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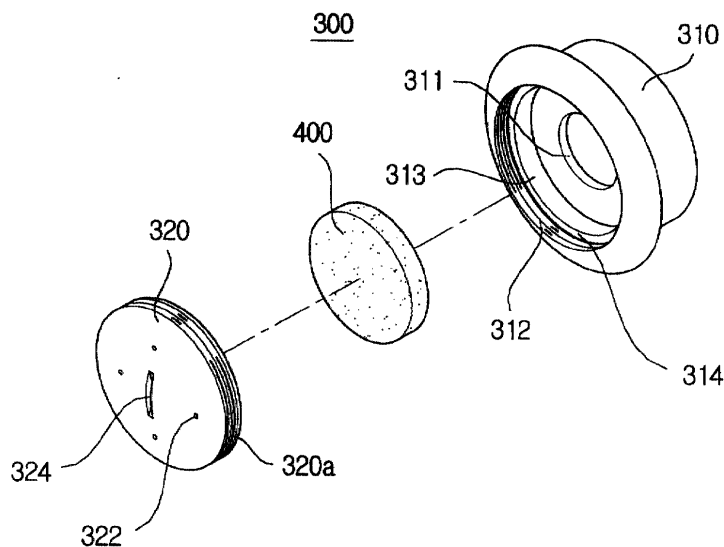
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A bed mattress with storage pockets

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A bed mattress (200) with one or more storage pockets comprising a receptacle (300) formed with a hole (311), an opening (313) opposite the hole and a space therebetween for holding chemicals, agents or the like (400) therein and having a cap (320) to be received and held in the opening, either of the body and cap (320) being provided with engagement means (320a,312); and a member for fixing (210) the receptacle on the sidewall of the mattress, for preventing out-break of bad smells and removing the existing ones is disclosed.

FIG. 2



Description

Technical Field

[0001] The present invention relates to a bed mattress with storage pockets, particularly a bed mattress with storage pockets placed in the ventilating holes of the mattress for keeping sublimates or the like such as antibiotics, aromatic agents, deodorants, etc. therein.

Background Art

[0002] Generally, a bed mattress serves as a cushioning member and includes structural springs surrounded by a textile covering. Poor ventilation in a mattress may cause its wooden or metal parts to rot or corrode and thus the mattress to reek of bad smell or odors. In a measure to solve such a problem, a number of holes are provided on the sidewalls of the mattress for sufficient ventilation and for discharging the odors locked up in the mattress. The conventional mattresses do not have any means or structure for preventing outbreak of bad smells or removing them.

Disclosure of Invention

[0003] According to the invention there is provided a bed mattress having one or more storage pockets for keeping antibiotics, aromatic agents, deodorants, desiccants and other suitable chemicals or agents therein, which are placed on a sidewall of the mattress.

[0004] The chemicals or agents kept in the pockets on the mattress can perform sanitary functions to prevent formation of bacteria, germs, fungi, mold, or the like as well as outbreak of bad smells or odors and/or eliminate the existing ones.

[0005] It is an advantage of this invention to provide a bed mattress which can prevent outbreak of bad smells and also remove the existing ones.

[0006] Another advantage of the invention is to provide a bed mattress with a simple structure for keeping chemicals to remove bad smells or odors.

Brief Description of the Drawings

[0007] The present invention will now be described in detail for the preferred embodiments by way of examples with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a bed to which the present invention is applied;

Fig. 2 is an exploded perspective view of a receptacle according to a first embodiment of the present invention;

Fig. 3 is a side view in section of the pocket in Fig. 2;

Fig. 4 shows a modified example of the receptacle in Fig. 2; and

Fig. 5 shows a receptacle according to a second embodiment of the present invention.

Best Mode for Carrying out the Invention

[0008] A bed mattress according to the present invention generally has at least storage pocket comprising a receptacle formed with a space for holding chemicals or agents, a hole and an opening and having a cap received and held in the opening, and a fixing member for fixing the receptacle on the mattress. Referring to Fig. 1, a receptacle 300 is shown as being fixed in a ventilating hole 250 formed at the sidewall of a mattress 200 placed on a bed 100.

