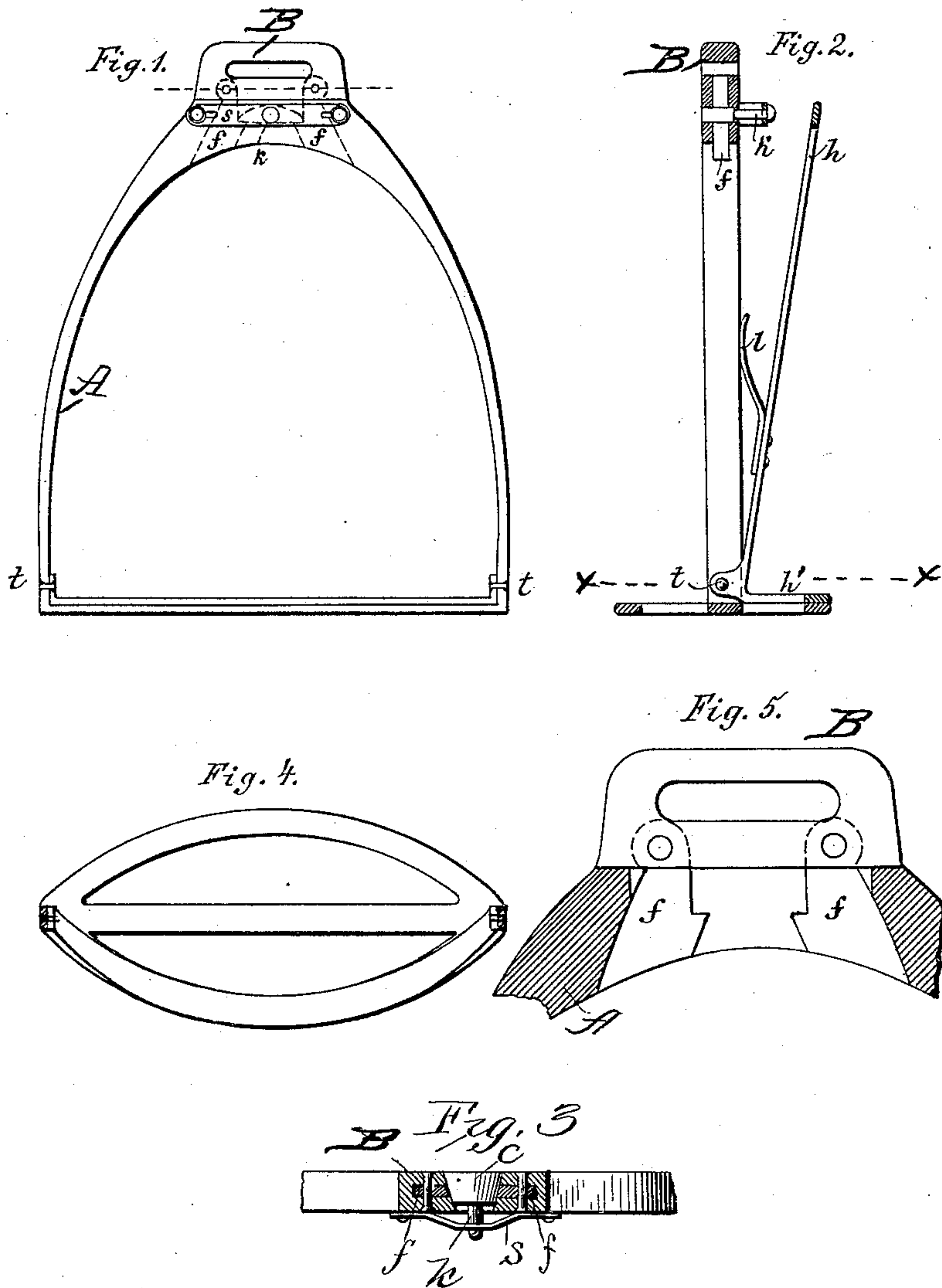


(No Model.)

