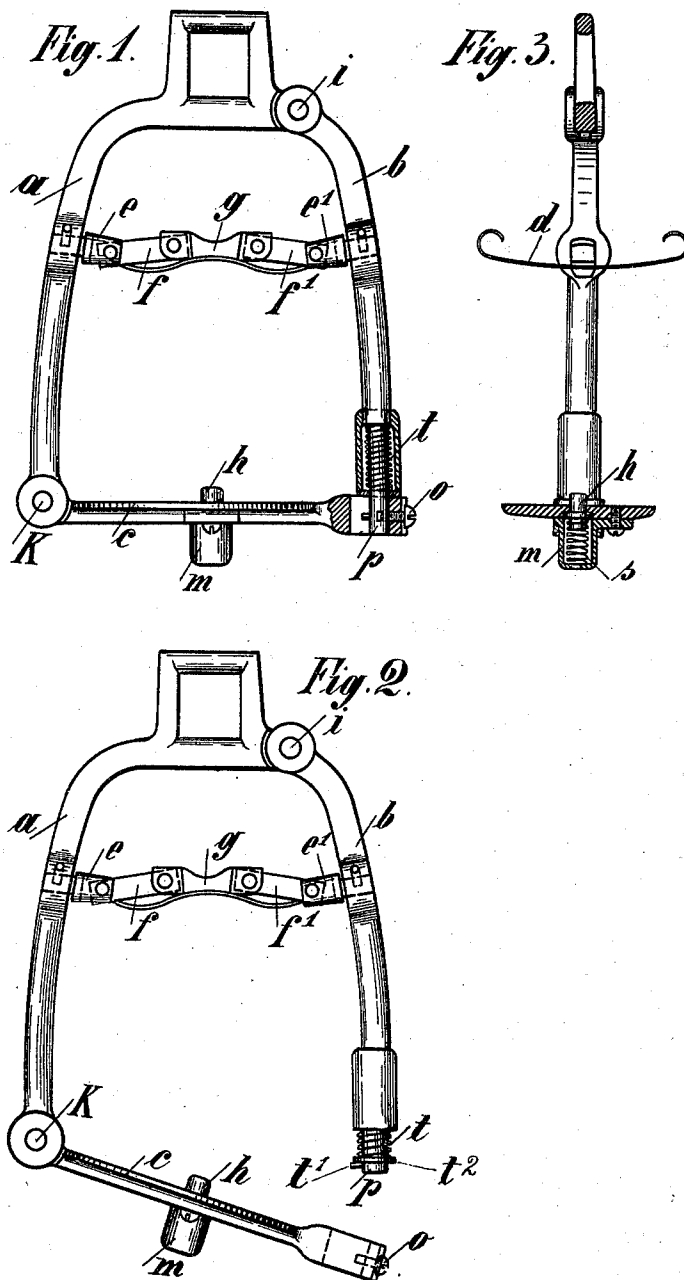


(No Model.)

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STIRRUP.

No. 545,796.

Patented Sept. 3, 1895.



Witnesses.
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STIRRUP.

SPECIFICATION forming part of Letters Patent No. 545,796, dated September 3, 1895.

Application filed October 5, 1894. Serial No. 525,051. (No model.)

To all whom it may concern:

Be it known that we, JOHANN MARTIN LUDWIG HADDORF and HINRICH FRIEDERICH HERMANN EGGERS, residing in the free city of Lubeck, in the Empire of Germany, have invented certain new and useful Improvements in Stirrups; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to make and use the same.

This invention is for a saddle-stirrup, the object thereof being to prevent the rider's foot from being caught and entangled therein in the event of accident from falling off the horse.

The construction of the stirrup is such that the foot rest or bar will open and allow the foot to escape therefrom when turned in the stirrup.

In order to understand our invention, attention is directed to the accompanying views, in which—

Figure 1 is a front view, partly in section, of the stirrup while closed. Fig. 2 is a front view of the same while open; and Fig. 3 is a sectional view of Fig. 1, taken through the center thereof.

The general form of the stirrup is the same as that ordinarily used, the only difference lying in the fact that in our form of stirrup the several parts are jointed together in such a manner as to allow the tread to be released when desired.

The part *a*, which forms a suspension-loop, carries by means of the hinge *i* one side of the stirrup and by means of the joint *k* the bar or tread *c* thereof.

The parts *b* and *c* are connected together by a fastening, to be presently described. The sides *a* and *b* of the stirrup are connected together by the multiple-jointed bar formed of the parts *e*, *e'*, *f*, *f'*, and *g*, secured together, as shown. The separate parts are connected by pivots in such a way that the cross-bar may bend from the center upward toward the point of suspension of the stirrup, which will draw the two sides *a* and *b* together. The center of this cross-bar is secured to a spring-

plate *d*, located above the instep of the rider's foot. This plate *d*, upon being elevated, will elevate the bar *g*, which will tend, by means of the bars *e e' f f'*, to move the part *b* toward the part *a*, which will release the tread *c* from the side *b* by means of the catch becoming disengaged from its fastening. This catch consists of a rod *p*, secured within an opening in the lower extremity of the side *b*. Near the lower portion of this rod is a small hole engaging with an adjustable screw *o*, secured to the tread *c*. Surrounding the pin *p* is a spiral spring *t*, bearing against a small disk *t'* surrounding the pin. This disk is prevented from dropping off by means of a small pin *t''*.

In order to give greater security for the rider and to prevent his foot from slipping from the tread of the stirrup, I preferably make use of a button or pin *h*, placed within the center of the tread *c*. This pin is kept normally elevated by means of the spiral spring *s*, placed within a box or receptacle *m* below the tread.

The operation of the device is as follows: It will be seen that if the parts are in engagement, as in Fig. 1, the pressure being applied upward upon the plate *d* by the turning of the rider's foot, will tend to elevate the center of the horizontal jointed bar, which, acting in the form of a toggle-lever, will draw the parts *a* and *b* together, which will release the screw *o* from the opening within the pin *p*. The spiral spring *t* being depressed will now be allowed to expand and the disk *t'* will bear against the top of the opening within the tread *c*. This will separate the tread from the sides of the stirrup and will allow the rider's foot to slip out from the bottom, and will avoid all possibility of entanglement with the stirrup.

Having now described our invention, what we claim as new therein, and desire to secure by Letters Patent, is as follows:

In a safety stirrup, the part *a* having a side *b* hinged thereto near the top, and the tread *c* hinged at the bottom thereof, a horizontal bar connecting the parts *a* and *b*, and formed of the separate jointed links *e*, *e'*, *f*, *f'*, and *g*,

the guard plate *d* bearing against these several parts and so arranged that upon pressure being applied upward upon the plate *d*, the parts *a* and *b* will be advanced together, and
5 a catch *p* with a spring *t* arranged thereon for depressing the tread, substantially as described.

In witness whereof we hereunto set our hands in presence of two witnesses.

JOHANN MARTIN LUDWIG HADDORF.

HINRICH FRIEDERICH HERMANN EGGERS.

Witnesses:

J. J. BRUHN,

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