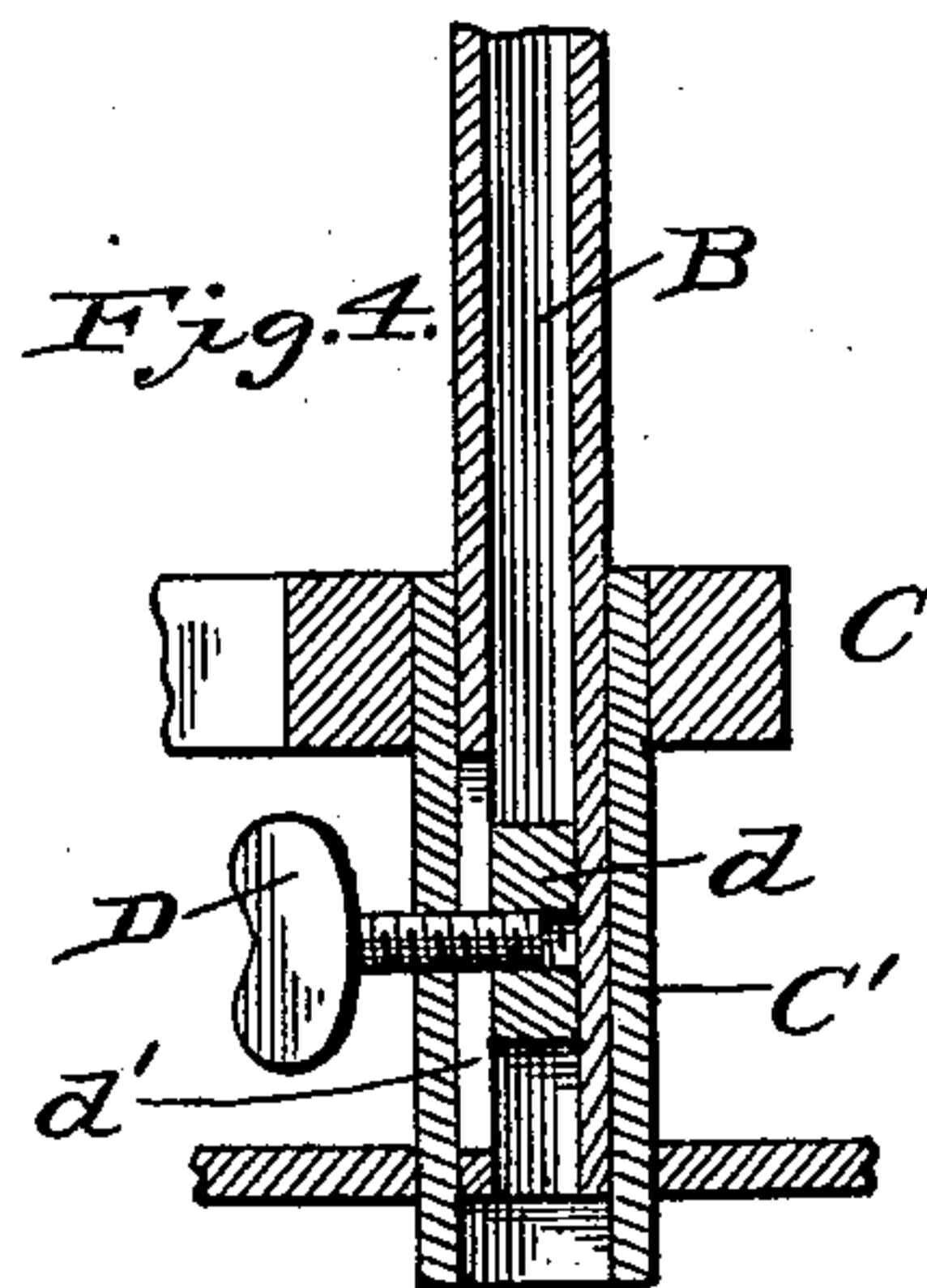
