F. M. CARTER.

STIRRUP.

APPLICATION FILED NOV. 14, 1908.

933,958. Patented Sept. 14, 1909.

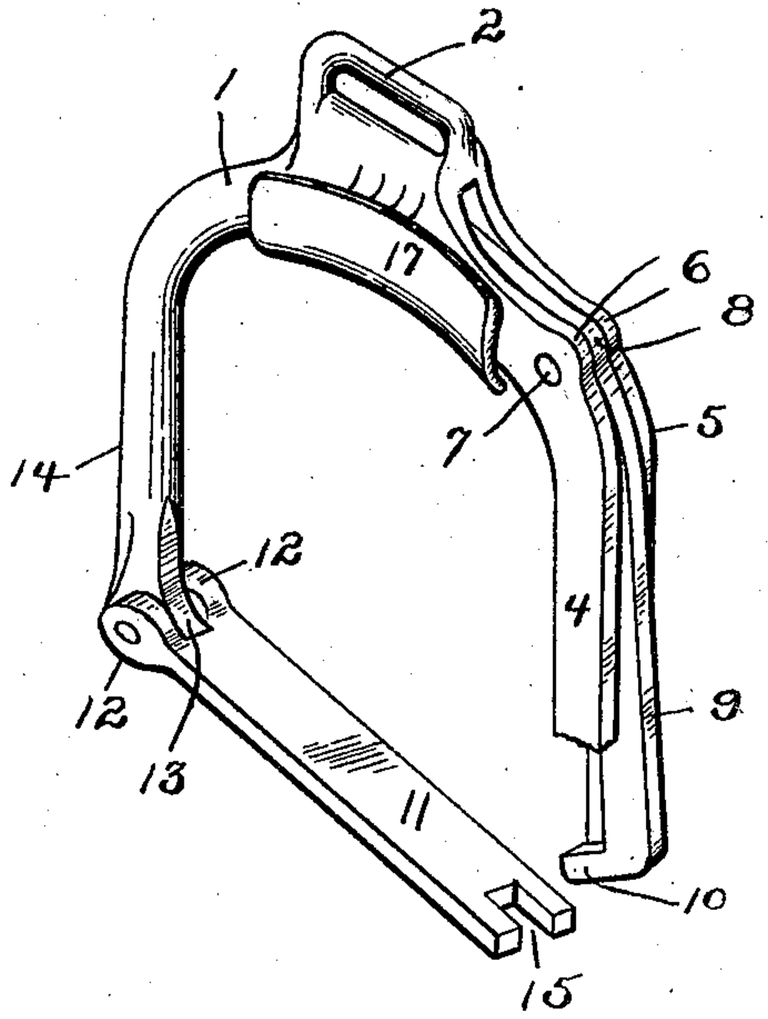

Fig. 1.

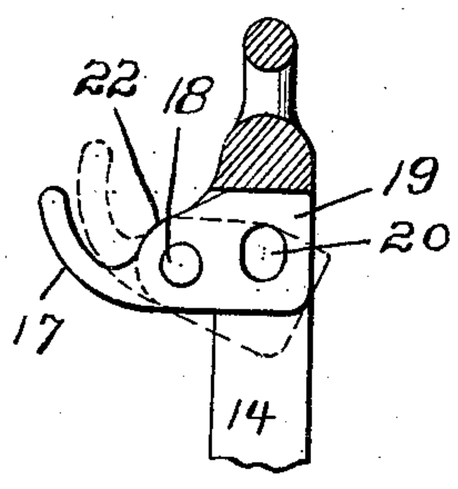

Fig. 2.

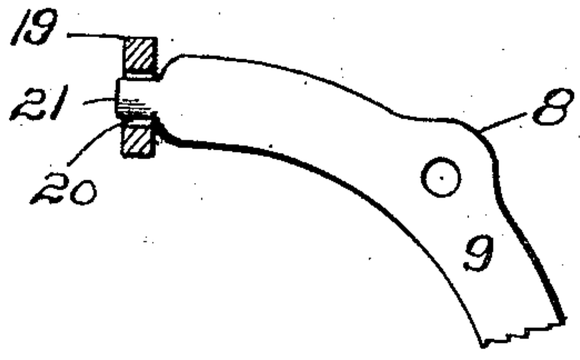

Fig. 3.

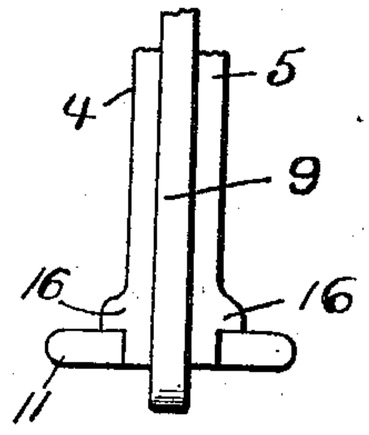

Fig. 4.

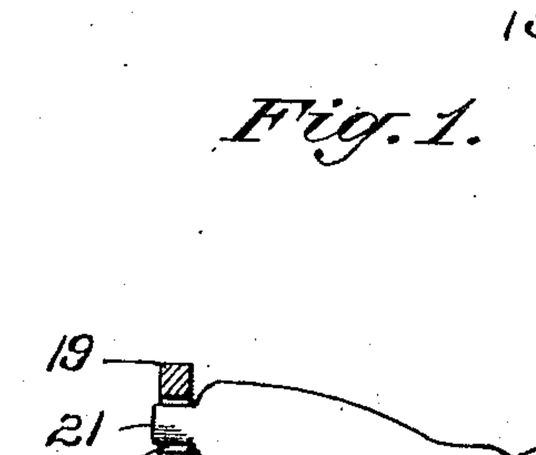

Fig. 5.

