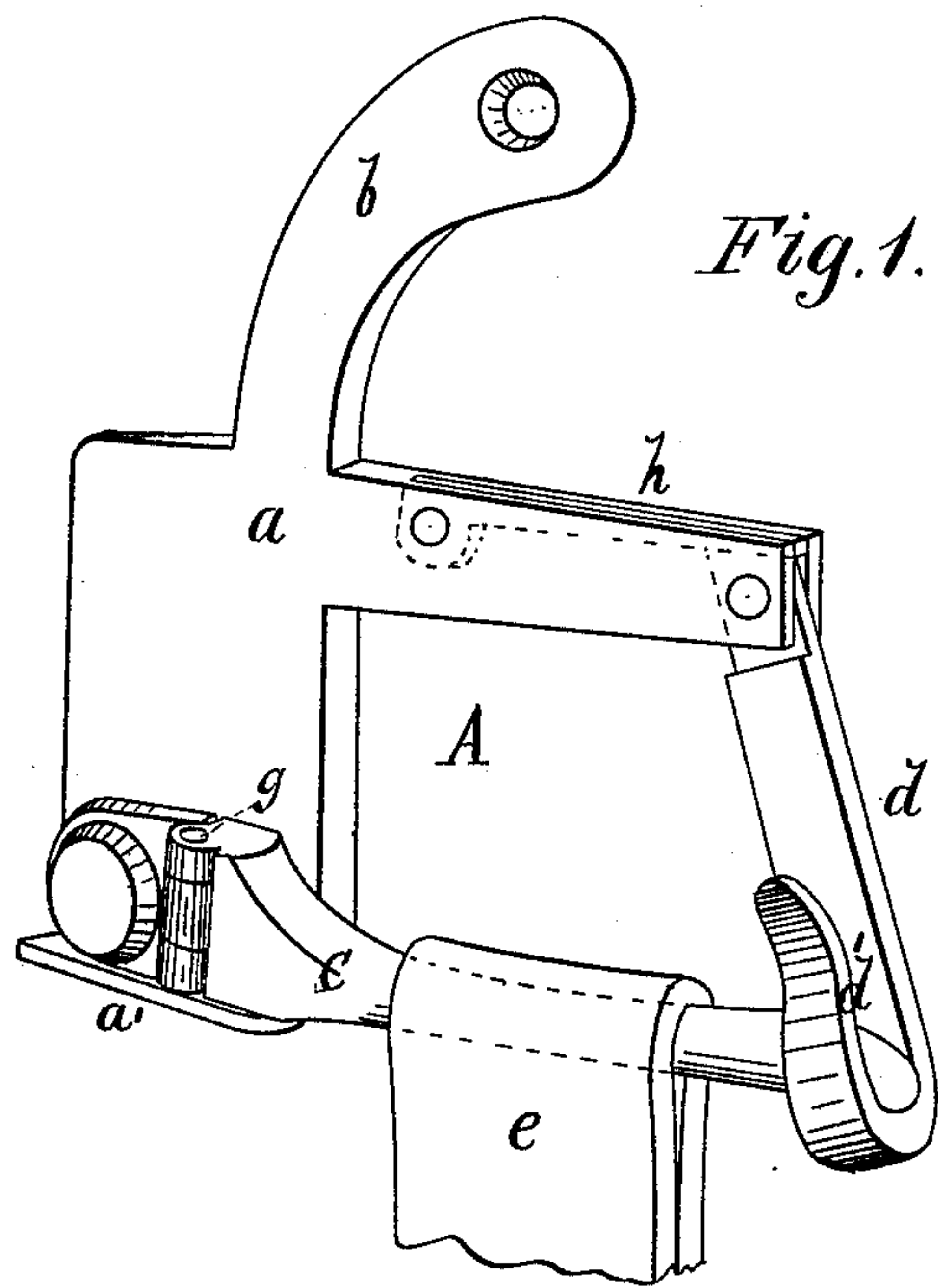


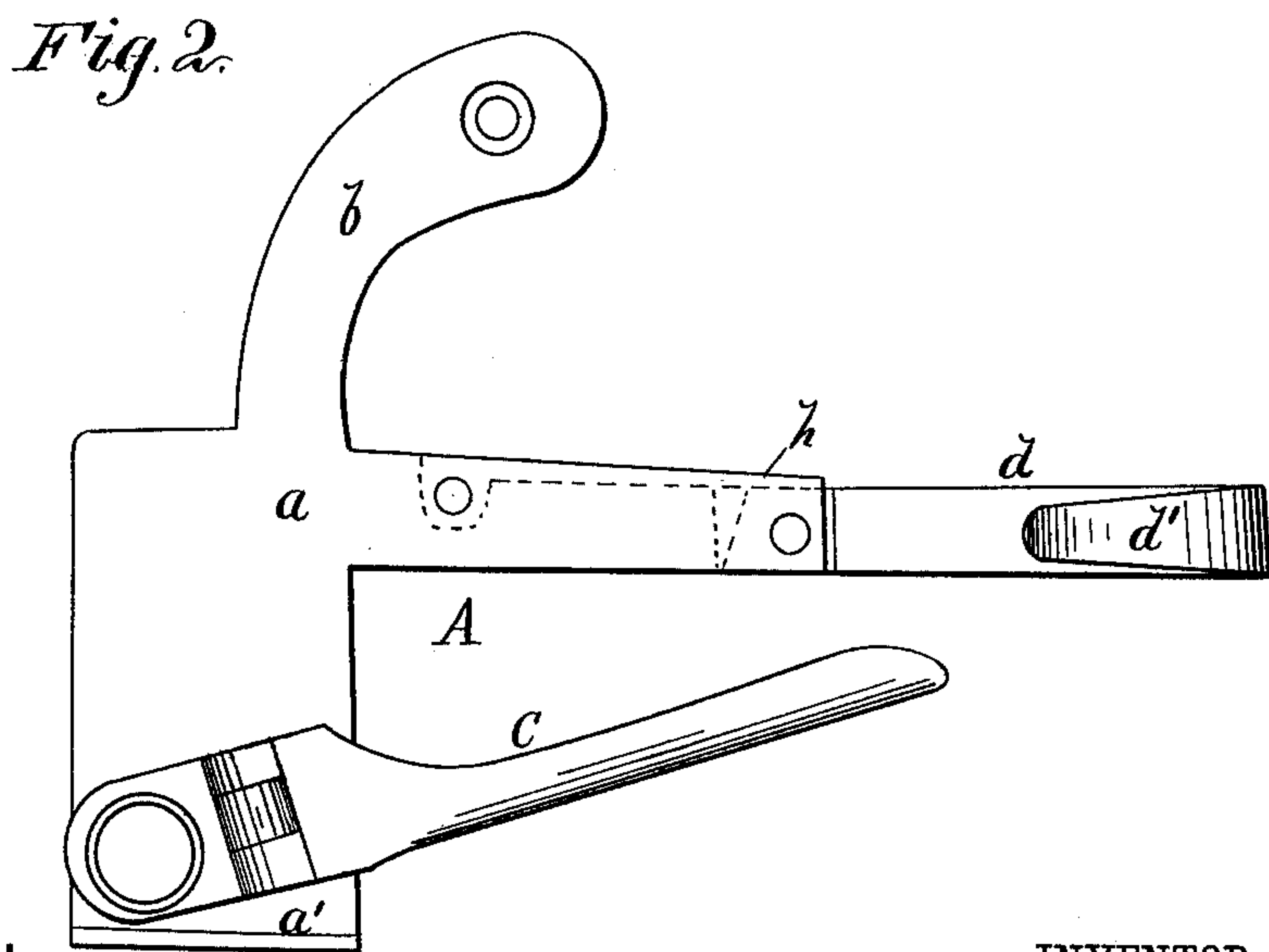
H. F. R. F. SOMERSET.  
Stirrup-Loop.

No. 220,677.

Patented Oct. 14, 1879.



*Fig. 1.*



*Fig. 2.*

WITNESSES:

*Henry N. Miller*  
*C. Sedgwick*

INVENTOR:

*H. F. R. F. Somerset*

BY

*Mum Co*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HENRY F. R. F. SOMERSET, OF BADMINTON, COUNTY OF GLOUCESTER,  
ENGLAND.

