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(54) **Purpouse lockers**

(57) The present locker (1) incorporates a proprietary and modular structure, having a general parallelepipedal shape, in zinc plated steel plates or similar material, and possesses a properly integrated and symmetrically arranged assembly of structural elements (2) forming the locker (1) central structure, pairs of inner hinges (3) for the locker doors and a lock (4) of different types controlling access to the locker interior, so as to form a single and modular assembly with adequate spaces between shelves on the inside, based on the technological concept called "flat pack".

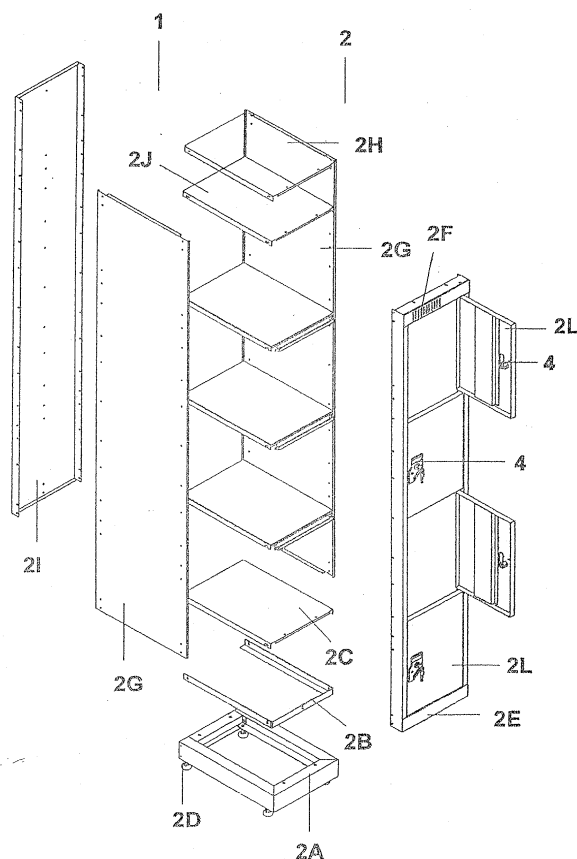


Fig.1B

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Description

[0001] The present patent relates to purpouse lockers in general, more specifically to a purpouse locker which, in accordance with the characteristics thereof, possesses as a basic principle to provide the formation of a differentiated structure as for the component elements and whose installation is based on a concept called "flat pack", in order to allow users in general greater practicality in the transportation and installation of the structure, as well as a better general application and use and having as a basis a locker with great strength, durability and versatility. With a specific design and shape, easily accessible for a better adaptation, comfort and safety for the users, practical handling, functionality and installation characteristics, compact and accessible cost and due to its characteristics and dimensions, is easily adaptable to any place and type of user, regardless of the characteristics thereof.

[0002] The patent in question is characterized in that it aggregates components and processes in a differentiated concept to meet the various requirements the nature of its use demands, that is, it is easy to install and store. Such concept provides a locker having more functionality, versatility, efficiency, durability, economy and safety due to its excellent technical qualities, thereby providing advantages and improvements to the product, the general characteristics of which differ from the other shapes and models known in the state of the art.

[0003] The present patent consists in the utilization of a modem, efficient, safe and functional purpouse locker, formed by an assembly of properly incorporated design, logistics and application solutions comprising a complete and differentiated locker, with an exclusive design, optimum finish details and proprietary characteristics, and incorporating a proprietary and modular structure of high durability and strength, having a general high parallelepipedal shape, made of zinc plated steel plates or similar material and possessing a properly integrated and symmetrically arranged assembly of structural elements forming the locker central structure, pairs of inner hinges for the locker door and a lock of different types controlling the access to the locker interior, so as to form a single and modular assembly with adequate spaces between shelves on inside of door based on the technological concept called "flat pack", installed with rivets and screws, with the purpose of providing greater practicality, safety and resistance during transportation and installation of the locker by the users in schools, gyms, factories, offices, clubs and others.

[0004] The present patent is based on the utilization of a locker comprising components and processes in a differentiated concept, without, however, achieving a high degree of sophistication and complexity, making it possible to solve some of the main inconvenients of the other shapes and models known in the current state of the art and employed to store clothes or objects in general in schools, gyms, factories, offices, clubs, etc.,

which are located in an operating range in which the handling difficulties and accidents são frequent and whose shapes and/or products are obsolete and based on simple adaptations, as the ones locally handcrafted, which causes fragility and difficult maintenance, low strength and durability, or else they have a large structure, which means high costs, high volume and weight, difficult and slow installation and the need of high skilled labor.

[0005] The objects, advantages and other important characteristics of the patent in question can be more easily understood when read jointly with the appended drawings, wherein:

Figure 1A is a perspective view of the purpouse locker.

Figure 1B is an exploded perspective view of the purpouse locker.

Figure 2A is a rear perspective view of the door for the purpouse locker.

Figure 2B is a rear perspective view of the door for the purpouse locker in a different angle.

Figure 3A is an exploded perspective view of the hinge for the purpouse locker.

Figure 3B is a perspective view of the hinge for the purpouse locker.

Figure 4 is a front perspective view of the door with a standard key lock for the purpouse locker.

Figure 5 is a front perspective view of the door with a padlock hasp type lock for the purpouse locker.

Figure 6 is a front perspective view of the door with a 'tosca' type lock for the purpouse locker.

Figure 7 is a rear perspective view of the door with a 'tosca' type lock for the purpouse locker.

Figure 8A is a front perspective view of the open door with an eyebolt type lock for the purpouse locker.

Figure 8B is a front perspective view of the closed door with an eyebolt type lock for the purpouse locker.

Figure 8C is an exploded perspective view of the door with an eyebolt type lock for the purpouse locker.

Figure 9A is a front perspective view of the door with combination lock for the purpouse locker.

Figure 9B is a rear perspective view of the door with combination lock for the purpouse locker.

[0006] As can be inferred from the appended drawings that illustrate and integrate the present descriptive report of the patent for utility model of "Purpouse Locker", Figure (1A) shows the same in a general manner, comprising a locker (1) incorporating a proprietary and modular structure of high durability and strength, having a general high parallelepipedal shape, made of zinc plated steel plates with electrostatic epoxy powder coated finish or similar material of equal or higher lightness and resistance and possessing a properly integrated

and symmetrically arranged assembly of structural elements (2) forming the locker central structure (1), pairs of inner hinges (3) for the locker (1) doors and a lock (4) of different types controlling the access to the locker (1) interior, so as to form a single and modular assembly in adequate spaces between shelves on the inside based on the technological concept called "flat pack" where all elements are provided with holes for installation and attachment by rivets and/or screws.

