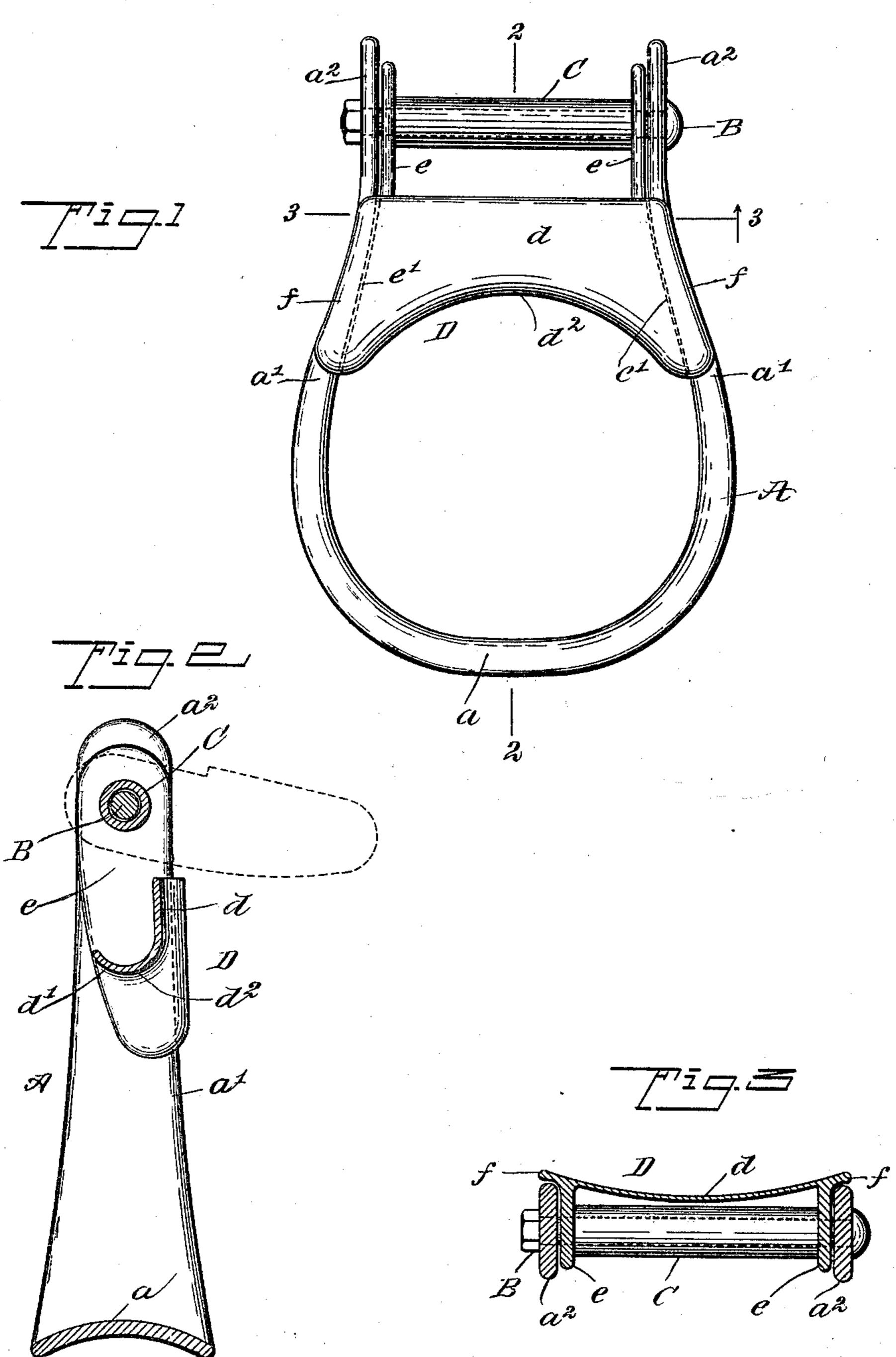
## W. G. MURPHY. RIDING STIRRUP.

APPLICATION FILED APR. 29, 1902.

NO MODEL.



WITNESSES:

William Grant Murphy

BY

ATTORNEYS.

## UNITED STATES PATENT OFFICE,

## WILLIAM GRANT MURPHY, OF YANKTON, SOUTH DAKOTA.

## RIDING-STIRRUP.

SPECIFICATION forming part of Letters Patent No. 719,246, dated January 27, 1903.

Application filed April 29, 1902. Serial No. 105,164. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GRANT MUR-PHY, a citizen of the United States, and a resident of Yankton, in the county of Yankton and State of South Dakota, have invented new and useful Improvements in Riding-Stirrups, of which the following is a full, clear, and exact description.

My invention relates to improvements in riding-stirrups; and the object that I have in view is the provision of means which will tend to disengage the foot from the stirrup in case the rider is thrown from the horse.

The improved stirrup can be used with per-15 fect ease and freedom by a rider wearing an ordinary boot, shoe, or any other article of footwear, because the movable shield is so fashioned and shaped that it conforms to the instep, and it has a broad convex surface de-20 signed to minimize friction on the foot. Another advantage of my stirrup resides in its ability to resist the strain or pressure of a horse falling on the article, which in ordinary devices is sufficient to crush and break 25 the same, thereby crushing the foot of the rider and preventing him from disengaging himself from the fallen animal. In my device, however, the shield tends to brace and strengthen the side portions of the stirrup, 30 and the latter will not give way and break when it is caught under a fallen horse. The shield is mounted to have a free swinging movement or play in an upward and rearward direction and through an arc of ninety de-35 grees or even less; but this shield is so disposed that its upward movement is limited or arrested by the coöperation of the stirrup in order that the shield may be prevented from moving too far and to cause it to drop 40 or fall by gravity back to its normal operative position.

