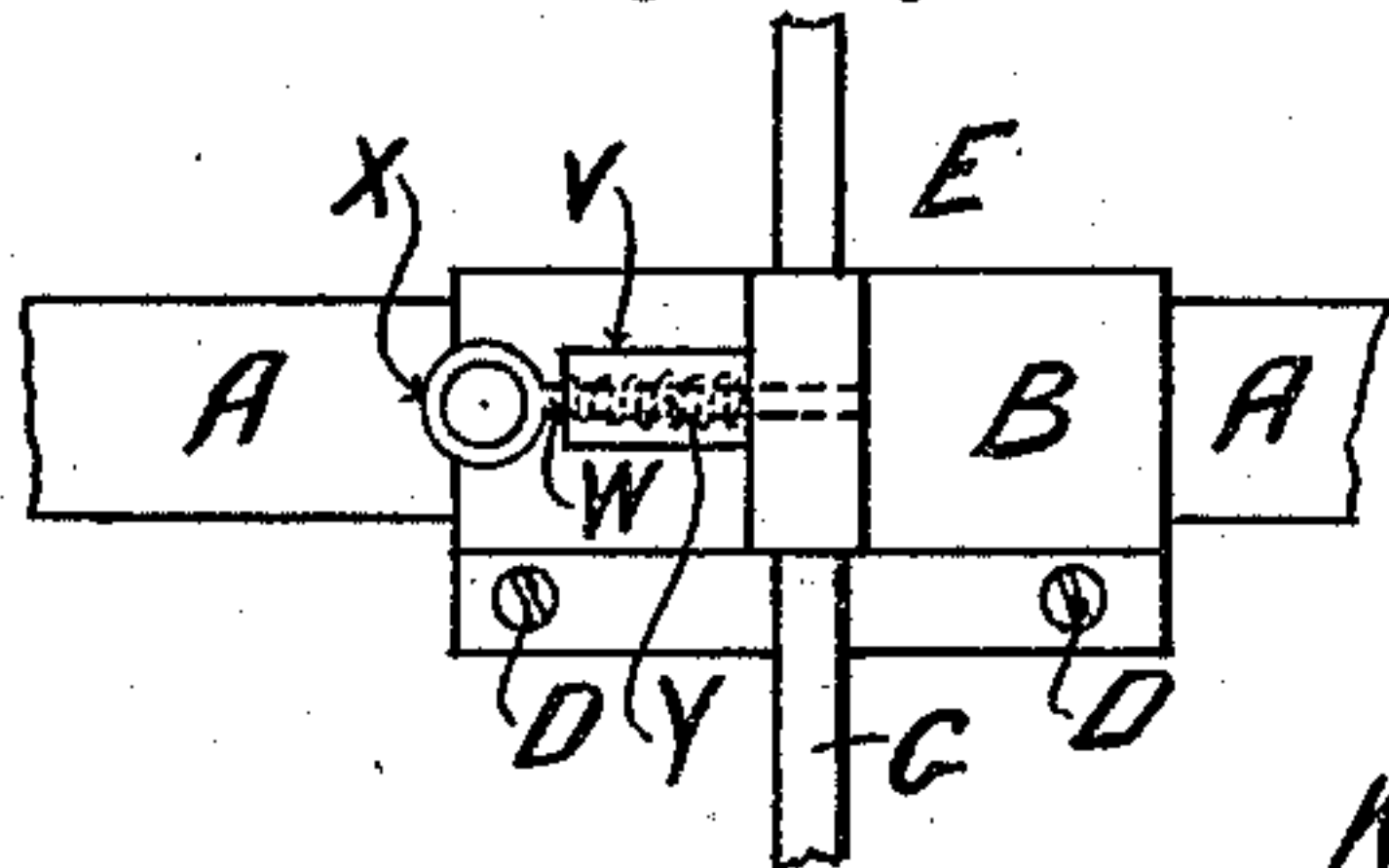
