(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 560 096 A2**

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
28.05.2025 Bulletin 2025/22

(21) Application number: **23757667.3**

(22) Date of filing: **20.07.2023**

(51) International Patent Classification (IPC):
E05B 67/32 *(2006.01)* ***E05B 37/02*** *(2006.01)*

(52) Cooperative Patent Classification (CPC):
E05B 67/32; E05B 37/025

(86) International application number:
PCT/ES2023/070470

(87) International publication number:
WO 2024/018109 (25.01.2024 Gazette 2024/04)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(30) Priority: **20.07.2022 ES 202231214 U**
20.07.2022 ES 202231215 U

(71) Applicant: **Guerra Iribarren, Fernando**
20009 Donostia / San Sebastián (ES)

(72) Inventor: **Guerra Iribarren, Fernando**
20009 Donostia / San Sebastián (ES)

(74) Representative: **Carlos Hernando, Borja**
Garrigues IP, S.L.P.
Hermosilla, 3
28001 Madrid (ES)

(54) **ADJUSTABLE PADLOCK, SECURITY RECEPTACLE AND SYSTEM**

(57) Adjustable padlock, security receptacle and system. The present invention relates to a locking device which can be securely adjusted on an object to prevent the padlock from being able to become separated from said object unless a specific combination of a combination mechanism incorporated in the padlock is used and releases the padlock without requiring the use of keys. Said object preferably relates to a security receptacle formed by a flexible mesh which preferably incorporates an internal covering and an external covering consisting of fabric or another flexible material making it look like a bag, backpack or sack. The mesh is preferably made of steel and is molded and treated to have the shape of the receptacle, i.e., of bag, sack or backpack. The combination of said adjustable padlock and receptacle gives rise to a receptacle system with a security lock.

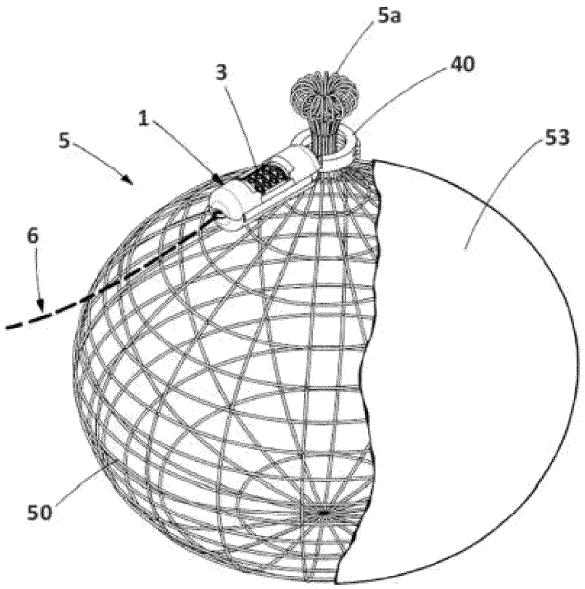


FIG. 13

EP 4 560 096 A2

Description

OBJECT OF THE INVENTION

[0001] The present invention, an adjustable padlock, relates to a locking device which can be securely adjusted on an element to prevent the padlock from being able to become separated from said object unless a combination which releases the padlock without requiring the use of keys is used. The padlock is particularly applicable in elements in the form of a bag or backpack type receptacles, to prevent them from being opened by anyone to whom they do not belong, and in turn allows, through securing means in the form of a cable, wire or chain, securing said receptacle, to a separate or external structure with respect to the object. An exemplary receptacle, also object of the present invention, is one often having a rectangular or cylindrical shape, for keeping personal objects, which can be carried by hand, worn on the shoulder or on the back and is open on one of its sides, and allows keeping and carrying said personal objects in a secure manner, for example, when the owner leaves and does not want to carry them with him/her at the beach, at a party, or in any other location. The receptacle object of the invention is formed by a flexible mesh which preferably incorporates an internal covering and an external covering consisting of fabric or another flexible material, for example, cloth, leather, paper, etc., making it look like an everyday bag, backpack or sack, for example, of beach bag. The mesh is preferably made of steel and is molded and treated to have the shape of the receptacle, i.e., a bag, sack or backpack. The internal and external coverings can be made of the same or a different material, or of a combination of materials. Said mesh provides the receptacle with sufficient resistance so that it cannot be easily broken, especially with cutting tools. The padlock can also be used to be secured to other elements, for example, a bicycle, a scooter or a motorcycle, to attach same to a separate or external structure.

[0002] The padlock comprises a hollow body in the form of a casing which houses a combination mechanism which blocks and unblocks, or releases, the mobility of at least two hooks which determine an adjustable enclosure suitable for being locked on an element. For example, in the case of the receptacle, it can constrain the mouth thereof, and in the case of a scooter, it can constrain and be locked on the tube of the frame thereof. The padlock also preferably has securing means to enable securing same, and accordingly the element on which it is locked, to an external or separate structure, whether fixed or mobile, with the help of a cable, chain, wire or the like.

[0003] As mentioned, the padlock is preferably applicable for locking a bag or backpack type receptacle for keeping personal objects in a secure manner and in turn securing the receptacle to a fixed or mobile structure when, for example, the user of the receptacle does not want to carry it or the personal objects with them, for example, when taking a walk on the beach or the like. Likewise, it is not ruled out that the padlock can be used to be locked onto any other element to secured.

[0004] The receptacle is preferably provided, in an accessory manner and forming a security system, with a security lock or locking device, such as the adjustable padlock object of the invention, which prevents access to the interior thereof, and as mentioned, in turn allows securing or fastening the receptacle to a preferably fixed element or structure by means of a chain, cable or similar means. Users can thereby keep their belongings inside the receptacle, locking same with a lock or locking device and securing it to a structure, to subsequently leave it for a time and not worry about it possibly being stolen or swiped.

[0005] The field of application of the present invention is comprised within the sector of the industry dedicated to the manufacture of padlocks, locks and security mechanisms. Likewise, the present invention is comprised within the sector of the industry dedicated to the manufacture of bags and suitcases, while covering at the same time the field of security systems for storing objects.

BACKGROUND OF THE INVENTION

[0006] Multiple types of security locks and padlocks to prevent elements of any type from being opened are known on the market, and also being widely disclosed are those which, rather than working with a key to open and lock same, include a combination mechanism formed by a series of numbered rollers which, when placed in a certain position, release a pin or similar locking element which allows the lock to be opened.

[0007] Another objective of the padlock of the present invention relates specifically to the development of a lock which allows being adjusted and securely locked directly on an element or body, preferably the mouth of a similar flexible receptacle, without the latter necessarily having to have a zipper, flap or other locking elements which, in turn, must be secured to prevent the object from being opened by a third party. Likewise, the padlock can be used for the aforementioned uses.

[0008] This mechanism also allows attaching the two ends (hooks and cable), thereby providing it with a standard protective use.

[0009] Furthermore, the problems existing when going to the beach or other places where one usually leaves their belongings unattended, for example, to take a walk or swim, are widely known because there is a risk that said belongings will be stolen, bringing about subsequent damages for the owner, especially when the belongings are keys, a wallet, important documents, mobile phone, or other similar personal belongings.

[0010] To avoid this, the users currently opt for different solutions to prevent said personal belongings from being stolen, for example, hiding them, having someone else look after them, using safe boxes or rental lockers, among others. However, none of them provides a satisfactory solution because they are either not secure or

they consist of stiff, heavy and bulky elements or are expensive.

