United States Patent [19]

O'Link

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[45] **Feb. 18, 1975**

[54] **BUOYANT PELLETED MATERIAL AND METHOD**

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[52] **U.S. Cl.** **161/145,** 2/2, 9/342, 161/89, 161/59

[51] **Int. Cl.** **A41d 13/00,** B32b 3/00, B32b 5/18

[58] **Field of Search** 2/2; 161/145, 159, 89; 9/311, 340, 342

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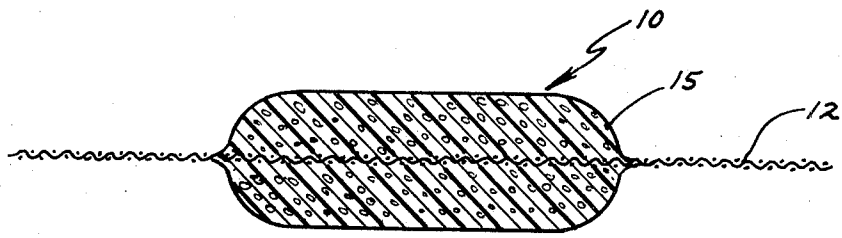
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[57] **ABSTRACT**

A buoyant material consisting of a mesh fabric disposed diametrically through a multiplicity of buoyant pellets, said pellets being disposed in planar spaced relation to one another.