[0007] The set of structural elements (2), as shown in Figures (1A) and (1B), is comprised of a base assembly (2A) having a general rectangular shape with a U profile as a support device; a base assembly bracket (2B) having a general shape similar to an inverted "C" horizontally and symmetrically arranged on the base assembly (2A); a lower tray (2C) having a general rectangular shape with extruded tabs on the lateral ends and horizontally and symmetrically arranged on the base assembly bracket (2B); four adjustable feet (2D) having general circular shapes symmetrically arranged on the lower lateral ends of the base assembly (2A) as devices to adjust and correct small differences of level; a frame (2E) having a general rectangular shape vertically and symmetrically arranged along the locker (1) front face, from the upper front end of the base assembly (2A), containing a set of louvers (2F) symmetrically arranged on the upper end as a ventilation device; two lateral divisions (2G) having general rectangular shapes with small extruded tabs facing the inner side both on the upper and lower ends, each lateral division (2G) vertically and symmetrically arranged on one of the lateral faces of the locker (1), from the upper lateral end of the base assembly (2A) and parallel to each other; a top cover (2H) having a general rectangular shape with extruded tabs on the lateral ends and horizontally and symmetrically arranged on the lateral ends of the lateral divisions (2G); a rear plate (2I) having a general rectangular shape with small extruded tabs facing the inner side on either of the lateral ends and vertically and symmetrically arranged on the rear face of the locker (1), from the upper rear end of the base assembly (2A), limiting the whole assembly as a back panel; a set of shelves (2J) having general rectangular shapes with small extruded tabs on either of the lateral ends, the shelves (2J) horizontally and symmetrically arranged between the lateral divisions (2G); and a set of doors (2L) having general rectangular shapes and containing a rigid reinforcement (2M) on the inside of general rectangular shape centrally and vertically arranged on the inner face, two cutaways (2N) having general rectangular shapes symmetrically arranged on one of the side faces and two striker plates made of rubbery material, with the doors (2L) vertically and symmetrically arranged between the frame (2E).

[0008] The inner hinge (3), as shown in Figures (2A), (2B), (3A), and (3B), is comprised of a single module inner portion (3A) having a general rectangular shape with three holes (3B) symmetrically arranged close and parallel to a lateral end and two extensions (3C) each

having a general cylindrical shape symmetrically arranged on the opposite end, a single module outer portion (3D) having a general shape similar to an "L" with two holes (3E) symmetrically arranged close and parallel to a lateral end, a small side flange (3F) having a general rectangular shape arranged along the opposite end and three extensions (3G) each having a general cylindrical shape symmetrically arranged on the side flange (3F) and synchronically fitted to the extensions (3C), the two inner (3A) and outer (3B) portions are properly fitted to each other by the extensions (3C) and (3G) and attached to each other by a pin (3H) penetrating the entire extension thereof and over which moves the door (2L) and each of the hinges (3) properly penetrating a cutaway (2N) and attaching itself through the inner portion (3A) to the door inner face (2L) and through the outer portion (3D), to the lateral division inner face (2G), so as to be invisible through the locker outer side (1).

[0009] The lock (4) contains a shield (4A) with a small plate and can be of the standard key type (4B) containing a Pacri key (4C); padlock hasp type (4D) containing two small hasps (4E) parallel arranged to each other and close to the side of the shield (4A) each with a hole (4F) close to the fitting end of a padlock; 'tosca' type (4G) containing a rotating handle (4H) on the outside and a cylinder (4I) on the inside, a catch (4J) and a shield (4L) attached by small clamps; eyebolt type (4M) containing an outer rotating knob (4N) with a lower cutaway (4O) on the outside and a cylinder (4P) on the inside, a clamp (4Q), a catch (4R) and a shield attached by small clamps; or combination lock type (4S) containing a small support plate (4T), a combination device (4U), an outer rotating knob (4V) and a cylinder (4X) and a catch (4Z) on the inside, the combination lock not being provided with a shield (4A) on the outside.

[0010] The purpose lockers, according to the use needs, can be designed with a set of doors (2L) with any number of doors (2L), as well as a set of shelves (2J) with any number of shelves (2J), being only that both sets must have the same number of elements and keep the same size and external characteristics, basically changing the number of doors (2L) and shelves (2J) only.

[0011] The components of the purpose locker are fully fitted and attached, do not present any breakable parts, are highly resistant and completely safe. After fitted and attached, the components are locked, thus preventing them from getting loose when in use, thus making the assembly fully available for storing items in general. Therefore, the product can be easily used without worries of any nature as regarding its durability and safety.

[0012] As its structures are made of zinc plated steel plates with electrostatic epoxy powder coated finish or similar material with equal or higher lightness and strength, the purpose locker and the components thereof, are rustproof and waterproof, have a high level of durability and strength, provide greater safety to the

users and, when routinely used, do not present any risks of fatigue or to the users.

[0013] For all of the above, this is a product that will be well received by all locker users in their various needs, since the present purpose locker presents several advantages, such as: great safety, reliability and agility; extremely high mechanical resistance and general durability, as well as a low or no wear of the assembly as a whole; great efficiency and performance in its use due to its general conception; greater comfort, facility and safety to the users; fully accessible costs, which provides an optimum cost/benefit ratio; practical and safe use by any users, regardless of the characteristics thereof, great versatility and flexibility provided by the several configurations; lower installation time; great mobility and easy storage; attractive and pleasant design; great capacity of a rational module assembly; easy logistics provided by the "flat pack" concept; excellent ventilation system; fully assembled/disassembled; and the certainty of always having a product that fully meets the ideal safety, strength and durability conditions required for the storage of objects and clothes in general.

[0014] For all of the above, the purpose locker can be classified as a fully versatile, efficient, resistant, strong and safe means for storing several types of clothes, books and accessories in general by any users, regardless of their needs, being easily installed and handled to meet the various needs in schools, gyms, factories, offices, clubs, etc., as well as having excellent general characteristics; the sizes, dimensions and quantities may vary, depending on the use needs.

Claims

1. "PURPOSE LOCKER", **characterized in that** it comprises a locker (1) incorporating a proprietary and modular structure having a general high parallelepipedal shape, made of zinc plated steel plates with electrostatic epoxy powder coated finish or similar material with equal or higher lightness and resistance and possessing a properly integrated and symmetrically arranged assembly of structural elements (2) forming the locker central structure (1), pairs of inner hinges (3) for the locker doors (1) and a lock (4) of different types controlling the access to the locker (1) interior, so as to form a single and modular assembly with adequate spaces between shelves on the inside based on the technological concept called "flat pack" where all elements are provided with holes to be installed and attached by rivets and/or screws.
2. "PURPOSE LOCKER", in accordance with claim 1, **characterized in that** the assembly of structural elements (2) is comprised of a base assembly (2A) having a general rectangular shape with a U profile; a base assembly bracket (2B) having a general