[0011] It would be desirable to be able to leave one's belongings in the receptacle itself in which they are carried, with the objective of the present invention being a security receptacle, in the form of a bag, backpack or sack, which allows keeping belongings secure against possibly being stolen by simply securing same with a chain, cable or the like to an element or structure, and which is furthermore preferably fixed, for example, to a tree or bench, although it can also be mobile, such as a hammock or chair, for example.

DISCLOSURE OF THE INVENTION

[0012] The present invention relates to a security padlock or lock according to claim 1.

[0013] The padlock comprises a hollow body in the form of a casing which houses a combination mechanism which blocks or unblocks the mobility of at least one adjustable enclosure formed by two hooks arranged symmetrically and each one attached by a first end to the casing, and allowing the diameter of the enclosure to be increased or reduced in order to be able to lock it on an element, with the second distal end of each hook being free and separated from the casing. Likewise, the two hooks are preferably attached to the casing by an articulated attachment point which rotates on a shaft such that when they are moved with the unblocked mechanism, they allow the diameter of the enclosure that they form to be increased or reduced, and the opening may be blocked throughout its development, if it is not in the unblocking position. This means that when the mechanism is in the blocking mode, the hooks only allow reducing the enclosure, preventing the rotation of the hooks in the sense of increasing said enclosure. The combination mechanism comprises rollers with characters, preferably numbers, which, when placed in a certain position, determine a password or code, allowing the movement of the hooks.

[0014] Said articulated attachment point which attaches each hook to the casing is a toothed pinion which meshes with the pinion of the other hook, there being a blocking pin belonging to the combination mechanism centered between both pinions. The distal ends of the hooks are interlinked with one another when the enclosure is adjusted, i.e., locked.

[0015] The hooks preferably have catches facing the inside of the enclosure that they define to allow being fixed better, when driven, to the element on which said hooks are locked. Said catches will preferably be arranged in those padlocks to be used for the locking bags or receptacles. Likewise, said hooks are preferably semicircular, and they can have other shapes, for example, elliptical, provided that when locked, they allow trapping and holding the securing of the element on which they are locked.

[0016] Likewise, the combination mechanism of the padlock comprises a pin, a lever at one end of said pin, a first spring at said end, the wheels with characters associated with rollers which are traversed by the pin, a first type of pushing elements housed in holes of the rollers and a second spring in contact with a second type of pushing element, such that depending on the position of the wheels with characters, the movement of the claws in the locking direction or in the locking and opening direction is allowed.

[0017] In that sense, when the wheels with characters are placed in a predetermined position, the rollers rotate causing the alignment of the pushing elements between the lever and the second spring, for the force of said second spring to displace the pushing elements which in turn push the lever and therefore the pin, overcoming the force exerted by the first spring and thereby allowing the opening of the hooks.

[0018] The combination mechanism also comprises, for the user to determine the password or code by displacing the wheels with characters, an eccentric associated with the rollers and with a guide disc, compressed by springs between the guide disc and the casing, such that the rotation of the eccentric pushes the rollers and the guide disc, with the latter compressing the springs and releasing the wheels with characters with the displacement of the rollers. After the previous movement said wheels with characters can be rotated to change the password of the padlock while the rollers remain firm in one position as a result of the internal displacement of the pushing elements. To end, the eccentric is rotated again to its initial position, and the guide disc and the rollers are pushed with the force of the springs. The casing comprises a hole for accessing a housing in the eccentric by means of a key.

[0019] As mentioned, said security padlock or lock is mainly designed to prevent a receptacle, bag, backpack or the like from being opened, by incorporating the combination mechanism which does not require the use of keys, and at least the two adjustable hooks forming said enclosure suitable for constraining the mouth of the receptacle or for being locked on any element. The padlock also preferably comprises securing means to be able to fasten the padlock, and therefore also the element to which the padlock is attached, to a fixed or mobile structure, for example, a fixed beach umbrella, a hammock, a tree, a street light or another structure.

[0020] Namely, the body of the casing is preferably elongated and has the at least two adjustable hooks at one of the two ends thereof. At the opposite end, the body can incorporate the securing means to be able to fasten the lock to a fixed structure, for example, by means of a chain, cable or similar thread-like element, or it can also incorporate two other hooks. This second set of adjustable hooks is also associated with the combination mechanism, one being used to lock the mouth of the bag and the other as securing means to be able to fasten the assembly to a fixed structure. This construction can even be used as shackles or handcuffs, thereby prevent-

ing the use of the keys. Moreover, this construction could also incorporate securing means, such as those the described previously, at another point of the body of the casing.

[0021] As mentioned, preferably the at least two hooks forming an adjustable enclosure of the security padlock or lock are semicircular and are, once locked, interlinked to one another at their distal ends and attached at the other end in a pivoting manner with respect to the casing by a mobile shaft attached to the casing. In that sense, by moving them when the combination mechanism is unblocked, said movement of the hooks allows the diameter of the enclosure that they form to be increased or reduced to be able to be adjusted and locked on the element to which they are to be attached. Each of the hooks pivots with respect to the body of the casing by being attached to same by means of a rotating shaft, which is a toothed pinion or gear which meshes with the pinion of the other hook, such that it is preferably arranged centered between both the blocking pin associated with the combination mechanism to be embedded in the toothed pinions and prevent the movement of the hooks, or conversely to release it.

[0022] The padlock is preferably applicable for use in a bag or backpack type receptacle, which is formed with a steel mesh structure which preferably incorporates an internal and external covering consisting of fabric or another flexible material that makes it look like an everyday bag, for example a beach bag. This receptacle has sufficient resistance so that it cannot be easily broken, not even with tools, allowing the user to secure their belongings against being potentially stolen once it is locked with the padlock and secured to a structure either directly with said padlock, in the option having two adjustable enclosures, or else by means of a chain, cable or the like which, in turn, will also be fastened with said padlock.

[0023] In that sense, a second object of the invention relates to a security receptacle according to claim 13. Specifically, the security receptacle comprises a flexible mesh, preferably a steel cable or resistant wire, made in the shape of the receptacle, bag, backpack or sack, said receptacle having at least two defined areas:

- a first area which determines the housing of the receptacle, and
- a second area, located in the opening of the receptacle, consisting of a thickening of the mesh and determining the mouth per se of the receptacle,

said mesh further having an internal covering which defines the inside of the housing and an external covering which defines the outside and the appearance of the receptacle.

[0024] Preferably the first area and the second area are located on opposite sides of the receptacle, more preferably the first area at the lower end of the receptacle and the second area at the upper end thereof.

[0025] The receptacle is locked below the mouth, i.e., below the thickening of the mesh, determining a third area, when the receptacle is locked, which consists of a narrowing of the mesh of the housing and determines a neck at the mouth of said receptacle, such that said narrowing is arranged between the first area of housing of the receptacle and the third area or thickening of the mesh.

[0026] The receptacle object of the invention is conceived for the purpose of being able to keep personal objects secure, for example, when the owner leaves and does not want to carry them with him/her at the beach or in another location where they could be susceptible to being stolen. Said receptacle, in the form of a bag, backpack or sack, comprises a flexible mesh structure formed by cables or wires made of a resistant material, preferably steel or Kevlar, said cables or wires being interlinked or configured to determine the mesh. The material of said mesh provides sufficient resistance to the receptacle so that it cannot easily break, not even with the use of scissors or other cutting tools. Said resistance will be determined by the material thereof, such that in the case of a mesh steel made, the type of steel used will determine the resistance of the receptacle.

