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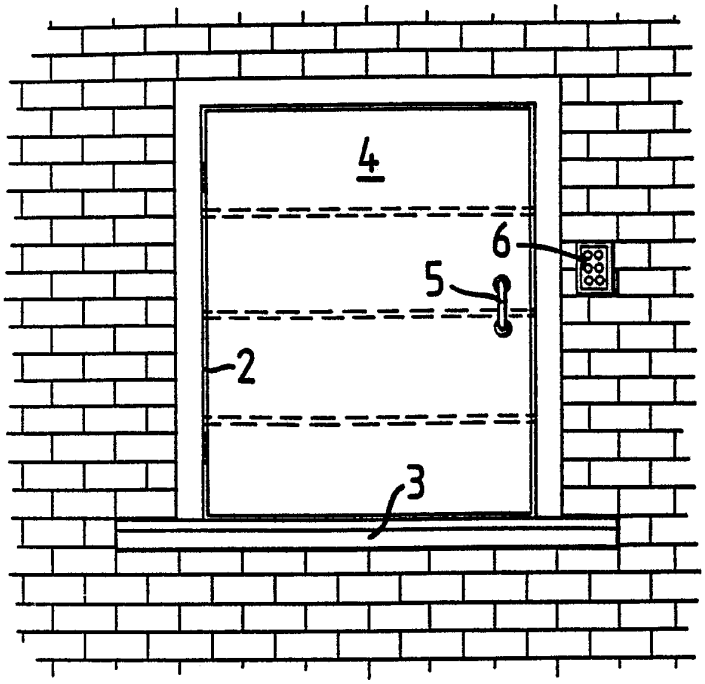
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(54) Title: SECURITY ARRANGEMENT FOR DELIVERED GOODS



(57) Abstract

The arrangement is for delivered goods, particularly to a household to avoid the necessity of the householder being at home. It comprises a hatch or enclosure (1) defined or fitted within an opening (2) through a wall of a building to which goods are to be delivered, said hatch or enclosure having an exterior door (4) with a lock (6), such as a combination lock which is lockable by the roundsman after delivery and an interior door (10) opening into the building which can be locked from within the building and through which the delivered goods can be extracted. The lock (6) of the exterior door may be self-locking after use by the roundsman, in which case, it could be unlocked from within the building prior to the next delivery. The hatch or enclosure may be divided into compartments (9) each with its own exterior door (4), and lock (6), in which case at least one compartment may have a chilling and/or refrigerating mechanism associated therewith for perishable and/or frozen goods.

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Security Arrangement for Delivered Goods.

This invention relates to a security and temporary storage arrangement for delivered goods, particularly for households.

A particular problem faced by delivery roundsmen is that the households to which they are to deliver are often empty. A problem is also faced by the householder when goods are to be delivered, due to the fact that a precise or even approximate time of delivery cannot normally be given by the roundsman. Thus, the householder cannot plan the day and must often stay indoors many hours before delivery is finally made.

Where the goods are inexpensive, e.g. milk, eggs etc they are often left at the door of the householder. Even then, in hot weather, such goods can be severely impaired if left for long. In the case of expensive goods, such as a container of groceries, these obviously cannot be left outside and if the groceries include frozen foods it is imperative that they are immediately attended to upon delivery.

The object of my invention is to provide a security and temporary storage arrangement for delivered goods which can be readily used by a roundsman, even if the householder is away.

According to this invention, such an arrangement for delivered goods comprises a hatch or enclosure defined or fitted within an opening through a wall of a building to which goods are to be delivered (e.g. in the wall of a house adjacent the front door), said hatch or enclosure having an exterior door which is lockable by the roundsman after delivery and an interior door opening into the building which can be locked from within the building and through which the delivered goods

can be extracted.

In a first application, the exterior door could be provided with a self-locking lock that can, however, be unlocked from inside by the householder. Thus, the exterior door could be opened by the roundsman when he calls, but it would automatically lock after the roundsman has opened the door, delivered the goods, and closed the door again. In this case, the householder would extract the delivered goods after returning home through the interior door and reset the lock to its open position from inside. To cater for a number of separate deliveries, the hatch or enclosure could be divided into compartments with a common exterior door and lock, or each with its own exterior door and lock.

