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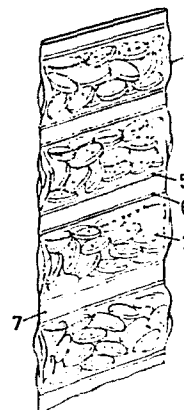
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54 A shock absorbing means for packing.

57 A shock absorbing means for packing which comprises a plurality of housings 1 of enlarged, quadrangular shape and defined by transverse lines of welding 5,6 between two laminar flexible strips of synthetic material, connected by pairs of parallel welding lines and united along the borders and whereby the housings are filled with elements 2 made of an essentially porous and absorbing material and arranged arbitrarily.

FIG.3



"A shock absorbing means for packing"

The invention relates to means designed to facilitate protection of fragile objects against shocks, vibrations, and other causes which might impair the integrity of the objects.

5 The shock absorbing means to be described in greater detail below is characterized by its simple structure, modest production cost, and efficiency in use as it provides for complete isolation from the effects of shocks, vibrations, and the like to which fragile objects normally are exposed during
10 transportation and temporary storage.

In order that the invention may be clearly understood and readily carried into effect an embodiment of a shock absorbing means for packing will now be described, by way of example, with reference to the accompanying drawings, in which:

15 Fig. 1 is a side elevational partial view of a means according to the invention;

Fig. 2 is a longitudinal sectional view along line II-II in fig. 1, as seen from the front;

Fig. 3 is a perspective view of the means according to the
20 invention, embodied by four identical portions;

Fig. 4 is a view of a fragile object packed by the embodiment of the means according to the invention shown;

Fig. 5 is a presentation at right angles of one of the elements of shock absorbing material of which the means
25 according to the invention is composed in its interior.

The body of the shock absorbing means according to the invention forms a pocket 1 of rectangular shape, as seen from the side, and approximately oval in transverse section. It

is filled with a plurality of elements 2 of variable shape which, in their preferred embodiment, have the configuration of an elliptical and curved piece, as illustrated in fig. 5.

The faces 3 and 4 defining the pocket 1 are limited by lines 5 and 6 of welding or fusing which extend in transverse direction across two strips or webs of laminar plastic material, thereby defining narrow zones 7 between each pair of adjacent pockets 1.

The shock absorbing means specifically comprises an elongated band formed of a plurality of pockets 1, as shown in fig. 3, to be arranged in such manner that it will wrap an object 8 of fragile structure, either fully or in part, protecting it against shocks, vibrations, or other causes of damage which might affect the object during its transportation. In fig. 4 the shock absorbing means is shown applied to position an object 8 in the interior of a box 9, the shock absorbing means acting as a wrapping in contact with the various surfaces of the object to be protected.

The elements 2 are manufactured separately by suitable methods and preferably of a porous and absorbing raw material, like expanded polystyrene, or any other material which is light in weight and capable of mechanical, thermal, and acoustic absorption.

The dimensions of the pockets 1 may vary in correspondence with the envisaged dampening or shock absorbing action and the size of the objects to be protected. They are made in industrial lengths and cut to measure, as desired.

WHAT IS CLAIMED IS:

1. A shock absorbing means for packing, characterized in that it comprises a plurality of housings (pockets 1) of enlarged, quadrangular shape and defined by transverse lines (5,6) of welding between two laminar flexible strips of synthetic material, connected by pairs of parallel welding lines and united along the borders, and in that the housings are filled with elements (2) made of an essentially porous and absorbing material and arranged arbitrarily.
2. The shock absorbing means as claimed in claim 1, characterized in that the elements (2) of absorbing material have the form of curved sheets, preferably being of elliptical shape, and in that the faces thereof form cells in connection with the pores of the internal structure of increased surface area as compared to the volume.