[0027] As mentioned, the flexible steel mesh structure determines an inner housing al which is accessed through the mouth or opening to introduce or extract personal objects such as an ID, cards, mobile phone, keys, books, among others. The flexible mesh can be in the form of a bag, sack, backpack or the like.

[0028] By means of the narrowing of the mouth which defines the third area or neck of the mesh when the receptacle is locked, the complete locking of the receptacle can be assured by means of an additional security lock, which forms said neck by surrounding the receptacle below the thickening of the mesh of the receptacle, such that once it surrounds said neck, it cannot be extracted due to the mentioned thickening or second area of the mesh. Since said thickening or second area has a diameter that is greater than the narrowing of the neck or third area prevents the additional security lock from being able to be extracted through either the upper part or lower part of the receptacle. The movement of the security lock is limited by the thickening or second area of the receptacle and by the first area or housing of the receptacle.

[0029] In that sense, the receptacle is preferably combined with a security lock, in turn associated with a chain or the like for the securing thereof to a preferably fixed element or structure, such that it allows the user to keep their belongings secure against possibly being stolen when they are not there.

[0030] The receptacle of the invention has an internal and external covering consisting of fabric or another flexible material covering the steel mesh structure and it makes the receptacle look like an everyday bag, backpack or sack, for example, like a beach bag. The internal and external covering material can be the same or different, where even more than one material can be used for any of the two coverings. The covering material can be

leather, a fabric, a type of plastic or paper, among others.

[0031] In any case, in a preferred embodiment, the flexible body forming the bag has a sack configuration such that the mouth can be locked with the security locking device forming a narrowing area of said mouth and to which the chain or a similar thread-like securing element used to surround a fixed or bulkier element or structure, such as a fixed beach umbrella at the beach, a hammock, a chair, a street light, a tree, etc., can in turn be fastened to secure the receptacle to same.

[0032] In relation to the locking device, any device can be used, but it is preferable to use one that lacks additional locking means, such as a key, to prevent the user from having to carry said key, with password-operated locking devices being preferred.

[0033] Preferably, the security locking device comprises a system which is adjusted and locked on the receptacle determining the neck thereof, for example, a system of hooks such as the first object of the present invention, with at least two hooks pivoting with respect to one and the same end and cross each other at the opposite end surrounding the second area below the mouth of the receptacle and trapping same between the end with respect to which the hooks and the crossing of both hooks pivot, forming an enclosure which constricts and creates the narrowing of said receptacle. As mentioned, the system of pivoting hooks is preferably linked to a number combination mechanism to prevent the need to use a key that the user would have to carry. Alternatively, the two hooks could be replaced with a steel cable, which allows the same dynamics as the previous device, i.e., it allows being adjusted and locked throughout its development.

[0034] A third object of the invention relates to a system formed by an adjustable device or padlock, according to the first object of the invention, and a security receptacle according to the second object of the invention.

DESCRIPTION OF THE DRAWINGS

[0035] To complete the description of the present invention and for the purpose of making it easier to understand the features of the present invention, illustrative and nonlimiting figures are included in the present specification as an integral part thereof.

Figure 1 shows a perspective view of an embodiment of the adjustable padlock object of the invention, namely an example with a single adjustable enclosure formed by interlinked hooks, showing its outer general configuration.

Figure 2 shows a perspective view of the exemplary adjustable security lock shown in the preceding figure, in this case depicted with the casing being open, showing some of the elements of the combination mechanism and for the attachment and rotation of the hooks.

Figure 3 shows an exploded view of the adjustable padlock.

Figure 4 shows a detail of an exploded view of the adjustable padlock.

Figure 5 shows another detail of an exploded view of the adjustable padlock.

Figure 6 shows another detail of an exploded view of the adjustable padlock.

Figures 7 and 8 show respective perspective views of another example of the adjustable padlock according to the invention, namely an example with two adjustable enclosures at each end of the casing, showing in Figure 7 its outer general configuration and in Figure 8 part of its configuration and internal elements.

Figures 9 and 10 show the padlock object of the invention with the hooks locked and the hooks open, respectively.

Figure 11 shows a perspective view of an exemplary use of the adjustable padlock with a bag with a mesh structure.

Figure 12 shows an example of an adjustable padlock object of the invention applied for securing a scooter through the hooks and a cable, chain or thread-like element arranged in the padlock at the end opposite the one having the hooks.

Figure 13 shows a perspective view of an embodiment of the security bag object of the invention, depicted in the locked position and with the external covering partially sectioned, such that the inner steel mesh structure can be seen.

Figure 14 shows a top plan view of the exemplary security bag of the invention shown in Figure 13.

Figure 15 shows a sectional view of the bag, according to section A-A indicated in Figure 14.

Figure 16 shows a view of a receptacle without an external or internal covering incorporating a security lock, associated with the mesh of the receptacle itself.

Figures 17 to 19 show a depiction of a bag object of the invention secured to different elements, specifically to two hammocks, to a bench or to a tree.

PREFERRED EMBODIMENT OF THE INVENTION

[0036] As can be seen in the figures, the adjustable padlock (1) of the invention essentially comprises a hollow body in the form of a casing (2) which houses a combination mechanism (3) which blocks or unblocks the mobility of at least one adjustable enclosure (4) allowing its diameter to be increased or reduced in order to be able to lock it on an element such as a bag, bicycle or scooter, or any other type of element or object.

[0037] Preferably, the body of the casing (2) is elongated and the adjustable enclosure (4), located at one end of the casing (2), for example, to lock a bag (5), and a securing means (6), as shown in the example of Figures 1 and 2, for a chain, cable or the like and to be able to fasten the assembly of the bag (5) with the padlock (1) to a

structure.

[0038] Optionally, the body of the casing (2) comprises two adjustable enclosures (4) linked to the combination mechanism (3), one at each end thereof, as shown in the example of Figures 7 and 8, such that one can be used to lock the mouth of a bag (5) and the other one as securing means to fasten the assembly to a fixed structure. This construction can also be used as shackles or handcuffs.

[0039] In any case, considering Figures 1 to 10, in one embodiment, the adjustable enclosure (4) comprising the padlock, whether one or two, is formed by two preferably semicircular articulated hooks (40) arranged symmetrically such that once they are locked, they are interlinked with one another at their distal ends and attached at the other end to the casing (2) by an articulated attachment point which rotates on a shaft (41) such that when they are moved with the unblocked mechanism, they allow the diameter of the enclosure that they form to be increased or reduced. The casing is preferably divided into three parts in the example of Figures 1 to 10, two upper parts (2a, 2b) and a lower part (2c).

[0040] Preferably, the articulated attachment point which attaches a first hook (40a) to the casing (2) is a first toothed pinion or gear (42a) which meshes with a second toothed pinion or gear (42b) of the second articulated hook (40b), there being a blocking pin (30) centered between both pinions. This pin (30) is associated with the combination mechanism (3) with wheels with characters (39), preferably four, such that when said mechanism (3) is actuated by rotating the wheels (39), the rotation of both toothed pinions or gears (42) may or may not be prevented. Each of these wheels with characters (39), said characters preferably being numbers, i.e., number wheels, has on the perimeter thereof numbers, letters, symbols, or a combination thereof, for example, from 0 to 9, such that a specific sequence formed by a number, letter or symbol of each of the wheels (39) determines the combination or password for opening the padlock. The pin (30) has a first spring (31) at the end opposite to that of the interaction with the pinions or toothed wheels (42) of the hooks (40) and arranged in a housing (21) in the casing (2). Likewise, the pin (30) has a lever (32) perpendicular to said pin (30) at the end close to the first spring (31).