In a second application, the exterior door could be fitted with a combination lock, in which case a regular roundsman, such as a milkman, would know the combination, whereas, for an infrequent delivery e.g. from a shop, the householder would advise the shop of the combination number when ordering. Advantageously, a combination lock could be used of the type where the combination numbers can be changed at will, so that the householder, with prior notification to the roundsman could change the number from time to time, or it could be changed for a special delivery.

It will be appreciated that, with either of the above described applications, at least one compartment could be chilled, e.g. by a suitable refrigerating compressor, for use for perishable goods such as milk or eggs.

In a third application, the hatch or enclosure could be

divided into compartments of a unit size, which size would preferably be standardised for use by roundsmen, so that each compartment could accept a standard storage container sent out by a shop, etc with the goods already stored therein. In this application, preferably a common exterior door and lock would still be provided for normally closing the compartments, but in addition, a one-way locking device would be provided for each compartment, which could act between a wall of the compartment, e.g. the floor, and a corresponding wall of the storage container so that, once delivered into a compartment, the locking device would prevent the container from being removed through the exterior door, but would permit it to be removed through the interior door.

In order that the invention may be readily understood, one embodiment, constructed in accordance with the third application discussed above, will now be described with reference to the accompanying drawing in which :-

Figure 1 is an exterior elevation of a security hatch, let into a wall of a house,

Figure 2 is a section through the hatch,

Figure 3 is an interior elevation of the hatch, and,

Figure 4 is an enlarged detail A of Figure 2.

Referring to Figures 1 to 3, the front of the security enclosure 1 is formed as an opening 2 extending through a brick wall which is faced with wood and has a sill 3. The opening is normally closed by an exterior door 4 with a handle 5, the door being lockable by a press-button combination lock 6. The enclosure extends inwardly and comprises a casing structure 7

with a series of shelves 8 dividing the enclosure into a number of compartments 9. Internally, the enclosure is normally closed, in this embodiment by a pair of lockable hinging doors 10, which take on the appearance of a cloak cupboard within the house, the lower part 10a of which can be used for general storage. As discussed hereinbefore, each compartment 9 is of a standardised unit size so that, if desired, goods can be delivered already packed into a standardised storage container 11. To prevent withdrawal of such a container when fitted into a compartment, a one-way lock is used, see Figure 4. The lock comprises a spring bar 12 upstanding from the floor 13 of each compartment and inclined towards the interior of the house. The bottom of each standard container is provided with an inclined cooperating recess 14. Thus, when the container is pushed into the compartment, its undersurface presses the spring bar to the floor and this latter then springs back into the recess when the container is fully located in the compartment. Although withdrawal of the container 11 is prevented through the exterior door, it will be appreciated that the container can be readily pulled out through the interior doors 10. In this embodiment, instead of providing a refrigerated compartment, some of the standard sized storage containers could be in the form of insulated cold boxes.

It will be appreciated that, in this embodiment, although the compartments are designed to receive goods already packed into standardised storage containers 11, they could also be used directly to receive unpacked goods.

It will also be appreciated that the arrangement could be

made more secure by using it in conjunction with a two-way phone and/or a camera system so that the householder can communicate with the roundsman. As a further feature, a time clock could be installed alongside the exterior door, or within the enclosure, to enable the roundsman to record the time of delivery.

Claims

1. A security and temporary storage arrangement for delivered goods, characterised in that it comprises a hatch or enclosure (1) defined or fitted within an opening (2) through a wall of a building to which goods are to be delivered, said hatch or enclosure having an exterior door (4) with a lock (6) which is lockable by the roundsman after delivery and an interior door (10) opening into the building which can be locked from within the building and through which the delivered goods can be extracted.

2. An arrangement according to claim 1, characterised in that the lock (6) of the exterior door is self-locking after use by the roundsman, but can be unlocked from within the building.

3. An arrangement according to claim 1, characterised in that the lock (6) is a combination lock of a type with combination numbers that can be changed at will.

