

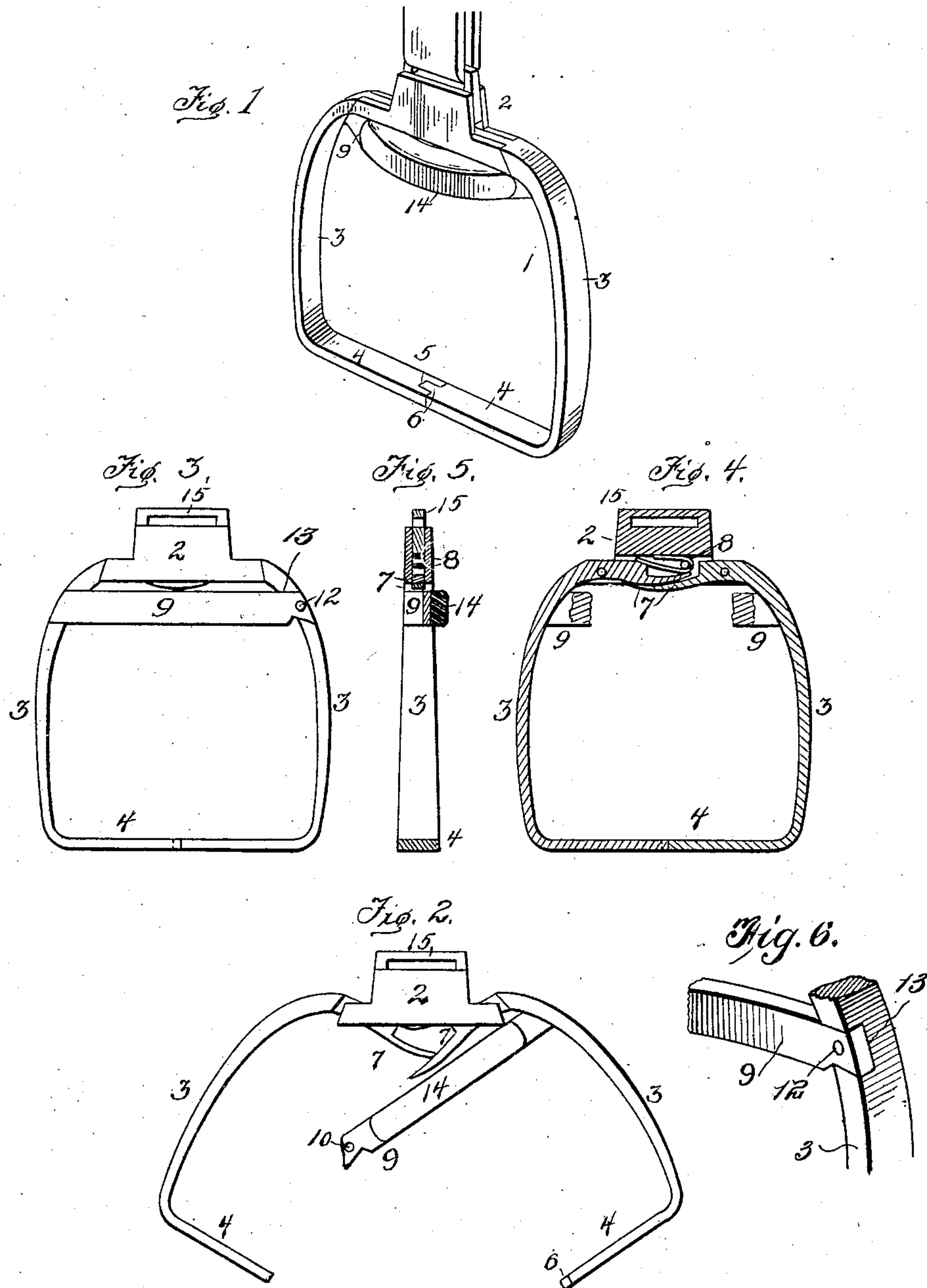
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SAFETY STIRRUP.

APPLICATION FILED JUNE 20, 1907.



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# UNITED STATES PATENT OFFICE.

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## SAFETY-STIRRUP.

No. 880,288.

Specification of Letters Patent.

Patented Feb. 25, 1908.

Application filed June 20, 1907. Serial No. 379,941.

*To all whom it may concern:*

Be it known that we, WILLIAM H. FLECKSING, MICHAEL KERCHER, and GUSTAV W. HENKE, citizens of the United States, residing at Bozeman, in the county of Gallatin and State of Montana, have invented certain new and useful Improvements in Safety-Stirrups; and we 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.

This invention relates to improvements in safety stirrups.

The object of the invention is to provide a stirrup having means by which the foot of the rider may be readily released when caught therein in being thrown from his horse, or from any other cause.

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

In the accompanying drawings, Figure 1 is a perspective view of a safety stirrup constructed in accordance with the invention, showing the same closed; Fig. 2 is a side view of the stirrup, showing the same open; Fig. 3 is a side view of the opposite side of the stirrup to that shown in Fig. 1; Fig. 4 is a central vertical sectional view of the stirrup; and Fig. 5 is a similar view taken at right angles to Fig. 4. Fig. 6 is a detail perspective view of a portion of one of the side bars of the stirrup, showing the manner in which the end of locking bar is secured to the side bar.

Referring more particularly to the drawings, 1 denotes the stirrup, which consists of a head or top portion, 2, into which is pivoted the upper inwardly curved ends of the side bars, 3, said side bars being bent inwardly at their lower ends to form the sections of the base bar, or foot rest, 4. The inner end of one of the sections forming the foot rest is provided with a notch or recess, 5, with which is adapted to be engaged an interlocking tongue or lug 6, formed on the inner end of the other section of the foot rest, thereby securely holding said sections against lateral movement.