[0041] The combination mechanism (3) comprises the mentioned number wheels (39), each of which is associated with a roller (37). Said rollers (37) have a central hole (37a) for the pin (30) to traverse same, and another off-centered hole (37b) for the housing of a first type of pushing elements (33b). The pushing element of the first type (33b) of the roller (37) closest to the first spring (31) can be in contact with the lever (32) of the pin (30). The roller (37) farthest away from the first spring (31) is arranged in contact with a guide disc (36), said guide disc (36) is provided with two holes, a central hole (36a) for the passage of the pin (30) and an off-centered hole (36b) that is always aligned with the lever (32). Said off-centered hole serves as a housing and guide for a pushing element of a second type (33a), which is longer than that of the first type (33b), with the purpose of said length being the partial housing of a second spring (34). The guide disc (36) is not rotational, unlike the rollers (37), and serves to keep the rollers (37) compressed with the number wheels (39) due to the action of the force of at least three third springs (35). Said third springs (35) are partially housed at one end in the guide disc (36), whereas the other end is supported on the casing (2), said third springs (35) thereby being compressed between the casing (2) and the guide disc (36).

[0042] The pin (30) is driven through the lever (32), such that to release the hooks (40), said lever (32) must be pushed towards the end of the pin close to the first spring (31) by means of the alignment with the rollers (37) of the pushing elements of the first type (33b), with this alignment being achieved by entering the combination or password of the mechanism (3) by rotating the number wheels (39). After said alignment of the pushing elements of the first type (33b), the force of the second spring (34), compressed between the pushing element of the second type (33a) and the casing (2) overcomes the force of the first spring (31), causing the displacement of the pin (30) upon the pushing of the first and second pushing elements (33a, 33b) by the lever (32).

[0043] The mechanism (3) also has an eccentric (38) to change the number combination or password for opening the mechanism (3) by means of the rotation of the number wheels (39). The opening of the mechanism (3) is the equivalent to allowing the blocking and unblocking of the hooks (40). A housing (38b) in a cylindrical protrusion (38a) of the eccentric (38) which allows rotating same is accessed with a key through a hole (24) in a module of the casing (2C). The eccentric (38) is housed in a space (22) in the casings (2b,2c). A housing (23) for the cylindrical protrusions (38a) of the eccentric (38) is incorporated in said spaces (22) of the casings (2b, 2c), which allows adjusting and guiding the eccentric (38) between the casings (2b, 2c) for rotation. The eccentric (38) can only rotate when the first and second pushing elements (33a, 33b) are aligned with one another, such that upon rotation of the eccentric (38), the rollers (37) of the number wheels (39) are pushed and drawn out, thereby allowing the rotation of said number wheels (39) with respect to the rollers (37) and the subsequent changing of the password. Once the password is changed, the eccentric (38) needs to be turned again to its original position with the use of the key, such that the guide disc (36) pushed by the springs (35) embeds the rollers (37) again in the number wheels (39). The password can only be changed in the unblocking position of the hooks (40), i.e., with the chosen password to be changed.

[0044] Optionally, the hooks (40) furthermore have catches (43) facing the inside of the enclosure (4) that they define, for the purpose of being driven into the bag (5) or element to be constrained. As mentioned, the hooks (40a, 40b) determine an adjustable enclosure (CA) depending on the position thereof, such that they

can determine a very wide adjustable enclosure (CA) when both hooks (40a, 40b) are completely separated in the open position (Figure 10), or a very narrow or small adjustable enclosure when both hooks (40a, 40b) are interlinked in the locked position.

[0045] Preferably, when the lock comprises two adjustable enclosures (4) at each of the two ends of the padlock, formed by the described hooks (40), the combination mechanism is common for both enclosures, as shown in Figures 7 and 8.

[0046] Considering Figure 11, it can be seen how the bag (5) having a mouth in which the security lock (1) of the invention is incorporated is preferably a security bag formed with an inner flexible steel cable mesh structure (50) which can optionally incorporate an external covering (not depicted) consisting of fabric or another flexible material that conceals said mesh (50).

[0047] Lastly, Figure 12 shows a padlock object of the invention, with a cable (6) associated with the end opposite to that of an adjustable enclosure (4) with the hooks (40). Said hooks surround the frame of a scooter (7) whereas the cable (6) surrounds a fixed external structure (8).

[0048] In that sense, considering Figures 13 to 18, a bag (5) like the one shown in the preceding Figure 11 is described below. In that sense, the receptacle (5) of the invention, formed in a known manner from a flexible body which defines a housing for keeping and carrying objects, which may or may not be provided with handles for carrying same (not depicted in the figures), is distinguished in that said body internally has a flexible steel or Kevlar mesh structure (50), having sufficient resistance so that it cannot easily break, not even with the use of scissors or other cutting tools.

[0049] Said formed mesh (50) has at least:

- a first area which determines the housing of the receptacle, and
- a second area, located in the opening (5a) of the receptacle (5) and consisting of a thickening of the mesh and determining the mouth (5a) per se of the receptacle (5).

[0050] The figures show a locked receptacle (5), where there can also be seen, in addition to the two previous areas, a third area consisting of a narrowing of the mesh (50) of the receptacle (5) and determining a neck at the mouth of the receptacle (5).

[0051] Preferably, the receptacle (5) further comprises an internal covering and an external covering (53) consisting of fabric or another flexible material covering the mesh structure (50), preferably made of steel (50), preventing the mesh (50) from being seen and making the receptacle (5) look like an everyday bag, backpack or sacks.

[0052] Likewise, the receptacle (5) preferably comprises a security lock (1) which prevents access to the inside of the bag (5) when it is placed and locked below the mouth (5a) of the bag (5).

[0053] In a preferred embodiment, the flexible mesh body (50) forming the receptacle (5) has a sack configuration (5) and the security lock (1) consists of a device which, upon surrounding the sack (5), determines the third area or neck of the mouth (5a). It is possible to fasten to this security lock (1) a chain (6) or similar thread-like securing element with which a preferably fixed and/or bulky element, such as a fixed beach umbrella, a hammock (71), a chair, a street light, a bench (72), a tree (73), etc., can be surrounded to secure the bag (5) to same. The bag (5) therefore can neither be opened nor carried, and is not easily damaged in order to access the inside thereof, the belongings of the user being safeguarded from being stolen.

[0054] Preferably, the security lock (1) is a device comprising at least one end provided with a system of hooks (40), which open and close to encircle the receptacle (5), thereby determining the third area or neck below the mouth of the bag (5) and constricting same, with the system of hooks preferably being linked to a number combination mechanism (3), preventing the use of keys which must be carried by the user.

[0055] Figure 16 shows the mesh (50) of a receptacle (5) object of the invention with the security lock (1) associated with the mesh (50) itself through the chain, cable or thread-like securing element (6). Said cable (6) is attached to the mesh (50) itself, preferably to the inside of same. In that sense, to secure the receptacle (5) to an external structure, such as those indicated above, the mentioned cable (6) will be passed through the external structure and the security lock (1) will then be locked on the receptacle (5) mentioned above. By means of this construction, the receptacle (5) itself the security lock (1) incorporated therein in a separable or inseparable manner, said lock (1) being able to rotate inside the receptacle (5) when said lock (1) is not being used.

