This invention relates to crutches and pertains more particularly to so-called "arm rests" which fit under the arm of the user of the crutch and carry a large part of the weight of the user.

Such arm rests as customarily constructed in the past have been extremely uncomfortable, and at times painful, to the user. Consequently, in an effort to reduce the discomfort, cushions of various types have been resorted to, sometimes in the form of padding wrapped around the arm rest and sometimes in the form of soft rubber guard pieces molded to fit over the arm rest. While such cushions have afforded relief in some cases, it has been found that the extra thickness of the cushioning material in other cases produced increased pressure on muscles and nerve centers which counteracted the softening effect of the cushion, with the result that either no relief was experienced, or even that the discomfort was increased.

It is an object of the present invention to provide an arm rest so shaped as to provide increased comfort for users of crutches.

Other objects and advantages of the invention will appear hereinafter.

A preferred embodiment of the invention selected for purposes of illustration is shown in the accompanying drawing, in which,

Figure 1 is a side elevation of the inside or body face of the arm rest.

Figure 2 is a top plan view of the arm rest.

Figure 3 is a section on the line S—S of Figure 1.

Figure 4 is a section on the line 4—4 of Figure 1.

Figure 5 is a section on the line 5—5 of Figure 1.

Referring to the drawing, the arm rest illustrated is adapted for use under the right shoulder, and it will be understood that an arm rest adapted for use under the left shoulder is reversely symmetrical therewith.

As shown in the plan view, Figure 2, the upper ridge of the arm rest 1, as indicated by the dotted line A which traces the high point of each transverse cross section therethrough, has a longitudinal contour which is substantially of a flattened S-shape having a concave portion 2 at the front end curving away from the body and toward the arm of the user and a concave portion 3 at the rear end curving away from the arm and toward the body of the user. As shown in elevation, Figure 1, the upper ridge of the arm rest has a side contour which is substantially crescent-shaped, being concave substantially from the front end to the rear end, with the crescent tilted slightly forwardly so that the rear end is slightly higher than the front end.

Representative cross sections of the arm rest are shown in Figures 3, 4 and 5. The cross section on the line 4—4, taken substantially at the midpoint of the arm rest, is substantially U-shaped with the central axis of the U substantially vertical. The cross section on the line 4—4, taken near the midpoint of the front end of the arm rest, is also substantially U-shaped, but the axis of the U is elongated and tilted so that it is inclined to the vertical in the direction of the body of the user.

Similarly, the cross section on the line 5—5, taken substantially at the midpoint of the rear end of the arm rest, is also substantially U-shaped, but the axis of the U is also elongated and tilted so that it is inclined to the vertical, the direction of inclination, however, being opposite to that of the front end, i.e. it is inclined away from the body of the user.

Thus, the side surface lying below the concave portion 2 is concave longitudinally and convex in cross section, with the convex curvature tilted inwardly, i.e. toward the body, from the bottom to the top. Similarly, the side surface lying below the concave portion 3 is concave longitudinally and convex in cross section, with the convex curvature tilted outwardly, i.e. away from the body, from the bottom to the top. These concavo-convex surfaces conform to the natural contour of the muscles of the body and arm, and provide a distribution of pressure which relieves much of the discomfort heretofore experienced by users of crutches.

The front and rear ends of the arm rest may be rounded as shown to avoid sharp corners and to present a pleasing appearance.

The arm rest as shown may be shaped from suitable material such as wood or may be molded from suitable plastic materials. The arm rest may be secured to an ordinary crutch frame in the usual manner by the provision of mortise holes to receive the usual tenon members on the crutch frame.

It will be understood that the invention may be variously modified and embodied within the scope of the appended claims.

I claim as my invention:

1. An arm rest for a crutch comprising an elongated member having an upper ridge of flattened S-shaped contour longitudinally with a concave portion at the front end curving toward the arm and away from the body of the user and a concave portion at the rear end curving toward the body and away from the arm of the user, said member having substantially U-shaped

2. An arm rest for a crutch comprising a member having a crescent-shaped concave portion disposed longitudinally and a non-concave portion disposed transversely.

3. An arm rest for a crutch comprising a member having a crescent-shaped concave portion disposed longitudinally and a non-concave portion disposed transversely.
2 contours in cross section throughout the major portion of its length.

2. An arm rest for a crutch comprising an elongated member having an upper ridge of flattened S-shaped contour longitudinally with a concave portion at the front end curving toward the arm and away from the body of the user and a concave portion at the rear end curving toward the body and away from the body of the user, said member having substantially U-shaped contours in cross section throughout the major portion of its length, the axes of the U-shaped contours at the front end of the arm rest being tilted inwardly toward the body of the user, and the axes of the U-shaped contours at the rear end of the arm rest being tilted outwardly away from the body of the user.

3. An arm rest for a crutch comprising an elongated member having an upper ridge of flattened S-shaped contour longitudinally with a concave portion at the front end curving toward the arm and away from the body of the user and a concave portion at the rear end curving toward the body and away from the body of the user, said member having substantially U-shaped contours in cross section throughout the major portion of its length, the axes of the U-shaped contours at the front end of the arm rest being elongated and tilted inwardly toward the body of the user, and the axes of the U-shaped contours at the rear end of the arm rest being elongated and tilted outwardly away from the body of the user.

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