(No Model.)

T. MILLER, Jr.

BICYCLE.

No. 522,610. Patented July 10, 1894.

Fig: 1

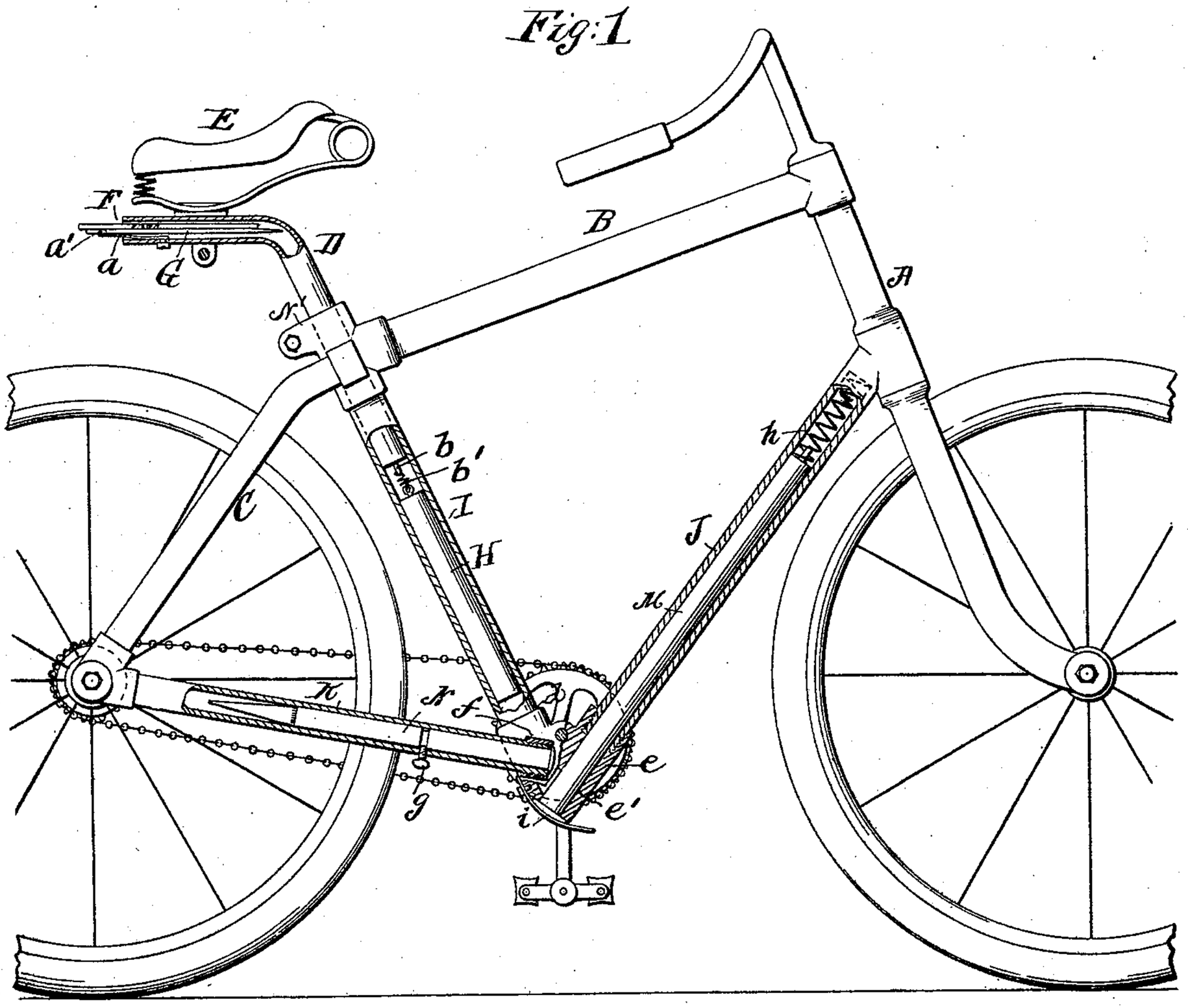


Fig: 2.