[0056] In any case, other locking systems can be used, such as a cable with a padlock.

Claims

1. An adjustable padlock, **characterized in that** it comprises a hollow body in the form of a casing (2) which houses a combination mechanism (3) which blocks or unblocks the mobility of at least one adjustable enclosure (4) formed by two hooks (40) arranged symmetrically and each one attached by a first end to the casing (2), and allowing the diameter of the enclosure to be increased or reduced in order to be able to lock it on an element, with the second end of each hook being free and separated from the casing.

2. The padlock according to claim 1, **characterized in that** the combination mechanism comprises wheels with characters (39) which, when placed in a certain

position, determine a password or code, allowing the movement of the hooks.

3. The adjustable padlock according to claim 1, **characterized in that** the two hooks (40) are attached to the casing (2) by an articulated attachment point which rotates on a shaft (41) such that when they are moved with the unblocked mechanism, allow the diameter of the enclosure that they form to be increased or reduced.

4. The adjustable padlock according to claim 3, **characterized in that** the articulated attachment point which attaches each hook (40) to the casing (2) is a toothed pinion (42) which meshes with the pinion of the other hook (40), there being a blocking pin (30) belonging to the combination mechanism (3) centered between both pinions.

5. The adjustable padlock according to any of the preceding claims, **characterized in that** once the distal ends of the hooks are locked, they are interlinked with one another.

6. The adjustable padlock according to any of the preceding claims, **characterized in that** the hooks (40) have catches (43) facing the inside of the enclosure (4) that they define.

7. The adjustable padlock according to any of the preceding claims, **characterized in that** the hooks are semicircular.

8. The adjustable padlock according to any of the preceding claims, **characterized in that** the adjustable enclosure (4) is located at one end of the casing (2), and **in that** are arranged at the opposite end of the casing (2) securing means (6) for a cable, wire, chain or the like to fasten the padlock to a structure.

9. The adjustable padlock according to any of the preceding claims, **characterized in that** the body of the casing (2) comprises two adjustable enclosures (4) linked to the combination mechanism (3), one in each end of this.

10. The adjustable padlock according to claim 1, **characterized in that** the combination mechanism (3) comprises: a pin (30) that can be separated from the hooks (40) of the adjustable enclosure (4), a lever (32) at one end of said pin (30), a first spring (31) at said end, wheels with characters (39) associated with rollers (37) which are traversed by the pin (30), a first type of pushing elements (33b) housed in holes of the rollers (37) and a second spring (34) in contact with a second type of pushing element (33a), such that when the wheels with characters (39) are placed in a predetermined position the rollers (37) rotate, causing the alignment of the pushing elements (33b) between the lever (32) and the second spring (34), for the force of said second spring (34) to displace the pushing elements (33a, 33b) which in turn push the lever (32) and therefore the pin (30), overcoming the force exerted by the first spring (31) and allowing the rotation of the hooks (40) like an opening as said hooks are separated from the pin (30).

11. The adjustable padlock according to claim 10, **characterized in that** it comprises an eccentric (38) associated with the rollers (37) and with a guide disc (36), compressed by springs (35) between the guide disc (36) and the casing (2), such that the rotation of the eccentric (38) pushes the rollers (37) and the guide disc (36), with the latter compressing the springs (35) and releasing the wheels with characters (39) with the displacement of the rollers (37), being able to rotate said wheels with characters (39) after the previous movement to change the password of the padlock while the rollers (37) remain firm in one position as a result of the internal displacement of the pushing elements (33), and to end, the eccentric (38) is rotated again to its initial position, and the guide disc (36) and the rollers (37) are pushed with the force of the springs (35).

12. The adjustable padlock according to claim 11, **characterized in that** the casing (2) comprises a hole for accessing a housing in the eccentric (38) by means of a key.

13. A security receptacle (5), **characterized in that** it comprises a shaped flexible mesh (50), made of a cable or wire of a resistant material, which defines a housing with an access mouth (1a), with at least two areas:

    - a first area which determines the housing of the receptacle, and
    - a second area, located in the opening (5a) of the receptacle (5) and consisting of a thickening of the mesh (50) which determines the mouth per se of the receptacle (5),

    said mesh (50) further having an internal covering which defines the inside of the housing and an external covering (53) which defines the outside and the appearance of the receptacle.

14. The receptacle according to claim 13, **characterized in that** the internal and external coverings are made of at least one fabric or another flexible material.

15. A security system, **characterized in that** it comprises a receptacle according to any of claims 13 or 14 and a padlock according to any of claims 1 to 12.