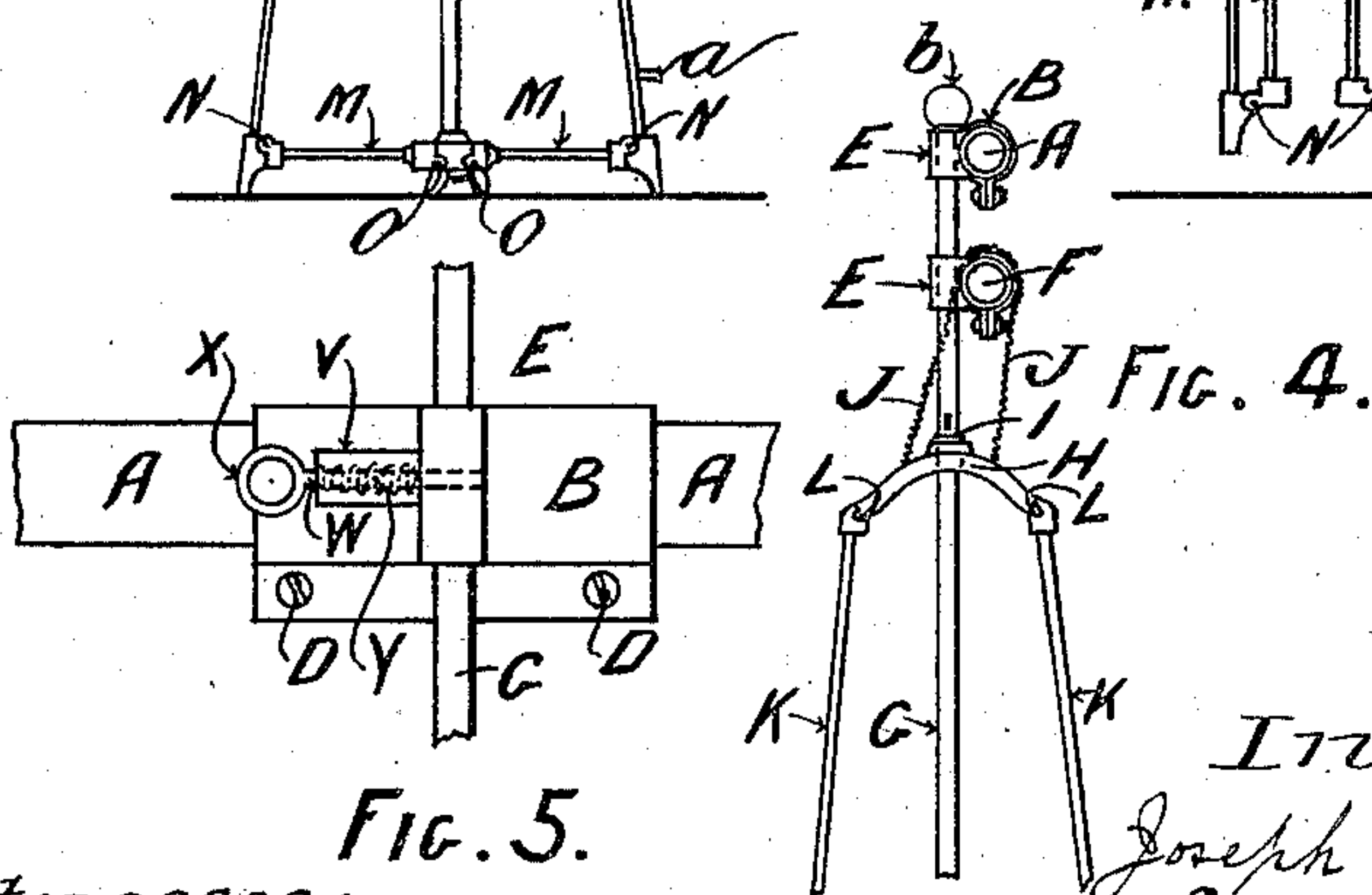
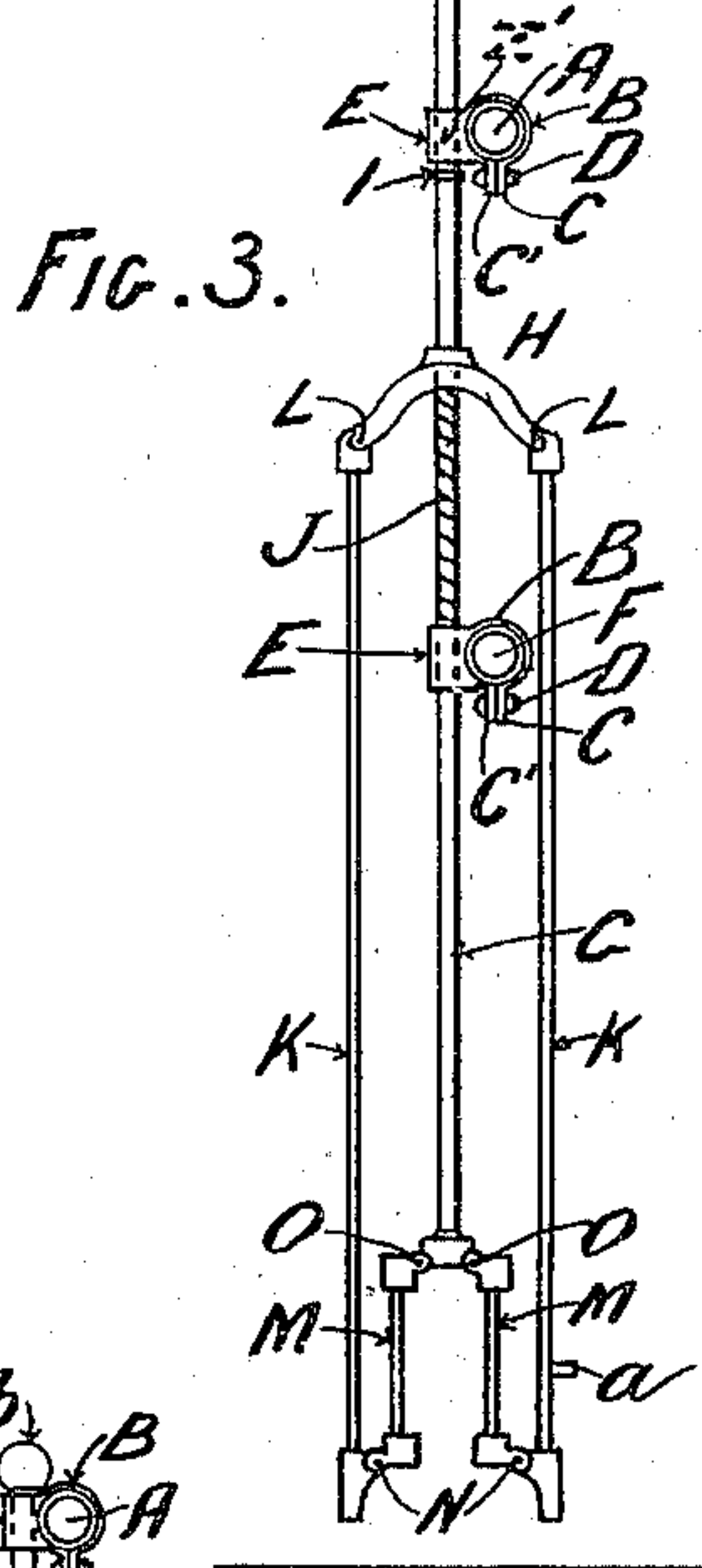
