

S. J. HARKNESS.

STIRRUP.

No. 191,851.

Patented June 12, 1877.

Fig. 1.

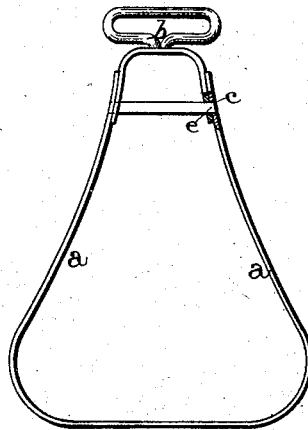


Fig. 2.

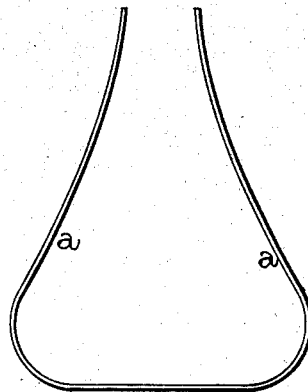
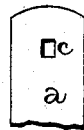


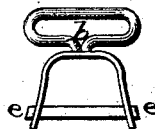
Fig. 3.



WITNESSES

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Fig. 4.



INVENTOR

S. J. Harkness
per
J. A. Lehmann, Atty.

UNITED STATES PATENT OFFICE.

SUMNER J. HARKNESS, OF THORNDIKE, MASSACHUSETTS.

IMPROVEMENT IN STIRRUPS.

Specification forming part of Letters Patent No. 191,851, dated June 12, 1877; application filed May 15, 1877.

To all whom it may concern:

Be it known that I, SUMNER J. HARKNESS, of Thorndike, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Stirrups; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in stirrups; and it consists in making the stirrup of a continuous sheet of steel or other elastic material, so that in case of accident to the rider the top of the stirrup will open and become detached from the stirrup-strap, so as to release the rider's foot, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents a stirrup, which is made from a continuous sheet of steel or other elastic material, and which has an opening, *c*, through each of its upper ends, so that the ends can be opened outward and receive the attachment *b* for the stirrup-strap. This attachment *b* may either be formed as here shown, or in any other way that may be preferred. Projecting from each end of this attachment *b* is a stud or projection, *e*, over which the ends of

the stirrup snap, the projections entering the holes in the upper ends of the stirrup, so that the stirrup and the attachment cannot accidentally come apart.

In case of accident to the rider, the upward or side pressure of his foot will cause the upper part of the stirrup to open outward from either side, and thereby release the attachment which fastens it to the stirrup-strap, thus preventing the rider from being dragged along in case the foot should have caught in the stirrup.

Having thus described my invention, I claim—

1. The stirrup *a*, made from a continuous sheet of steel, its upper portion being adapted to spring open and become released from the stirrup-strap, substantially as shown and described.

2. The stirrup *a*, made from a continuous sheet of steel, and adapted to open outward at its upper portion, in combination with the attachment *b*, having the studs or projections *c* for catching in the openings in the ends of the stirrup, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of May, 1877.

SUMNER J. HARKNESS.

Witnesses:

WILBUR J. McELWAIN,
GEO. H. NEWTON.