No. 635,683. Patented Oct. 24, 1899.

A. HERMAN.

HARNESS ATTACHMENT FOR BICYCLES.

(Application filed Apr. 4, 1898.)

(No Model.)

Fig. 1.

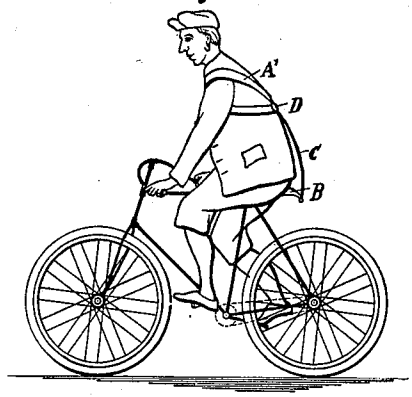


Fig. 2.

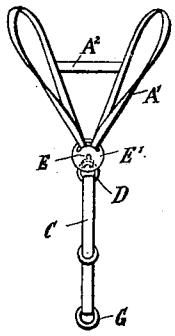


Fig. 4.

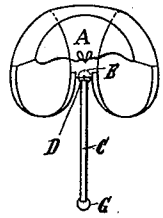


Fig. 3.

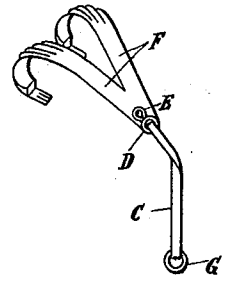


Fig. 5.

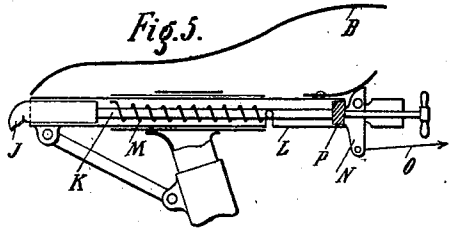


Fig. 7.

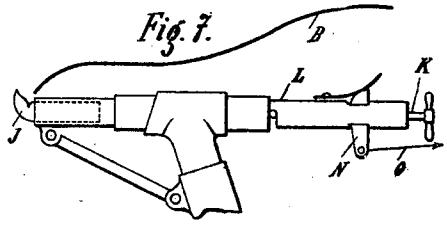
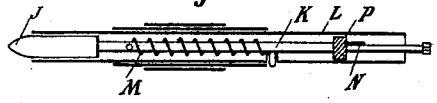


Fig. 6.



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HARNESS ATTACHMENT FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 635,683, dated October 24, 1899.

Application filed April 4, 1898. Serial No. 676,408. (No model.)

To all whom it may concern:

Be it known that I, ANTON HERMAN, a subject of the Emperor of Austria-Hungary, residing at Vinohrady, Prague, in the Kingdom of Bohemia, Austria-Hungary, have invented new and useful Improvements in Harness Attachments for Bicycles and the Like, of which the following is a specification.

My invention relates to improvements in means for riding bicycles up hills and in such cases where a certain amount of strength must be developed by the rider for overcoming the steep grades or other considerable obstacles with his bicycle if a greater amount of strength is required than the rider's own weight.

The object of the invention is to provide, in connection with a suitable form of harness adapted to pass around the shoulders or waist of the rider, an improved means for connecting said harness with the bicycle, whereby it may be readily attached and detached.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view illustrating the use of a harness arrangement according to my invention. Fig. 2 is a detail view of the form of harness shown in Fig. 1. Figs. 3 and 4 are views of other forms of harness. Fig. 5 is a sectional view of my improved means for connecting and disconnecting the harness. Fig. 6 is a sectional view at right angles to Fig. 5, and Fig. 7 is a side elevation showing the brace omitted and the hook J turned to disengage the harness.

In the form of harness shown in Fig. 5 the band r is buckled around the waist of the rider. It is connected by a short strip, band, or the like C with the saddle B in Fig. 1. This can be made, for instance, in such a way that the band C is provided with a ring and is simply hung upon a hook E on the rear end of the band r, or as the case may be.

Figs. 1 and 2 show the apparatus constructed with slings A′ for the shoulders, these slings being fastened on their rear ends to a central piece E′, which is provided with a hook E or a buckle D for the rear band C. Instead of the piece E′ a ring E^2, Fig. 6, can be arranged, in which the slings A′ can slide. Appropriate bands A^2 can be used in front or upon the shoulders to keep the left and the right sling A′ together. A waistcoat-piece A, Fig. 4, can be applied instead of the simple slings of the former figures.

Fig. 3 shows a form of harness in which hooks F, of thin corrugated plates, are hung over the shoulders instead of the slings A′, and they are easily thrown off, if needed.

Figs. 5, 6, and 7 show my improved device by means of which the ring or hook G may be easily and quickly loosened from the hook J, which holds it fast as long as the rider wishes. The hook J is placed on the rear end of the saddle B, and it can be easily turned upward or downward. Fig. 5 shows the hook J in its downward position and Fig. 7 when it is turned upward. For this purpose the hook J may be formed as the outer end of a small piston which is placed in a tube L, fastened under the saddle B. It forms one piece with a bar K, which carries a support or block P and is arranged so that it can be easily turned downward, Fig. 5, by the rider. In this latter position it is held fast by means of an appropriate spring-pressed stop N, which under the action of said spring engages a notch in the block P. As soon as the stop N is pulled by the rider himself in the direction O (indicated by the arrow) the block is released and the spiral spring M turns the hook J upward. If in the former position the hook or ring G has been kept fast by the hook J and by the action of the rider himself, Fig. 1, it is evident that as soon as the hook J is released and turned by the action of the spring M the ring G will immediately slip therefrom.

Fig. 6 is a plan and axial section through the device.

What I claim as my invention, and desire to have protected by Letters Patent, is—

In combination with a bicycle, a rod rotatably mounted in the horizontal member of a saddle-post thereof, and having a hooked end, a spring operating on said rod and tending to hold the hook normally inclined upwardly, a catch adapted to hold said rod with the hook inclined downwardly against the pressure of the spring and a harness adapted to be worn by the rider and to engage said hooked end, said catch serving to release the rod and permit it to turn to disengage the harness, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ANTON HERMAN.

Witnesses:
ADOLPH FISCHER,
L. VOJACELY.