1 Claim, 5 Drawing Figures



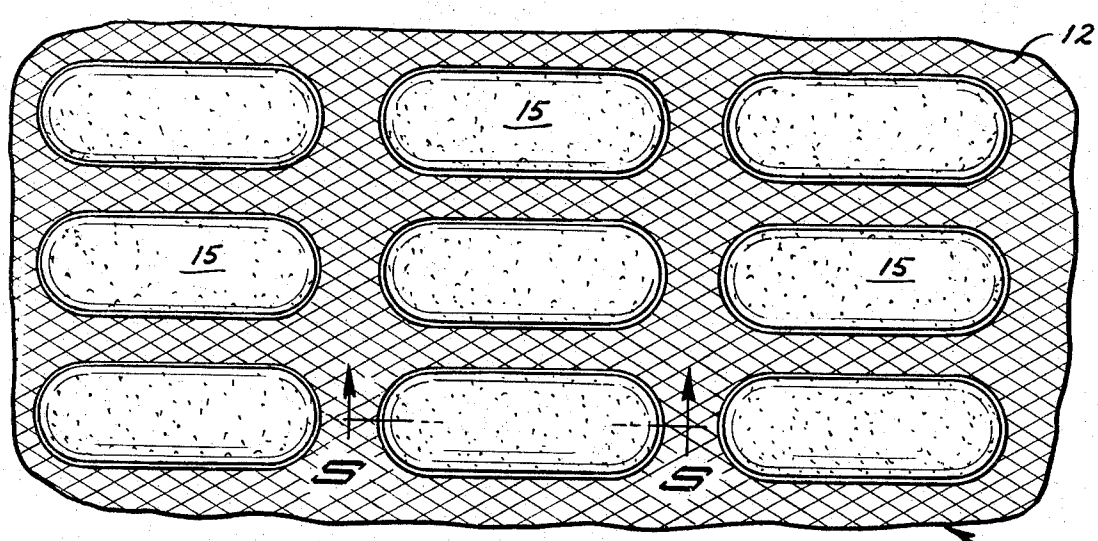


FIG. 1

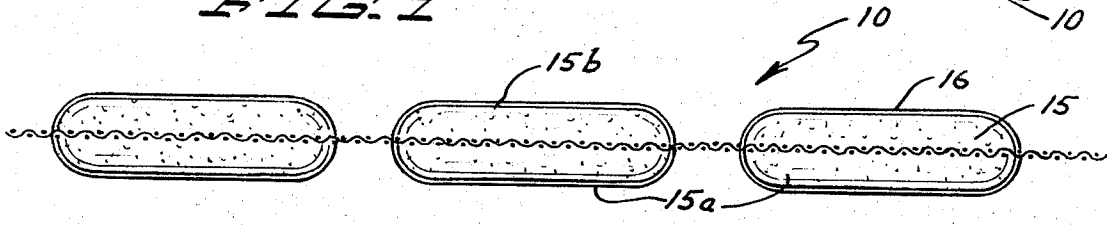


FIG. 2

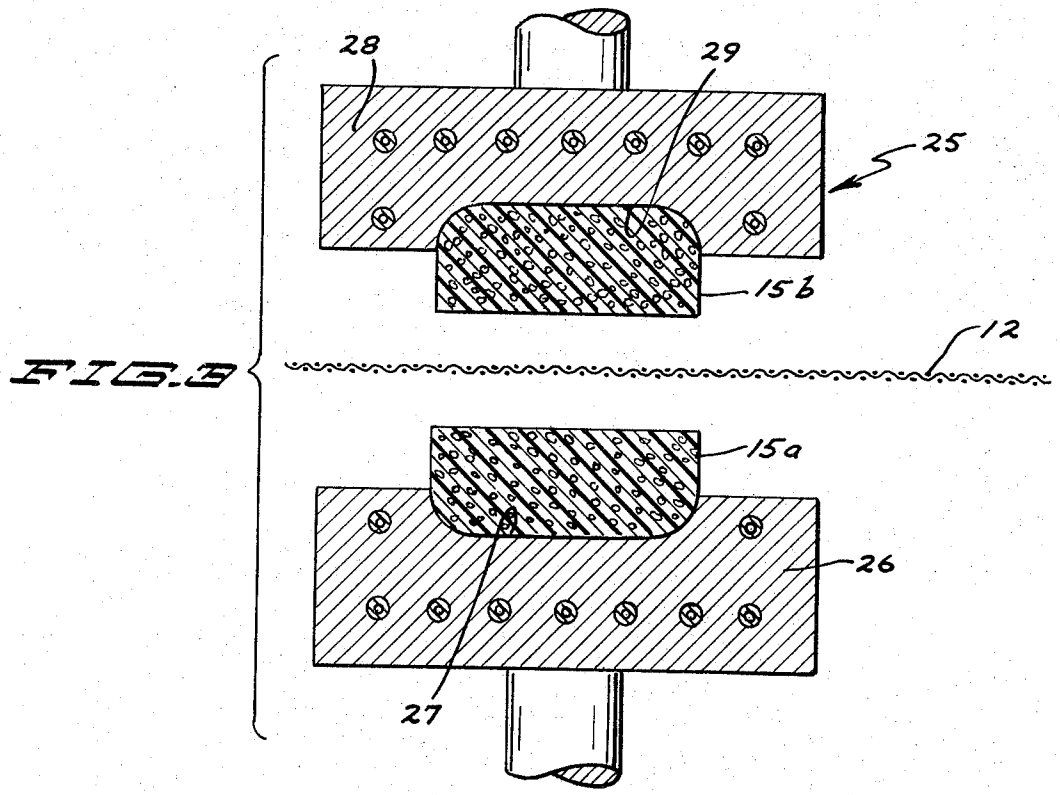


FIG. 3

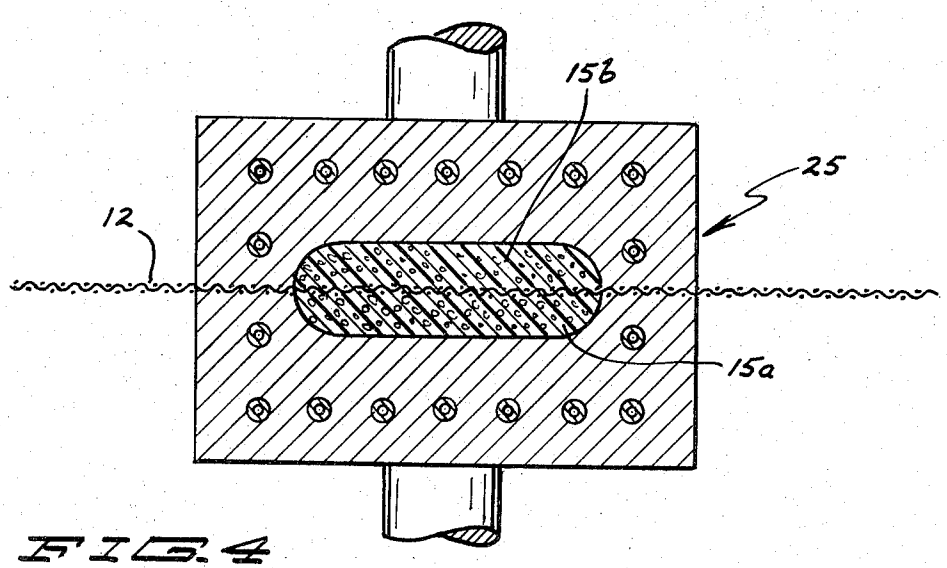


FIG. 4

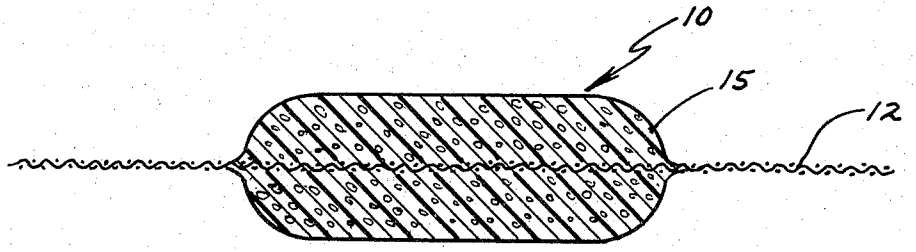


FIG. 5

BUOYANT PELLETED MATERIAL AND METHOD

SUMMARY AND BACKGROUND OF THE INVENTION

A closed cell expanded foam material is in common use for buoyant vests and jackets as used for water sports and for hunting and fishing. Such material is commonly used in slab or panel form for insertion between the outer shell and the lining of a vest or jacket.

It is desirable to simplify the buoyant vest and jacket construction by integrating more intimately the buoyant elements of said vests and jackets with the fabric from which said vests and jackets are made.

It is an object of this invention therefore to provide a buoyant material suitable for use in forming a buoyant vest or jacket said material combining the buoyant elements and the fabric of said vests and jackets into an integrated form.

It is another object of this invention to combine buoyant pellets directly with a material suitable for forming a vest or jacket.

It is more specifically an object of this invention to combine a suitable fabric such as a mesh fabric with a multiplicity of buoyant pellets by arranging said fabric to be diametrically disposed through a planar arrangement of a multiplicity of said pellets in spaced relation and thus forming a material from which a buoyant vest or jacket may be suitably made.

It is also an object of this invention to provide buoyant pellets, formed of a closed cell expanded foam material which is light in weight, and have a suitable degree of buoyancy and which may be readily fused together as by being disposed at either side of a sheet of fabric and fused through said fabric to become integral therewith.

These and other objects and advantages of the invention will be set forth in the following description made in connection with the accompanying drawings in which like reference characters refer to similar parts throughout the several views and in which:

FIG. 1 is a broken view in plan of the invention herein;

FIG. 2 is a view similar to FIG. 1 in side elevation;

FIG. 3 is an exploded schematic view showing an apparatus in connection with forming the invention herein;

FIG. 4 is a view similar to FIG. 3 showing another position thereof; and

FIG. 5 is a view in vertical section taken on line 5—5 of FIG. 1 as indicated.

DESCRIPTION OF A PREFERRED EMBODIMENT

The invention herein comprises a material **10** which for purpose of illustration herein is particularly adapted for use in making buoyant vests and jackets as for boating, hunting and fishing.