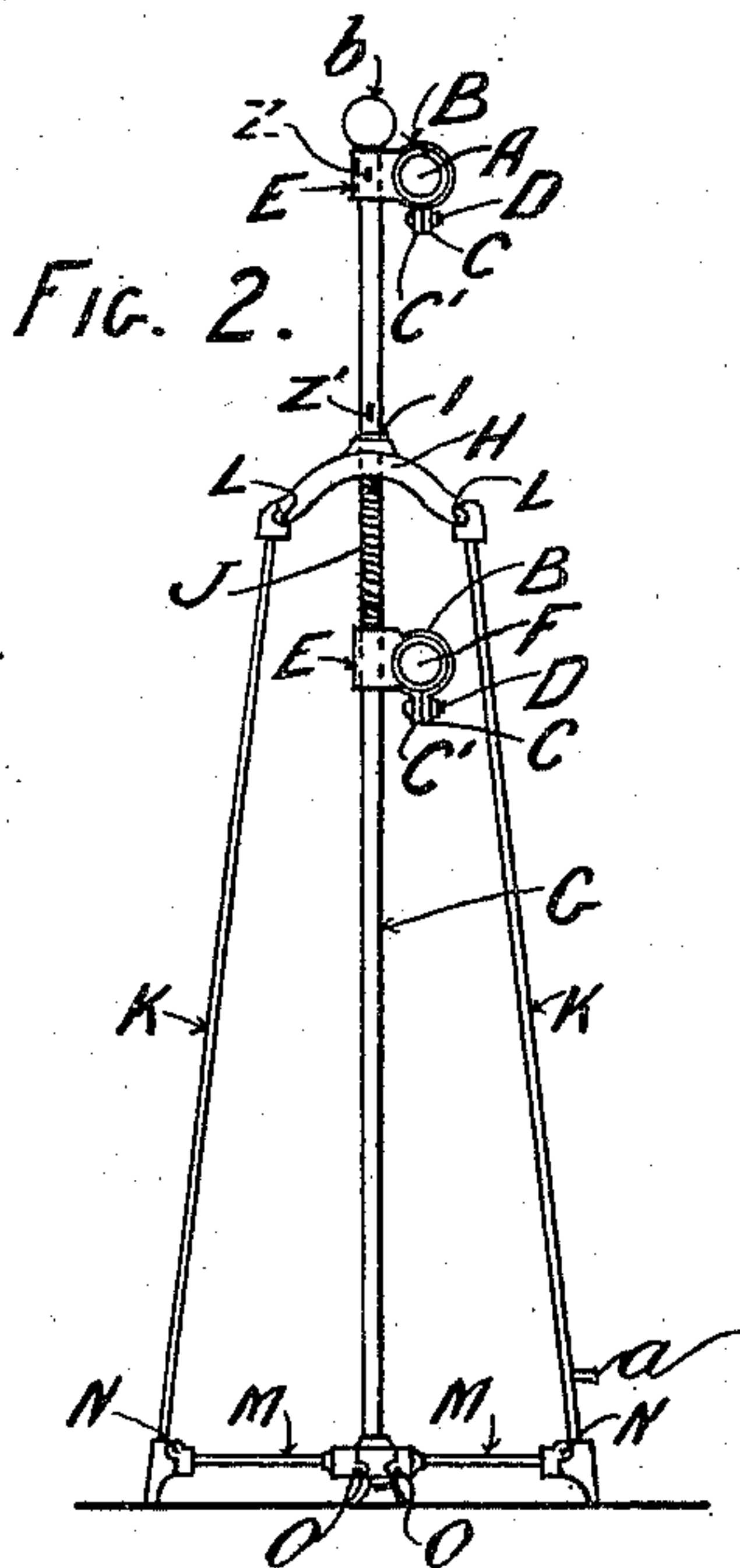
