No. 715,647. Patented Dec. 9, 1902.

E. E. DUNNEGAN.

RIDING STIRRUP.

(Application filed Jan. 23, 1902.)

(No Model.)

Fig. 1

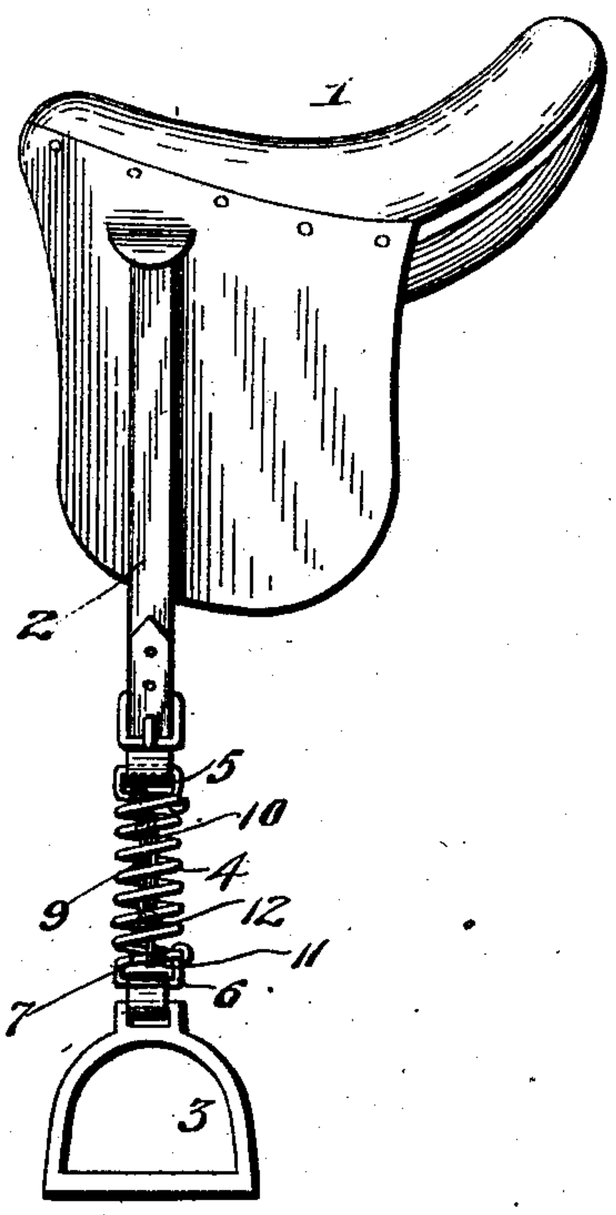


Fig. 2

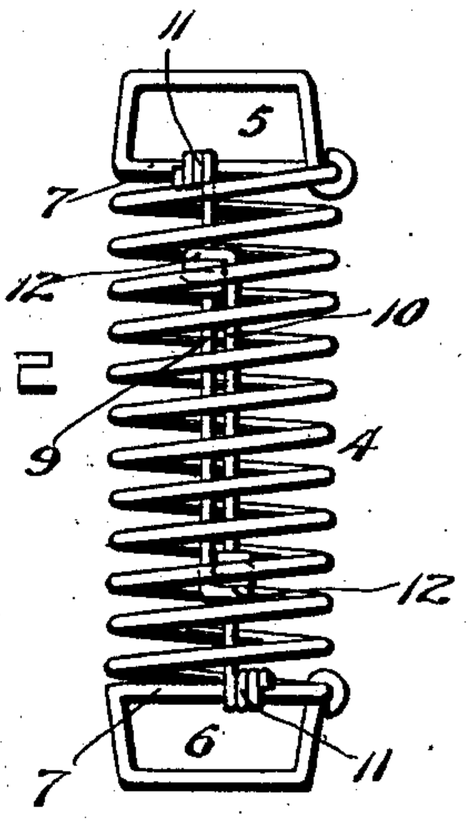
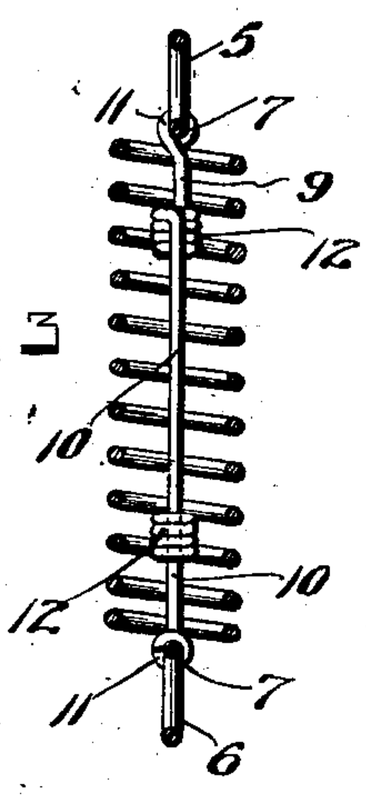


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD E. DUNNEGAN, OF GREENVILLE, MISSOURI.

