

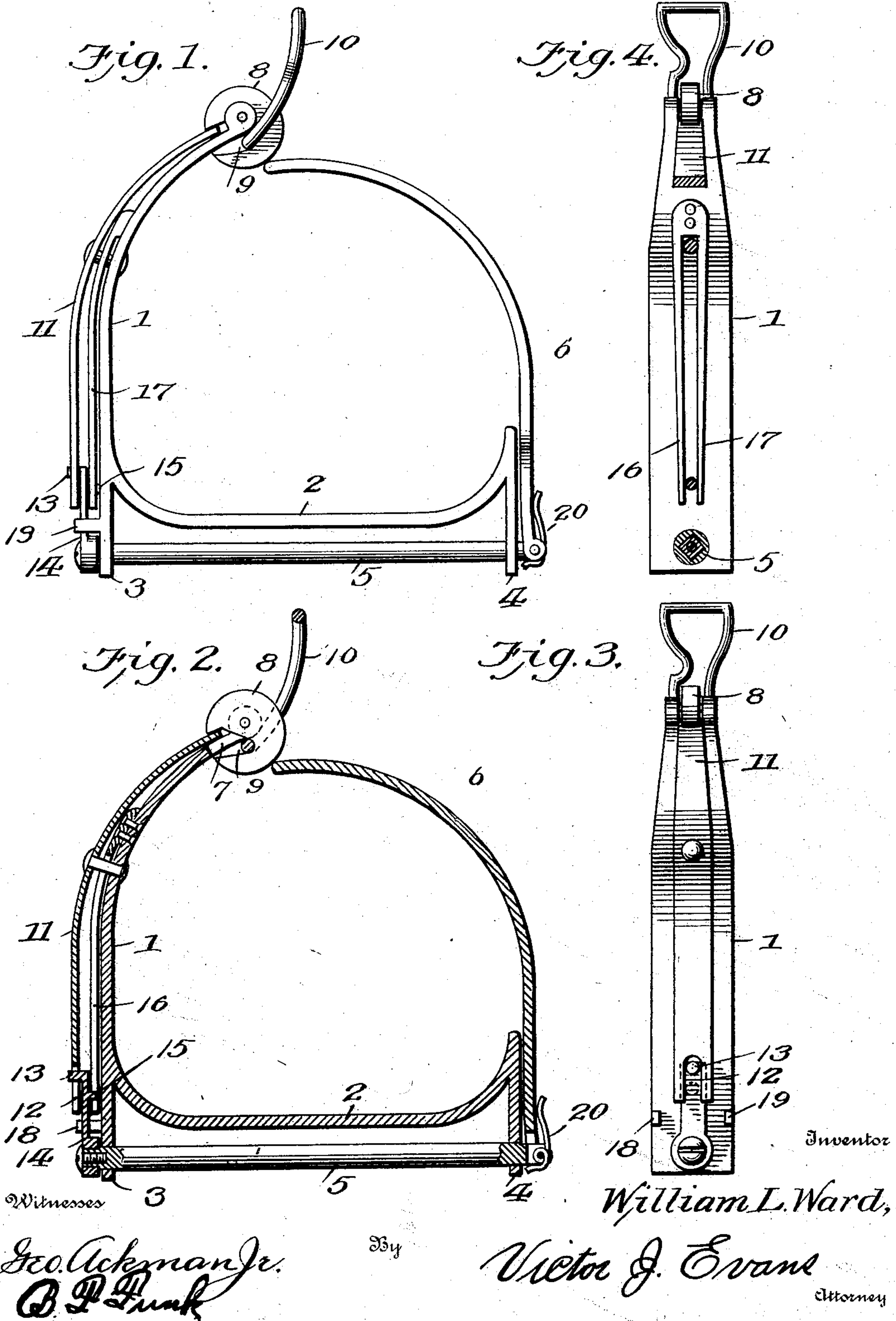
No. 744,653.

PATENTED NOV. 17, 1903.

W. L. WARD.
STIRRUP.

APPLICATION FILED JAN. 16, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

WILLIAM L. WARD, OF WATAUGA FALLS, NORTH CAROLINA.

STIRRUP.

SPECIFICATION forming part of Letters Patent No. 744,653, dated November 17, 1903.

Application filed January 16, 1903. Serial No. 139,330. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. WARD, a citizen of the United States, residing at Watauga Falls, in the county of Watauga and State of North Carolina, have invented new and useful Improvements in Stirrups, of which the following is a specification.

This invention relates to stirrups, and has for its object to provide a stirrup from which the foot of the rider can be readily detached in case of accident.