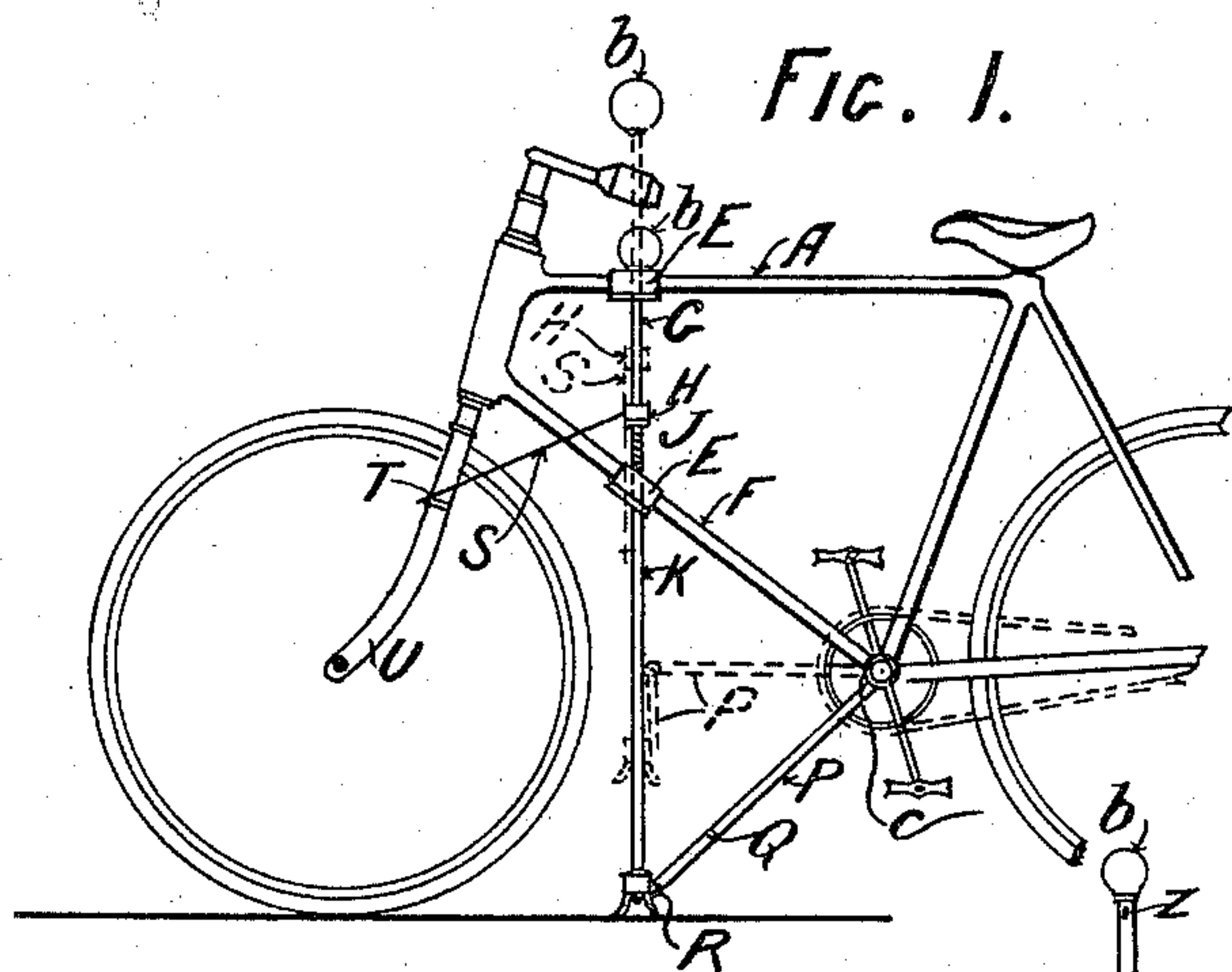