shape similar to an inverted "C" horizontally and symmetrically arranged on the base assembly (2A); a lower tray (2C) having a general rectangular shape with extruded tabs on the lateral ends and horizontally and symmetrically arranged on the base assembly bracket (2B); four adjustable feet (2D) having general circular shapes symmetrically arranged under the lower lateral ends of the base assembly (2A); a frame (2E) having a general rectangular shape vertically and symmetrically arranged along the front face of the locker (1), from the upper front end of the base assembly (2A), having a set of louvers (2F) symmetrically arranged on the upper end; two lateral divisions (2G) having general rectangular shapes with small extruded tabs facing the inner side on either of the upper and lower ends, each lateral division (2G) vertically and symmetrically arranged on one of the lateral faces of the locker (1), from the upper lateral end of the base assembly (2A), and parallel to each other; a top cover (2H) having a general rectangular shape with extruded tabs on the lateral ends and horizontally and symmetrically arranged on the lateral ends of the lateral divisions (2G); a rear plate (2I) having a general rectangular shape with small extruded tabs facing the inner side on either of the lateral ends and vertically and symmetrically arranged on the rear face of the locker (1), from the upper rear end of the base assembly (2A); a set of shelves (2J) having general rectangular shapes with small extruded tabs on either of the lateral ends, the shelves (2J) horizontally and symmetrically arranged between the lateral divisions (2G); and a set of doors (2L) having general rectangular shapes and containing a rigid reinforcement (2M) on the inside having a general rectangular shape centrally and vertically arranged on the inner face, two cutaways (2N) having general rectangular shapes symmetrically arranged on one of the side faces and two striker plates made of rubbery material, with the doors (2L) vertically and symmetrically arranged between the frame (2E).

3. "PURPOSE LOCKER", in accordance with claim 1, **characterized in that** it contains an inner hinge (3) comprised by a single module inner portion (3A) having a general rectangular shape with three holes (3B) symmetrically arranged close and parallel to a lateral end and two extensions (3C) each having a general cylindrical shape symmetrically arranged on the opposite end, a single module outer portion (3D) having a general shape similar to an "L" with two holes (3E) symmetrically arranged close and parallel to a lateral end, a small side flange (3F) having a general rectangular shape arranged along the opposite end and three extensions (3G) each having a general cylindrical shape symmetrically arranged on the side flange (3F) and synchronically

fitted to the extensions (3C), the two inner (3A) and outer (3B) portions are fitted to each other by the extensions (3C) and (3G) and attached to each other by a pin (3H) penetrating the entire extension thereof and over which moves the door (2L) each one of the hinges (3) properly penetrating a cutaway (2N) and attaching itself through the inner portion (3A) to the door inner face (2L) and through the outer portion (3D), to the lateral division inner face (2G), so as to be invisible through the locker outer side (1). 5 10

4. "PURPOUSE LOCKER", in accordance with claim 1, **characterized in that** it contains a lock (4) possessing a shield (4A) with a small plate and can be of the standard key type (4B) containing a Pacri key (4C); padlock hasp type (4D) containing two small hasps (4E) parallel arranged to each other and close to the side of the shield (4A) each with a hole (4F) close to the fitting end of a padlock; 'tosca' type (4G) containing a rotating handle (4H) on the outside and a cylinder (4I) on the inside, a catch (4J) and a shield (4L) attached by small clamps; eyebolt type (4M) containing an outer rotating knob (4N) with a lower cutaway (4O) on the outside and a cylinder (4P) on the inside, a clamp (4Q), a catch (4R) and a shield attached by small clamps; or combination lock type (4S) containing a small support plate (4T), a combination device (4U), an outer rotating knob (4V) and a cylinder (4X) and a catch (4Z) on the inside, the combination lock not being provided with a shield (4A) on the outside. 15 20 25 30

5. "PURPOUSE LOCKER", in accordance with claim 1, **characterized in that** it is designed with a set of doors (2L) with any number of doors (2L), as well as a set of shelves (2J) with any number of shelves (2J), being only that both sets must have the same number of elements and keep the same size and external characteristics, basically changing the number of doors (2L) and shelves (2J) only. 35 40

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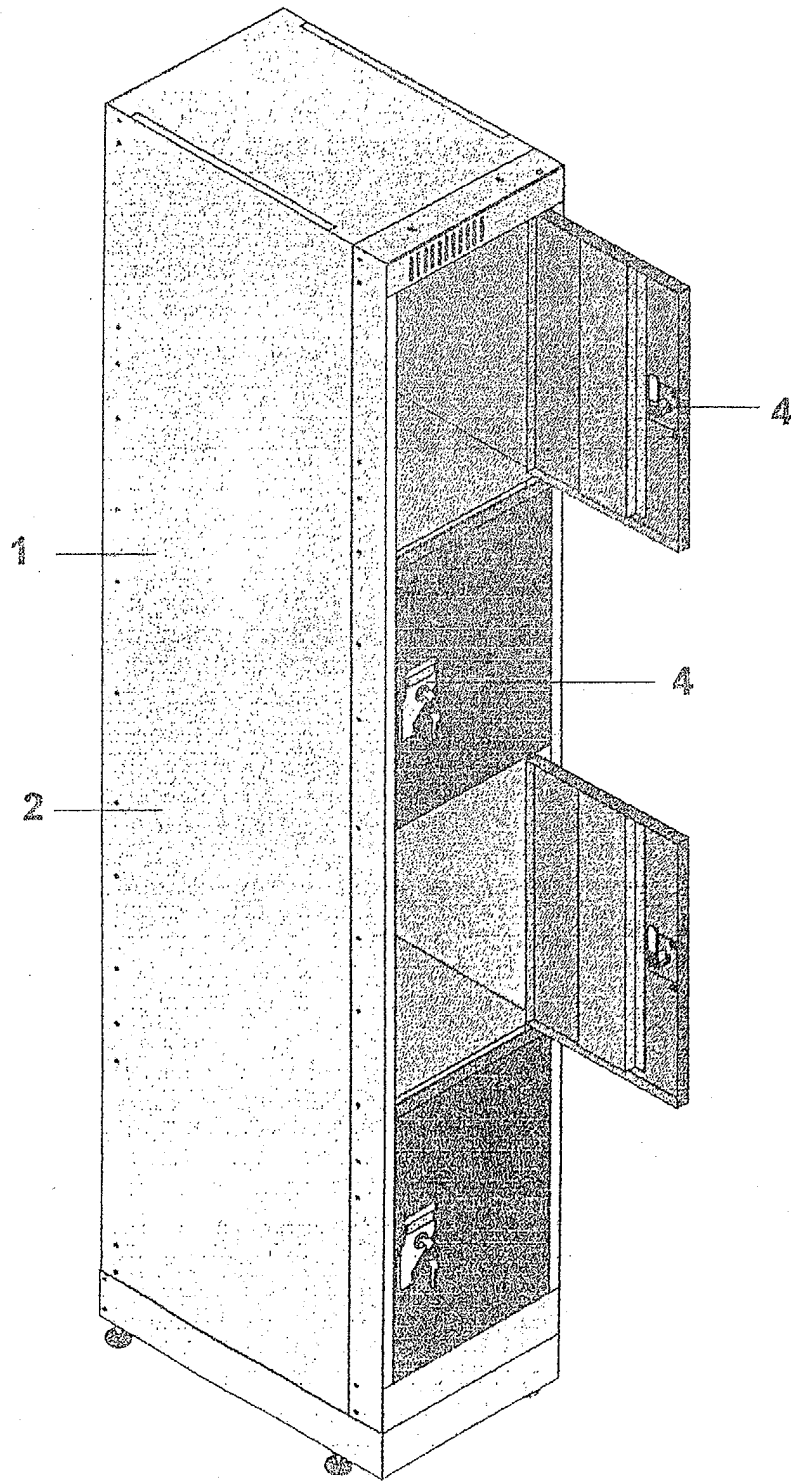