The peculiar construction of device, as well as the method of detaching the foot, will be described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a view in elevation of a stirrup constructed in accordance with my invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is an end view of the stirrup, and Fig. 4 is a vertical cross-sectional view.

The reference-numeral 1 designates a curved arm having a laterally-projecting tread or rest 2 to be engaged by the foot. Depending from the respective ends of the rest 2 are bearings 3 and 4, which carry a laterally-disposed rotating shaft 5. On one end of the shaft is a pivoted lever 6. This lever is curved and projects upward and toward the bar 1, as will be explained hereinafter. The upper extremity of the arm 1 is bifurcated or split, as at 7, and within the split portion is an eccentrically-pivoted disk 8, having a cut-out portion or slot 9 therein.

A stirrup-ring 10 is designed to engage the cut-out portion 9 of the disk 8, and the ring is held in locked position therewith by means of a pivoted latch-lever 11, which is secured to the arm 1 intermediate its ends and is provided with a bifurcated lower end 12. The bifurcated end of the locking-lever 11 is engaged by a lug or projection 13, carried by a crank 14, rigidly secured to the shaft 5. The opposite side of the crank 14 is provided with a similar lug or projection 15, which is positioned intermediate its ends and projects between two depending spring-strips 16 and 17, said crank being held against swinging beyond the edges of the arm 1 by stops or lugs 18 and 19.

All the parts being assembled, the opera-

tion of the device will be as follows: Suppose the stirrup is secured to its strap by the ring 10, so that the parts will be in the position shown in Figs. 1 and 2. If by accident the person is thrown forward or backward, the instep of his foot will engage the curved lever 6, which is spring-pressed by a spring 20 and normally rests adjacent to the disk 8. The pull on the lever 6 will cause it to move in a lateral direction, rotating the shaft 5, so as to oscillate or rock the crank 14. The projection on the crank being in engagement with the bifurcated portion of the lever 11, the upper extremity will be thrown out of engagement with the slotted portion of the disk 8, and as the resistance afforded by the link 10 is on an eccentric to the pivotal connection of the disk the disk will be caused to rotate, so that the slot will be inverted, thereby permitting the stirrup to become detached from the ring or link 10. The movement of the crank will be limited by the lugs or stops 18 and 19, and inasmuch as the spring-strips engage the respective sides of the projection 15 the crank will be promptly returned to its normal position as soon as pressure is relieved on lever 6. If by chance the rider is thrown sidewise from the horse, the foot can become detached from the stirrup, owing to the fact that the lever 6 is pivotally secured to the shaft, being retained in its normal position by the spring 20. The tension of this spring, however, will not be sufficient to prevent the lever 6 swinging outwardly, so that the foot can become released from engagement with the stirrup. However, as soon as the foot is released the lever will be returned to its normal position by the spring.

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

1. In a safety-stirrup, the combination of a stirrup device comprising an upwardly-curved side arm and a tread, the upper end of the side arm having a slotted disk eccentrically mounted therein, a shaft held by the stirrup device proper, a movable stirrup side pivotally connected to one end of the shaft and normally held in closed position in contact with the disk, a locking-lever pivotally attached to the stirrup side and having its

upper end normally extending into the slot of the disk, and a link attached to the disk at one side of the pivotal point thereof.

2. In a safety-stirrup, the combination of
5 a stirrup having a side member with a rotatable device eccentrically mounted in the upper end thereof and formed with a slot, a rock-shaft held by the stirrup, a lever pivoted to one end of said rock-shaft and having the upper end normally in engagement
10 with the rotatable device, means on the stirrup for preventing the rotatable device from moving and actuated by the rock-shaft, and a link attached to said rotatable device and
15 adapted to receive the hanger-strap of a saddle.

3. A safety-stirrup comprising an upwardly-extending side arm and a tread, a locking device pivotally mounted on the arm, a rotatable
20 disk eccentrically held in the upper end of the arm and having a slot therein to re-

ceive the upper end of the locking device, and means for releasing the disk from engagement with the locking device.

4. A stirrup having a rotatable locking device
25 eccentrically mounted in one of the sides thereof and provided with a slot, the opposite side of the stirrup being pivoted to open outwardly and having its upper end normally held in engagement with the rotatable device,
30 a locking device pivotally mounted on the side of the stirrup carrying the rotatable device to engage the slot in the latter, and means operative by the pivoted side of the stirrup for releasing the locking device from
35 the rotatable device.

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

WILLIAM L. WARD.

Witnesses:

JOHN WARD,

W. J. FARTHING.