No. 630,561. Patented Aug. 8, 1899.

R. REID.

ATTACHING INFLATING PUMPS TO CYCLES.

(Application filed Dec. 24, 1898.)

(No Model.)

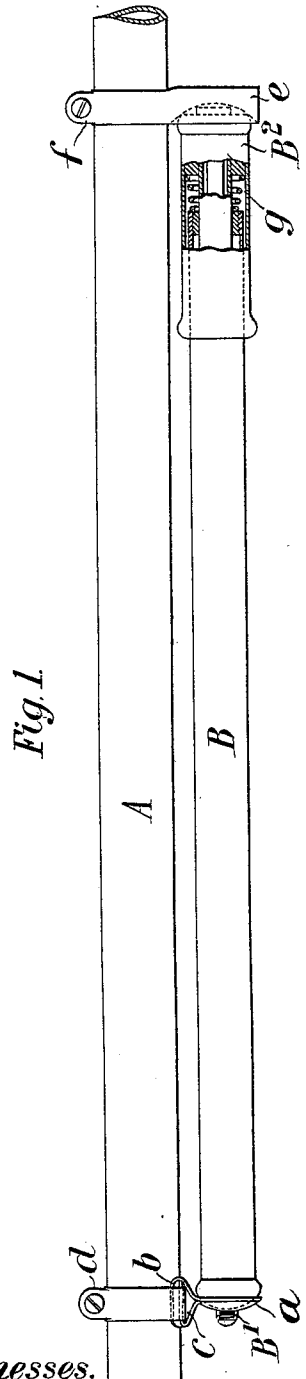


Fig. 1.

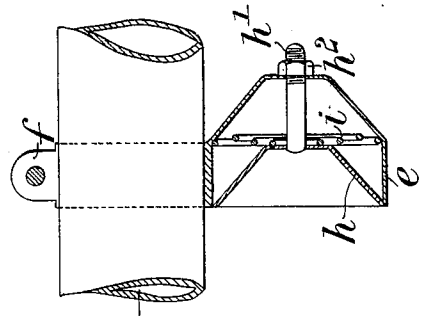


Fig. 4.

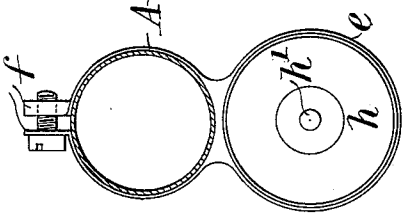


Fig. 5.

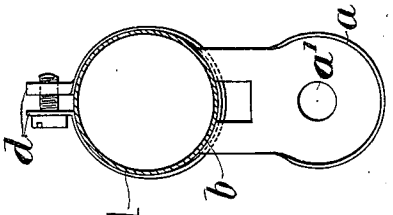


Fig. 3.

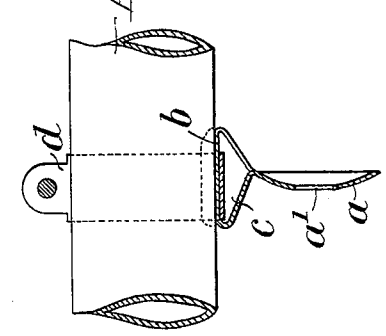


Fig. 2.

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UNITED STATES PATENT OFFICE.

ROBERT REID, OF MELBOURNE, VICTORIA.

ATTACHING INFLATING-PUMPS TO CYCLES.

SPECIFICATION forming part of Letters Patent No. 630,561, dated August 8, 1899.

Application filed December 24, 1898. Serial No. 700,215. (No model.)

To all whom it may concern:

Be it known that I, ROBERT REID, a subject of the Queen of Great Britain, residing at Melbourne, in the Colony of Victoria, have invented new and useful Improvements in Attaching Inflating-Pumps to Cycles, (for which I have applied for a patent in Great Britain, No. 16,954, dated August 5, 1898,) of which the following is a specification.

This invention relates to improvements in attaching inflating-pumps to cycles.

According to the invention I fix to one of the tubes or bars of the cycle-frame two projecting lugs or plates, between which the pump is to be held, the said lugs or plates being cup-shaped or otherwise suitably formed so as to engage with the ends of the pump. To permit of introducing the pump between these lugs, one of the said lugs is formed so that a part thereof may be moved longitudinally relatively with the other part against the pressure of a spring, or instead of making the lug with a spring adapted to yield the spring may be arranged in the pump itself, so that the latter may be compressed or shortened slightly to permit of introducing it between the said lugs.

