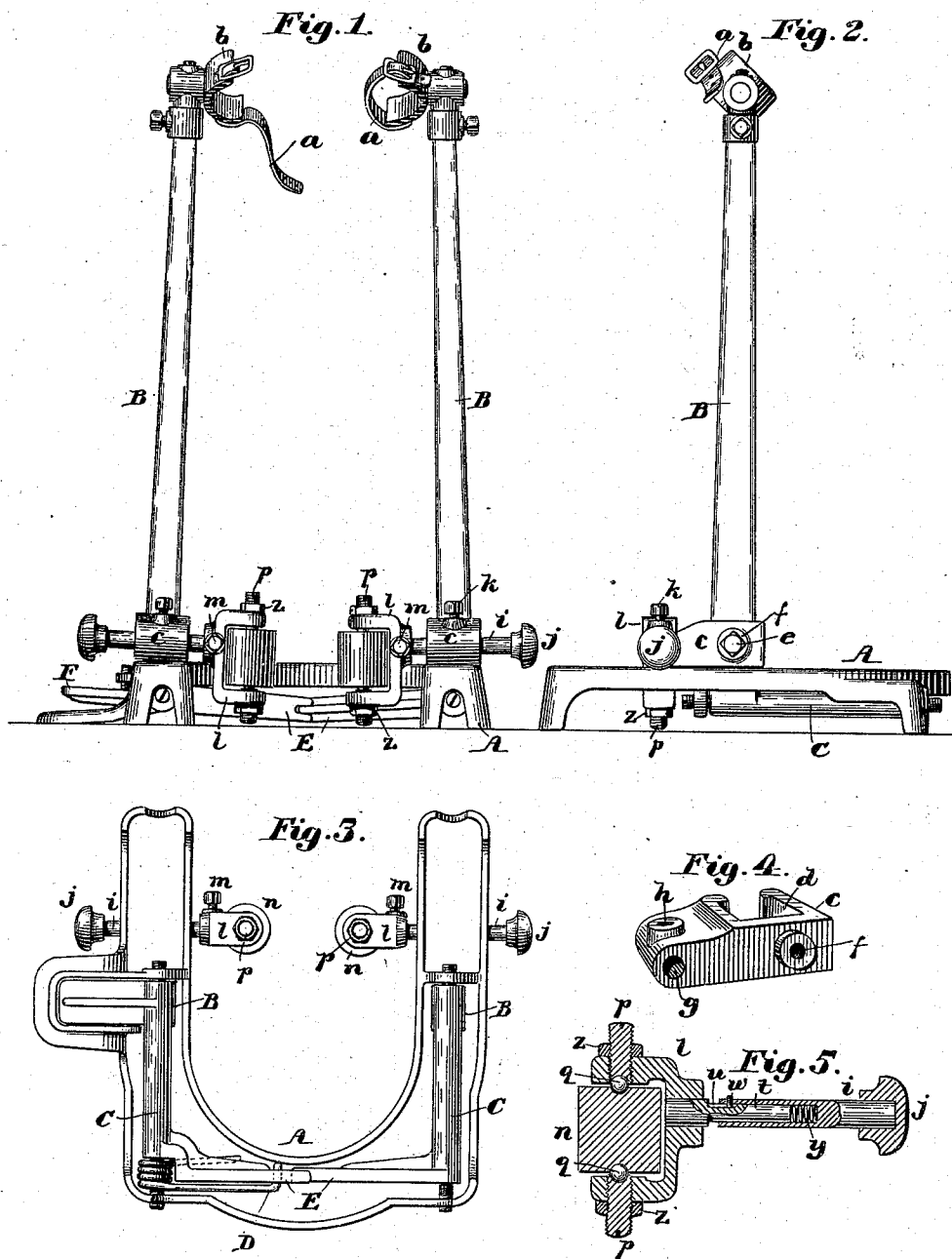


(No Model.)

I. I. FONDA.
BICYCLE STAND.

No. 562,520.

Patented June 23, 1896.



Witnesses:

Walter E. Lombard.
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UNITED STATES PATENT OFFICE.

ISAAC I. FONDA, OF BOSTON, MASSACHUSETTS.

BICYCLE-STAND.