Fig. 1A

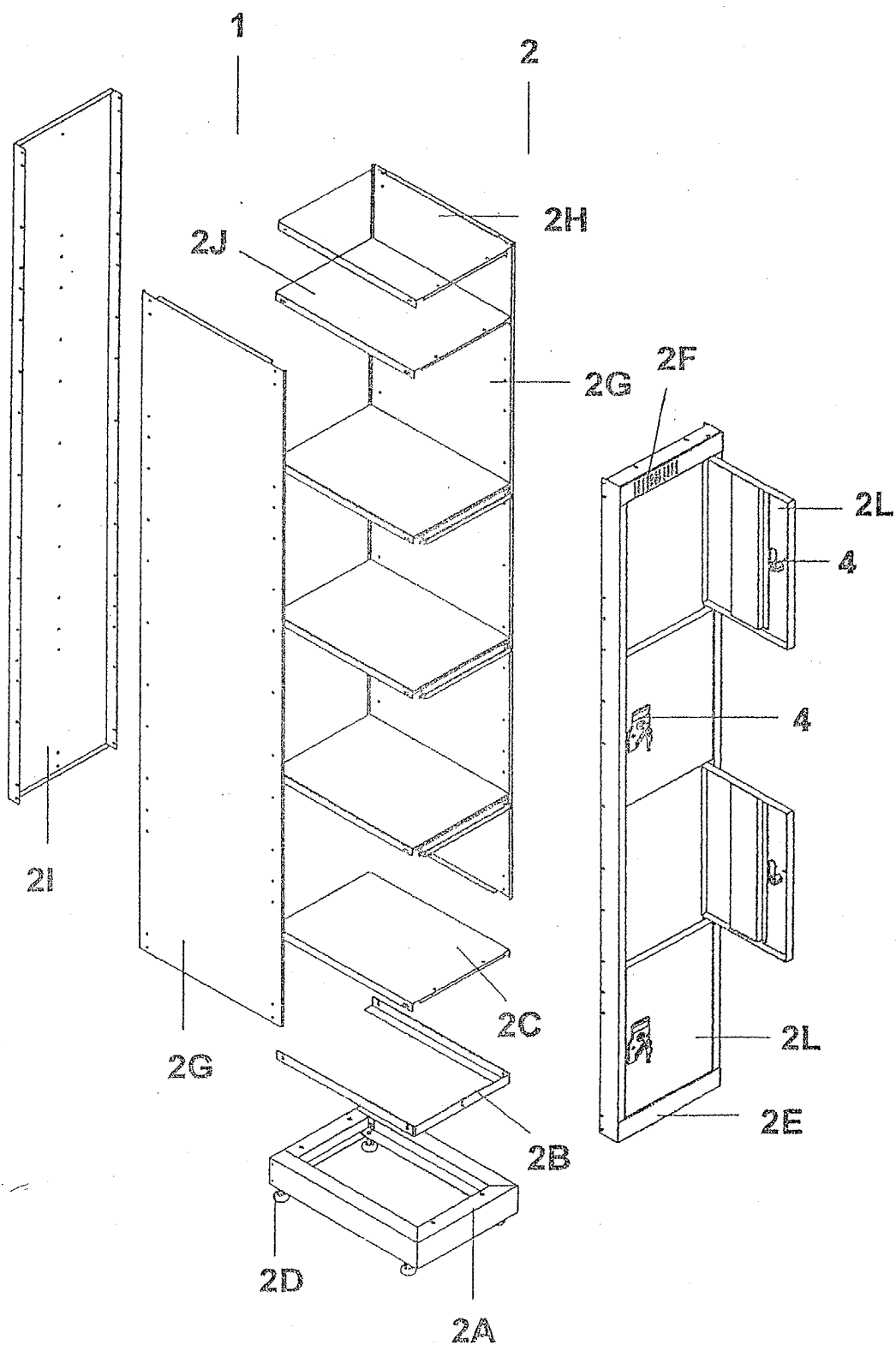


Fig. 1B

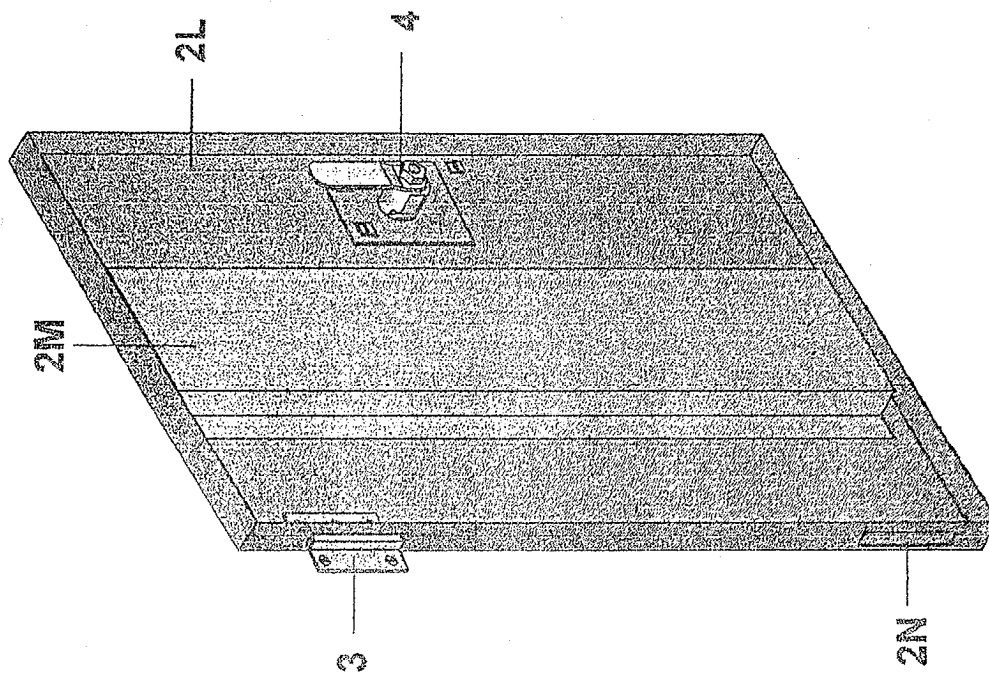


Fig. 2B

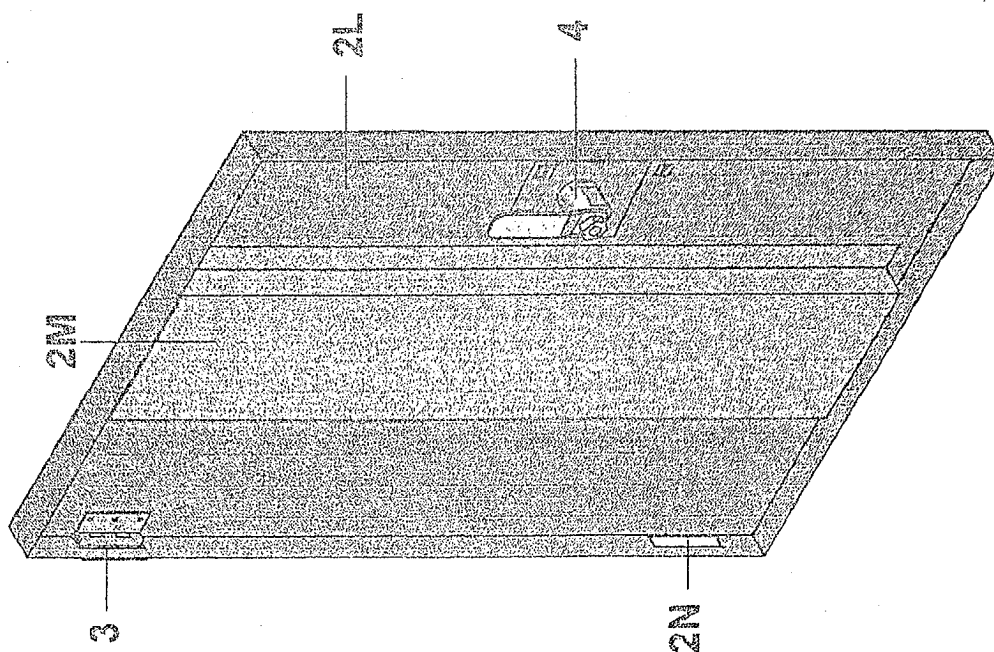


