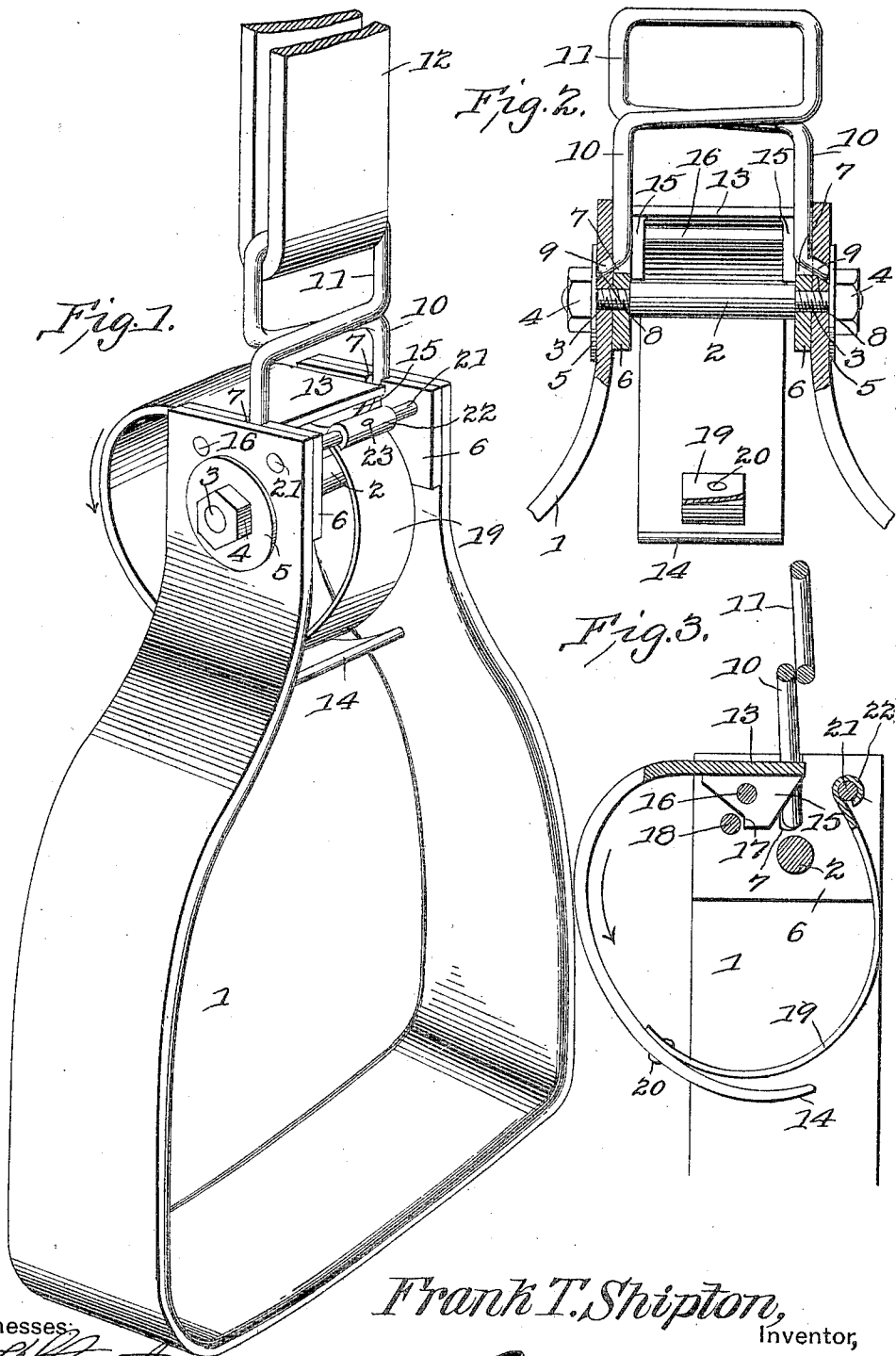


No. 811,100.

PATENTED JAN. 30, 1906.

F. T. SHIPTON.
SAFETY STIRRUP.

APPLICATION FILED AUG. 5, 1905.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANK T. SHIPTON, OF KINNIKINNICK, OHIO.

SAFETY-STIRRUP.

No. 811,100.

Specification of Letters Patent.

Patented Jan. 30, 1906.

Application filed August 5, 1905. Serial No. 272,828.

To all whom it may concern:

Be it known that I, FRANK T. SHIPTON, a citizen of the United States, residing at Kinnikinnick, in the county of Ross and State of Ohio, have invented a new and useful Safety Stirrup, of which the following is a specification.

This invention relates to safety-stirrups.

The object of the invention is to provide a safety-stirrup having a novel arrangement of mechanism for releasing the stirrup from its supporting-loop whereby any dragging over the ground of the rider should he be thrown from a horse will positively be prevented.