[0009] Fig. 2 shows a receptacle 300 according to a first embodiment of the present invention, which comprises a hollow circular body 310 with a hole 311, an opening 313 opposite the hole and a space therebetween for holding chemicals or agents 400 therein, and a cap 320 to be received and held in the opening 313. The cap 320 formed with four apertures 322 for ventilation purpose may be pushed into the opening 313 by means of a screwdriver with the tip inserted in the groove 324 so that the male thread 320a may be engaged with the female thread 312.

[0010] Referring to Fig. 3, the receptacle 300 with the chemicals 400 therein is received and held in the opening of a tubular fixing member 210 attached to a hole formed on the mattress 200 by means of its circumferential opening. The air can flow through the apertures 322, the space 313 and the hole 311 so that the chemicals or agents held in the space may work to sterilize, dehumidify and aromatize the air in and around the mattress, or remove bad smells or odors according to the function or use of the respective chemicals or agents. The cap 320 may be pulled out from the opening 313 by disengaging the male thread 320a from the female thread 312, using a screwdriver with the tip inserted in the groove 324 for replacing the chemicals or agents.

[0011] Fig. 4 shows a modified example of the storage pocket according to the second embodiment of the invention in Fig. 2, in which a handle 326 is provided on the cap 320 instead of the groove 324 for engaging or disengaging of the cap 320 with or from the body 310.

[0012] Fig. 5 shows a receptacle according to a second embodiment of the invention, in which the body 310 is provided with two opposite locking grooves 315 and the cap 320 is formed with two locking protrusions 325 corresponding to the two grooves 315, for substituting the female and male threads 312 and 320a in the first embodiment. The functions and operations of the storage pocket of this embodiment are the same as those of the first embodiment.

Industrial Application

[0013] The embodiments described above are provided merely for and by way of examples, but not to limit

the present invention. It is to be understood that changes and modifications may be made from the embodiments presented herein by those skilled in the art without departing from the spirit and the scope of the invention.

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Claims

1. A bed mattress with at least a storage pocket comprising: a receptacle formed with a hole, an opening opposite said hole and a space therebetween for holding chemicals or agents therein and having a cap to be received and held in said opening, either of said body or cap being provided with engagement means; and a fixing member of said receptacle provided on a sidewall of the mattress. 10 15
2. A bed mattress as claimed in claim 1, wherein said engagement means comprises a female thread and a male thread, either of which is formed around said opening of said body or on the circumference of said cap. 20
3. A bed mattress as claimed in claim 1, wherein said engagement means comprises one or more locking grooves formed around said opening and the same number of locking protrusions as said grooves formed on the corresponding positions on the inner surface of said cap. 25 30
4. A bed mattress as claimed in claim 1, 2 or 3, wherein a groove for receiving the tip of a tool is formed on the outer surface of said cap. 35
5. A bed mattress as claimed in claim 1, 2 or 3, wherein a handle is protruded on the outer surface of said cap. 40