Fig. 2A

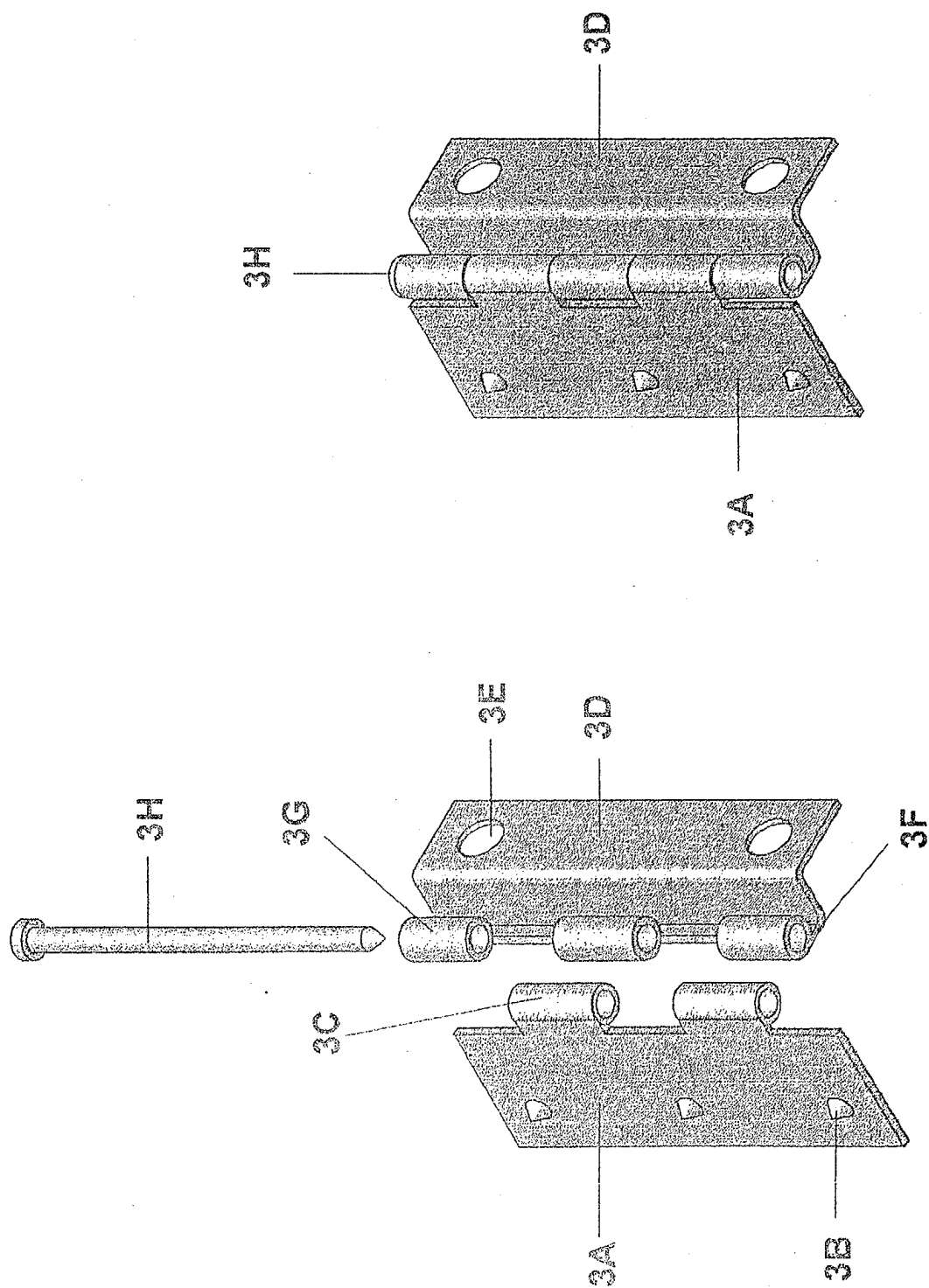


Fig.3B

Fig.3A

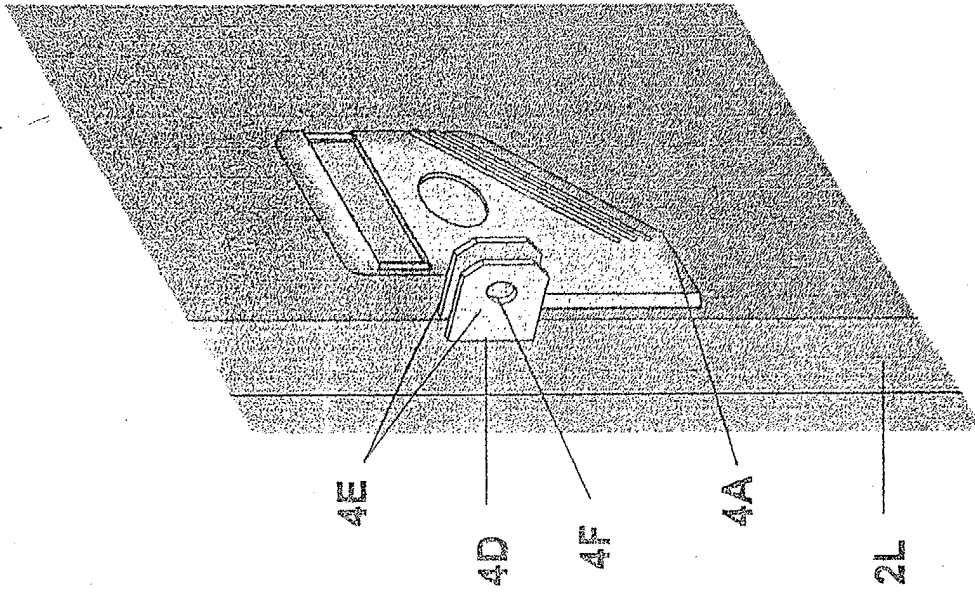


Fig. 5