4. An arrangement according to claim 1, characterised in that the hatch or enclosure is divided into compartments (9) each with its own exterior door (4), and lock (6).

5. An arrangement according to Claim 4, characterised in that at least one compartment has a chilling and/or refrigerating mechanism associated therewith for perishable and/or frozen goods.

6. An arrangement according to claim 4 or 5, characterised in that the hatch or enclosure is divided into compartments of a standard unit size adapted to receive a storage container of corresponding standard size.

7. An arrangement according to claim 6, wherein a one-way

locking device (12) is provided for each compartment adapted to act between a wall (13) of the compartment and a corresponding wall of a storage container therefor so that, once delivered into its compartment, the container cannot be removed from the outside.

8. An arrangement according to any one of the preceding claims, characterised in that it includes two/way phone and/or a camera installation.

9. An arrangement according to any one of the preceding claims, characterized in that a time clock is provided to record the time of delivery.

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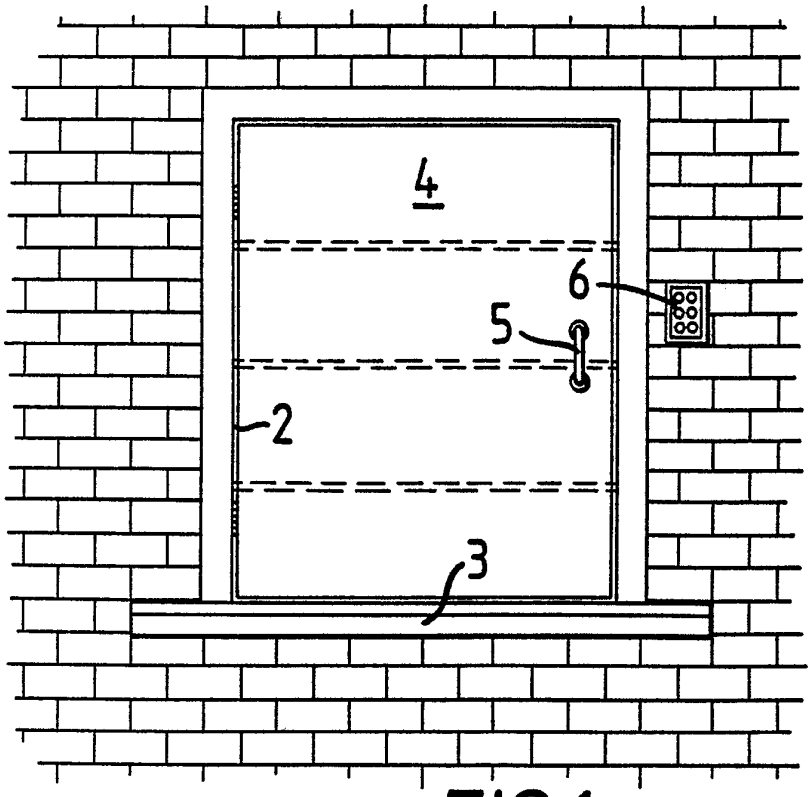