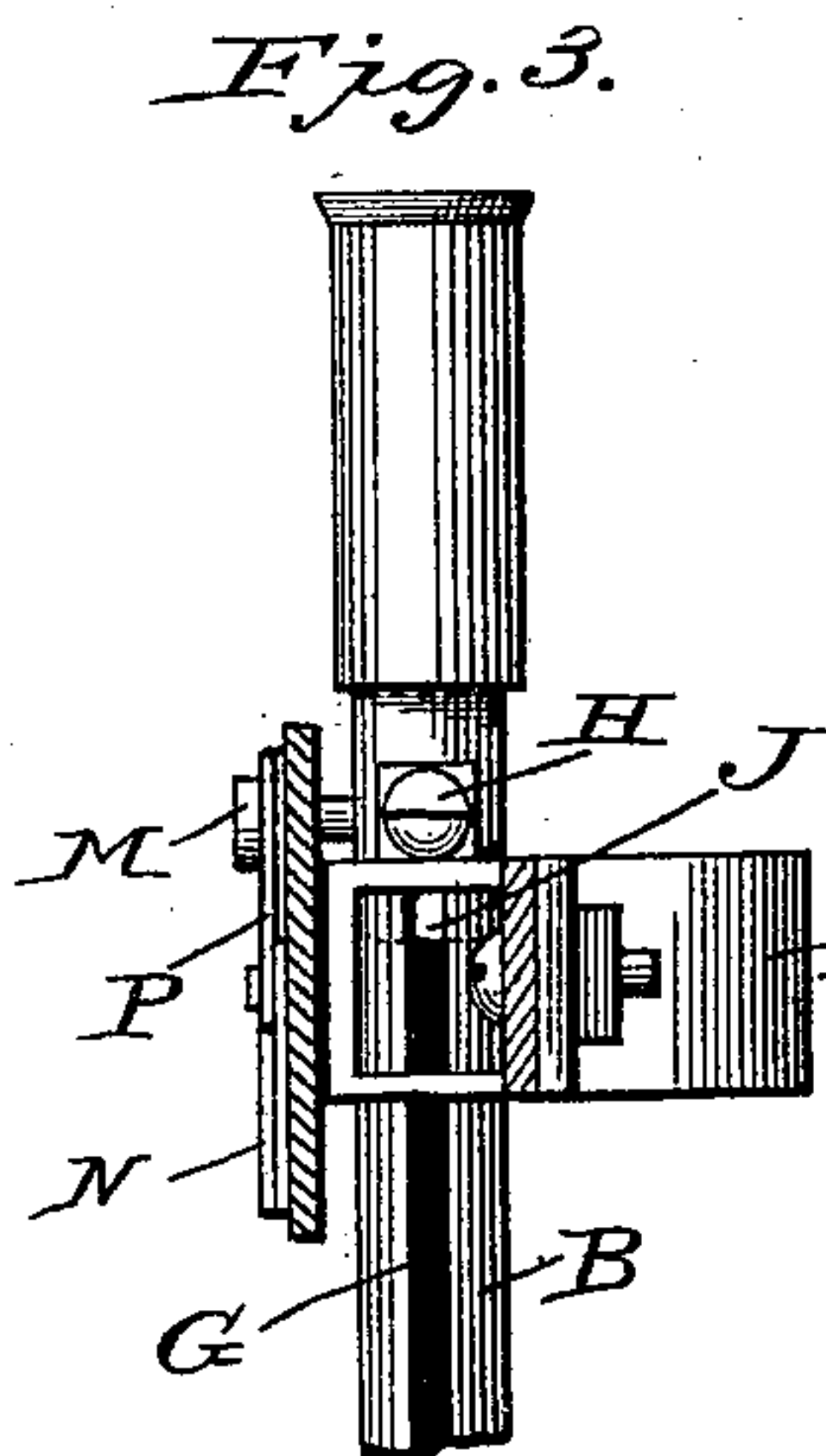
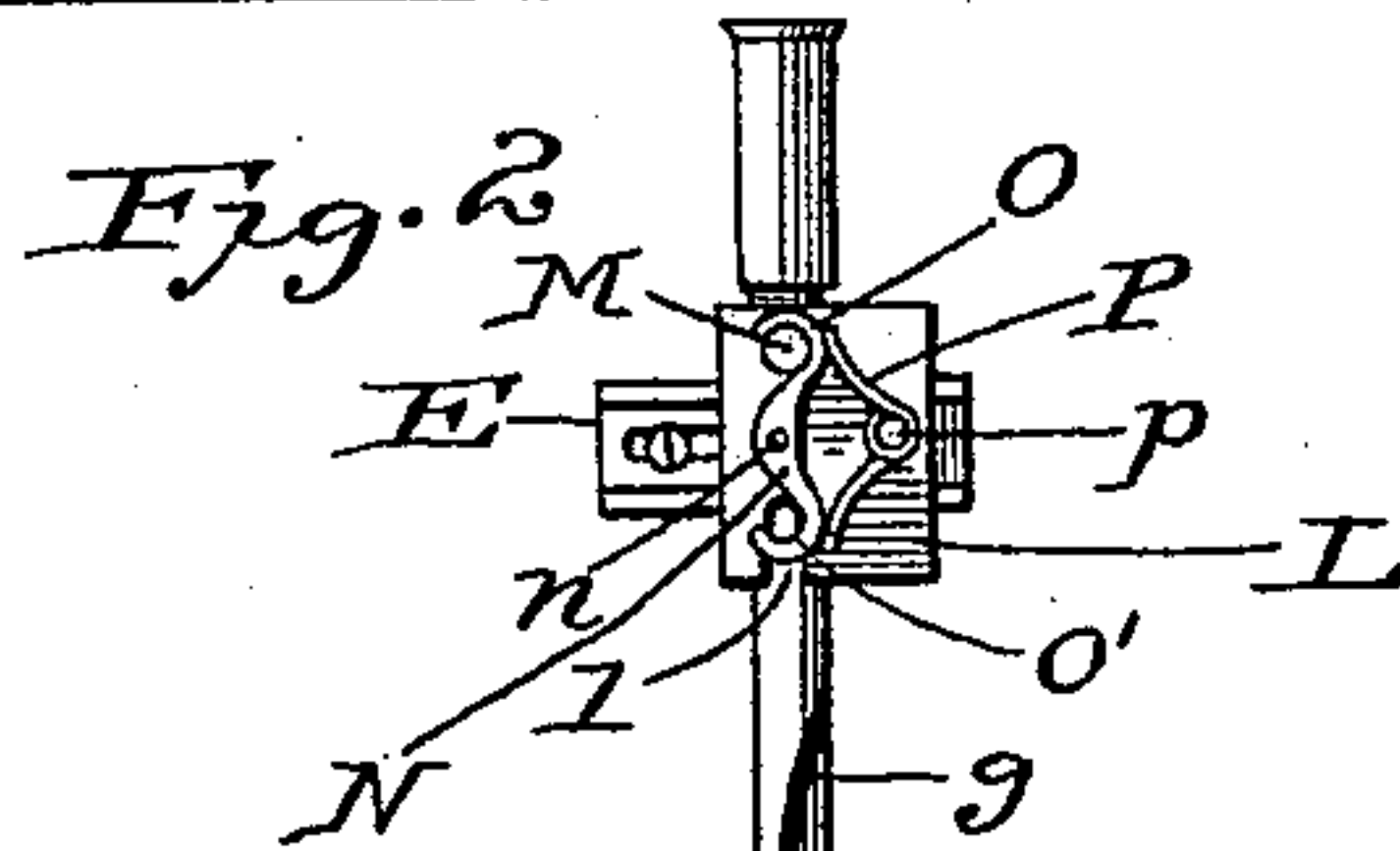
