

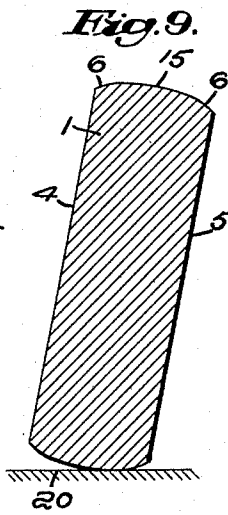
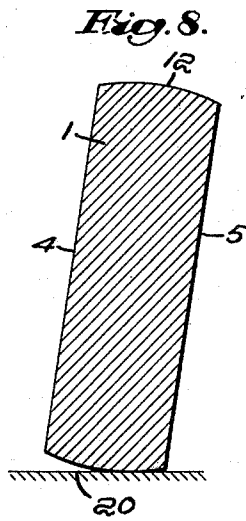
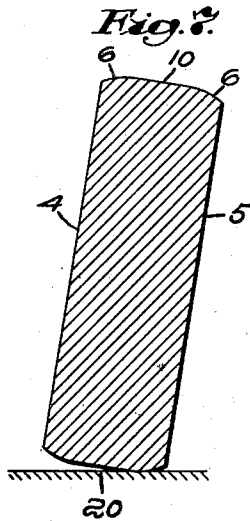
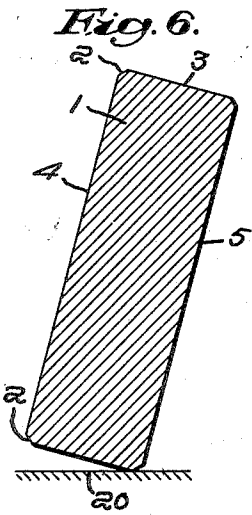
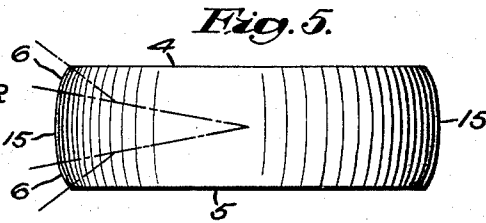
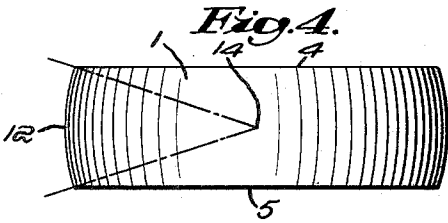
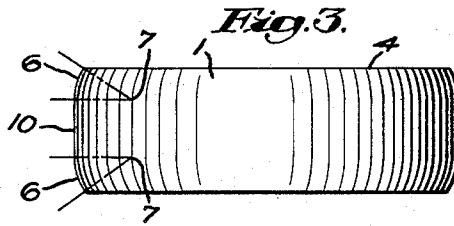
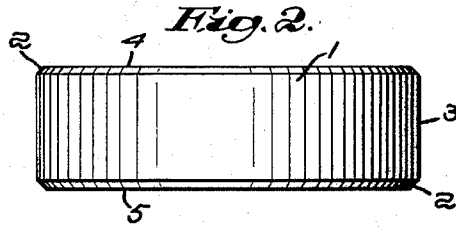
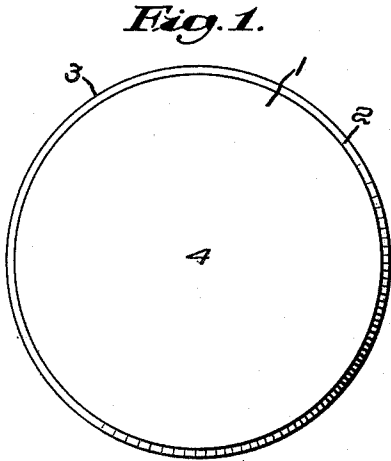
Dec. 24, 1940.

A. H. ROSS

2,226,516

ROLL-PREVENTING HOCKEY PUCK

Filed Feb. 17, 1940



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UNITED STATES PATENT OFFICE

2,226,516

ROLL-PREVENTING HOCKEY PUCK

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Application February 17, 1940, Serial No. 319,377

1 Claim. (Cl. 273—128)

My present invention is a novel and improved hockey puck, formed with the edge or rim portion of a distinctive and predetermined contour so as to eliminate any sharp corners between the top and bottom surfaces of the disc and edge portion.

Heretofore, the type of standard and official hockey puck or disc was made of rubber of desired diameter, thickness, weight, and resiliency in the form of a round disc, with the top and bottom surfaces parallel and with the edge portion perpendicular thereto and flat throughout the circumference of the same, producing sharp corners at both the top and bottom disc surfaces.

Objections and difficulties experienced with such prior type of hockey pucks have been that the relatively sharp corners between the top and bottom surfaces and the circumferential edge constituted a serious danger to the players, cutting faces, wrists, legs, and also the clothing of the players. Also, such a prior type of puck during play is very apt to be thrown, struck, or bounced upon its edge and rolls on its edge. This is a highly objectionable feature, as a rolling puck cannot be readily controlled by a player, cannot be passed, nor shot at the net, as the puck must lie flat on either of its disc-like surfaces to permit stick-handling, passing, and shooting.

