Oct. 14, 1969 K. D. ERICKSON 3,472,217

GAME DEVICE FOR FORMING AND THROWING SNOWBALLS

Filed Dec. 6, 1966

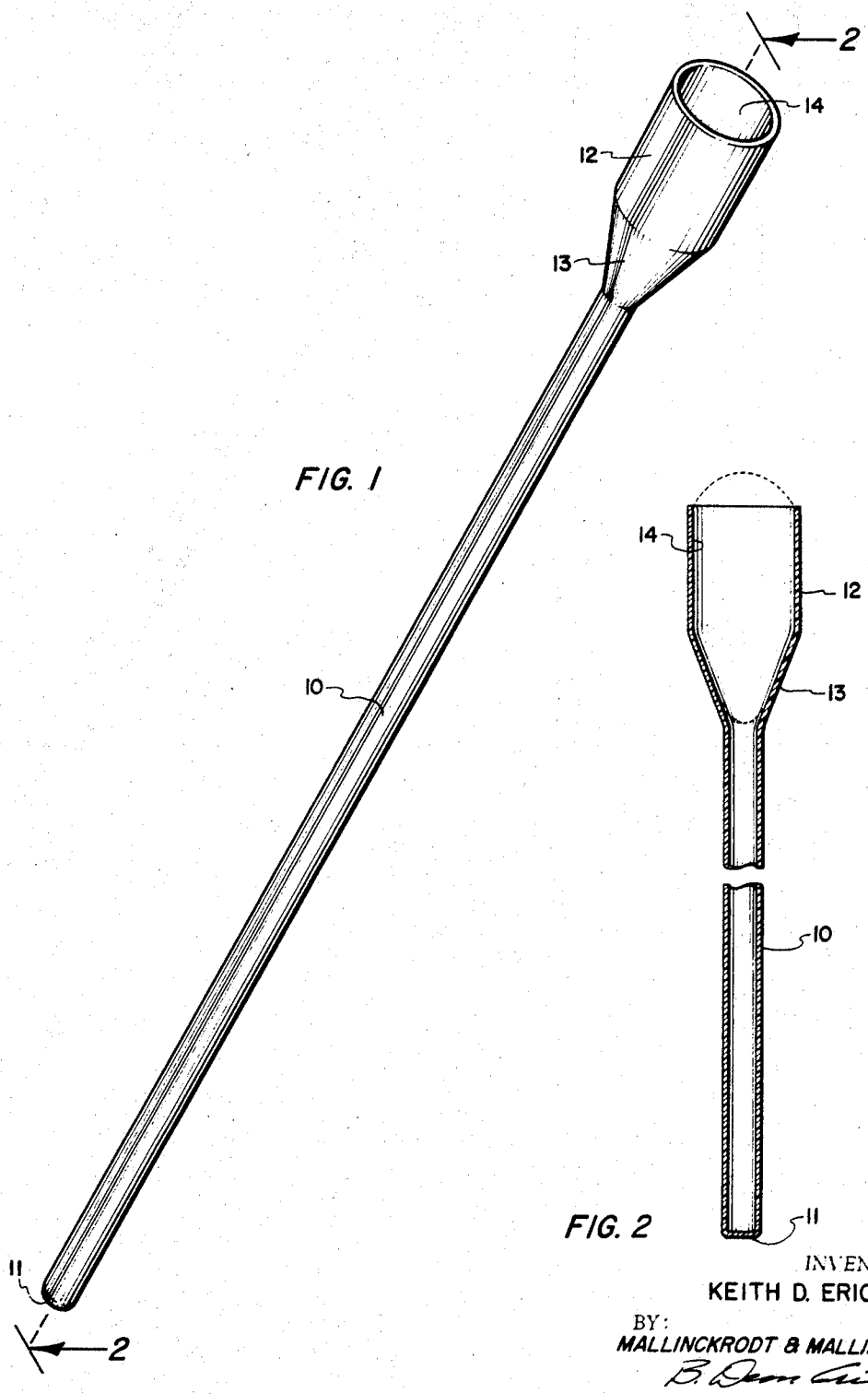

FIG. 1

FIG. 2

INVENTOR:
KEITH D. ERICKSON

BY:
MALLINCKRODT & MALLINCKRODT
B. Dean Criddle
ATTORNEYS

United States Patent Office 3,472,217
Patented Oct. 14, 1969

3,472,217

GAME DEVICE FOR FORMING AND THROWING SNOWBALLS

Keith D. Erickson, 6444 South 9th East, Salt Lake City, Utah 84108

Filed Dec. 6, 1966, Ser. No. 599,611
Int. Cl. F41b 3/00, 15/00
U.S. Cl. 124—5 1 Claim

ABSTRACT OF THE DISCLOSURE

A device to be used in the forming and throwing of snowballs. It has a somewhat flexible, hollow, elongate handle that is gradually expanded into an enlarged, smooth-bore, snowball forming and holding end.