(No Model.)

J. F. FURLEY & E. FORSYTH.
BICYCLE SUPPORT.

No. 605,477.

Patented June 14, 1898.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH FREDERICK FURLEY, OF NORTH SYDNEY, AND EBENEZER FORSYTH, OF WILLOUGHBY, NEW SOUTH WALES.

BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 605,477, dated June 14, 1898.

Application filed November 26, 1897. Serial No. 659,849. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH FREDERICK FURLEY, farrier, residing at North Sydney, and EBENEZER FORSYTH, accountant, residing at Willoughby, in the Colony of New South Wales, subjects of the Queen of Great Britain, have invented a certain new and useful Improvement in Bicycle-Supports, of which the following is a specification.

10 The object of this invention is to provide an improved bicycle-support that will enable a bicycle to be retained in an upright position when stationary.

Other bicycle-supports have been invented, 15 but have in many cases been found defective in operation. With some it is necessary for the rider to dismount in order to bring the support into position, and in most cases the front or steering wheel is at liberty to swing 20 and bring a strain on the support.

Now this invention provides a bicycle-support that can be brought into operation in an instant by the rider without dismounting and which will lock the front or steering wheel. 25 The support may also be removed or thrown out of operation in an instant. Thus a bicyclist finding himself in an awkward and dangerous position among street traffic and having no room to dismount may stop his bicycle and, instantly bring the support into 30 operation, remaining in his saddle until he is safe to proceed.

Bicycles fitted with this invention would be especially suited for the use of military, 35 postmen, messengers, or the like, for in the case of military one part of this improved bicycle-support could be used to carry a rifle or the like; but in order that this invention may be more fully understood reference will 40 now be made to the accompanying sheet of drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of a bicycle fitted with this invention. Fig. 2 is a view 45 of the support in operation, looking from the front. Fig. 3 is a view of the support closed or out of operation. Fig. 4 shows the method of attaching the support to a lady's bicycle. Fig. 5 is a fragmentary detail showing locking 50 device.

In all figures similar letters are used to denote similar parts.

The top frame-tube A is provided in a suitable position with a band B, which band is cut and has the flanges C and C', through 55 which the bolts D are passed to tighten the same onto the tube. On one side of the band B is provided the sleeve E. The lower frame-tube F is provided with a similar attachment to that described above, secured on the top 60 frame-tube A. These attachments may be secured in the manner described or in any other suitable way; but in any case they must be firmly fastened.

The rod G is passed through the sleeves E 65 E and also through the head-piece H. The collar I, secured to the rod G, prevents the latter from falling through the head-piece H more than a given distance. A spiral spring J is placed around the rod G between the un- 70 der side of the head-piece H and the top of the lower sleeve E. The legs K K are hinged (one on either side) to the head-piece H at L. The bars or rods M M are hinged at N to the legs K K, while the inner ends of the rods M 75 M are hinged at O to the rod or center leg G. The stay P, jointed at Q, is also hinged at R to the rod or center leg G. The other end is attached to the crank-bracket c in such a manner as will permit it to assume the position 80 shown in dotted lines in Fig. 1.