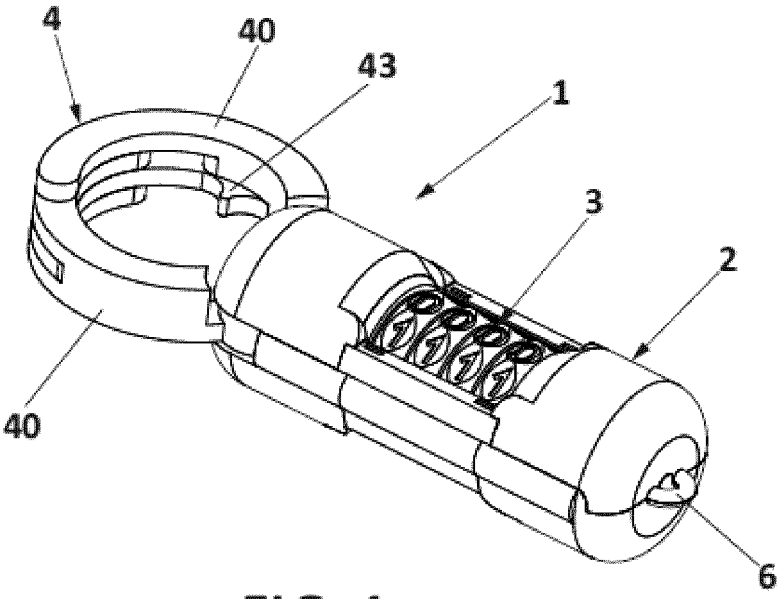


FIG. 1

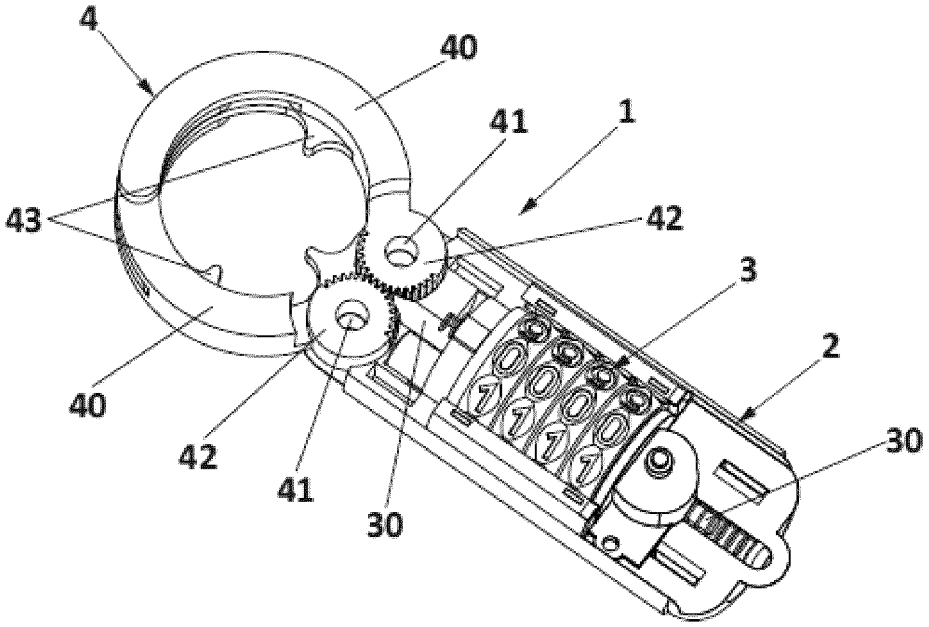


FIG. 2

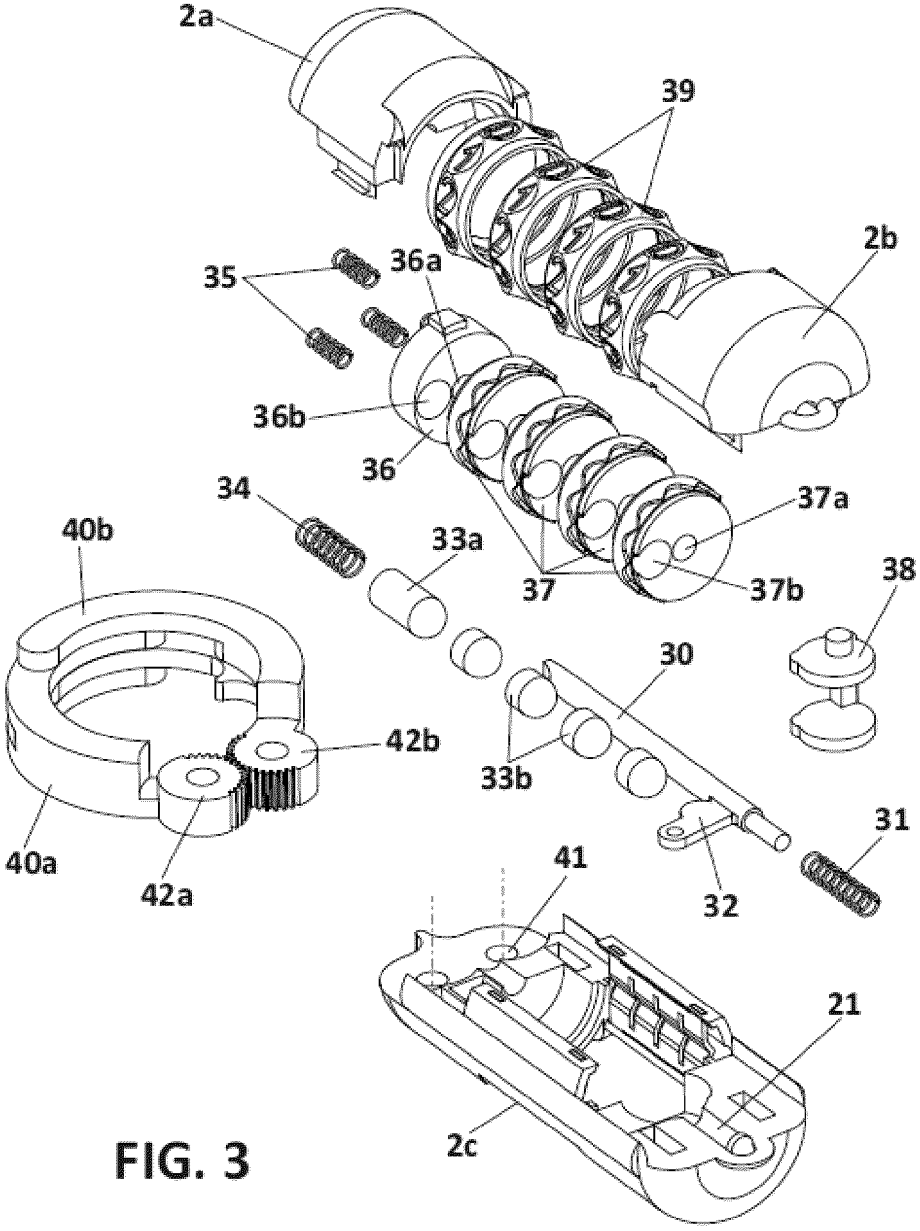

2a
39
2b
35
36a
36b
36
34
37a
40b
33a
37
37b
38
30
42b
33b
31
40a
42a
41
32
21
2c

FIG. 3

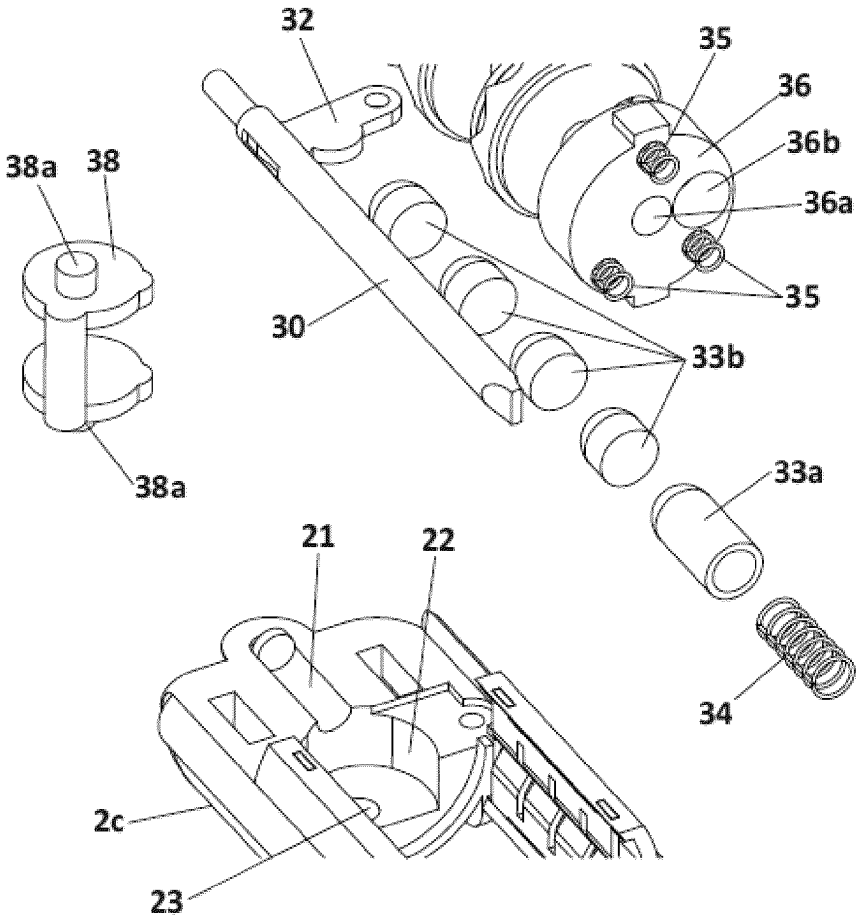
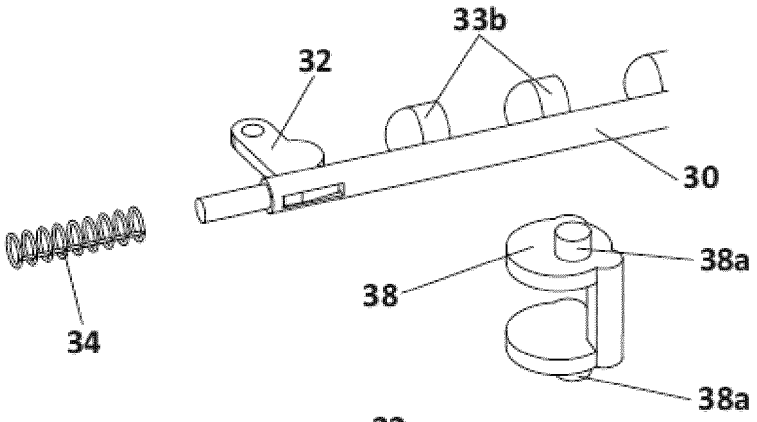


