No. 633,674. Patented Sept. 26, 1899.

E. E. WARD.

TROUSERS GUARD.

(Application filed Jan. 6, 1899.)

(No Model.)

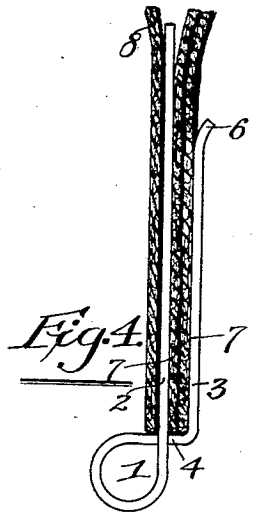


Fig. 4.

Fig. 1.

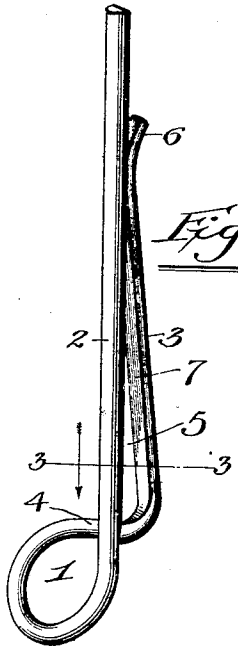


Fig. 2.

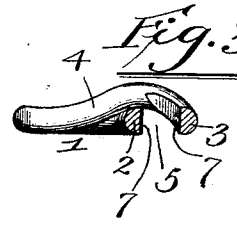


Fig. 3.

Witnesses

A. Roy Appleman Jr.

[illegible] Shepard

Elmer E. Ward, Inventor.

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ELMER E. WARD, OF COLORADO SPRINGS, COLORADO, ASSIGNOR OF ONE-HALF TO ANDREW S. BLAKE, OF SAME PLACE.

TROUSERS-GUARD.

SPECIFICATION forming part of Letters Patent No. 633,674, dated September 26, 1899.

Application filed January 6, 1899. Serial No. 701,384. (No model.)

To all whom it may concern:

Be it known that I, ELMER E. WARD, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and useful Trousers-Guard, of which the following is a specification.

This invention relates to trousers-guards for clamping the bottoms of trousers-legs about the ankles of the riders of bicycles.

The object of the present invention is to provide a guard which does not bind the ankles and thus interfere with the free circulation of the blood, and which may be adjusted to hold the trousers tightly or loosely, as desired.

To these ends the present invention consists in the construction and manner of application of the device, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the drawings, Figure 1 is a side view showing the device applied. Fig. 2 is a perspective view of the clamp. Fig. 3 is a sectional view taken transversely through the jaws. Fig. 4 is a detail sectional view through the trousers, illustrating the application of the guard.

Corresponding parts are designated by like characters of reference in all the figures of the drawings.

Referring particularly to Fig. 2 of the accompanying drawings, the clamp is formed from a single length of spring-wire bent intermediate its ends, forming an eye, 1 and the spring-jaws 2 and 3, respectively. In forming the eye 1 the jaw 3 is bent transversely across the jaw 2, as at 4, extending a suitable distance beyond the latter jaw, and then bent alongside of the jaw 2, whereby a slot 5 is formed between the jaws, gradually narrowing from the closed end to the open end thereof. The bend forming the eye 1 provides a handle for applying the clamp and is disposed upon one side of the jaw 2, opposite the jaw 3. It will be understood that both jaws and the eye or handle are all approximately in the same plane. The jaw 2 is preferably longer than the jaw 3, as shown, and the latter jaw has its free extremity 6 bent or deflected away from the jaw 2.

By reference to Fig. 3 it will be noted that the adjacent or clamping faces 7 of the jaws are each flattened to provide comparatively broad clamping-surfaces.

The operation of the clamp will be understood by reference to Fig. 1, which illustrates the same applied to the left leg of the trousers. A fold 8 is made in the bottom of the trousers-leg by the left hand, and the clamp is held by its handle 1 in the right hand, the long jaw 2 being first inserted in the fold of the trousers-leg and forced upward, the bottoms of the trousers-legs entering the slot between the jaws, as shown. The proper applied position of the clamp is shown in Fig. 4, the long jaw being inside the fold 8 and the short jaw being on the inside of the trousers-leg, whereby the folded portion is firmly clamped thereto and the trousers-leg is confined about the ankle. The fold 8 may be made either from the front or back and may be held tightly or loosely about the ankle, as desired. It is preferable to have the clamping-surface of the jaws flattened, as heretofore described, to engage the material of the trousers more firmly than if rounded.

The eye provides the spring to the jaws and the transverse portion of the short jaw engages the lower edge of the trousers, thereby forming a stop to prevent the clamp from being forced entirely within the fold of the trousers. The jaw 2 is the longer, for the purpose of being entered into the fold of the trousers-leg before the other jaw engages therewith and should engage against the free end 9 of the fold to hold the same firmly in position. The extremity of the short jaw is deflected to facilitate the passage of the bottom of the trousers-leg into the slot between the two jaws.

It will be noted that the eye 1 is offset entirely to one side of the long jaw opposite the short jaw and in the vertical plane of the jaws, whereby the short-jaw side of the guard is free from obstructions to facilitate the positioning of the device.

The present form of guard embodies advantages over the common band-clamp in that it does not embrace the ankle and rub thereon and may be adjusted to hold the trousers-legs tightly or loosely, as desired.

Changes in the proportion and minor details of construction and arrangement may be made without departing from the spirit and scope or sacrificing any of the advantages of the present invention.

Having thus described the invention, what is claimed is—

A trousers-guard formed from a single length of spring-wire bent intermediate its ends into an eye and a long and a short spring-jaw, the short jaw being bent transversely across the long jaw to form the eye, the eye being located entirely to one side of the long jaw opposite the short jaw and in the vertical plane of the jaws, whereby the short-jaw side of the guard is free from obstructions, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ELMER E. WARD.

Witnesses:
C. E. TAYLOR,
A. P. KUNCKEY.