(No Model.)

W. F. HOLLISTER.

SPRING STIRRUP.

No. 592,588. Patented Oct. 26, 1897.

Fig. 1

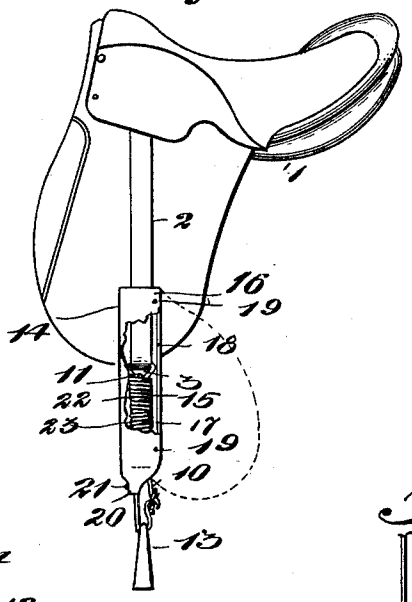


Fig. 2

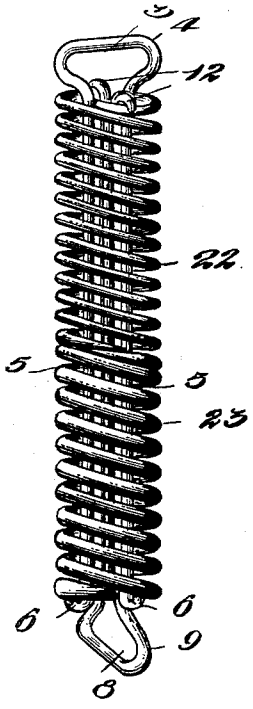
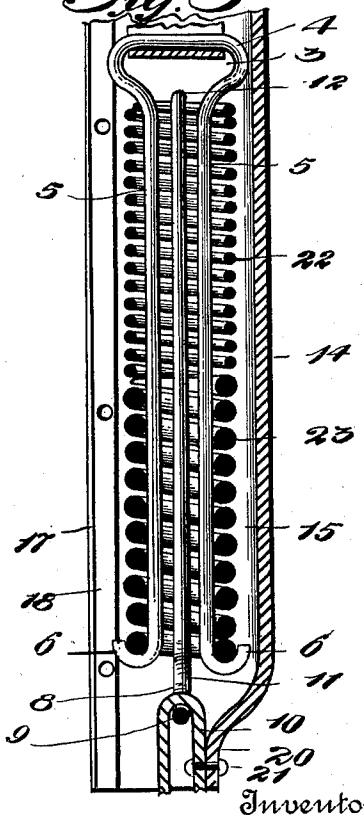


Fig. 3



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

UNITED STATES PATENT OFFICE.

WILLOAHBY F. HOLLISTER, OF COWEN, WEST VIRGINIA.

SPRING-STIRRUP.

SPECIFICATION forming part of Letters Patent No. 592,588, dated October 26, 1897.

Application filed December 5, 1896. Serial No. 614,593. (No model.)

To all whom it may concern:

Be it known that I, WILLOAHBY F. HOLLISTER, a citizen of the United States, residing at Cowen, in the county of Webster and State of West Virginia, have invented certain new and useful Improvements in Spring-Stirrups; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in spring-stirrups for the saddles used on horseback; and the object is to provide a device of this class to contribute to the ease and comfort of the rider, both in mounting and while traveling on the road.

To these ends the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-numerals indicate the same parts of the invention.

Figure 1 is a side elevation of a saddle with my improved stirrup-spring secured thereto. Fig. 2 is a perspective view of the spring detached from the saddle; and Fig. 3 is a longitudinal section of Fig. 1, taken on the plane of the paper.

1 represents the saddle, and 2 the adjusting-strap, its lower end passing through the eye 3 of the yoke 4, the parallel arms 5 5 of which extend downwardly inside of the spring proper, and their lower ends are outwardly and upwardly curved to form hooks 6 6, which engage the lower coil of said spring. The eye 8 of a similar though inverted yoke 9 receives the stirrup-strap 10, its parallel arms 11 11 extending upwardly inside of the spring, and the upper ends of said arms are bent outwardly and downwardly to form hooks 12 12, which engage the upper coil of said spring, as shown. The strap 10 has the usual buckle for adjustably securing the stirrup 13.

14 represents the fender-leather, and it is formed with an integral sleeve 15, which encompasses said spring, the sleeve being made by folding the edge 16 over on the wing or fender-flap 17, inserting a sheet-steel stiffening-strip 18 between, and clenching the rivets 19 19 through both thicknesses of the leather and through the metal strip between them. This construction prevents the sleeve from buckling and thus protects the spring and allows it to expand and contract freely when in action. The lower end of said sleeve is provided with an integral ear 20, which is secured to the strap 10 by a rivet 21, which serves to prevent the vertical displacement of the sleeve and fender.

The spring proper is of peculiar construction and comprises two or more independent spiral springs 22 23, the spring 22 being formed of stouter wire than the spring 23 and requiring a greater power to compress it than that required for the spring 23, so that a person of comparatively light weight will readily affect the spring 23, while he will have little or no effect on the spring 22, while the heavier person will fully compress the spring 23 and have his weight taken up expansively by the spring 22.

The meeting coils of the contiguous ends of both springs are finished off in a true plane to form true bearings for each other.

In employing the springs, as I do, by utilizing their compressed energy in sustaining the weight of the rider, in contradistinction to that class of devices in which the expansive force of the spring is employed, a very important advantage is gained in that it often happens that the spring in the latter instance is expanded or stretched beyond its limit, and consequently rendered worthless, while in my case an unusually heavy weight will only close the coils until they rest against each other, and of course beyond this it is impossible to compress the spring, and which does not in the least affect its retractile energy.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

The strap 2, the yoke 4, suspended therefrom, and having its parallel arms 5 5 terminating in hooks 6 6, the stirrup-strap 10 and the yoke 9 secured thereto and having its parallel arms 11 11 terminating in hooks 12 12, in combination with the alined springs 22 23 of different tension, having their inner contiguous ends abutting against each other, and their outer ends engaging the hooks 6 6, and 12 12, respectively, and the fender-leather 14, formed with an integral sleeve 15 encompassing said springs, and provided with an integral ear 20 fixed to the stirrup-strap 10, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WILLOAHBY F. HOLLISTER.

Witnesses:
E. R. ROGERS,
E. V. COPELAND.