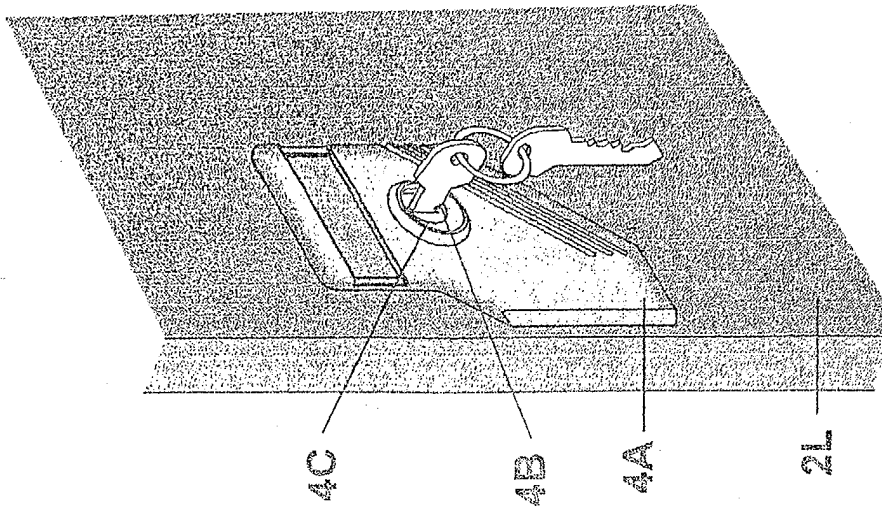


Fig. 4

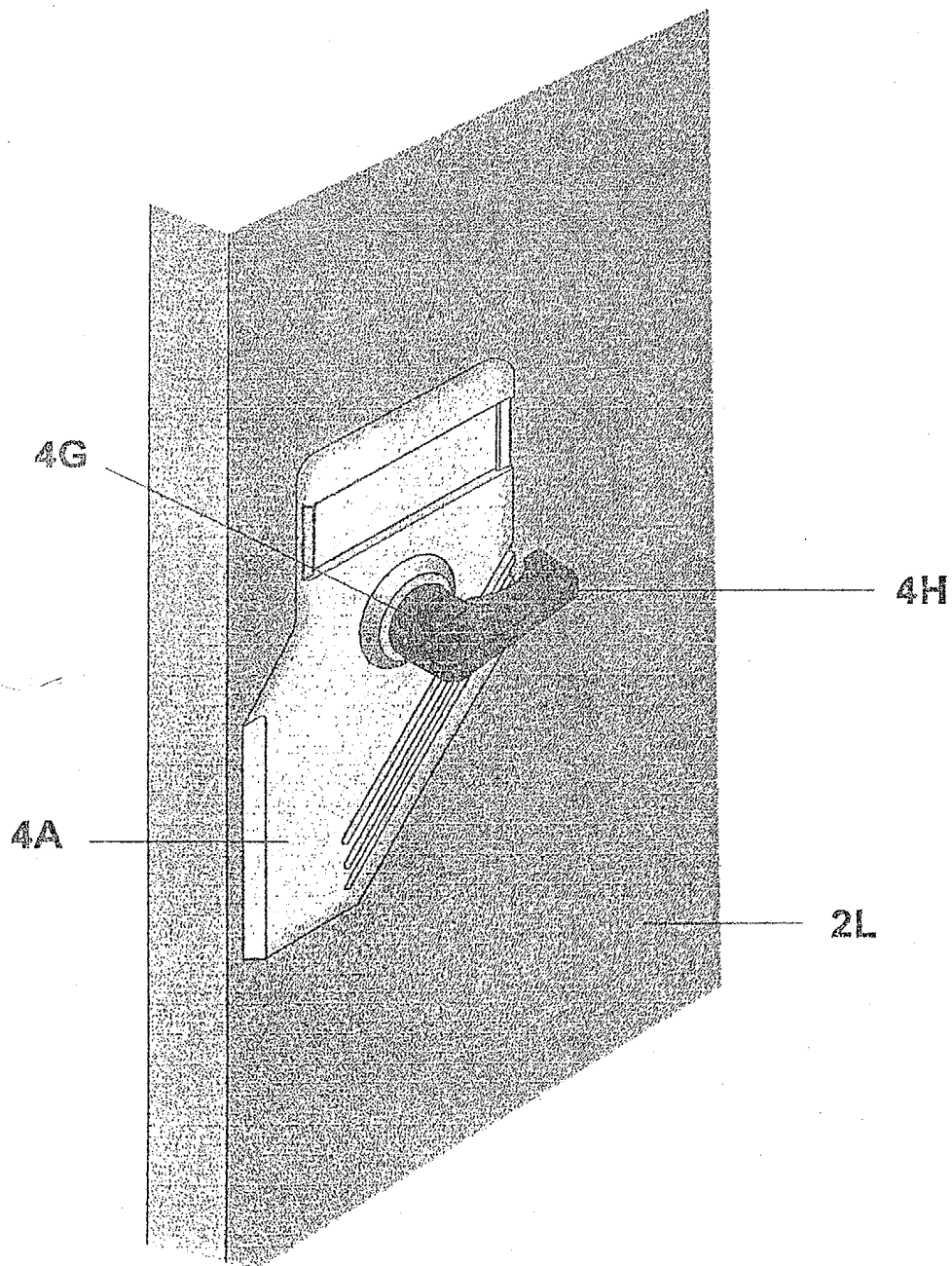


Fig.6

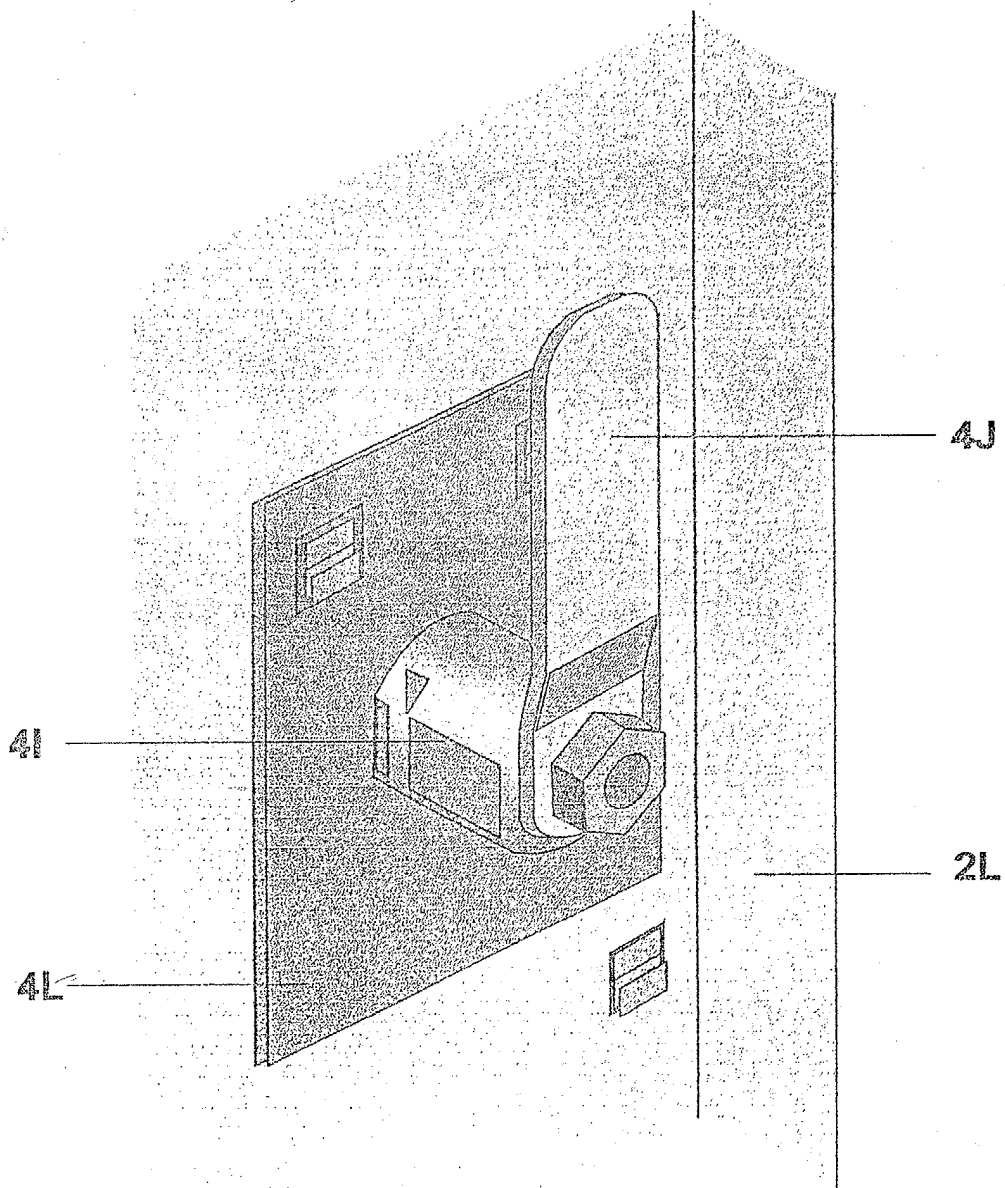