With these ends in view the invention consists of a riding-stirrup embodying certain novel features of construction, which will be hereinafter fully described, and defined by the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference into dicate corresponding parts in all the figures.

Figure 1 is a front elevation of a ridingstirrup equipped with a shield constructed in

accordance with this invention. Fig. 2 is a vertical transverse section in the plane of the dotted line 2 2 of Fig. 1, the shield being 55 shown in its operative position by full lines and in its inactive position by dotted lines; and Fig. 3 is a horizontal sectional view taken in the plane of the dotted line 3 3 of Fig. 1.

A designates an ordinary stirrup, which is 60 preferably made of a single piece of metal in the shape shown more particularly by Fig. 1. This stirrup has a wide tread-surface a, and the side portions a' thereof converge upwardly, as shown more clearly by Fig. 1, and 65 terminate in the substantially straight parallel portions  $a^2$ .

A bolt B is arranged to pass through coincident openings in parallel portions  $a^2$  of the stirrup, and on this bolt is loosely arranged 70 the sleeve C, which serves to reduce the friction and wear of the stirrup-strap at the point of attachment of the stirrup thereto.

The important feature of my invention consists of the shield B, which is made or cast 75 in a single piece of metal and is adapted to fit closely to the upper portion of the stirrup, said shield being arranged to span the space between the converging portions a' of the stirrup and being also pivotally mounted on 80 the bolt B, so as to swing upwardly and rearwardly. The shield proper consists of the plate d and the forwardly-extending flange d', said flange and the plate merging one into the other, so as to produce the arched lower 85 edge  $d^2$ , as shown by Fig. 1, and to make the shield take the cross-sectional shape represented by Fig. 2. The plate d of the shield is curved transversely in a horizontal plane, as represented in Figs. 2 and 3, and the en- 90 tire shield is thus given a contour which makes it conform to the instep of the rider's foot or shoe, thus contributing to the comfort and ease of the rider, particularly if he is engaged in an occupation which requires 95 the use of the saddle many hours in the course of a day.

The cast-metal shield D is provided with the projecting arms e, which are extended above the plate d and are spaced apart, so as to fit snugly between the parallel upper ends  $a^2$  of the stirrup. These arms e are provided with coincident openings adapted to receive the bolt B and to pivotally connect the shield

to the stirrup through the medium of the bolt.

The shield D is furthermore provided at the side edges with the ribs f, which lie in 5 planes substantially at right angles to the arms e, and these ribs f practically form extensions or continuations of the plate d of the shield, as shown by Fig. 3. The side edges of the ribs f are curved to conform to the ex-10 ternal contour of the stirrup at the converging portions a' thereof, and these ribs are made very thin in cross-section, so that the shield will fit compactly or snugly to the stirrup when said shield is in the closed active 15 position. (Indicated by full lines in the any position except the proper one. drawings.)

The arms e of the shield are extended along the side portion of the plate d until they meet with the cross-sectionally convex flange d', 20 and these arms have their lower portions curved or inclined in downwardly-diverging relation, as indicated by dotted lines at e' in Fig. 1. The arms of the shield and the ribs at the sides thereof are fashioned to fit snugly

25 to the stirrup in order that the shield may occupy an exceedingly compact relation thereto, and in this connection it is to be observed that the arms e will lie between the converging and parallel portions a'  $a^2$  of the 30 stirrup when the shield is in its active posi-

tion, whereby the shield is adapted to serve as a stay or brace to the side portions of the stirrup. This adaptation of the shield prevents the stirrup from being broken or crushed 35 when an animal falls thereon, and thus the rider is relieved from the liability of having

his foot crushed and is enabled to disengage his foot from the stirrup in case the animal should fall. The shield is adapted to swing 40 through an arc of ninety degrees or less, assuming that the beginning of the movement is from the lower vertical position. (Shown by full lines in Fig. 2.) It is evident that the rider's foot can readily and quickly clear the

stirrup should the rider be thrown from the 45 horse, because the shield D will swing upwardly and rearwardly with relation to the stirrup, and the foot will practically be carried outwardly and away from the stirrup. The shield is free to drop or fall by gravity 50 back to its operative position shown by the drawings.

Another advantage secured by my construction is that the arms guide or direct the shield to its proper position within the stir- 55 rup when said shield drops from a raised position back to its normal upright position, thus preventing the shield from assuming

If desired, the stirrup-strap may be made 60 to prevent the shield from turning clear over the stirrup.

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

A riding-stirrup provided with the converging portions a' and the parallel portions  $a^2$ , a bolt B secured in said parallel portions, and a one-piece shield D comprising a plate d and the side arms e, said plate being provided with 70 a concave lower edge and with a cross-sectionally curved flange, and the arms e being fitted loosely on the bolt; the ends of the plate d being extended beyond the arms to form the ribs f which abut the stirrup to limit the 75 movement of the shield in one direction, and said arms e of the shield arranged to fit with the sides of the stirrup and to coöperate with the plate d in forming a brace within the stirrup.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM GRANT MURPHY.

Witnesses: MARTIN G. SINN, LYNN JEFFRIES.