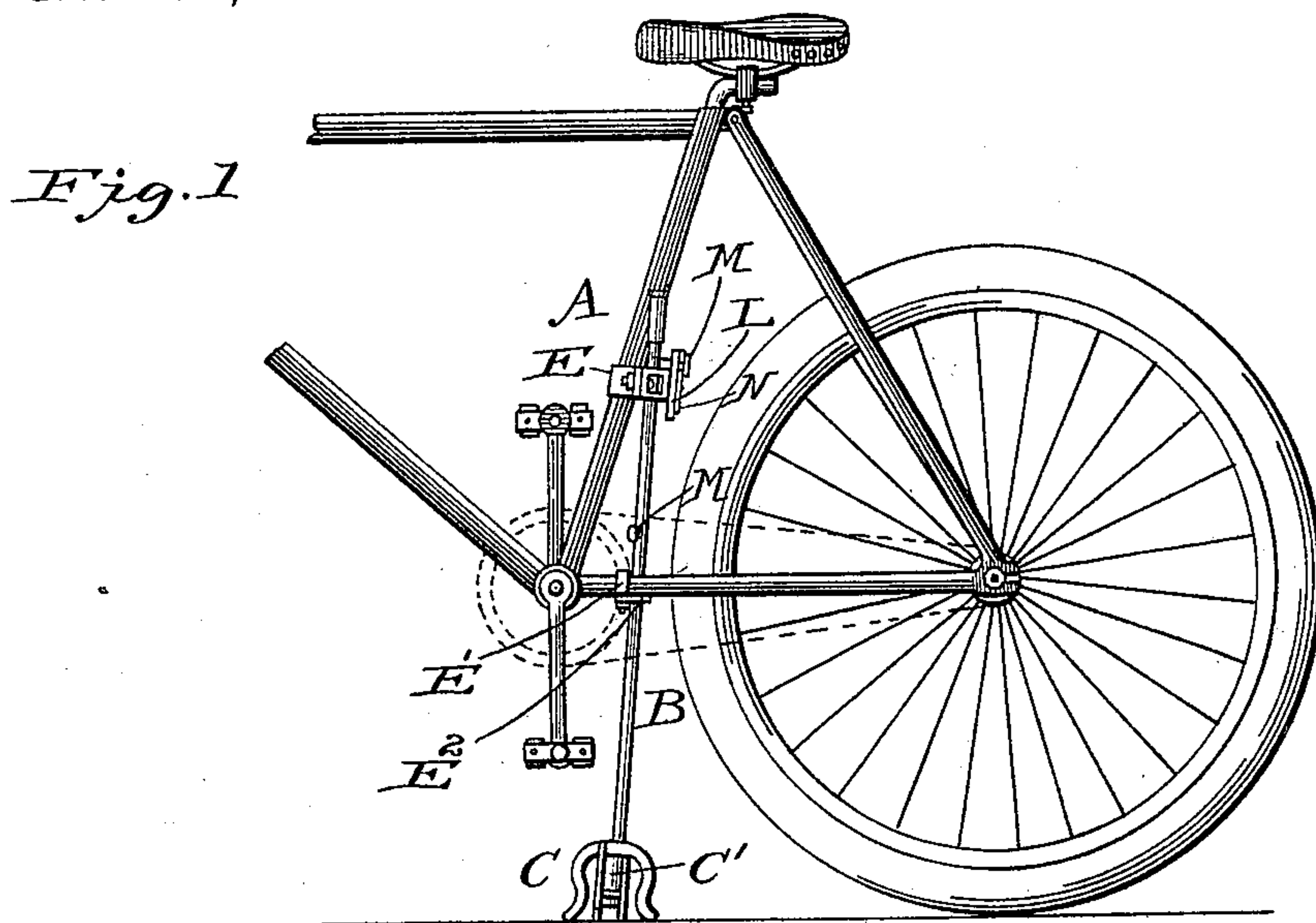