SPECIFICATION forming part of Letters Patent No. 562,520, dated June 23, 1896.

Application filed March 16, 1896. Serial No. 583,330. (No model.)

To all whom it may concern:

Be it known that I, ISAAC I. FONDA, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Bicycle-Stands, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

The object of this invention is to furnish a machine in which the bicycle may be firmly secured in an upright or racing position, with the frame secured to the uprights, and with the rim of the treadle-driven wheel firmly pressed between rollers, which aid in guiding said wheel as it is being revolved by the person practicing upon the machine, as will be next pointed out, in connection with the accompanying drawings.

In said drawings, Figure 1 is a front elevation of a bicycle-stand with my wheel-guide thereto attached. Fig. 2 is a view from the right of Fig. 1. Fig. 3 is an under side plan view of Figs. 1 and 2. Fig. 4 is a detached perspective view of the bracket that is attached to the standard of the stand; and Fig. 5 is a detached vertical section through the roller, the part in which the roller is pivoted, and the arm on which said parts are supported.

The base of the wheel-stand is shown at A, and the standards at B, said standards being formed with bases C, which are pivoted upon the under side of the base, as shown. Said standards are at their upper ends moved apart by pressure upon pin F, that projects sideways from one of the standards, and they are forced inward by the action of spring D, that acts upon the interlocked arms E, that extend inward from bases C, as shown in Figs. 1, 2, and 3; but said parts may be varied as desired, as they do not, by themselves, constitute any part of my present invention.

The frame of the bicycle is secured to the top of standards B by means of straps *a*, which are secured to fingers *b*, or by any other known means. Just above base A, I secure upon each standard B a bracket *c*, formed with a vertical opening *d*, in which the standard is secured by a set-screw *e* in hole *f* in said bracket. A rod *i*, having a hand-knob *j*, is placed in hole *g*, formed through said bracket, and is secured as desired by set-screw *k*, inserted in threaded hole *h*. Upon the inner

ends of said rods *i* is secured the smaller bracket *l*, secured thereon by set-screw *m*, and in these brackets are arranged rollers *n*, by means of set-screws *p*, threaded in said brackets and secured by lock-nuts *z*. The ends of screws *p* are cupped, as is also the axis of rollers *n*, and in the chamber thus formed are inserted balls *q*, on which said rollers rotate. Said rod *i* may be formed continuous from bracket *l* to its head *j*, or it may be formed in two parts, as shown in Fig. 5, one part being hollow and the other part inserted therein, the inner part being formed with a groove *u*, in which is seated a screw *w*, that extends from the outer part into said groove to prevent rotation of said bracket *l*, a coiled spring *y* being arranged against the inner end of the inner part of rod *i* to cushion the same.

In the use of my invention, the frame of the bicycle is rigidly secured to the top of standards B, by means of straps *a* or by any desired means, and the elastic tire of the treadle-driven wheel is pressed closely between rollers *n*, that are locked in position to maintain the proper pressure upon the tire of the wheel, and hence the operator may run said wheel without other motions of the machine as rapidly as he desires and without friction except its contact with said rollers *n* and with the desired pressure of rollers *n* upon the tire.

Having thus described my invention, what I claim as new is—

1. In a bicycle-frame having adequate means for securing the frame of the machine to the upper part of the standards, the brackets *c*, formed and arranged to be secured to said standards near their base, a rod *i* extended through said brackets and adjustably secured therein, a bracket *l* secured upon the inner end of said rods and the rollers *n* pivotally mounted, in said last-named brackets, all substantially as specified.

2. In a bicycle-stand, means for securing the frame of the bicycle to the standards of the frame near the top: the rollers *n* pivotally arranged in a bracket, connected with a rod duly supported, and arranged to be adjusted toward and away from each other, and an outer bracket carrying said rods, and arranged to be secured upon the standards of the machine, substantially as specified.

3. In a bicycle-stand, the brackets *c* secured to the standards *B*, the rollers *n* mounted in brackets *l* on rods *i* and said rods formed in two parts with a cushioning-spring *y* arranged against the inner end of the inner part, and a groove *u* formed in said inner part, and a pin *w* extending from the outer part into said groove to hold said brackets from rotation substantially as specified.

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Witnesses:

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