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FIG. 1

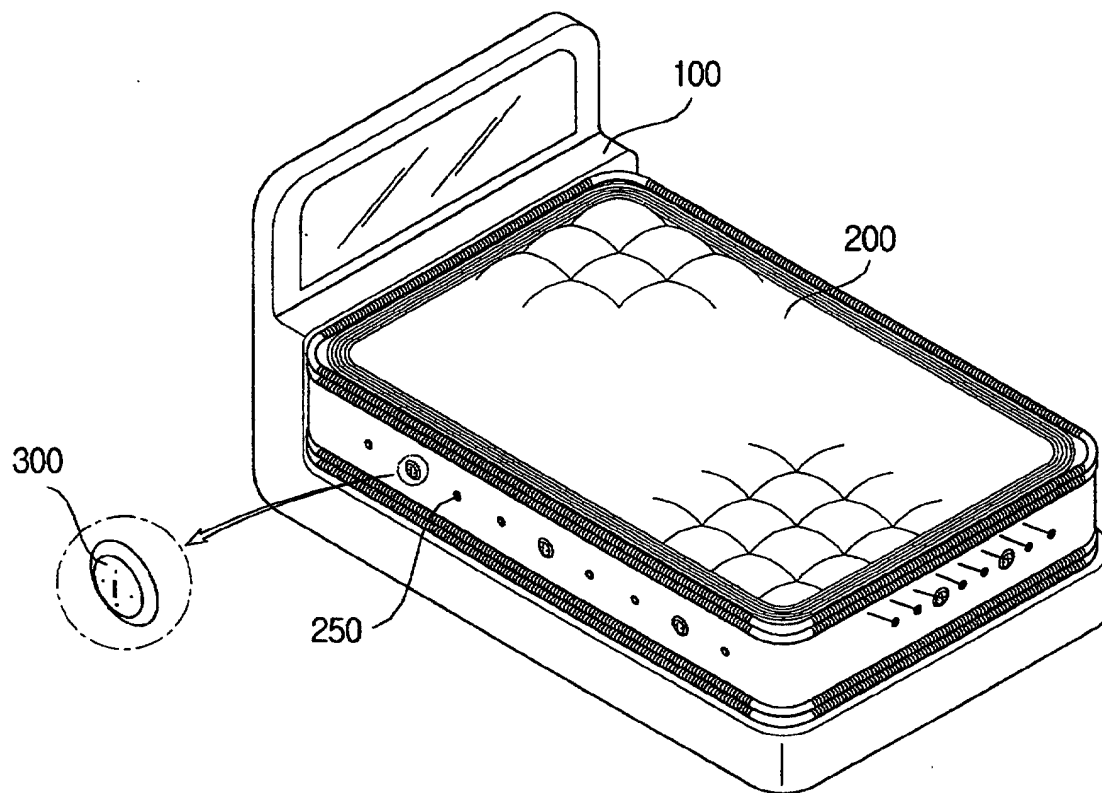


FIG. 2

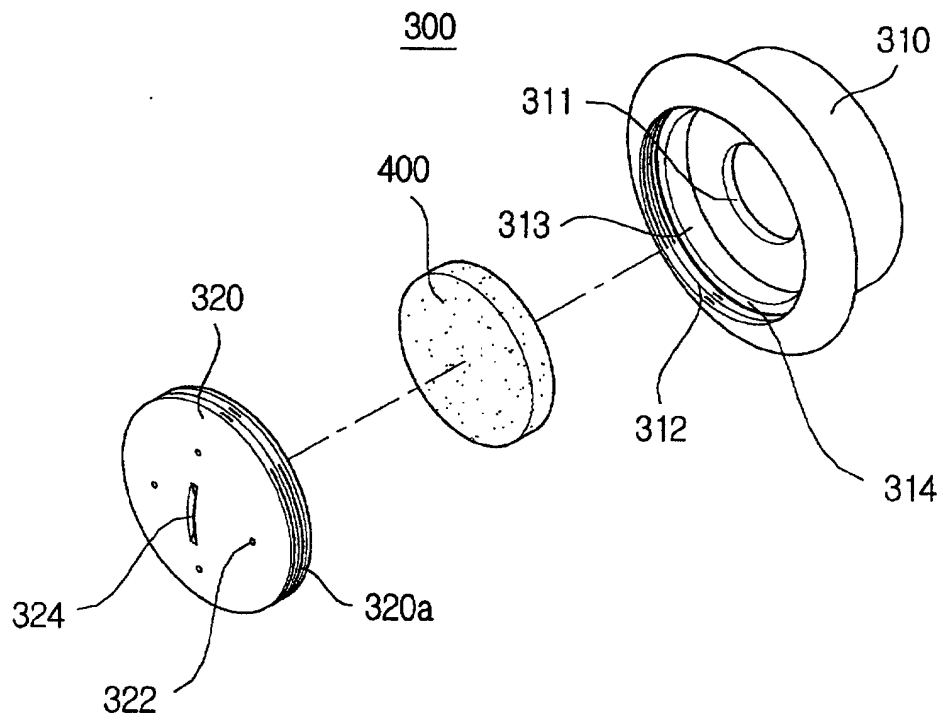


FIG. 3

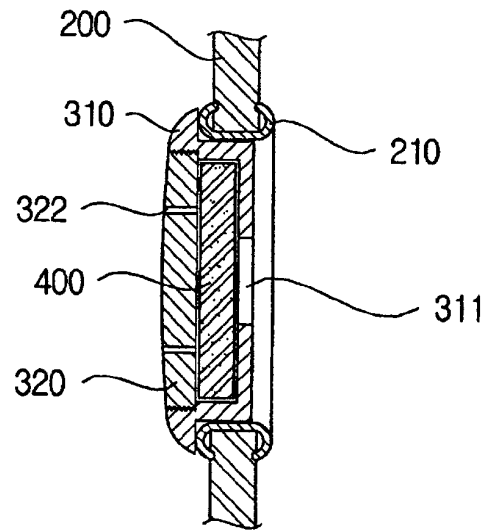


FIG. 4

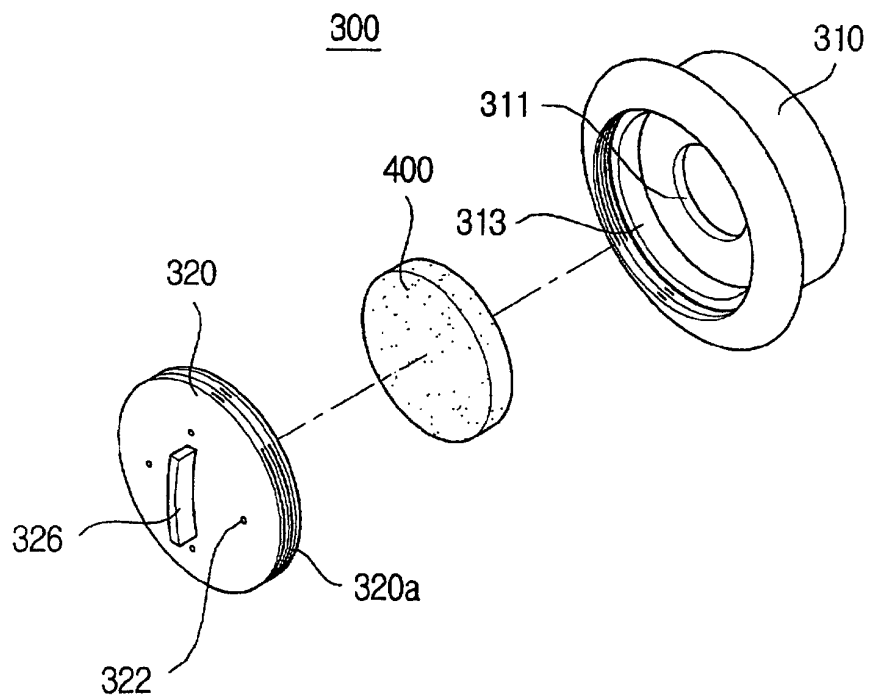
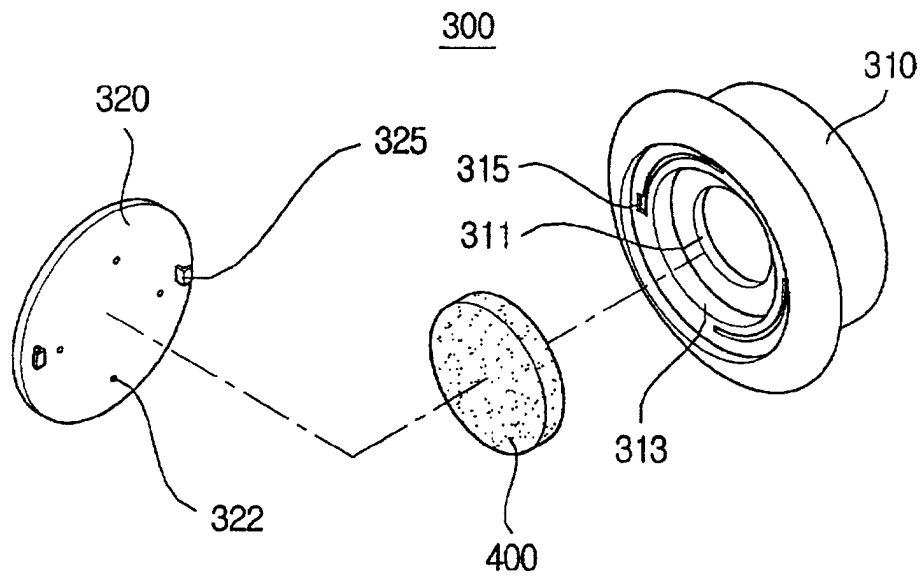


FIG. 5





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 30 3747

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.7)
X	GB 791 017 A (JOHN LOGAN ANDREW) 19 February 1958 (1958-02-19) * the whole document *	1-5	A47C21/04 A47C31/08
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A47C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 4 October 2000	Examiner van Bilderbeek, H.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>& : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 30 3747

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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04-10-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 791017	A	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82