FIG. 4



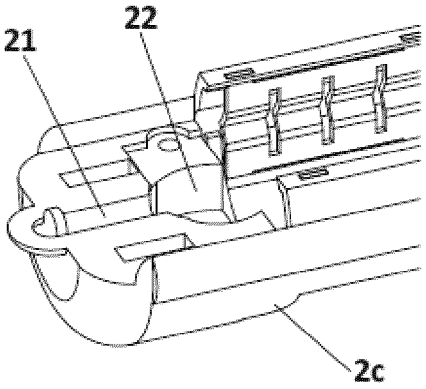


FIG. 5

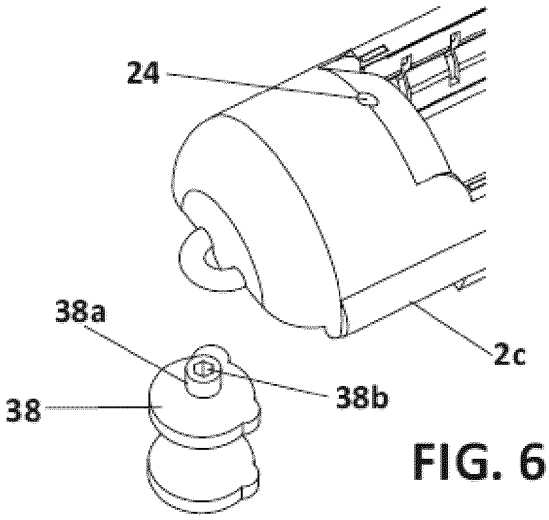


FIG. 6

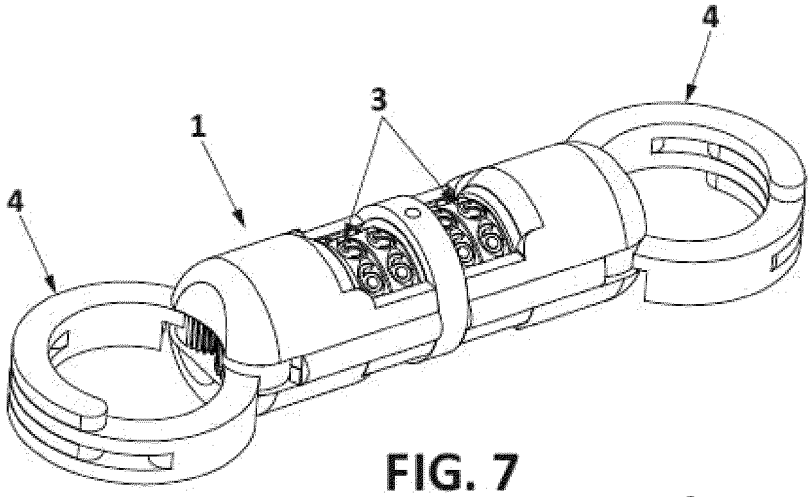


FIG. 7

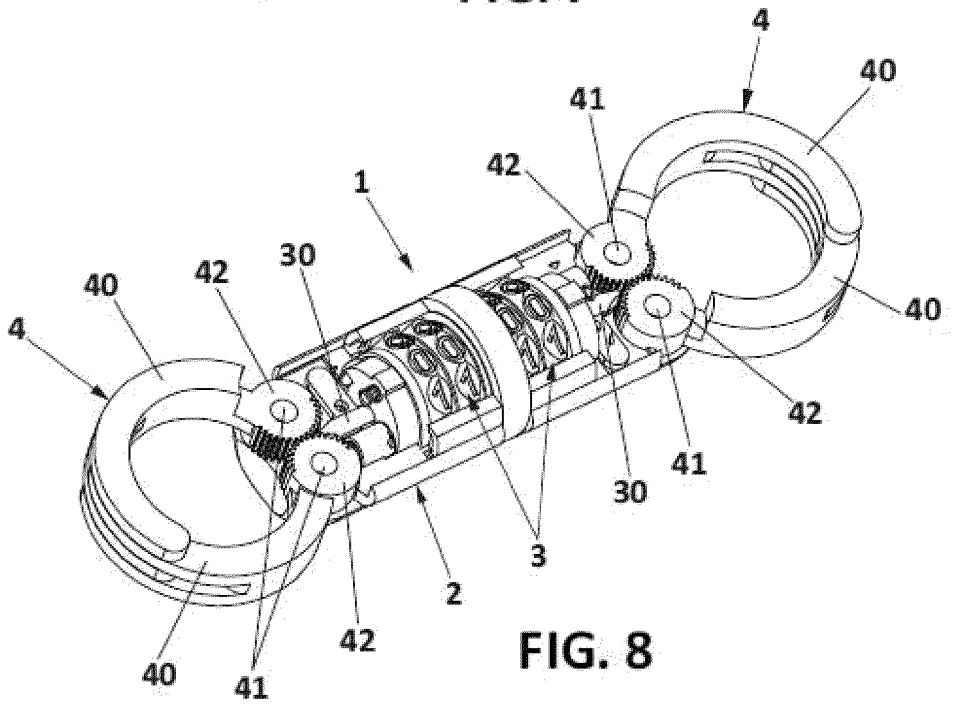


FIG. 8