A light rod S is hinged to the head-piece H. A grooved attachment T, secured to the front fork U, is provided to receive the other 85 end when the support is in operation. On one side of the band B, attached to the top frame-tube A, is secured a short tube V, through which the locking-bar W passes, being provided on the outer end with the ring 90 X. A short spiral Y is placed around the bar W inside the tube V. The inner end of this tube V abuts onto the upper sleeve E, through which a small opening is made to permit of the entry of the locking-bar W. Two slots 95 Z and Z' are provided in the rod or center leg G in suitable positions to admit the locking-bar W.

In the construction of ladies' bicycles the top and lower frame-tubes are closer than in gentlemen's. This necessitates a slightly-dif- 100

ferent attachment, which is shown in Fig. 4, the difference being that instead of placing the spiral spring J in the position shown in Figs. 1, 2, and 3 it is passed over the lower frame-tube F, Fig. 4, and the two ends at-

10 In a suitable position on the outer side of one of the legs K may be provided a loop or cup *a* for the purpose of receiving the end of an umbrella or rifle. The other end may be held by passing a rubber band around the upper frame-tube A, thus keeping the umbrella or rifle in an upright position against the leg K.

15 The operation of this invention will be as follows: When the bicycle is being ridden, the support would be raised into the position shown in Fig. 3 and the locking-bar W will have passed into the slot Z', retaining the support in this position. To bring the support into operation, the rider is required to withdraw the locking-bar W by the ring X, releasing the rod or center leg G, which will fall by its own weight until the collar I strikes the head-piece H. The spiral J then forms a resistance to the downward movement of the head-piece H and the legs K K. While the rod G is descending the distance before the collar I strikes the head-piece H, the lower ends of the legs K K are moved slightly outward by the intervention of the rods M M. It is then necessary to press with the hand the knob *b*, thereby forcing the rod G downward and the legs K K downward and outward until the locking-bar W enters the slot Z in the rod G and retains the support in the position shown in Fig. 2. The spiral J will then be compressed, and the stay P will assume the position shown in Fig. 1, the object of this stay being to prevent any forward or backward movement of the support. To lock the front wheel, the rod S is placed in the grooved attachment T, and the bicycle will now stand in an upright position without the slightest risk of falling.

45 To throw the support out of operation, it is necessary to withdraw the locking-bar W from the slot Z. This will permit the compressed spiral J to expand and raise off the ground the whole of the support. The rod G is then raised by the hand until the locking-bar W enters the slot Z'. The lower ends of the legs K K will then be drawn inward by the rods M M, the whole assuming the position shown in Fig. 3, and the stay P will be drawn upward and be held in the position shown by dotted lines in Fig. 1.

The spring attachment for ladies' bicycles, arranged as before described, will operate in the reverse way to that used on gentlemen's bicycles. Whereas the latter would be compressed, the former would be extended, the normal position of the springs being reverse. A modification may be made in the construction of the rod or center leg G by jointing the same in such a position as will enable the top end, when the support is in the position of Fig. 3, to be folded back over the top frame-tube A.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is—

1. In combination with a bicycle, sleeves secured thereto, the central leg or rod guided vertically in said sleeves, the spring-pressed yoke vertically movable on said rod and the side legs or rods having their upper ends pivotally connected with the yoke and their lower ends linked to the central rod, substantially as described.

2. A bicycle-support with a vertical rod or center leg, passing through vertically-secured sleeves and a head-piece H, having hinged thereto the outer legs K, K, connected at or near their lower ends with the vertical rod or center leg, the downward movement of same being regulated by a spiral spring placed around a part of the vertical rod or center leg, between one of the vertical sleeves and the head-piece, the said vertical rod or center leg being governed in its downward passage by a collar placed above the head-piece, substantially as herein described, explained, and illustrated in the drawings.

3. In combination with a bicycle a pair of sleeves secured thereto, one above the other, a center leg vertically guided in said sleeves, a spring-pressed yoke movably carried on said leg, the side legs hinged to said yoke at their upper ends, links connecting said side legs with the center leg at the lower end, and the folding or joined backstay P having a hinge connection with the central leg and with the bicycle-frame, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

JOSEPH FREDERICK FURLEY.
EBENEZER FORSYTH.

Witnesses:

THOMAS WILLIAM MILLER,
MAY SEALE.