

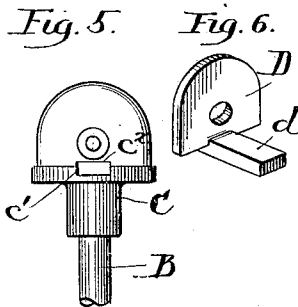
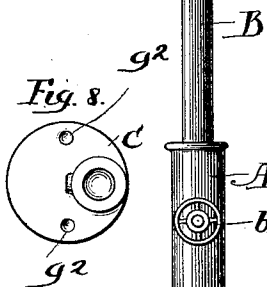
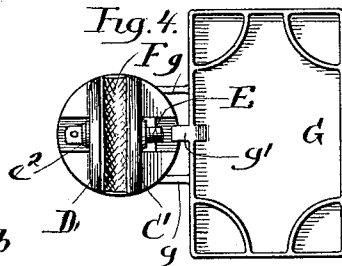
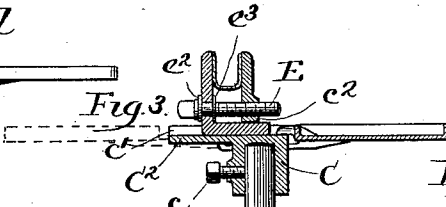
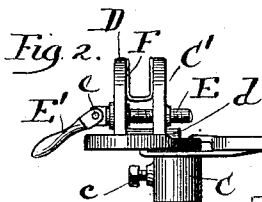
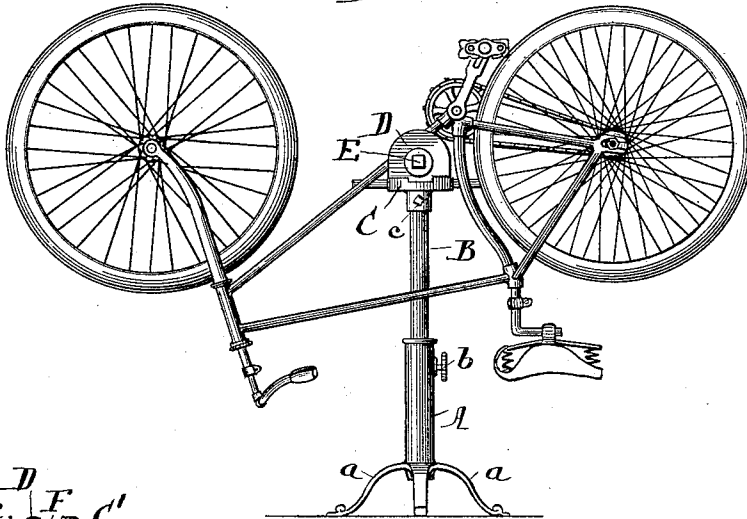
(No Model.)

B. M. STEELE.  
VISE STAND FOR SUSTAINING BICYCLES.

No. 486,511.

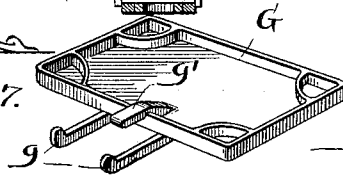
Patented Nov. 22, 1892.

Fig. 1.



Witnesses:  
Fred J. Bach  
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Fig. 7.



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# UNITED STATES PATENT OFFICE.

BENJAMIN M. STEELE, OF PEORIA, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
WILLIAM H. MILLER, OF SAME PLACE.

## WISE-STAND FOR SUSTAINING BICYCLES.

SPECIFICATION forming part of Letters Patent No. 486,511, dated November 22, 1892.

Application filed March 9, 1892. Serial No. 424,263. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN M. STEELE, a citizen of the United States, residing at Peoria, in the county of Peoria, State of Illinois, have invented certain new and useful Improvements in Vise-Stands for Sustaining Bicycles, &c., of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention has for its object more especially to provide a vise-stand designed for sustaining and securely holding bicycles for the purpose of enabling the operator to more conveniently work thereon in making repairs and the like, and this object I have accomplished by the improved construction of stand hereinafter described, illustrated in the accompanying drawings, and particularly defined as to its novel features in the claims at the end of this specification.

Figure 1 is a view in front elevation of a vise-stand embodying my improvements, the stand being shown as having a bicycle sustained thereby. Fig. 2 is a view in front elevation showing the stand upon a somewhat larger scale. Fig. 3 is a view in vertical section, the base of the stand being broken away. Fig. 4 is a plan view. Fig. 5 is a detail view of the upper part of the sustaining-rod with the head-block and fixed jaw mounted thereon. Fig. 6 is a detail perspective view of the movable jaw of the vise. Fig. 7 is a perspective view of the detachable tool shelf or table. Fig. 8 is an inverted plan view of the head-block.