Referring to the drawings, a strong coarse mesh fabric **12** is preferred and preferably one which is non-absorbent and which is resistant to the adverse effects of the suns rays.

Secured to and made integral with the fabric are shown a multiplicity of buoyant pellets **15.** Said pellets are preferably formed of a light weight closed cell expanded foam material. Said pellets have an exterior surface **16** which is durable and resistant to the adverse effects of active usage and resistant to the adverse effects of the suns rays.

For purposes of illustration, one method is shown for making pellets integral with said fabric.

Said pellets **15** are here shown having separate portions **15***a* and **15***b*. It has been found to be expedient to fuse or bond the pellets onto the fabric by the use of an adhesive or by the application of heat. The use of heat is here indicated. A press **25** having heating elements therein is indicated comprising a lower face portion **26** having a cavity **27** therein to receive a pellet portion **15***a* and is shown having an upper face portion **28** having a cavity **29** therein to receive a pellet portion **15***b*.

The fabric **12** will be positioned to overlie the pellet portion **15***a*. The upper face **28** of said press will be lowered to overlie and mate the pellet portion **15***b* with the pellet portion **15***a*. The press will be suitably heated in a conventional manner and the mating pellet portions will be fused through said fabric **12** for an integral relationship between the portions of said pellet and the fabric therebetween.

Thus there is formed and results a buoyant material **10** which is very suitably adapted as a single material to have buoyant vests and jackets made therefrom.

Said fabric and the pellets may be variously colored whereby attractively colored and significantly novel sporting vests and jackets may be formed.

It will of course be understood that various changes may be made in the form, details, arrangement and proportions of the product and in the steps and sequence of steps of the method without departing from the scope of applicant's invention which, generally stated, consists in a product and method capable of carrying out the objects above set forth, such as disclosed and defined in the appended claim.

What is claimed is:

1. A buoyant pelleted sheet material, having in combination

a sheet of fabric,

a buoyant pellet underlying said fabric,

a buoyant pellet overlying said fabric in register with said underlying pellet, and

said pellets being integrally joined together through said fabric.

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