

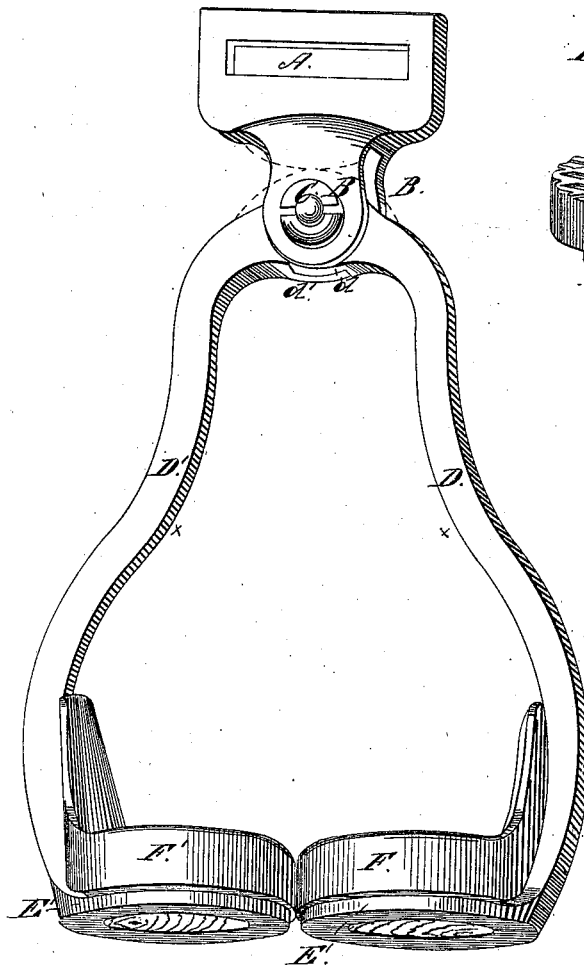
*F. N. Martin,*

*Saddle Stirrup.*

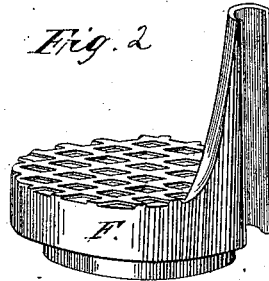
*N<sup>o</sup> 54,380.*

*Patented May 1, 1866.*

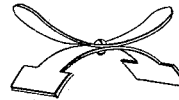
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses*

*W. H. Woodward  
J. H. Layman*

*Inventor:*

*F. N. Martin  
By G. H. H. H. H. H.  
O. H. H.*

# UNITED STATES PATENT OFFICE.

FRANK N. MARTIN, OF CINCINNATI, OHIO.

## IMPROVED STIRRUP.

Specification forming part of Letters Patent No. 54,380, dated May 1, 1866.

*To all whom it may concern:*

Be it known that I, FRANK N. MARTIN, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Stirrups; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a form of stirrup which, while affording an entirely secure and reliable support for the foot of the rider in ordinary use, is yet self-releasing the moment that he is thrown from the saddle by the stumbling of the animal, or any other casualty.

Figure 1 is a perspective view of a stirrup embodying my improvement. Fig. 2 shows one of my pads detached. Fig. 3 represents a spring-clasp.

A is a loop or clevis to receive the customary stirrup-strap. Projecting downward from the clevis A are two cheeks, B B', which have a perforation to receive a bolt, C.

The bow of the stirrup, instead of being forged in one piece with the clevis, as in the common form, consists of two distinct arms, D D', having at their upper extremities eyes *d d'* to receive the same bolt C which traverses the cheeks of the clevis and serves to hinge the said arms to the clevis, as seen in Fig. 1.

The tread or foot-bar of the stirrup instead of being in one piece with the bow is composed of two distinct horizontal projections, E E', from the arms D and D', respectively.

The projections E E' may be in the form of rings, and may be mounted with pads F F', or wood, leather, gutta-percha, or india-rubber, or any other substance that will combine the qualities of traction, slow conduction of heat, and the requisite toughness. These pads, how-

ever, may be omitted without impairing the essential function of automatic release which distinguishes my invention.

A spring-clasp (see Fig. 3 and red line in Fig. 1) may be applied between the clevis and the arms, for the purpose of pressing the latter toward each other; but I do not deem such spring of vital necessity.

The arms D D' may be curved inward, so as to present shoulders *x x*, to give the foot a more instantaneous and effective purchase for spreading the stirrup in the event of accident, as aforesaid.

I have selected to illustrate my invention the form preferred by me, but do not desire to restrict myself thereto, so long as the primary object of automatic release of the rider's foot is secured by means substantially equivalent. For example, one only of the members D E and D' E' may be hinged to the clevis, and the other one may project rigidly therefrom, or each member may be secured to the clevis by a separate hinge.

I claim herein as new and of my invention—

1. A stirrup composed of two distinct members, D E and D' E', hinged together at their upper portions, substantially as set forth.

2. In this connection, the rings or recessed projections E E', for the reception of pads, in the manner stated.

3. The use of a spring-clasp, Fig. 3, in the manner set forth.

In testimony of which invention I hereunto set my hand.

FRANK N. MARTIN.

Witnesses:

F. T. CLARK,

JAMES H. LAYMAN.