## IMPROVEMENT IN STIRRUP-LOOPS.

Specification forming part of Letters Patent No. **220,677**, dated October 14, 1879; application filed  
September 3, 1879.

*To all whom it may concern:*

Be it known that I, HENRY FITZ ROY FRANCIS SOMERSET, of Badminton, in the county of Gloucester, England, have invented a new and Improved Stirrup-Loop, of which the following is a specification.

My improvements relate to loops for connecting stirrup-straps to the saddles, and have for their object to provide for automatic disconnection of the strap in case of accident.

The invention consists in a stirrup-loop adapted for connection to the saddle, and formed with two sides hinged or pivoted, and retained in position by spring-pressure under ordinary circumstances, the hinged sides being held in such manner that the parts are released and the loop thrown open by the draft caused by the rider being thrown.

The construction and operation will be more particularly explained with reference to the accompanying drawings, wherein—

Figure 1 is a perspective view of my improved stirrup-loop as in use. Fig. 2 is a side view with the loop thrown open.

Similar letters of reference indicate corresponding parts.

The loop *A* is adapted for the left-hand side of the saddle, and consists of the rigid or main portion *a*, formed with a curved arm, *b*, by which it is to be hung or attached to the saddle, and fitted with the hinged horizontal bottom bar, *c*, and inclined end bar, *d*.

The horizontal bar *c*, around which the stirrup-strap *e* passes, is hinged to the forward end of *a* by a gimbal-joint at *g*, which permits movement of bar *c* vertically and horizontally, the vertical movement being limited by a flange, *a'*, on *a*.

The end bar, *d*, is hung to the rear part of portion *a* by a knuckle-joint, the part *a* being slotted to receive bar *d*, so that bar *d* swings in a direction lengthwise of the loop.

In the normal position bar *d* hangs with its lower end inclined outward, in which position it is retained by a bar-spring, *h*, that is secured in a slot in portion *a*, and bears upon the upper end of *d*.

The lower end of bar *d* is bent to form a spring-hook, *d'*, as shown, to receive the end of the horizontal bar *c*. The hook *d'* prevents bar *c* from swinging outward, and prevents

bar *c* from swinging upward, except when there is sufficient force applied to spring the hook *d'* apart, the loop *A*, when closed, being thus substantially rigid, and the draft of strap *e*, under ordinary circumstances, is sustained by rigid connections.

In case the rider is thrown to the right side and the left foot becomes entangled with the stirrup, the draft of the stirrup-strap would be upward on bar *c*, which would release *c* from the hook *d'*, and the stirrup would be released by the strap *e* slipping off.

If the rider be thrown to the left side, with the left foot entangled, the draft would then be backward on bar *d*, and the loop would be opened by bar *d* swinging outward. The right-hand or off-side stirrup-loop would, of course, operate in the same manner under similar circumstances.

By the above-described construction the stirrup is rendered perfectly reliable in ordinary use, while securing safety from entanglement in case of accident.

The plate *a*, to which bar *c* is hinged, may be extended toward the forward portion of the saddle, so as to fit securely over the "gullet-plate," or plate forming the arch of the saddle, to which the stirrup loop is connected in use, and the sides of plate *a* will be tapered, so as to lie flat and present a smooth surface under the leg of the rider.

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

1. The combination, with the rigid angle-bar *a*, of the bar *c*, hinged to turn horizontally, and the hook-bar *d*, hinged to turn vertically, as shown and described.

2. In a stirrup-loop, the combination, with the main portion *a* and the hinged horizontal bar *c*, of the pivoted end bar, *d*, formed with the spring-hook *d'*, and retained in its normal position by spring *h*, substantially as and for the purposes set forth.

HENRY FITZ ROY FRANCIS SOMERSET.

Witnesses:

J. TRENFIELD,  
*Solicitor, Chipping, Sodbury, England.*

JOHN D. B. TRENFIELD,  
*Solicitor, Chipping, Sodbury, England.*