my improved adjusting device. Fig. 2 is a sectional view of the adjusting device, showing a top-flat supported by the same.

In the drawings similar figures of reference designate corresponding parts throughout.

25 Referring to the drawings, 5 indicates the semicircular end of the carding-engine on which the top flats are supported.

6 indicates the pins passing through the top-flats and guiding the same.

30 7 indicates the top-flats, and 8 8 radial supports, on which the top-flats rest.

35 9 is a semicircular rib, on which rests the slide 10, the upper edge of which is formed into a number of inclined planes having re-entering angles and forming a serrated saw-toothed-section outline. On this slide 10 the radial supports 8 rest, the supports being provided with the projections 11, bearing on the tangential inclined planes 12. The length of the tangential inclined planes 12 between the re-entering angles on each of their ends is equal to the width of the radial supports 8. These supports may carry one or they may carry two top-flats. Therefore their width is equal to either one or two top-flats. The depth of the re-entering angle on the ends of the tangential inclined planes is equal to the widest

space allowable in practice between the wires of the cylinder and the wires of the top-flats. The ends of the slide 10 are provided with the screw-threaded rods 13. On each of these ends a screw-threaded nut 139 is placed, bearing against the flange 14. These nuts may be made with flat sides, so as to be turned by a wrench, or they may be provided with hand-wheels, so as to be readily turned.

60 When the slide 10 is to be moved to adjust the radial supports 8, the screw-nut on one end of the slide is turned down, while the other screw-nut is turned upward, so as to move the slide on the rib 9 to either raise or lower the supports 8. As indicated in Fig. 1, the radial supports 8 rest on the highest points of the tangential inclined planes 12 on the slide 10, and in this position the wires of the top-flats are farthest from the wires of the cylinder. By loosening the nut on the left-hand screw 13 and tightening the nut on the right-hand screw 13 the slide will be moved to the right. The tangential inclined planes on the slide by being moved to the right will permit the radial supports 8 to rest at a point on the inclined planes 12 lower than the points shown in the drawings, and thus bring the top-flats nearer to the cylinder.

75 The radial supports 8 are held against the inclined planes on the slide 10 by means of the wire 15, which bears on the upper surfaces of the projections 11. The ends of the wire 15 pass through the flange 14. These ends are screw-threaded and provided with the nuts 16, between which nuts and the flange 14 the coiled springs 17 are placed, and thus an elastic or yielding pressure is exerted on the radial supports 8, by which the same are held against the inclined planes on the slide 10. This pressure can be regulated by means of the nut 16.

80 Both sides of the carding-engine are provided with the devices shown in Fig. 1, and therefore both ends of the top-flats are adjusted in the manner above described.

85 All the top-flats in a carding-engine can be accurately and simultaneously adjusted by this device. The wires of all the top-flats will be at the same distance from the wires of the cylinder and will all perform the same work on the fiber.

In carding-engines as heretofore constructed, where the top-flats are each separately adjusted, the accurate adjustment of all the top-flats to the cylinder is so very difficult
5 that in practice only part of the top-flats can perform the work, part of the top-flats being nearer the cylinder than the rest.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

10 1. In a carding-engine, the combination, with the top-flats and radial supports for the same, of an adjusting-slide provided with tangential inclined planes forming the bearing for the radial supports, and the screw-thread-
15 ed ends 13, provided with nuts for adjusting the slide, and the wire 15, constructed to hold

the radial supports against the inclined planes on the adjusting-slide, as described.

2. In a carding-engine, the combination, with the radial supports for the top-flats provided with the projections 11, of the rim 9, the
20 slide 10, provided with the inclined planes 12, and the adjusting-screws 13, and the rod 15, having the spring 17 and nut 16, all constructed to adjust the bearing for the top-
25 flats, as and for the purpose set forth.

In witness whereof I have hereunto set my hand.

JOHN J. HOEY.

Witnesses:

JOSEPH A. MILLER,
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