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STIRRUP.

933,958. Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed November 14, 1908. Serial No. 462,701.

To all whom it may concern:

Be it known that I, FRANK M. CARTER, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Stirrups, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to stirrups, and has specially in view a novel type of stirrup opening device which will open the stirrup to release the foot of the rider in the event of the animal falling, or the rider being thrown from the saddle.

In carrying out the object of the invention generally stated above it will be obvious that the essential features thereof are susceptible of structural changes and modifications as to details, but a preferred and practical embodiment of the same is shown in the accompanying drawings, wherein—

Figure 1 is a perspective view of the improved safety stirrup, the same being shown partly open. Fig. 2 is a detail vertical sectional view thereof, showing the tripping lever. Fig. 3 is a detail sectional view showing the connection between the tripping lever and the releasing lever. Fig. 4 is an end view of the releasing lever and the bottom of the stirrup. Fig. 5 is a detail view in front elevation of the construction shown in Fig. 4.

Like characters of reference designate corresponding parts in the several figures of the drawing.

In the practical embodiment of the invention shown in the accompanying drawings, 1 designates the main body or arched portion of the stirrup which carries the usual loop 2 of the stirrup strap (not shown). One of the leg members of the arched body of the stirrup is bifurcated as indicated at 4 and 5 and at their upper portion they are provided with exterior and outstanding pivot ears 6 for the reception of a pivot pin 7 which passes through a similar pivot ear 8 of an arch-shaped lever 9 the lower end of which has an inturned angular extension 10 forming a support for the stirrup bottom 11. The stirrup bottom at one end is provided with pivot ears 12 which have a pivotal engagement with an ear 13 of the leg member 14 of the stirrup, the other, or free end of said bottom being provided with a slot 15 which receives the lower portion of the arch shaped lever 9 and permits the angular extension thereof to pass below the bottom of said supporting plate and normally retain said plate in a horizontal position relatively to said stirrup. The slot in said bottom plate is sufficiently wide to permit of the ends of the bifurcated members 4 and 5 to pass therein beside the lever 9, with their outstanding abutment shoulders 16 resting on the upper surface of said plate, so as to prevent said plate having an upward movement.

A trip lever 17 in the form of a curved plate having the same external contour as the arch of the stirrup, has a pivotal mounting 18 in said arch, its inner end being in the form of a vertically arranged flat plate 19 having a substantially elliptical slot or opening 20 formed therethrough for the reception of a lug 21 carried by the upper end of the releasing lever 9. Said plate 19 is limited in its upward movement by the arch 1 of the stirrup, as shown in Fig. 2, but is permitted to have a downward movement relative to said arch through the medium of a downwardly inclined or beveled portion 22.

Assuming the stirrup to be in a closed condition, that is to say, with the bottom plate in engagement with the angular inturned extension of the releasing lever 9, it will be seen that a contact between the toe of the rider, or any other part of the foot, with the trip lever 17 will rock the same on its pivot to depress the plate 19, and similarly depress the lug 21 and cause the lever 9 to rock on its pivotal connection with the bifurcated portion of the stirrup leg and throw its inturned bottom extension from its supporting position beneath the bottom plate. This movement of the lever 9, releases the bottom plate from its closing position, and the same drops on its pivot to an open position, thereby permitting the foot of the rider to be readily withdrawn from the stirrup.

Claims:—

1. A safety stirrup comprising an arched body portion provided with legs, one of said legs being bifurcated and provided with pivot ears, a bottom plate in pivotal engagement with the other leg, a releasing lever pivoted within said bifurcated leg and having an angular end extension forming a support for said bottom plate, and a trip lever carried by the arched body and having a slot for connection with said releasing lever, whereby when said trip lever is rocked in one

direction it will cause said releasing lever to swing to a position where it will be disengaged from the said bottom plate.

2. A safety stirrup comprising an arched body portion provided with legs, a releasing lever pivoted to one of said legs, a bottom supporting plate pivoted to the other leg and held in a supporting position by said lever, and a trip lever pivoted to the arch body and having a slot for interlocking engagement with said releasing lever, whereby a movement of the trip lever in one direction causes said releasing lever to be disengaged from the bottom supporting plate.

3. A safety stirrup comprising an arched body portion provided with legs one of which is bifurcated, a releasing lever having a pivotal engagement within said bifurcated leg and provided at one end with an angular supporting extension and at its other end with an outstanding lug, a plate carried by the other leg and having a slotted end for the reception of the supporting end of said releasing lever, and a trip lever pivotally mounted in the arch of the stirrup and having a plate extension provided with an opening for the reception of the lug of said releasing lever, whereby a movement of said trip lever in one direction will withdraw said releasing lever from engagement with the plate carried by one of the legs of the stirrup.

4. A safety stirrup comprising an arched body portion provided with legs, a releasing lever pivoted to one of said legs, a supporting plate pivoted to the other leg and normally held in its supporting position by said releasing lever, and a trip lever pivoted to the arch body and provided with a slotted plate extension having an interlocking engagement with said releasing lever.

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

FRANK M. CARTER.

Witnesses:
MARTIN CARTER,
EDWARD M. PETERSON.