A further object is to simplify the construction of such articles and to render them more durable and efficient in use.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a safety-stirrup, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective of a stirrup constructed in accordance with the present invention. Fig. 2 is a view in vertical transverse section through the upper part of the stirrup, showing more particularly the manner in which the supporting-loop is combined for detachment therewith. Fig. 3 is a view in vertical longitudinal section through the locking and releasing mechanism of the stirrup.

Referring to the drawings, 1 designates the stirrup or stirrup-iron, which may be of the usual or any preferred shape, and therefore needs no further description. The upper ends of the arms of the stirrup are held suitably spaced apart by a bolt 2, which has reduced threaded terminals 3, that project through orifices in the arms and are held against disconnection therefrom by nuts 4, between which and the outer sides of the arms are interposed washers 5. Secured to the inner sides of the arms above the bolt 2 are plates 6, which are provided with longitudinal slots 7, that extend entirely through them and to the upper ends or edges thereof, and formed in the arms are downwardly and outwardly disposed seats or orifices 8, that extend entirely through them and are closed at their outer terminals by washers 5. The

lower walls of the seats 8 are in alinement with the like walls of the slots 7 and are engaged by flattened or reduced locking-toes 9, which are oppositely inclined and correspond to the pitch of the seats 8, the slots 7 being engaged by the arms which are thus held against any rocking movement. These locking-toes are carried by spring-arms 10, that form continuations of a loop 11, with which is combined a stirrup-strap 12, as usual. The arms 10 are normally flexed outward, so that in order to bring the toes into engagement with the seats 8 it will be necessary to flex or force the arms inward for this purpose. As will be apparent, the coaction between the locking-toes and the seat will not be of a stable character, owing to the inclinations of the parts, so that without some means for preventing disconnection a slight downward pressure upon the stirrup would cause the toes to leave the seats, and thus release the stirrup. To obviate this, there is provided a detent which embodies a locking-plate 13 and a tripping-arm 14, the plate when in normal position operating to bridge the slots 7, and thereby positively preclude inward movement of the arms toward each other, whereby the stirrup and the arms will remain in operative connection.

The detent is provided with a pair of ears 15, which are orificed to receive a pivot-bar 16, the ends of which are riveted or upset, thus to hold it positively combined with the stirrup. Each ear is formed with a shoulder or stop 17, which is adapted to engage with a stop-bar 18, and thus limit the rocking movement of the detent in one direction. The tripping-arm 14 curves downward and inward and projects between the arms of the stirrup and in such position as to be engaged by the toe of the shoe of a rider should he be thrown from the saddle. Combined with the tripping-arm is a detent-setting spring 19, which is curved to the appropriate shape and has one end secured to the tripping-arm by a rivet 20 and its other end secured to a supporting-bar 21, which is provided with a lug 22 to engage an orifice in the spring to hold it from any movement relatively thereto. The spring exerts a thrust in the direction to cause the detent normally to occupy the position shown in Figs. 1 and 3—that is, bridging the slots 7 and holding the spring-arms against possibility of inward movement.

In the use of the device should a rider be

thrown from the saddle the upward pressure of his toe upon the tripping-arm would cause the latter to be rocked in the direction indicated by the arrow in Fig. 3, whereupon the
5 detent will be moved out of the path of the slots 7 and the downward pressure exerted by the weight of the rider will cause the upper walls of the seats 8 to force the toes out of engagement therewith, whereby the loop
10 will be free from the stirrup and the latter will fall to the ground.

To assemble the loop with the stirrup, it will only be necessary to rock the tripping-arm in the direction of the arrow shown in
15 Fig. 1, compress the spring-arms, insert the toes within the seat, and then release the tripping-arm.

It will be seen from the foregoing description that although the improvements herein
20 defined are simple in character they will be thoroughly efficient in use for the purposes designed and will in a ready and practical manner secure the objects sought.

Having thus described the invention, what
25 is claimed is—

1. A stirrup having the upper portion of its arms provided with oppositely-inclined seats and with slots alining with the seats, in combination with a loop having arms to engage
30 the slots and inclined locking-toes to engage the seats, a pivoted detent to hold the arms

within the slots, and means coacting with the detent to hold the parts in operative position.

2. A stirrup having its arms provided with oppositely-inclined seats and plates secured
35 thereto and provided with slots alining with the seats, in combination with a loop having arms engaging the slots and provided with inclined locking-toes engaging the seats, a pivoted detent to hold the arms within the
40 slots, and a spring combined with the detent for holding the parts in operative position.

3. The combination with a stirrup having its arms provided with oppositely-inclined
45 seats, of plates secured to the inner sides of the arms and having slots alining with the seats, a loop having resilient arms to engage the slots, and oppositely-inclined locking-toes to engage these seats, a pivoted detent hav-
50 ing a part normally to engage with the arms, and having a curved tripping-arm disposed between the members of the stirrup, and a curved spring having one end combined with the stirrup and the other end secured to the
55 tripping-arm.

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

FRANK T. SHIPTON.

Witnesses:

SILAS F. GARRETT,
GEORGE GARRETT.