A designates the body of the stand, which is preferably of cast metal, and its lower end is fixed within the base having sustaining-legs *a*. The body *A* is formed with the tubular socket *a'* to receive the sustaining-rod *B*, which is held at any desired height within the body by means of a hand-screw *b*, that passes through a correspondingly-threaded perforation in the body *A* of the standard. Upon the top of the sustaining-rod *B* is mounted a head-block *C*, having a tubular socket, within which the upper end of the sustaining-rod is held. The head-block *C* can be freely revolved upon the upper end of the sustaining-rod *B* or can be fixed thereto

by means of the set-screw *c*, that passes through a threaded perforation in the head-block. The head-block *C* has cast in piece therewith the fixed jaw *C'*, whereon is sustained the movable jaw *D* of the vise. This movable jaw *D* is provided with a laterally-extending arm *d*, that rests within the seat *c'*, formed in the top of the head-block *C* and passes through the opening *c''*, formed at the base of the fixed jaw *C'*. The fixed jaw *C* is provided with a threaded perforation to admit the threaded portion of the screw rod or spindle *E*, by means of which the clamping of the jaws is effected, and the movable jaw *D* is provided with a perforation through which passes an unthreaded portion of the rod or spindle *E*. The outer end of the rod or spindle *E* is furnished with a handle *E'*, preferably pivoted thereto, as at *e*, and provided with a shoulder *e''*, bearing against the outer face of the movable jaw *D*. So, also, the spindle *E* is preferably furnished with a flange or stop *e'''* to bear against the inner face of the movable jaw *D*, so as to insure the outward movement of this jaw when the screw rod or spindle *E* is turned to force apart the jaws. To the inner faces of the jaws *D* and *C'* is preferably attached a strip of felt, leather, or like material *F*, which will guard against any danger of the jaws marring the bicycle-frame or other part that may be clamped between them.

From the foregoing description it will be seen that when a bicycle, for example, is to be repaired it is only necessary to place the frame of the bicycle between the fixed and movable jaws *D* and *C'*, after which by turning the handle *E'* the screw rod or spindle *E* can be operated, so as to cause the jaws to tightly clamp the bicycle-frame. My purpose in pivoting the handle *E'* to the end of the screw rod or spindle *E* is to enable this handle to be turned at an angle to the screw-rod when the jaws are being clamped or released and to be turned either in horizontal position or in vertical position, so as to be out of the way of the operator or of the work after the jaws have been set to the desired position. It will be observed that the fixed jaw *C'* is formed at such point upon the top of the head-block that the clamping of the bicycle-frame

or other work to be operated upon is at one side of the sustaining-rod B, and hence the sustaining-rod does not interfere with the clamping of the frame of the bicycle in true vertical position. My purpose in mounting the sustaining-rod in such manner that it can be set at different heights is to enable the workman without bending over to freely work upon any part of the bicycle. Thus, for example, if repair work is being done to the treadles the sustaining-rod can be in the lower position shown in the drawings, whereas if work is to be done upon the upper part of the frame, the saddle, the handle, or the like the sustaining-rod can be raised and adjusted to a higher position, so as to bring the work into more convenient and easy reach of the workman. So, also, by loosening the set-screw *c* the head-block C can be freely turned upon the sustaining-rod, thereby permitting the workman to readily turn the head-block in order to conveniently bring any part of the bicycle into position to be worked upon. By thus affording a simple and effective means for sustaining the bicycle above the ground or floor it is manifest that all danger of marring the handles or other plated or enameled portions of the machine by contact with the floor or ground is avoided.

In order to afford a convenient means for sustaining the tools with which the repair work or the like is to be effected, I provide the improved construction of detachable shelf more particularly shown in Figs. 2, 3, 4, and 7 of the drawings. This shelf G is preferably a single casting, having formed in piece therewith the arms *g* and lug *g'*. The arms *g* are separated a sufficient distance to enable them to straddle the head-block C, and the upturned ends of these arms set within sockets *g*<sup>2</sup>, formed on the under side of the head-block, (see Fig. 8,) while the lug *g'* rests upon the upper face of the head-block, as shown in Figs. 2, 3, and 4 of the drawings. This de-

tachable tool-shelf G can be readily shifted to either side of the head-block—that is to say, it can be held either in position shown by full lines in Figs. 2, 3, and 4, or in position shown by dotted lines in Fig. 3, and by this means the workman can at all times have his tools within easy reach of his work.

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

1. A vise-stand for bicycles, comprising a body A, a rod B, adjustably sustained by said body A, and a head-block revolubly mounted upon the upper end of said rod B, said head-block having jaws adapted to clamp the bicycle-frame and arranged and located in such position on the revoluble head-block as to hold the bicycle-frame entirely at one side of the sustaining-rod, substantially as described.

2. A vise-stand for bicycles or the like, comprising a body portion A, a sustaining-rod B, supported by said body portion, a head-block C, having a socket to receive the upper end of said sustaining-rod, whereby said head-block can be revolved, a fixed jaw C', formed in piece with said head-block, a movable jaw D, sustained by said head-block, and a screw-spindle E, passing through said fixed and movable jaws, substantially as described.

3. A vise-stand for bicycles or the like, comprising a body A, a sustaining-rod B, supported by said body, a head-block C, provided with a socket to receive the upper end of said sustaining-rod, whereby said head-block can be revolved, said head-block having cast in piece therewith a fixed jaw C' and a lateral extension C<sup>2</sup>, and a movable jaw D, mounted upon the lateral extension of said head-block, and means for operating said jaws, substantially as described.

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Witnesses:

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