The inwardly turned upper ends of the side bars 3, beyond their pivotal connections with the head 2, are provided with overlapping slightly curved expanding fingers, 7, the upper or inner one of which engages at its inner end with the upper side of the lower

or outer finger, as shown. Arranged in the head 2 and adapted to bear upon the inner or upper finger 7 is an expanding spring, 8, the tension of which is exerted to force the inner finger 7 downwardly and outwardly, and as the inner end of said finger engages and bears upon the upper side of the lower or outer finger, said finger will also be forced downwardly and outwardly by the tension of the spring. The downward and outward movement of the fingers 7 will disengage the interlocking inner ends of the sections of the foot rest 4, and will throw said sections and the side bars outwardly or away from each other, thus expanding or opening the stirrup.

In order that the side bars 3 and sections of the foot rest 4 may be normally held in an operative position, a locking bar 9 is provided, said bar being secured to or formed integral at one end with one of the side bars 3 adjacent to the upper pivoted end thereof, while the opposite end of the locking bar 9 is provided with a hole, 10, which is adapted to be engaged with a locking pin 12 arranged in a recess, 13, formed in the opposite side bar of the stirrup, and with which the free end of the bar 9 is engaged. The bar 9 is preferably curved in a horizontal plane and is disposed at right angles to the side bars 3, and on the outer side of said locking bar is arranged a releasing pad, 14, which is preferably formed of rubber, but which, if desired, may be formed of wood or any suitable material. The pad 14 is preferably wider at its central portion and projects beyond the outer side of the stirrup to a sufficient degree to permit the same to be engaged by the toe of the rider's boot, so that when sufficient pressure is thereby exerted upon the pad, the free end of the bar 9 will be disengaged from the pin 12 and recess 13, thus permitting the spring 8 in the head 2 to force the fingers 7 downwardly, thereby separating or disengaging the inner ends of the sections of the foot bar and throwing or forcing the side bars apart at their lower ends, thus allowing the foot of the rider to be disengaged from the stirrup.

In the head 2 is arranged a strap eye, 15, by means of which the stirrup supporting straps are connected to the stirrup. It will be understood that the locking bar 9 is sufficiently resilient or yielding, to permit the free end of the same to be disengaged from the locking pin and recess in the side bar of the



stirrup by the toe of the rider when engaged therewith.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention may be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

Having thus described our invention, what we claim as new and desire to secure by Letters-Patent, is:

1. A stirrup, comprising a head, side bars pivotally mounted at their upper ends in said head, a foot rest formed by the lower inwardly turned engaging ends of the side bars, means whereby said side bars and sections of the foot bar are forced apart or expanded, means to normally retain the same in an operative position, and means adapted to be engaged by the upturned toe of the rider to release said side bar retaining mechanism, substantially as described.

2. A stirrup, comprising a head, side bars pivotally mounted at their upper ends in said head, a foot rest formed by the lower inwardly turned engaging ends of the side bars, inwardly projecting overlapping fingers formed on the upper ends of said side bars, an expanding spring adapted to engage said fingers to force the side bars and sections of the foot rest apart, and means to lock said side bars and foot rest sections in an operative position, substantially as described.

3. A stirrup, comprising a head, side bars pivotally mounted at their upper ends in said head, a foot rest formed by the lower inwardly turned engaging ends of the side bars, inwardly projecting overlapping expanding fingers formed on the upper ends of said side bars, an expanding spring arranged in said head to bear on one of said fingers, whereby the same is forced downwardly and outwardly to open or expand the lower portion of the stirrup, a locking bar secured to one of said side bars and adapted to be detachably engaged with the opposite side bar to hold the same in an operative position, and means on said locking bar whereby the other end of the same may be disengaged from said side bar, thereby permitting the expanding spring to open said stirrup, substantially as described.

4. A stirrup of the character described, comprising a head, means arranged thereon to connect the supporting straps therewith, side bars having inwardly turned upper ends pivoted in said head, a foot rest formed by the lower inwardly turned interlocking ends of said side bar, overlapping inwardly-projecting expanding fingers formed on the upper ends of said side bars, an expanding spring adapted to bear on said fingers to force the same outwardly and downwardly, thereby expanding or separating the lower ends of said side bars, a curved resilient locking bar secured at one end to one of said side bars, a locking pin arranged in a recess in the opposite side bar, and adapted to be engaged by the free apertured end of said locking bar, and a releasing pad on the outer side of said locking bar, substantially as described.

5. A safety stirrup, comprising a hollow head, side bars having inwardly turned upper ends pivoted in said head, a foot rest formed by the inwardly turned lower ends of said side bars, one of said ends having formed therein a notch or recess, a locking lug on the end of the opposite side bar and adapted to be engaged with said notch or recess to hold said ends against lateral movement, inwardly projecting curved overlapping expanding fingers formed on the upper ends of said side bars, an expanding spring arranged in said head and adapted to bear on said fingers to force the same downwardly and outwardly, and thus expand the lower end of the stirrup, a resilient locking bar secured at one end to one of said side bars and having a reduced apertured opposite end adapted to be engaged with a recess in the opposite side bar, a locking stud in said recess to enter the aperture in the end of said locking bar, and an outwardly curved elastic releasing pad secured to the outer side of said locking bar, whereby the latter is disengaged from the locking pin and recess of said side bar by the toe of the rider when thrown from the horse and caught in the stirrup, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

WILLIAM H. FLECKSING.  
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Witnesses:

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