RIDING-STIRRUP.

SPECIFICATION forming part of Letters Patent No. 715,647, dated December 9, 1902.

Application filed January 23, 1902. Serial No. 90,952. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. DUNNEGAN, a citizen of the United States, residing at Greenville, in the county of Wayne and State of Missouri, have invented certain new and useful Improvements in Riding-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.

The invention relates to riding-stirrups, and more particularly to that class of inventions known to the trade as "spring-stirrups."

The object of the invention is to provide a spring for connecting the stirrup proper to the stirrup-strap, which spring shall be simple of construction, durable in use, comparatively inexpensive of production, and which will have a tension sufficient to support under ordinary conditions the weight of the rider when the weight is equally distributed to both stirrups, special provision being made, however, to limit the stretch of the spring when the entire weight of the person is supported by but one stirrup—for instance, in the act of mounting or dismounting—whereby the life of the spring is materially increased.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side view of the saddle, illustrating the application of my invention. Fig. 2 is an enlarged side elevation of the spring, and Fig. 3 is a vertical cross-sectional view.

Referring to the drawings, 1 denotes the saddle, 2 the stirrup-strap, and 3 the stirrup. These parts may be of any well-known or approved construction.

4 denotes the stirrup-spring, the coils of which are elliptical, so as to render it less bulky. This spring is formed at its ends with loops 5 and 6, formed by hooking each extremity of the spring to its endmost coil, the cross-bar 7 of the loop lying within the coils of the spring and connected together by slip-rods 9 and 10. Each rod is formed with an eye or twist 11 at its outer end to engage the cross-bar of the loop, and each rod is provided at its inner end with an eye 12 to engage the other rod. These eyes 12 are offset from said rods, as more clearly shown in Fig. 2, and when the spring is stretched to a predetermined distance the eyes come in contact with each other and sustain the weight of the person mounting or dismounting, and thereby prevent undue stretching of the spring. The upper loop of the spring is buckled or otherwise secured to the end of the stirrup-strap, and the lower end of the spring is buckled or otherwise secured to the stirrup.

In use it is apparent that under ordinary circumstances when the weight of the rider is equally distributed between both springs the springs will not be stretched sufficient to enable the eyes of the inner ends of the slip-rods to abut, thus imparting a pleasant easy spring movement to the rider, as well as relieving the animal of shocks and jolts. In mounting and dismounting the entire weight of the person is oftentimes placed in one stirrup, and as the spring should not be too stiff to prevent a yielding movement when the weight is equally distributed between them, the entire weight of the person placed upon one spring would under ordinary circumstances unduly stretch the spring or break it. In order to overcome this, I provide the slip-rods 9 and 10, which will limit the stretch of the spring, and thereby prevent damage to the same.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my invention will be readily understood without requiring an extended explanation.

Various changes in the form, proportion, and details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

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

1. A coil-spring for the purpose described, each end of said spring being formed with a loop, having cross-bars which lie within the coils, and means for connecting the cross-bars

and for positively limiting the stretch of the spring, substantially as set forth.

2. A coil-spring for the purpose described, each end of said spring being formed with a loop having cross-bars, which lie within the coils, and means for connecting the cross-bars and for positively limiting the stretch of the springs, said means comprising two rods, the inner ends of which have a slip-joint connection, substantially as set forth.

3. A coil-spring for the purpose described, each end of said spring being formed with a loop, having cross-bars which lie within the coils, and means for connecting the cross-bars for positively limiting the stretch of the springs, said means comprising two rods, the outer ends of which are connected to one of the cross-bars at each end of the spring, and the inner ends of which are provided with eyes offset from the rods, the eyes of each rod engaging with the other rod, whereby a slip-joint connection of the two rods is effected.

4. A coil-spring for the purpose described, each end of said spring being formed with a loop having a cross-bar, which lie within the coils, the end of each loop being joined to one of the coils of the spring, two rods having a slip-jointed connection, and provided with means for limiting the distention of the rods with respect to each other, said rods having their outer ends connected to the cross-bars of the loop, substantially as and for the purpose specified.

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

E. E. DUNNEGAN.

Witnesses:
WM. M. COLEMAN,
FRANK BAIRD.