

W. VON SOKOLOWSKI.
SAFETY STIRRUP.
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1,058,480.

Patented Apr. 8, 1913.

Fig. 1.

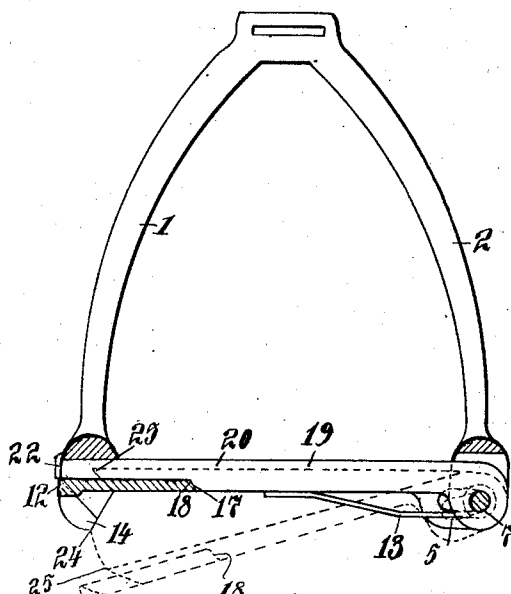


Fig. 2.

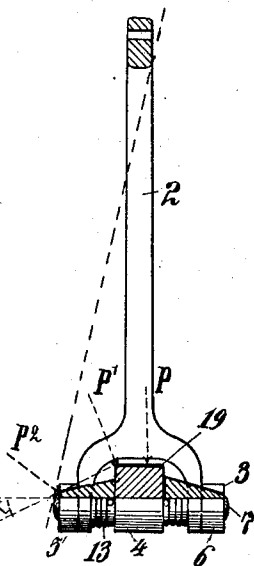


Fig. 3.

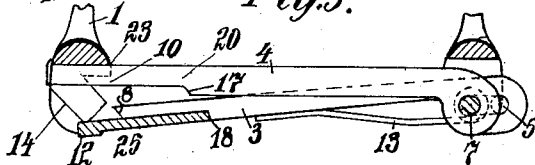


Fig. 4.

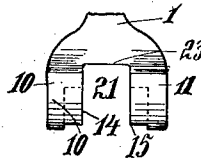


Fig. 5.

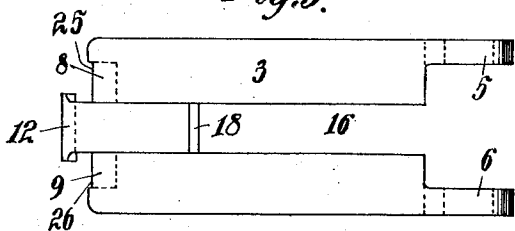
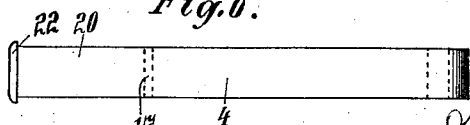


Fig. 6.



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SAFETY-STIRRUP.

1,058,480.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WITOLD VON SOKOLOWSKI, a subject of the Czar of Russia, residing at Warsaw, Russia, have invented
5 new and useful Improvements in Safety-Stirrups, of which the following is a specification.

The present invention relates to improvements in safety stirrups with hinged treads
10 arranged to open downwardly.

The tread of the safety stirrup according to the present invention consists of two members supporting each other, namely a supporting broadplate and a tread locking
15 the latter. The broadplate has a longitudinal slot and is displaceable at one end in a hinge, while the other end bears with two beveled notches on corresponding notches
20 in the free bow of the stirrup. The tread is in the form of a strip, adapted to fit in the longitudinal slot in the broadplate and is pivoted on a hinge pin of the broadplate. The tread has a beveled nose which will,
25 bear on the broadplate and thereby secure the tread between the bows of the stirrup.

Figure 1 is a front elevation of the closed stirrup, the lower parts being shown in section. Fig. 2 is a cross section through the
30 vertical axis of the stirrup. Fig. 3 is a front view of the lower parts of the stirrup, partly in section. Fig. 4 shows the left stirrup bow seen from inside. Fig. 5 is a top view of the broadplate. Fig. 6 is a top
35 view of the tread.