BRIEF DESCRIPTION

This invention is a game device used in the forming and throwing of snowballs and is particularly appealing to children. It has an elongate, hollow handle, that is closed at one end and that serves as a resonance chamber when a snowball is thrown. The handle is gradually expanded to an enlarged open end in which snowballs are formed and held. The handle is somewhat flexible so that during the throwing motion a limited amount of "whip" action is obtained that increases the velocity of the snowball. The enlarged end is smooth-bored, so that snow compacted therein into snowball form sealingly engages the bore wall, like a piston in a piston cylinder, to thereby create a low pressure in the hollow handle as the snowball is discharged. The low pressure prevents the snowball being prematurely thrown and adds sound effects to the throwing action.

It is an object of the present invention to provide a game apparatus that can be easily used by persons of all ages, but especially by children, to assist in the forming and throwing of snowballs.

A user of the device of the invention will merely hold the handle while sticking the enlarged end into snow, either while the snow lies on the ground or after it has been rolled into a large snowball. Continued pushing compacts the snow inside the enlarged end and the user can then slowly raise the device to a throwing position. The device is quickly swung in an arc, in the same manner an axe or a baseball bat is swung, to centrifugally dislodge the snow. The natural flexibility of the plastic from which the device is preferably made will impart a slight "whip" action as the device is quickly swung, thereby increasing the velocity of the snowball as it flies from the enlarged end. As the snowball is discharged a partial vacuum is formed in the hollow handle, and air rushing into this low pressure area creates a pronounced noise that adds audible sound effects to the act of throwing the snowball. The partial vacuum also slows movement of the snowball from the enlarged end and prevents its being discharged before the user has properly aimed the device. The delayed discharge also allows the device to be swung through a greater arc before the snowball flies from the enlarged end and this further increases its velocity.

Initially, a user will normally find it difficult to accurately throw snowballs with the device, although great distance can be obtained. With practice, greater accuracy will be achieved.

There is shown in the accompanying drawing a specific embodiment of the invention representing what is presently regarded as the best mode of carrying out the generic concepts in actual practice. From the detailed description of this presently preferred form of the invention, other more specific objects and features will become apparent.

THE DRAWING

FIG. 1 is a perspective view of a preferred form of the invention; and

FIG. 2, a vertical center section taken on the line 2—2 of FIG. 1 and drawn to a reduced scale.

DETAILED DESCRIPTION

Referring to the drawing:

In the illustrated preferred embodiment, the invention includes an elongate tubular handle **10**, closed at **11**, but otherwise forming a hollow cylinder that serves as a resonance chamber.

An enlarged, snowball forming and holding end **12** at the other end of the nandle is connected by an intermediate section **13** with the hollow handle.

Handle **10** must have some degree of flexibility in order for the velocity of a thrown snowball to be increased as a result of "whip" action occurring when the user swings the device.

The bore **14** of the enlarged end **12** must be straight-walled and smooth, so that snow compacted therein, when thrown, will engage the wall like a piston in a cylinder. As it slides from the enlarged end the snowball creates a partial vacuum in the hollow handle. This partial vacuum, or suction, initially acts on the snowball formed in the enlarged end **12** in opposition to the centrifugal force resulting from a user swinging the device while holding the handle **10** adjacent to its closed end **11**, thereby tending to hold the snowball in the bore **14**. However, since the centrifugal force is much greater, the net effect of the suction is to merely slow the discharge of the snowball. This, however, enables the user to swing the device through a complete arc and to have the bore pointed in the desired direction of discharge when the snowball flies out. Also, since a full arc is completed, and the maximum rate of swing of the device is achieved, the centrifugal force will impart a maximum velocity to the snowball.

As the snowball leaves bore **14**, air rushing into the handle to fill the parital vacuum creates a noise that is magnified and made clearly audible by the elongate hollow handle. The noise created is especially pleasing to children using the device since it adds sound effects to their throwing efforts.

The flexibility of the handle and the smooth bore of the enlarged end can both be achieved by constructing the device in one-piece, of a suitable plastic material, and without any projections on the bore wall. Care must be taken not to make the handle so flexible that the device cannot be pushed into accumulated snow to pack a snowball in the large end or such that too much "whip" action is obtained, and the device becomes uncontrollable.

Whereas this invention is here described and illustrated with respect to a certain preferred form thereof, it is to be understood that many variations are possible without departing from the subject matter particularly pointed out in the following claim, which subject matter I regard as my invention.

I claim:

1. A game device for forming and throwing snowballs, comprising:

an elongate, longitudinally straight tubular, plastic hollow handle of limited flexibility, completely enclosed, except at one end, whereby the enclosed portion forms a resonance chamber;

an enlarged portion connected to the open end of said handle, said enlarged portion being cylindrical and having a smooth, straight-walled interior surface; and

a smooth-walled, closed, intermediate section interconnecting the innermost surface of the tubular handle and the innermost surface of the enlarged portion, the space formed by said intermediate section being smaller in cross setcion throughout the entire length

of the intermediate section between the handle and the enlarged portion than the cross section of the space formed within the cylindrical enlarged portion.

References Cited

UNITED STATES PATENTS

1,075,041	10/1913	Kirkness	124—5
2,853,991	9/1958	McLain	124—41 X
3,087,481	4/1963	Foster	124—41 X
3,236,521	2/1966	Knott	124—41 X

ANTON O. OECHSLE, Primary Examiner

THOMAS ZACK, Assistant Examiner