(No Model.)

W. TURNER.

BICYCLE.

No. 590,732. Patented Sept. 28, 1897.

Fig. 1.

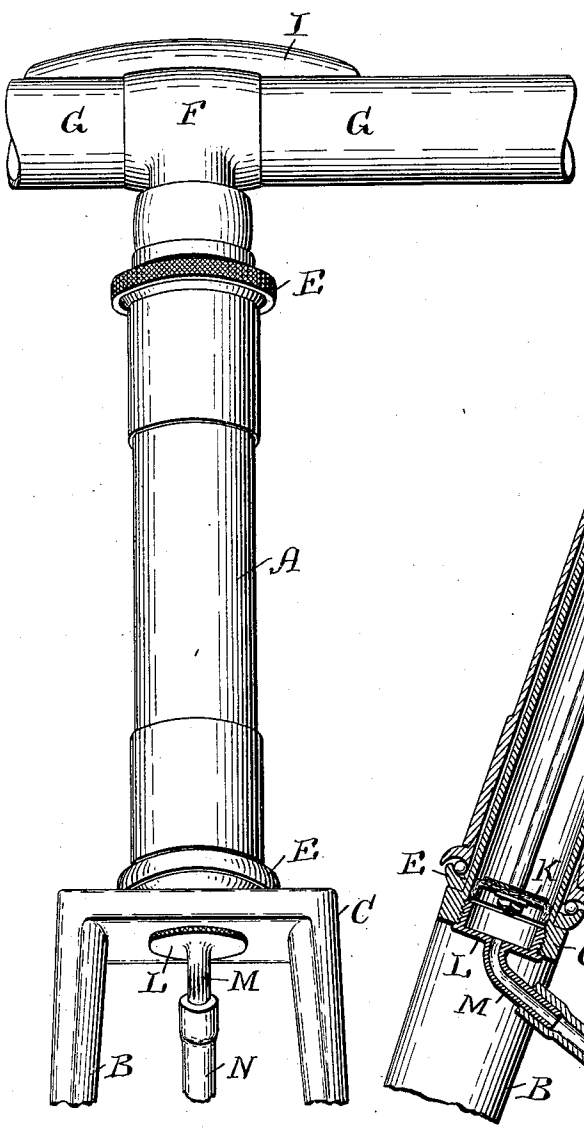
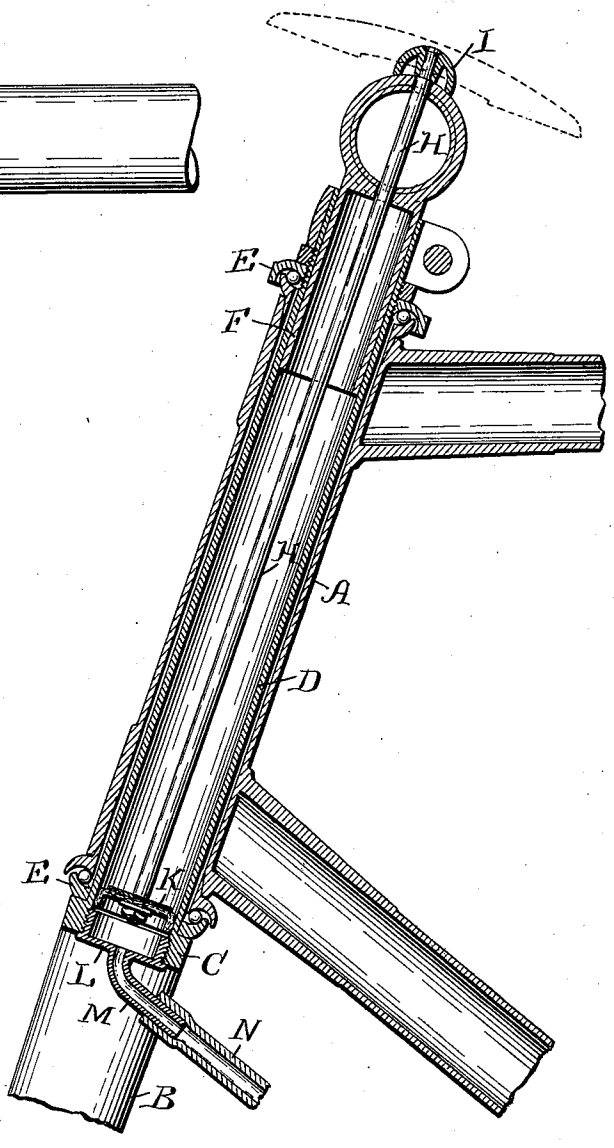


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM TURNER, OF PROVIDENCE, RHODE ISLAND.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 590,732, dated September 28, 1897.

Application filed April 21, 1897. Serial No. 633,180. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM TURNER, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Bicycles; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in bicycles by which the spindle-tube of the fork is utilized to form an air-pump for inflating the wheel-tires.

The invention consists in the peculiar and novel construction, as will be more fully set forth hereinafter.

Figure 1 is a front view of the head of a bicycle-frame. Fig. 2 is a sectional view of the same.

In the drawings, A indicates the head-tube of the bicycle-frame; B, the fork, in the lower end of which the front or steering wheel is supported; C, the crown of the fork; D, the spindle-tube, which extends from the fork upward through the head-tube; E E, the bearings for the spindle-tube; F, the handle-bar bracket secured in the spindle-tube and forming the support for the handle-bars G G. The parts so far enumerated are the parts forming the usual head of the diamond form of a bicycle-frame to which the invention is applied, and to this end the bracket F is perforated to receive the pump-rod H, on the upper end of which is secured the handle I and to the lower end the cup-piston K. The crown C is perforated and screw-threaded to receive the cap L, provided with the bent tube M, to which the flexible tube N is secured.

The handle I of the pump is made to fit the bracket F and the part of the handle-bars on its lower surface, while the upper surface is rounded and shaped so as to present a smooth surface.

By this construction and arrangement the spindle-tube D is utilized for the pump-cylinder, or, if preferred, the tube of the bracket F may be extended down into the spindle-tube, as is now frequently done, and utilized as the pump-cylinder.

The air-pump forms part of the bicycle-frame and, when required, is always at hand ready to be connected by means of the flexible tube N with the wheel the tire of which requires to be pumped up. The pump has considerable length of stroke. It can be used effectively to exert considerable air-pressure and does not interfere with the free use of the handle-bars or any other part of the bicycle. The perforation in the bracket F is made sufficiently large so that the air can pass freely around the pump-rod H to supply the pump, the valve of which is collapsible, as in the ordinary form of bicycle-pump.

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

In a bicycle, the combination with the head of the bicycle-frame, of the spindle-tube D, the cap L secured in the crown of the fork and provided with the tube M, the perforated bracket F, and the pump-rod H provided at one end with a handle and at the other with the cup-piston K; whereby an air-pump is permanently connected with and forms part of the head of the bicycle-frame, as described.

In witness whereof I have hereunto set my hand.

WILLIAM TURNER.

Witnesses:
JOSEPH A. MILLER, Jr.,
M. F. BLIGH.