FIG.1

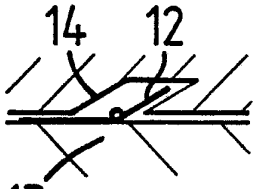


FIG.4

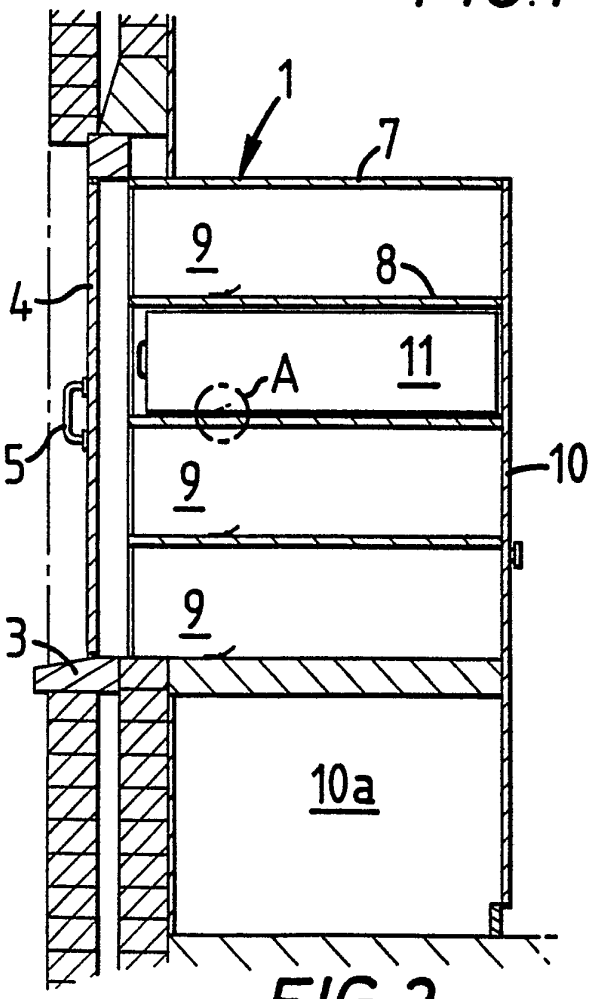


FIG.2

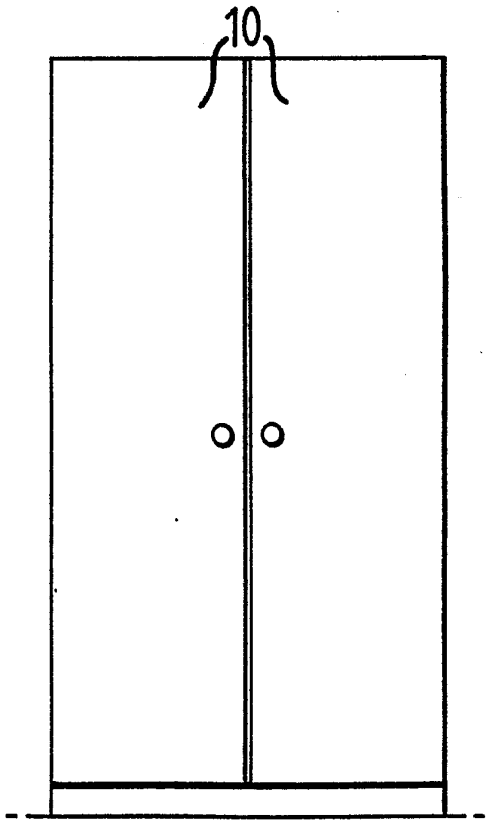


FIG.3

INTERNATIONAL SEARCH REPORT

International Application No PCT/GB 87/00251

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) [6]

According to International Patent Classification (IPC) or to both National Classification and IPC

IPC[4]: E 06 B 7/32

II. FIELDS SEARCHED

Minimum Documentation Searched [7]

Classification System	Classification Symbols
IPC[4]	E 06 B

Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched [8]

III. DOCUMENTS CONSIDERED TO BE RELEVANT [9]

Category [10]	Citation of Document, [11] with indication, where appropriate, of the relevant passages [12]	Relevant to Claim No. [13]
X	FR, A, 918110 (WILMOT-BREEDEN LTD) 30 January 1947 see pages 1,2; figures 1-3	1,2
X	US, A, 1738539 (MOSS) 20 July 1928 see page 1, lines 47-100; page 2; page 3, lines 1-12; figures 1-3	1,2,4
A	FR, A, 513223 (THE SEVIDOOR CY) 10 February 1921	
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* Special categories of cited documents: [10]

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IV. CERTIFICATION

Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report
23rd June 1987	24 JUL 1987
International Searching Authority	**Signature of Authorized Officer**
EUROPEAN PATENT OFFICE	M. VAN MOL

ANNEX TO THE INTERNATIONAL SEARCH REPORT ON

INTERNATIONAL APPLICATION NO. PCT/GB 87/00251 (SA 16848)

This Annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 03/07/87

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR-A- 918110		None	
US-A- 1738539		None	
FR-A- 513223		None	
US-A- 1581776		None	