FIG.1

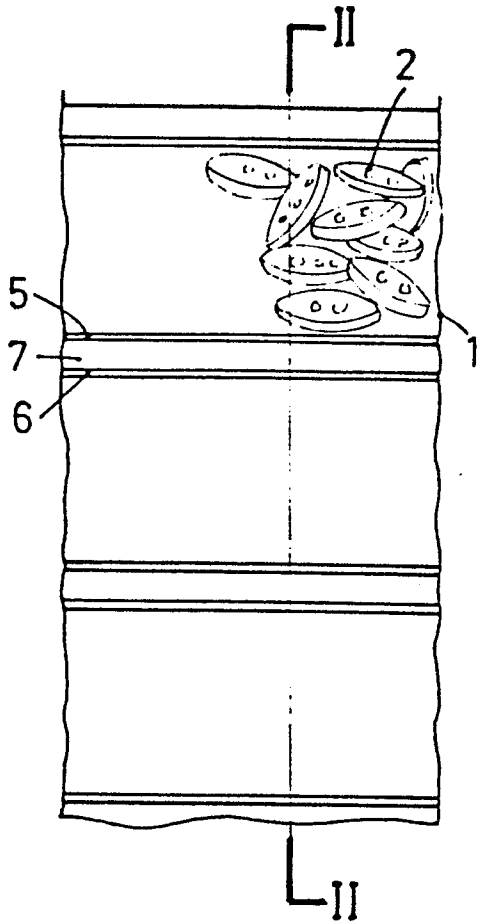


FIG.2

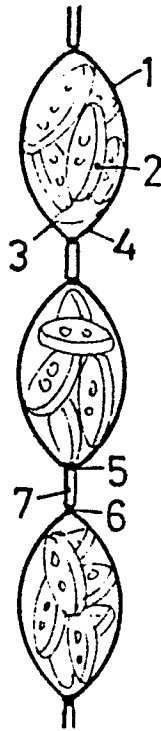


FIG.3

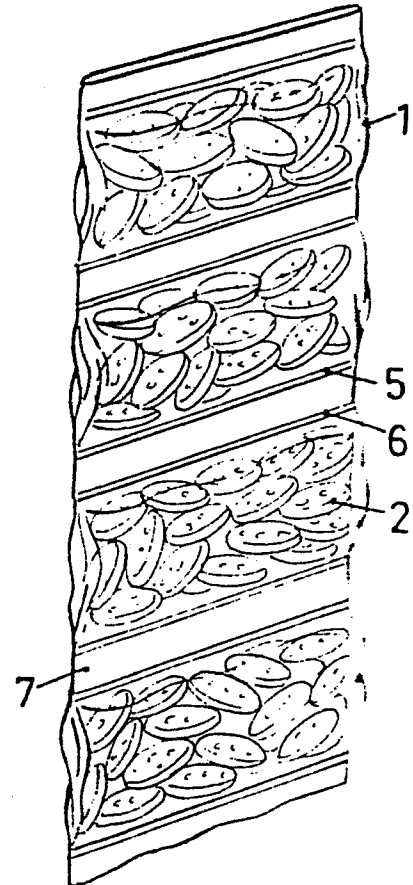


FIG.4

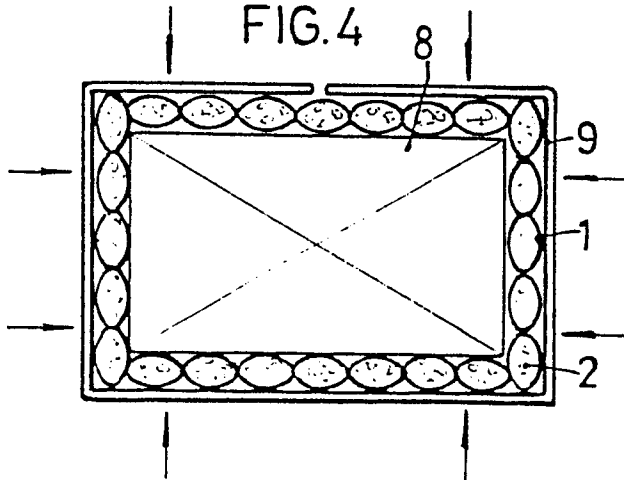
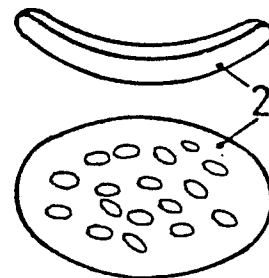


FIG.5





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
X	US-A-3 462 007 (HEIDER) * Whole document *	1	B 65 D 81/12
Y		2	
Y	--- NL-A-7 214 775 (BASF) * Page 2, lines 22-35; figures *	2	
X	--- FR-A-2 319 543 (ZORRA) * Page 1, line 37 - page 3, line 4; figures *	1	
A	--- US-A-4 104 440 (COLLINS) * Column 9, line 57 - column 10, line 2; figure 3 *	3	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
			B 65 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 30-08-1983	Examiner MARTENS L.G.R.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	