My present invention is directed to obviate the difficulties above briefly outlined, to a large degree, and to improve and perfect the structure of a hockey puck by eliminating sharp corners or edges and, hence, preventing injuries to the players when hit by the same, or damage to their clothing, as well also as to largely eliminate the tendency of the puck to roll on its edge when it is in such position, and to cause the puck when rolling to tend automatically to fall quickly on either disc surface.

My improved structure thus eliminates the difficulties and dangers incident to a puck rolling for any substantial length or distance on its edge, while still providing an edge structure suitable for handling and contacting with the stick of a player necessary in "dribbling," passing, or shooting.

I carry out my present invention by providing the edge portion of a hockey puck with a predetermined corner bevel either as a straight bevelled surface or in an arc. Or I may even form the entire edge as an oval or with slightly convex surface, or with a combination of flat and arc, oval and arc, or flat or oval and straight bevel corner structure.

While it is desirable to have a flat surface on the edge of the hockey puck or disc to permit the stick of a player to handle the same, yet a relatively flat arc might be feasible, particularly if formed with an anti-slipping surface or other friction-creating or clinging device, such as shown in the copending application of Henry G. Tyer, Ser. No. 319,419, filed February 17, 1940, although ordinarily a distinctly rounded puck structure would not be suitable for use, as tending to distort a player's shots or throws.

Referring to the drawing illustrating preferred embodiments of my present invention,

Fig. 1 indicates a full-sized hockey puck of standard diameter and with one form of my predetermined bevel thereon;

Fig. 2 illustrates an edge view of the puck shown in Fig. 1;

Fig. 3 illustrates an edge view showing a modification with an arc-shaped corner and flat surface;

Fig. 4 illustrates a convex edge contour;

Fig. 5 illustrates a still further modification with a plurality of differing arcs constituting the edge portion;

Figs. 6, 7, 8, and 9 are diagrammatic cross-sectional views illustrating the action of the various modifications of Figs. 2, 3, 4, and 5 respectively, showing the tendency of these various modified structures of my improved hockey puck to eliminate edge-roll and tending to fall flat on the disc face.

Referring to the drawing, a hockey puck 1 of standard weight, diameter, and resiliency is shown as formed with a predetermined edge bevel 2-2 at each corner adjacent the disc surface 4 and 5 of the hockey puck 1. These disc surfaces 4 and 5 are flat throughout the extent of the puck 1 but the edge structures are of varying form. Thus, in Fig. 2, the edge structure constitutes the bevelled corner surfaces 2-2 and an intermediate flat surface 3, as clearly shown in the drawing.

In the form shown in Fig. 3, the edge surface is made up of rounded arc sections 6-6, utilizing a point approximately as indicated at 7-7 as the center of the radius forming these edge arcs 6-6 and with the intermediate section 10 flat.

In Fig. 4 I have illustrated a still further modification, wherein the edge portion 12 is in the form of a continuous arc formed with a radius having its center approximately at 14, as shown.

In Fig. 5 I have illustrated a still further modification wherein the edge is a compound arc, having the edge arcs 6-6 in substantially the form

shown at Fig. 3, and with the center portion 15 on a relatively larger arc similar to that indicated at 12 in Fig. 4. Thus, a compound arc edge surface, either convex, oval, or with a combination like the bevels 2 of Figs. 1 and 2 with an arc-formed edge or combination of same, as shown for illustrative purposes, all constitute various embodiments of my present invention.

As illustrated in Figs. 6, 7, 8, and 9, I have indicated in diagrammatic form the tendency of the various edge structures when rolling on a flat surface 20 to tend to eliminate the edge-rolling propensity of the disc and to facilitate the falling of the same in flat position either on the disc surface 4 or 5.

Thus, it will be appreciated that my present invention, while maintaining the advantages of size, diameter, weight, and resiliency desired in a standard and official hockey puck, yet eliminates the probable cause of injury by providing rounded, bevelled, or arc-shaped corners, and preventing damage and danger to both player and clothing from the sharp-cornered structure. Also, the

provision of a predetermined portion or area adjacent the corners of the edge of the puck produces effective means to diminish rolling on the edge. Thus, my invention includes the safety factor of a non-cutting corner and a construction producing to a considerable extent a non-rolling edge structure.

I claim:

A solid circular hockey puck of predetermined weight, diameter, and thickness, formed of resilient material throughout, having top and bottom surfaces each formed in a horizontal plane as a continuous flat disc, the circumferential rim surface coextensive with the thickness of the puck and being of substantially uniform diameter throughout the greater area of said circumferential surface, but of lesser diameter where said circumferential surface joins with the top and bottom flat surfaces, whereby said circumferential surface constitutes a hockey stick-engaging portion, and roll-preventing portions adjacent the top and bottom surfaces.

ARTHUR H. ROSS.