While the bows 1, 2 of the stirrup are formed integral, the movable tread consists of two members, namely the broadplate 3 and the tread proper 4. The broadplate 3
40 has a trapezoidal section, Fig. 2, and has a central longitudinal slot 16 terminating in a beveled ledge 18, Fig. 5; its one end is bifurcated and has two oval eyes 5, 6 which bear on a pin 7 fitted in the foot of the one
45 stirrup bow 2, having a swiveled and slidable fit on said pin 7. The other end of the broadplate bears with its beveled notches 8, 9 on corresponding notches 10, 11 of the bow 1 and terminates in the slide 12 which will,
50 sliding under action of spring 13 on the bevels 14, 15 of the bow 1, introduce the beveled notches 8, 9 of the broadplate 3 into the corresponding notches 10, 11 in the bow 1. The tread 4 has the form of a strip
55 which is pivoted at one end on the pin 7.

This strip 4 bears with its beveled ledge 17, on the ledge 18, in the slot 16, projects at 19 above the broadplate 3 and has a shank 20 which engages in the slot 21, Fig. 4, of the stirrup bow 1, and terminates in a head 22
60 bearing against the outside of the same.

The operation is as follows: When the load acts from above only against the top 19 of the strip 4, projecting upward, as will be the case when the foot of the rider presses
65 in a vertical downward direction p , or in an angular direction p^1 not exceeding a given angle, Fig. 2, the beveled ledge 17 will bear against the ledge 18 and will force the beveled notches 8, 9 against the corre-
70 sponding notches 10, 11 in the stirrup bow, thereby locking the stirrup in service position, as the strip 4 will by means of its head 22 hold the bows 1, 2 together and prevent them from spreading. If the load acts on
75 the broadplate 3 only, as will be the case when the foot has been caught in the stirrup and acts in an outward levering direction p^2 , Fig. 2 the notches 8, 9 will glide down the notches 10, 11, the bifurcations of
80 the broadplate will be displaced with their slots on the pin 7, the beveled ledge 18 will be disengaged from the ledge 17, of the strip 4 which latter is free of all load, and the stirrup will open, the foot which has been
85 caught will be released, while the two members of the tread, 3 and 4 will swing around the pin 7 downward into the position shown by the dotted lines in Fig. 1. A spring 13
90 is provided for automatically closing the stirrup after it has opened, said spring 13 being attached to the pin 7, and bearing from below against the broadplate 3. Under the action of this spring the broadplate 3
95 will approach the point of the bow 24 with the points 25 and 26 of the beveled notches 8, 9 and will move along the beveled surface of the bow and rise until the slide 12 reaches the bevels 14, 15. The slide 12 then
100 glides along these bevels 14, 15 and projects the beveled notches 8, 9 into the corresponding notches 10, 11, whereupon the tread 4, which had been carried during this upward movement by the broadplate 3, bearing with
105 its top against the transverse wall 23 of the stirrup bow, Figs. 3, 4, will move with its beveled ledge 17 close up to the ledge 18, whereby the stirrup is again closed and the two bows 1, 2 are coupled by means of the head 22.

In the accompanying, hereinbefore referred to drawing a stirrup with a symmetric tread is exemplified, which must be used either on the right or on the left side of the saddle. The side of this broadplate intended to be turned forward may, however, also be covered by the tread, when separate right and left stirrups are provided.

10 I claim:

1. A safety stirrup with a hinged tread opening in a downward direction, the said tread composed of two members, a broadplate and a tread proper adapted to mutually support each other, the broadplate being displaceable on its hinge and engaging in beveled notches in the stirrup bow opposite to the one having the hinge, the tread pivoted on the hinge pin of the broadplate, fitting in a longitudinal central slot in said broadplate, and having a beveled ledge engaging in said broadplate and adapted to prevent the latter from disengaging from the said beveled notches in the stirrup bow, while the tread is under the action of the rider's foot in riding position.

2. A safety stirrup with a hinged tread

opening in a downward direction, the said tread composed of two members, a broadplate and a tread proper adapted to mutually support each other, the broadplate being displaceable on its hinge and engaging in beveled notches in the stirrup bow opposite to the one having the hinge, the tread pivoted on the hinge pin of the broadplate, fitting in a longitudinal central slot in said broadplate, and having a beveled ledge engaging in said broadplate and adapted to prevent the latter from disengaging from the said beveled notches in the stirrup bow, while the tread is under the action of the rider's foot in riding position, the free end of said broadplate having the form of a slide under action of a spring adapted to force the said broadplate with beveled notches provided in it into the said beveled notches in the stirrup bow.

In testimony whereof I affix my signature in presence of two witnesses.

WITOLD VON SOKOLOWSKI.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."