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SYNTHETIC SKATING SURFACE

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2 Claims. (Cl. 106—1)

The object of my invention is the production of a synthetic skating surface that will be equal to ice in coefficient of friction to the skate blade, equal in hardness and friability, and that will be such that a smooth skating surface is easy to maintain.

The synthetic skating surface consists essentially of a slightly porous, and suitably hard and slightly friable plastic of low melting point and low coefficient of friction, treated with an oil or other lubricant to further reduce the friction.

The synthetic skating surface has a coefficient of friction approximating ice and makes unnecessary the large capital outlay required for an artificial ice plant to produce an ice surface, and also reduces the cost of maintaining the surface in skating condition.

The inventive idea in my synthetic skating surface consists in combining several substances to obtain a plastic of approximately the same hardness and friability of natural ice, to obtain in the plastic a porous formation that will hold lubricating material, and to obtain a plastic of low melting point that can readily be reconditioned as a skating surface without a great expenditure of heat.

The plastic is easily applied in a liquefied state to a suitable supporting base, and simply reconditioned on the surface by portable heating apparatus.

The preferred composition of the plastic consists of the following materials in approximately the proportions set down.

	Parts by weight
Carnauba wax (obtained from the leaves of the carnauba palm)	10
Gum dammar (dammarin) (obtained from cowrie pine and other trees of same family)	2
Naphthalene (distillate of coal tar)	7

The preferred lubricant consists of mineral oil of low viscosity, non-chemically active, having a high surface tension, to prevent evaporation, a high flash point and a low freezing point.

The carnauba wax is the base material, the naphthalene acts as a hardener and the gum dammar provides a suitable binder giving the compound the correct degree of hardness and friability.

To prepare the plastic the following procedure is followed.

The naphthalene and gum dammar are mixed and liquefied by heat, the carnauba wax is liquefied by heat separately and added to the liquid mixture of naphthalene and gum dammar and the whole thoroughly mixed. The resulting compound is maintained within the temperature range of 190 degrees Farh. to 216 degrees Farh. and is poured or sprayed on to a suitable timber or concrete base until the desired thickness of surface has been obtained, the liquid is allowed to cool and harden, the surface is then sprayed or brushed with the low viscosity, stable oil to fill the pores on the surface. The coefficient of friction is thus reduced and the nature of the plastic is such that the surface in contact with the skate blade is slightly friable and so provides the necessary grip for skating.

I claim:

1. A synthetic skating surface consisting of a plastic composed of a mixture of naphthalene, gum dammar and carnauba wax with a suitable surface lubricant.

2. A synthetic skating surface consisting of 10 parts by weight of carnauba wax, 2 parts by weight of gum dammar, and 7 parts by weight of naphthalene; treated with a lubricant of mineral oil of low viscosity, non-chemically active, having a high surface tension, a high flash point and a low freezing point.

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