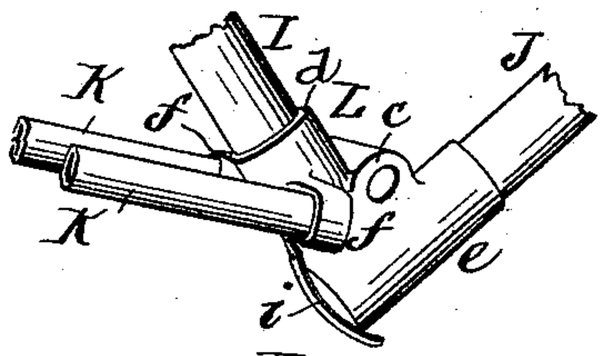
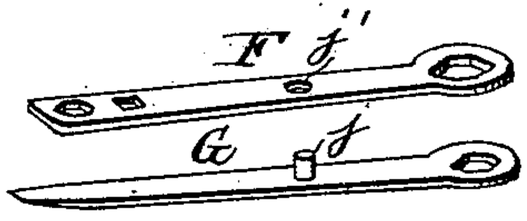


Fig: 3.



WITNESSES:

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THOMAS MILLER, JR., OF SPRINGBOROUGH, OHIO.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 522,610, dated July 10, 1894.

Application filed September 26, 1893. Serial No. 486,518. (No model.)

To all whom it may concern:

Be it known that I, THOMAS MILLER, Jr., a citizen of the United States, and a resident of Springborough, in the county of Warren and State of Ohio, have invented certain new and useful Improvements in Bicycles, of which the following is a specification.

The object of my invention is to devise such construction of the tubular frames of bicycles, that certain implements, such as wrenches, air pump, oil can, repairing-kit case, &c., may be conveniently stowed away and carried within the tubes and easily and securely held, thus obviating the necessity of carrying instruments in a separate case or package, as is now the practice; and to this end my invention consists in the construction, arrangement and combination of parts all as hereinafter described and claimed.

In the accompanying drawings which form a part of this specification, and in which like letters of reference indicate corresponding parts in all the views, Figure 1 is a broken side elevation of a safety bicycle having my improvements applied thereto, showing the preferred construction for carrying wrenches, air pump, oil-can and repair-kit case, &c. Fig. 2 is a detached perspective view of the central cluster coupling or union for the frame tubes, and Fig. 3 is a perspective view of the two wrenches constructed to be locked together, so that a single fastening may be used for holding them in place in the saddle support.

The fork A, top tube B, and rear tubes C, are of the usual, or of any approved construction.

The support D for the saddle E is hollow at its upper horizontal end and provided with a latch spring *a* to support and engage with one or more wrenches or similar instruments F, G, which are inserted in the said support. The lower end of the said saddle support D is provided with an eye or other fastening device *b* to which a case or other article H is attached, which case is designed to contain a repair-kit such as cement, rubber patching, lacing, &c., and which fits in the upright tube I of the frame and is by preference attached or suspended by the small cord or spring *b'*. The said upright tube I and the front tube J and rear horizontal tubes K K are all coupled together by a single union piece L, which also forms the journal *c* for the pedal shaft and sprocket wheel. This union piece is formed with a top inclined socket *d* for the tube I and with a lower inclined sleeve *e* to receive the end of the tube J. The sleeve *e* is formed with a passage *e'* through it coincident with the tube J, through which the air-pump M is inserted. The said union piece is also formed with the side keepers *f f* for the tubes K K off-set, so that an oil-can N or other instrument may be inserted in said tubes, and held in place by a set-screw or other device *g*, as shown in Fig. 1.

The tube J is provided upon the inside with a spring *h* to cushion the inner end of the air-pump M and the union piece L is provided with a cover *i* for holding the air-pump in place, and this cover is, by preference, a narrow strip of spring metal adapted to be turned to the right or left on its pivot to permit the insertion and removal of the pump, and by its spring action it presses upon the pump and holds it firmly in place against the spring *h*.

The spring *a* is formed with a lip or stud *a'* to enter an aperture in the adjacent wrench to prevent it from working back, and one of the instruments if two are to be carried, is locked to the other in this instance by a stud and aperture *j j'*, as shown clearly in Fig. 3, so that a single fastening applied to one will secure both instruments in place.

The support D may be removed, to remove the case I by loosening the clamp N', as will be understood from Fig. 1.

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

In a bicycle, the union piece L formed with an open sleeve *e*, provided with a cover, in combination with the spring *h* and removable instrument M, substantially as described.

THOMAS MILLER, JR.

Witnesses:
HOWARD EARLY,
ARTHUR F. PEEBLES.