Fig.7

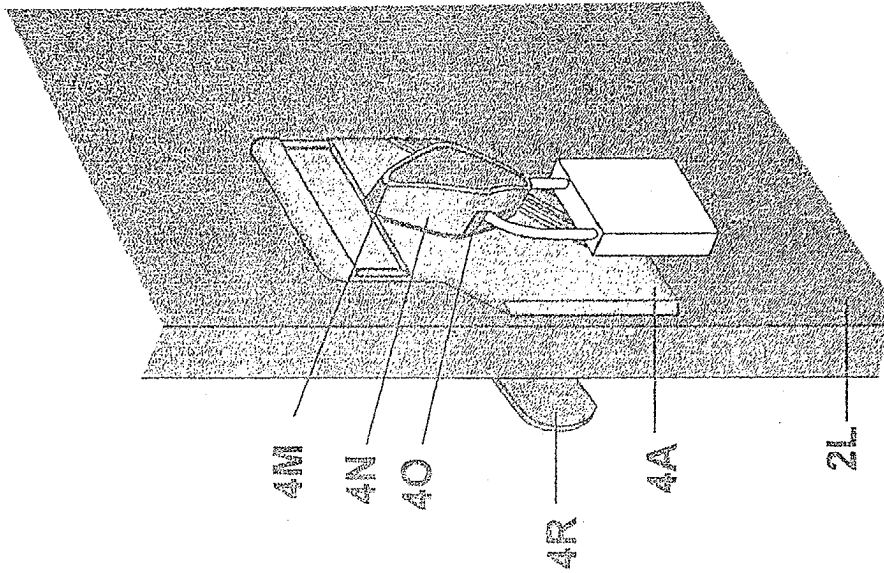


Fig. 8B

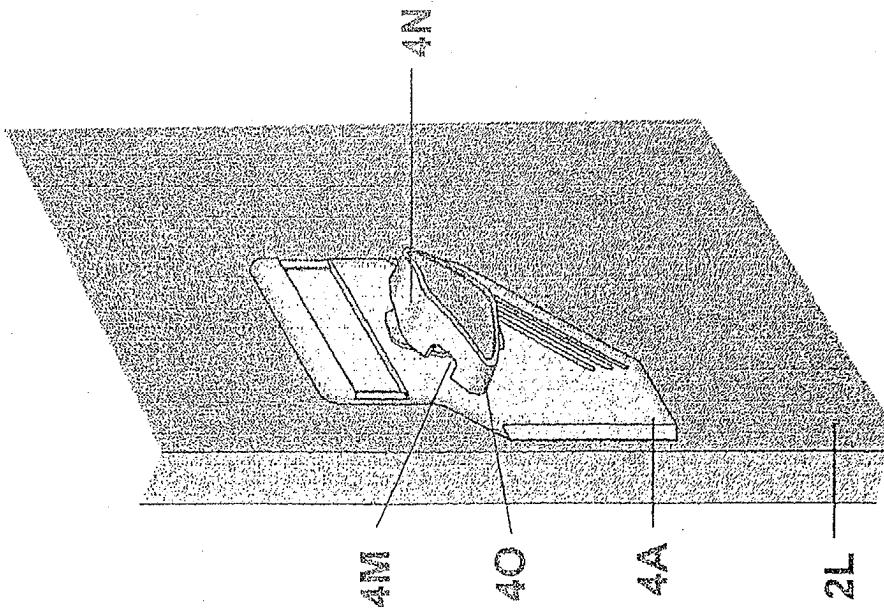


Fig. 8A