(No Model.)

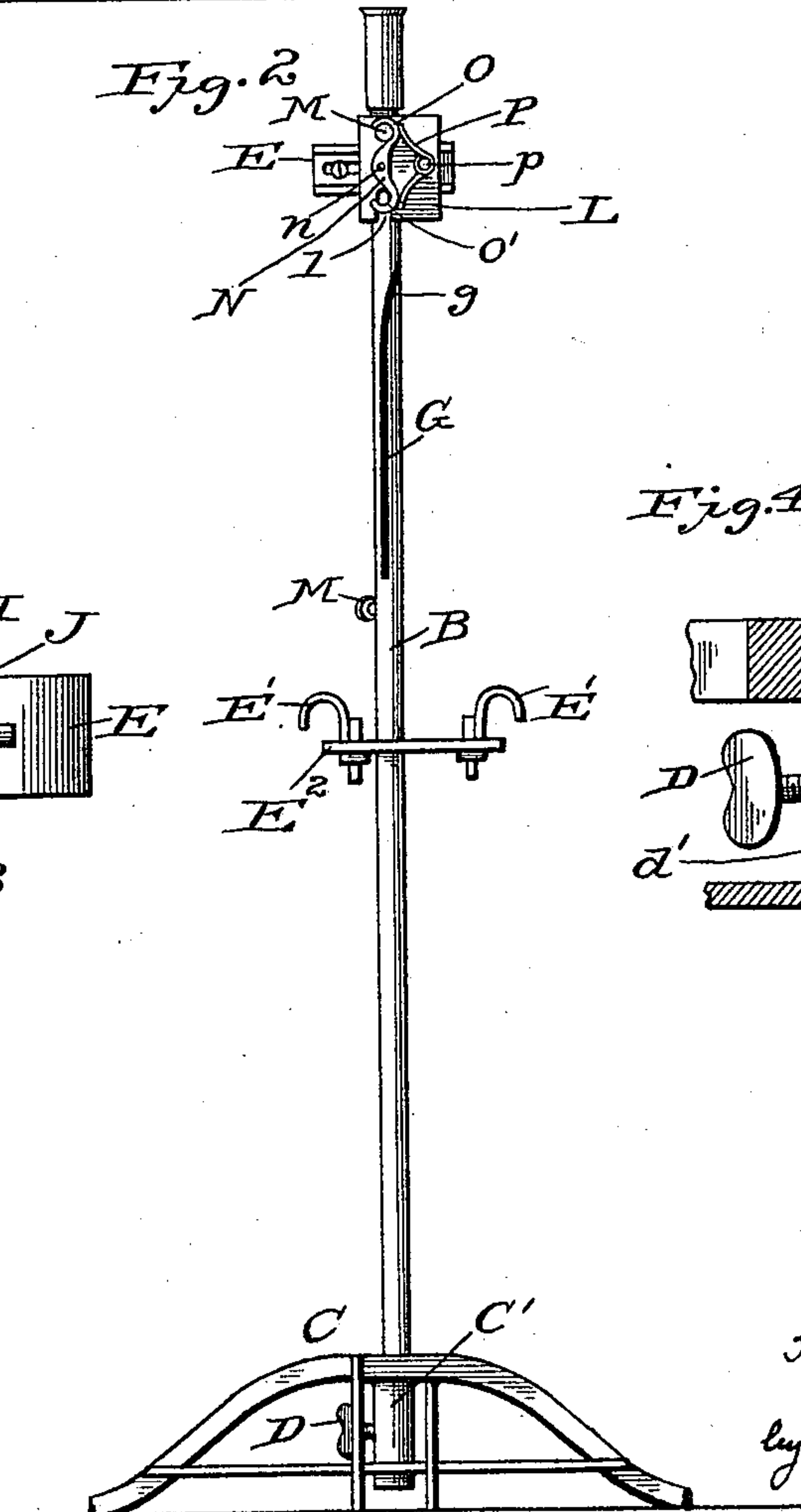
H. H. OLSEN.
BICYCLE SUPPORT.