In the accompanying drawings, Figure 1 is a sectional elevation showing a pump secured to a stay of a bicycle-frame according to my invention, the spring being arranged in the pump. Fig. 2 is a view showing one of the cup-shaped lugs in section. Fig. 3 is an end view of the said lug; and Figs. 4 and 5 are views similar to Figs. 2 and 3, respectively, illustrating the spring-lug. Fig. 1 is drawn to a smaller scale than Figs. 2 to 5.

A is the stay or bar of the cycle-frame, and B is the pump, which may be of any suitable construction.

a is the lug which is designed to receive the nozzle end of the pump, the said lug *a* being cup-shaped and preferably stamped from a piece of sheet metal (the upper part of which is slit into three sections, two of which are bent forwardly and then rearwardly, while the other section is bent rearwardly and then forwardly) in such a manner as to form a curved seat *b*, designed to be applied against the tube A, and with an eye *c*, through which passes the clamp *d*, by means of which it is secured to the said tube A. The cup-shaped lug *a* is provided with a central hole *a'*, adapted to receive the screw-nipple B' of the pump, as clearly shown in Fig. 1. *e* is the other lug, the said lug being also formed cup-shaped or conical, so as to receive the handle end B^2 of the pump, as shown in Fig. 1. The said lug *e* is provided or formed with a clamp *f*, by means of which it is secured to the stay A.

As above described, one of the lugs or the pump itself is to be provided with a spring arrangement to allow of the necessary movement for inserting the pump between the cup-shaped lugs, which are secured to the stay A in such a position that the distance between their inside centers is equal to the normal length of the pump when collapsed or closed.

In Fig. 1 of the drawings I have shown the pump provided with a spiral spring *g*, inserted in the bottom of the handle B^3 around the rod of the pump, so that the pump-cylinder B does not normally reach to the bottom of the said handle, thus allowing a slight movement against the action of the spring when inserting the pump between the lugs *a e*.

In Figs. 4 and 5 I have shown the lug *e* provided with a spring. The said lug is formed with a cone or cup *h*, the base of which fits the inside of the lug *e* and the apex of which is provided with a pin *h'*, which extends back through a hole in the apex of the lug *e*, which acts as a guide. The cup *h* is supported in its outermost position—that is to say, in the position wherein its base is in the same plane as the base of the conical lug *e*—by a spring *i*, but which can be slid into the said lug *e* against the action of the spring *i* when the pump B is being inserted. The outer end of the pin *h'* is screw-threaded and is provided with a nut h^2, so that the tension of the spring *i* can be adjusted.

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

1. An attachment for cycles comprising among its members a pump-holding lug stamped from sheet metal provided with a pump-engaging part having a hole to receive the pump-nipple, and having its upper portion split into several sections said sections being bent oppositely to form a curved seat to engage a bar of the cycle-frame and an eye

to receive a securing-clip, a securing-clip passing through said eye and adapted to engage said frame-bar and a second lug adapted to be secured to the frame-bar for engaging the opposite end of the pump, substantially as described.

2. An attachment for cycles comprising among its members a pump-holding lug stamped from sheet metal provided with a pump-engaging part having a hole to receive the pump-nipple and having its upper portion split into several sections, said sections being bent oppositely to form a curved seat to engage a bar of the cycle-frame and an eye to receive a securing-clip, a securing-clip passing through said eye and adapted to engage said frame-bar, a second lug provided with a fastening-clip to engage said frame-bar and a pump, said pump and second clip having the one a yielding part adapted to engage the other to permit the insertion of the pump, substantially as described.

3. An attachment for cycles comprising among its members a pump-holding lug stamped from sheet metal provided with a pump-engaging part having a hole to receive the pump-nipple, and having its upper portion slit into several sections, said sections being bent oppositely to form a curved seat to engage a bar of the cycle-frame and an eye to receive a securing-clip, a securing-clip passing through said eye and adapted to engage said frame-bar, a second lug provided with a cup-shaped portion and a clip for securing it to the frame-bar, a pump provided with a movable piston-rod having a handle adapted to engage said cup-shaped portion of the clip, and a spring interposed between the said handle and the body of the pump, substantially as described.

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Witnesses:
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