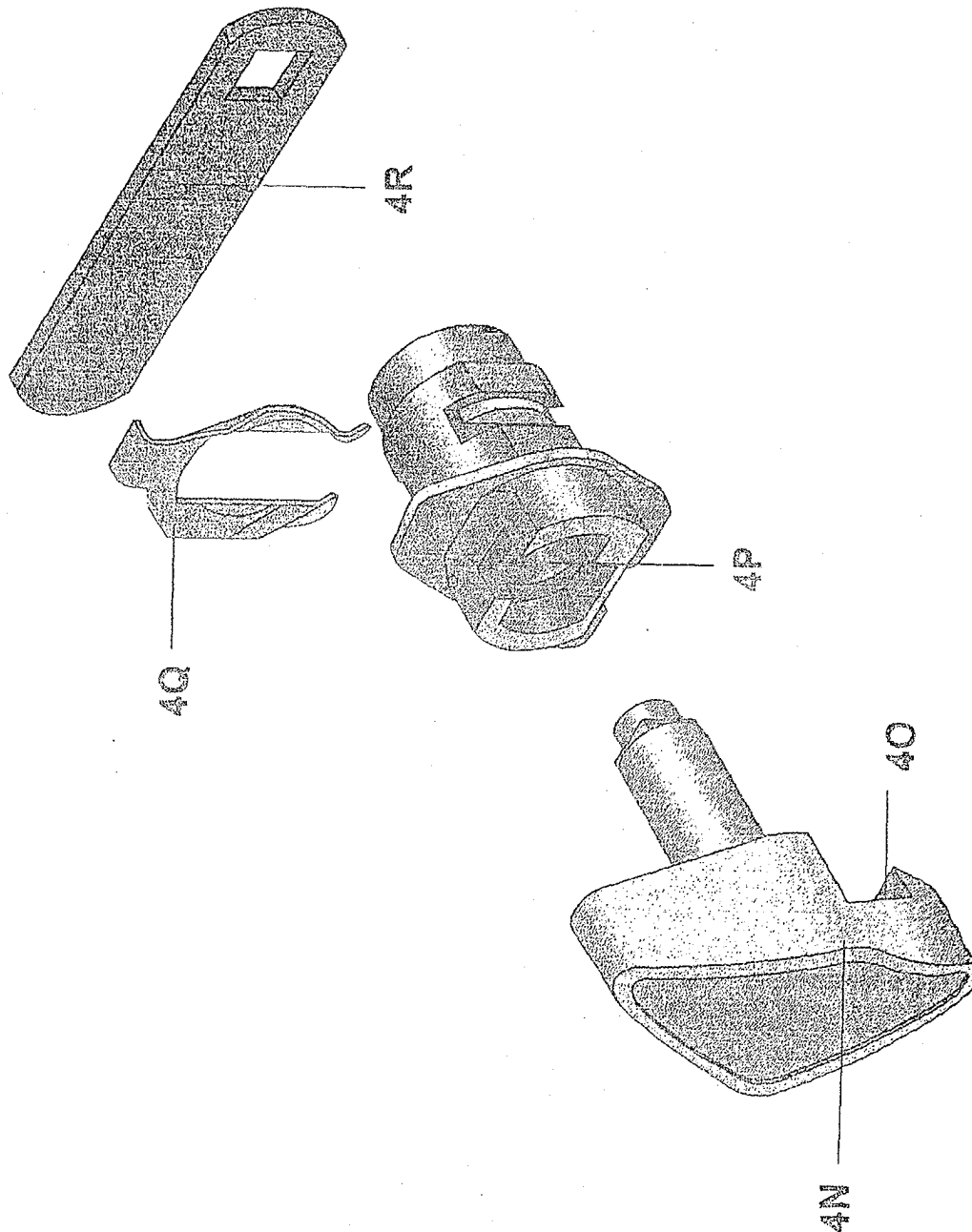


Fig.8C

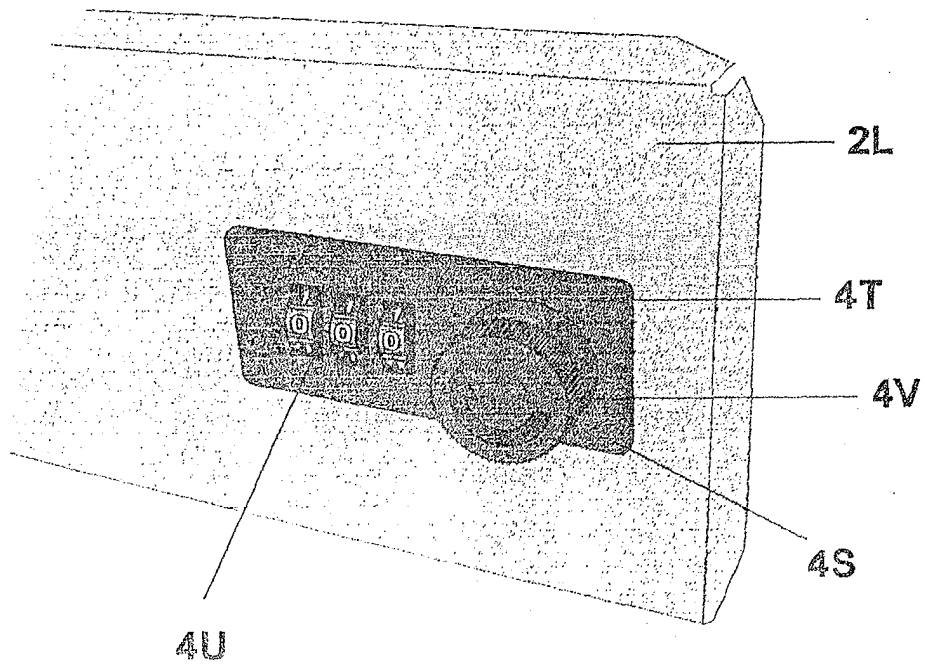


Fig. 9A

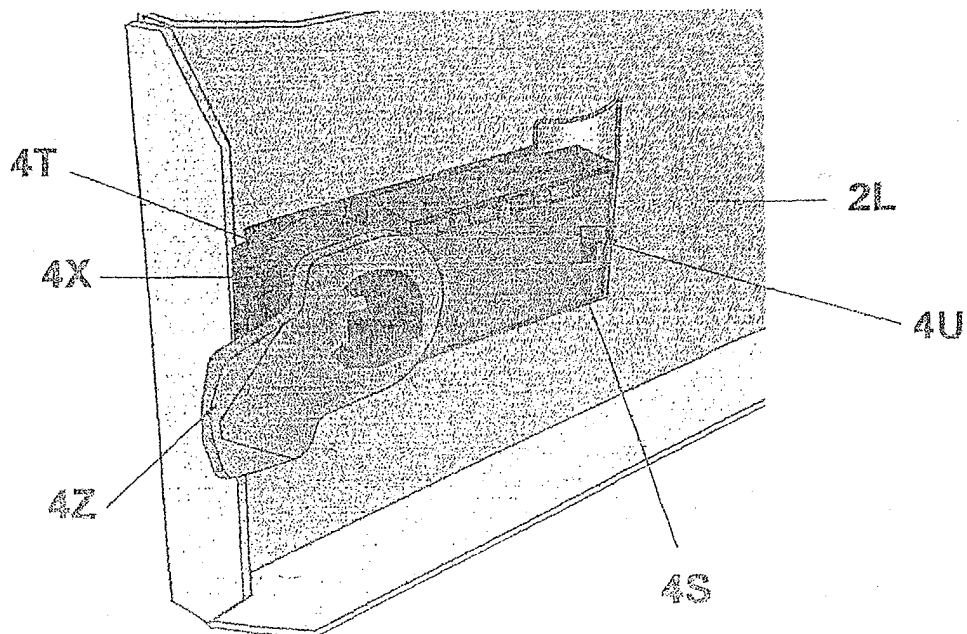


Fig. 9B