No. 583,691.

Patented June 1, 1897.



Witnesses
E. G. McKee
K. A. Haw



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UNITED STATES PATENT OFFICE.

HERMAN H. OLSEN, OF WHITEHALL, MICHIGAN.

BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 583,691, dated June 1, 1897.

Application filed June 13, 1896. Serial No. 595,461. (No model.)

To all whom it may concern:

Be it known that I, HERMAN H. OLSEN, a citizen of the United States, residing at Whitehall, in the county of Muskegon and State of Michigan, have invented certain new and useful Improvements in Bicycle-Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in bicycle-supports; and it has for its objects, among others, to provide a simple cheap device readily applied to bicycles and capable of being drawn up or folded into a position where it will be out of the way of the rider when not in use and readily lowered into position to support the wheel in an upright position when desired. The foot or supporting-piece is adjustably mounted on its supporting-rod, so that it may be raised or lowered when desired. I provide an automatic lock for holding the support in its adjusted position and clamps for attachment of the same to the frame of the bicycle.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is an elevation showing the improvement applied to a bicycle. Fig. 2 is an elevation of the support. Fig. 3 is a section through the lock. Fig. 4 is a detail of the base portion, showing means for adjustment thereof.

Like letters of reference indicate like parts in the several views.

Referring now to the details of the drawings by letter, A designates a portion of the frame of a bicycle to which my improvement is shown as applied. It comprises the stand or rod B, preferably hollow, and to the lower end thereof is secured the foot C, which is rendered adjustable thereon, as shown, the said foot having a sleeve or tube C', into which the rod or stand is inserted and in which it is held by a set-screw D, which passes through

the sleeve or tube and engages the lower end of the rod. The inner tube or rod has a plug *d* secured therein, into which the set-screw is designed to engage, and a rod or stand is provided with an elongated slot *d'*, through which the set-screw passes. By this means the foot can be adjusted vertically on the rod or stand to raise or lower it, as occasion may require.