E. G. SOLLORS.
STIRRUP.

No. 410,939.

Patented Sept. 10, 1889.



Witnesses.
Walter C. Keeney.
J. L. Middleton

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Ernest G. Sollors
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UNITED STATES PATENT OFFICE.

ERNST GEORG SOLLORS, OF DÜLMEN, PRUSSIA, GERMANY.

STIRRUP.

SPECIFICATION forming part of Letters Patent No. 410,939, dated September 10, 1889.

Application filed April 1, 1889. Serial No. 305,626. (No model.)

To all whom it may concern:

Be it known that I, ERNST GEORG SOLLORS, civil engineer, of Dülmen, in Westphalia, in the Kingdom of Prussia and German Empire, have invented a new and useful Improvement in Safety-Stirrups, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention is a detachable stirrup; and it consists in detachable means of attaching the stirrup to the stirrup head or clip which holds the strap, and in means for automatically detaching the stirrup from said holding devices when the rider falls from the horse.

In the drawings, Figure 1 is a front view. Fig. 2 is a vertical section through the center of the stirrup and head. Fig. 3 is a horizontal section through the head or strap-clip. Fig. 4 is a horizontal section on line $x x$ of Fig. 2. Fig. 5 is a detail view of the detachable holding devices.

In the drawings, A is the stirrup, and B the head or clip having a slot for the strap. The stirrup is chambered in its upper part, said chamber being dovetailed in form and adapted to receive dogs $f f$, pivoted to the head B. When said dogs are spread apart, they hold the stirrup to the head, and for this purpose a wedge c is used, fitting between them and held in place by a spring s , engaging with its headed shank k . To release the stirrup it is only necessary that the wedge be pushed from between the dogs, so that they may move toward each other and away from the walls of the dovetailed chamber in the stirrup. To accomplish this releasing automatically when the rider falls, a frame h is pivoted at t to the stirrup and is pressed normally outward by a spring l , so that its upper end does not engage the shank k of the wedge. The frame has a heel portion h' , upon which the foot of the rider bears under normal conditions, and this pressure keeps the frame from contact with the wedge. Should, however, the rider fall his foot will bear at some point along the side of the frame h , or at its tip, and thus press it inward against the wedge-shank, forcing the wedge from between the dogs and releasing the stirrup.

I claim—

1. In combination, the stirrup, the head,

the gripping and supporting dogs pivoted to the head and engaging with the stirrup to detachably connect them, means for holding said dogs in position, and means, substantially as described, on the stirrup and operating independently of the other parts for releasing the dogs, substantially as described.

2. In combination, the stirrup, the head, the gripping and supporting dogs pivoted to the head and engaging with the stirrup to detachably connect them, a movable holding-wedge for the dogs, and means for moving said wedge to ungrip the dogs, substantially as described.

3. In combination, the stirrup, the head, independently-movable detachable connections between the head and stirrup, and a frame pivoted to the stirrup and normally disengaged from the detachable connection and arranged to bear upon the said connection when moved, substantially as described.

4. In combination, the stirrup, the head, the detachable connections between, and a pivoted frame acting upon said detachable connections, said frame having a tread portion h' , by which it is held normally out of action, substantially as described.

5. In combination, the stirrup, the head, the detachable connection between, comprising a wedge, a spring for holding said wedge in normal position, and means for automatically forcing said wedge aside against the spring-pressure, substantially as described.

6. In combination, the stirrup, the head, independently-movable detachable connections between the head and stirrup, a frame arranged to bear upon said connections when moved, and a spring for keeping said frame normally out of contact with the connections, substantially as described.

7. In combination, the stirrup having the dovetailed chamber, the head, the dogs pivoted thereto and extending into said chamber, and the wedge between the dogs, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

ERNST GEORG SOLLORS.

Witnesses:

HERM. SIMONS,
CARL PRINZ.