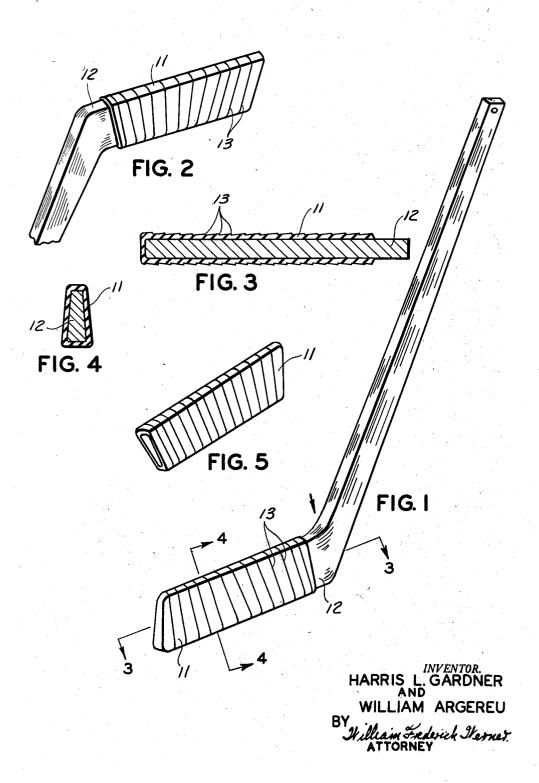
HOCKEY STICK

Filed Feb. 27, 1957



Ĩ

## 2,912,245

## HOCKEY STICK

Harris L. Gardner and William Argereu, Cranston, R.I., assignors of one-third to Willard Brownson MacKenzie, Cranston, R.I.

Application February 27, 1957, Serial No. 642,694 1 Claim. (Cl. 273-67)

This invention relates to hockey sticks and more partic- 15 ularly to a covering for the blade of the hockey stick.

One of the objects of the present invention is to provide the blade of a hockey stick with a covering.

Another object of the present invention is to provide the blade of a hockey stick with means to reinforce the 20 blade in such a manner that splitting or breakage of the blade and the injury incident to splitting of the wooden blade or bodily injury caused by the loosening of the nail in the toe of the blade is completely obviated

Another object of the present invention is to provide 25 the molding process. the blade of a hockey stick with a covering which greatly lessens bodily injury caused by the sharp, hard corners of the blade and which does not lessen the flexibility of

Still another object of the present invention is to pro- 30 vide a covering for a hockey stick blade which is of long wearing material, which simulates the tape wind surface now in use, which does not add appreciably to the weight of the hockey stick and which will conform to the rules laid down for playing the game.

Other objects of the present invention will be pointed out in part and become apparent in part in the following specification and claim.

Referring to the drawings in which similar characters of reference indicate corresponding parts in all the figures:

Figure 1 is a perspective view of a hockey stick provided with the new and improved blade.

Figure 2 is a fragmentary perspective view of the hockey stick blade showing the bottom and back surface not evident in Figure 1.

Figure 3 is a horizontal cross sectional view taken along line 3—3 of Figure 1.

Figure 4 is a transverse cross sectional view taken along line 4—4 of Figure 1.

Figure 5 is a perspective view of the covering as ap- 50 plied to the blade in a modified form.

In the past a hockey stick was fabricated from laminated wood with a nail located in the toe of the blade. The nature of the game of hockey dictated abuse to the hockey stick especially the blade. The abuse resulted in destruction of the blade. Destruction of the blade frequently took the form of flying splinters and a flying nail with consequent serious bodily injury. To overcome bodily injury and rapid destruction of the blade, players wrapped friction tape around the blade. The friction 60 tape reinforced the strength of the blade. It also prevented splinters of wood and the nail from flying through the air to cause bodily injury. The tape also provided a ridged surface for contact with the puck instead of a smooth blade surface. The one disadvantage of the friction tape was that it wore out rapidly leaving flying strips dangling from the blade unless the stick or tape was replaced. The tape would seldom outlast one hockey game before it had to be replaced. Tape replacement is costly.

The present invention obviates these disadvantages by 70 providing a long lasting covering for the blade which simulates the taped blade. The new and improved cover-

ing provides additional advantages as will presently appear.

In proceeding with this invention reference is made to all figures of the drawing, in which reference numeral 10 generally indicates a conventional hockey stick.

The new and improved blade covering consists of a sleeve 11 permanently attached to the blade 12.

The sleeve 11 may be fabricated and attached in several ways. In one contemplated form a two part mold is 10 provided with ridges in its face corresponding to the ridge lines produced when friction tape is wrapped around a blade. The mold is opened. A strip of uncured rubber is laid on one face of the mold. The blade 12 is laid upon the strip of uncured rubber. A second strip of uncured rubber is laid upon the blade 12. The mold is closed with the second face of the mold provided with ridges lying against the second strip of uncured rubber. The blade 12 and the sides of the two strips of uncured rubber may be provided with an adhesive. After the mold is closed it is subjected to three hundred degrees of temperature, Fahrenheit and between three and five tons of pressure for a duration of from three to three and one half minutes. There may be a little run off of the rubber strip in the mold. The rubber strip is cured in

The uncured strip of rubber may be (.060) sixty thousandths of an inch when placed in the mold. The molding process will reduce this thickness to (.030) thirty thousandths due to heat, pressure and run off.

The uncured strip of rubber may consist of synthetic or natural rubber.

It is also contemplated that strips of cord or tape fabricated from nylon, Fiberglas, cotton or the like may be wound around the blade to provide ridges or to-reenforce the blade, especially if a plain faced mold is employed instead of a ridged face mold.

After the two part mold is open, a blade as shown in Figures 1, 2, 3 and 4 is provided with a permanently attached sleeve 11 having ridges 13.

As illustrated in Figure 5, a sleeve 11 may be prefabricated and attached to the blade 12 with the aid of adhesives. It is obvious that lack of heat and pressure does not provide the same high quality sleeve on the blade

Having shown and described preferred embodiments of the present invention, by way of example, it should be realized that structural changes could be made and other examples given without departing from either the spirit or scope of this invention.

What we claim is: A hockey stick comprising a handle and a wooden blade attached to the handle, a molded rubber covering attached to the wooden blade having structural characteristics resulting from having been made by the method comprising the steps of providing a two part mold, the inner surfaces of which are provided with ridges corresponding to the ridge lines, in number, width and depth produced when friction tape is wrapped around a wooden hockey stick blade, the mold is opened, a strip of uncured rubber is laid upon one face of the mold, the wooden hockey stick blade is laid upon the strip of uncured rubber, with one end of the blade extending beyond the end of the mold, a second strip of uncured rubber is laid upon the wooden blade, the mold is closed with the second face of the mold engaging the second strip of uncured rubber, the mold is subjected to three hundred degrees of temperature, Fahrenheit and between three and five tons of pressure for a duration of from three to three and one half minutes, the mold providing for the running off of quantities of rubber in excess of the capacity of the mold, thereby producing a wooden hockey stick blade with a rubber covering attached uniformly to the surfaces of the wooden hockey stick blade, the rubber covering having ridges in number and of a width and depth of a friction tape covering, the rubber covering having a thickness of approximately thirty thousandths of an inch, the rubber covering terminating short of the exposed end of the wooden hockey stick blade to permit the exposed end of the wooden hockey stick blade to be subjected to moisture to insure a moisture content in the wooden hockey stick

Ref	erences Cited in the file of this patent
	UNITED STATES PATENTS
1,798,355	Roberts Mar. 31, 1931
	FOREIGN PATENTS
459,578	Canada Sept. 12, 1949