The rod or stand is secured to the frame of the wheel by suitable clamps E, and I preferably provide additional hook-clamps E', designed to be engaged over the lower portion of the rear fork, as shown, so as to steady and help support the rod and its attachment, these hooked clamps being carried by a plate E², through which the rod passes. The foot is preferably of the shape shown, having its portions extending in opposite directions and also at right angles to each other, so as to form a support not only lengthwise but crosswise of the wheel, so that all danger of tipping of the bicycle is prevented, either transversely to the length of the frame or in line therewith. The rod and its attachment is designed to be raised and lowered vertically and to be automatically held in its adjusted position, and for this purpose I provide the stand or rod B with the slot G, which is formed with a spiral portion *g*, in which is engaged a screw or projection H, carried by the upper clamp, which clamp remains stationary on the frame, and this screw engages in a cylindrical portion J, adapted to slide within the tube, or rather over which the tube slides in its movement up and down, and at the same time the tube is given a partial rotation, so that the longer arms of the foot, which normally stand lengthwise of the machine when the support is in its inoperative position, will, when the support is in its operative position, stand at right angles thereto.

The automatic lock comprises a plate L, secured to the upper clamp and having upon its upper and lower faces the slots *l*, which are adapted to receive the pins or screws M on the rod or stand, one near the upper end and the other near the lower limit of movement of the rod. On this plate is pivoted the locking-lever N, which is pivotally mounted on the pivot *n* at its center, and its two arms

O and O', extending into the direction of the length of the rod, are hooked, so as to engage over the pins or projections M on the rod, and a spring P is provided, which is provided
 5 around a stud *p* on the plate L and its arms bearing against the hooked portions of the pivoted locking-plate. With the parts thus constructed and arranged the support is normally held in its uppermost position by the
 10 engagement of the lower hooked arm of the pivoted plate with the lowermost pin or projection on the rod. When it is desired to lower the support, all that it is necessary to do is to move the pivoted plate so that its
 15 lower arm is disengaged from the pin or projection on the rod, when the rod automatically drops into its operative position, and as the rod assumes its lowermost position the upper pin or projection thereon is automatically engaged by the upper hooked arm of the
 20 pivoted plate, over which it is forced by its spring and the support thus locked. At the same time it is given a partial rotation, so as to reverse the relative positions of the long
 25 and short arms of the foot, as herein shown and described.

The support and its clamps and lock may be made of any suitable material and as ornamental as may be desired.

30 Modifications in details may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

It is deemed important that the support be placed between the forks near or in front of
 35 the hind wheel, being nearly in the center of the bicycle, thus nearly carrying its whole weight and not only supporting but holding the hind part of the bicycle clear from the ground to enable a person to easily clean and
 40 repair the same.

Having thus described the invention, what is claimed as new is—

1. The combination with the clamp and its plate and a pivoted plate having hooked arms, of the rod mounted for vertical movement through said clamp and having a spiral groove and a projection on the clamp engaging said groove, a foot and pins on said rod adapted to engage the hooked arms of the pivoted plate, substantially as described. 45 50

2. The combination with the clamp and its plate and a pivoted plate having hooked arms, of the rod mounted for vertical movement through said clamp and having a spiral groove and a projection on the clamp engaging said groove, a foot and pins on said rod adapted to engage the hooked arms of the pivoted plate, and a spring on the clamp acting on the hooked arms, substantially as described. 55 60

3. The combination with the clamp and its plate and a pivoted plate having hooked arms, of the rod mounted for vertical movement through said clamp and having a spiral groove and a projection on the clamp engaging said groove, a foot and pins on said rod adapted to engage the hooked arms of the pivoted plate, and a spring on the clamp acting on the hooked arms, the plate to which the hooked plate is pivoted being provided with slots to receive the pins or projections on the rod, substantially as described. 65 70

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HERMAN H. OLSEN.

Witnesses:

J. W. OCOBOCK,

PATRICK H. FITZGERALD.