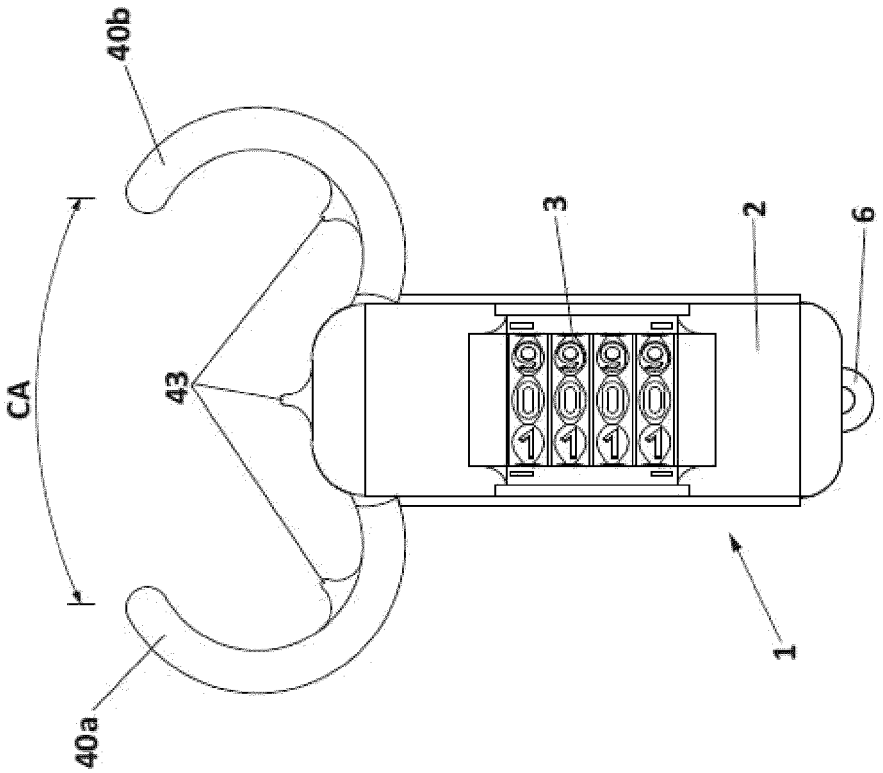


FIG. 10

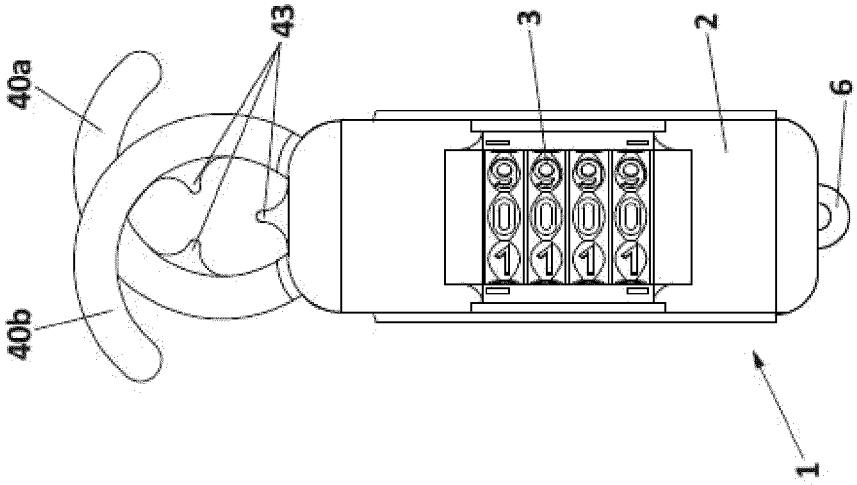


FIG. 9

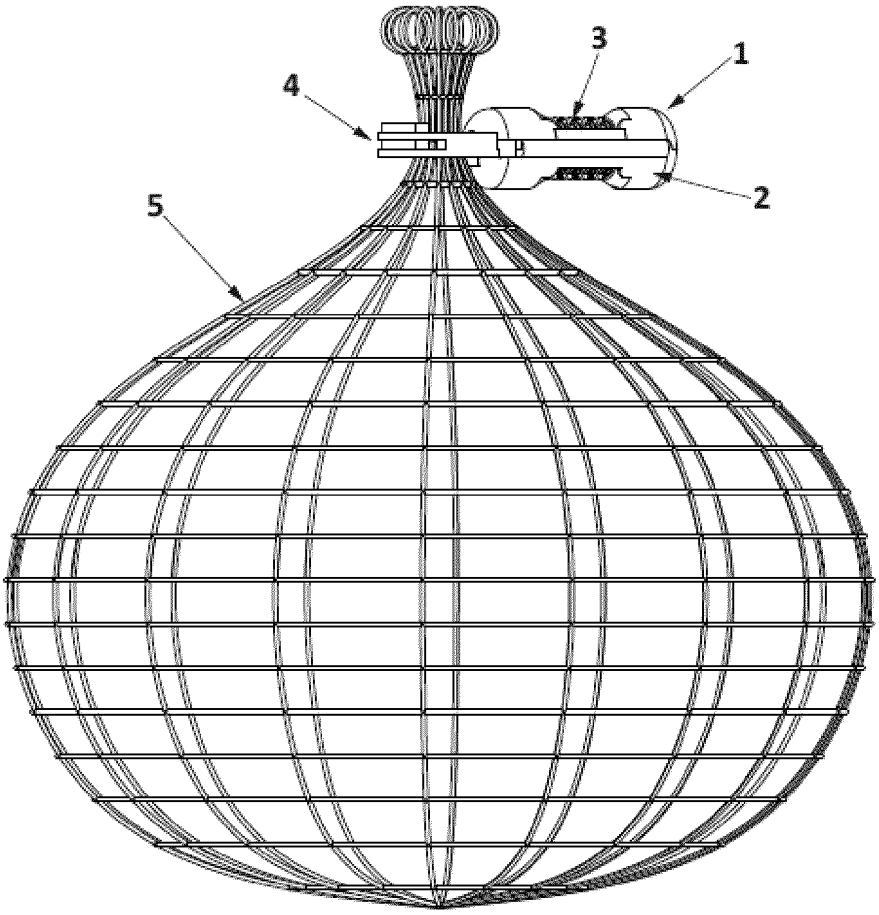


FIG. 11

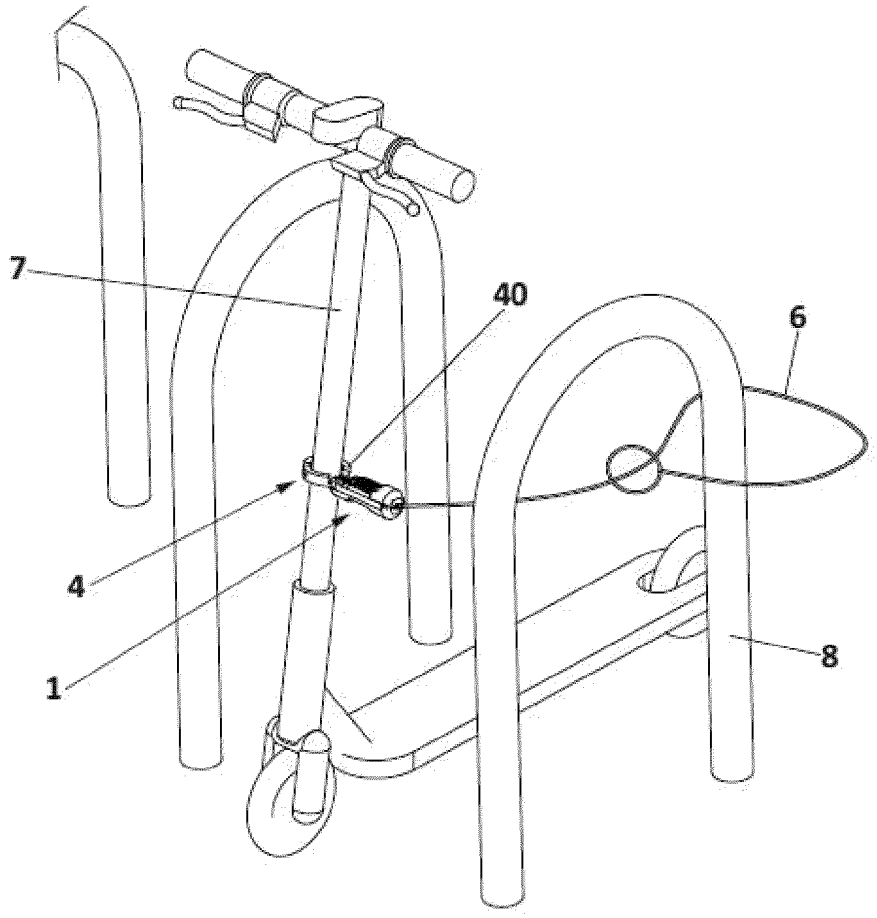


FIG. 12

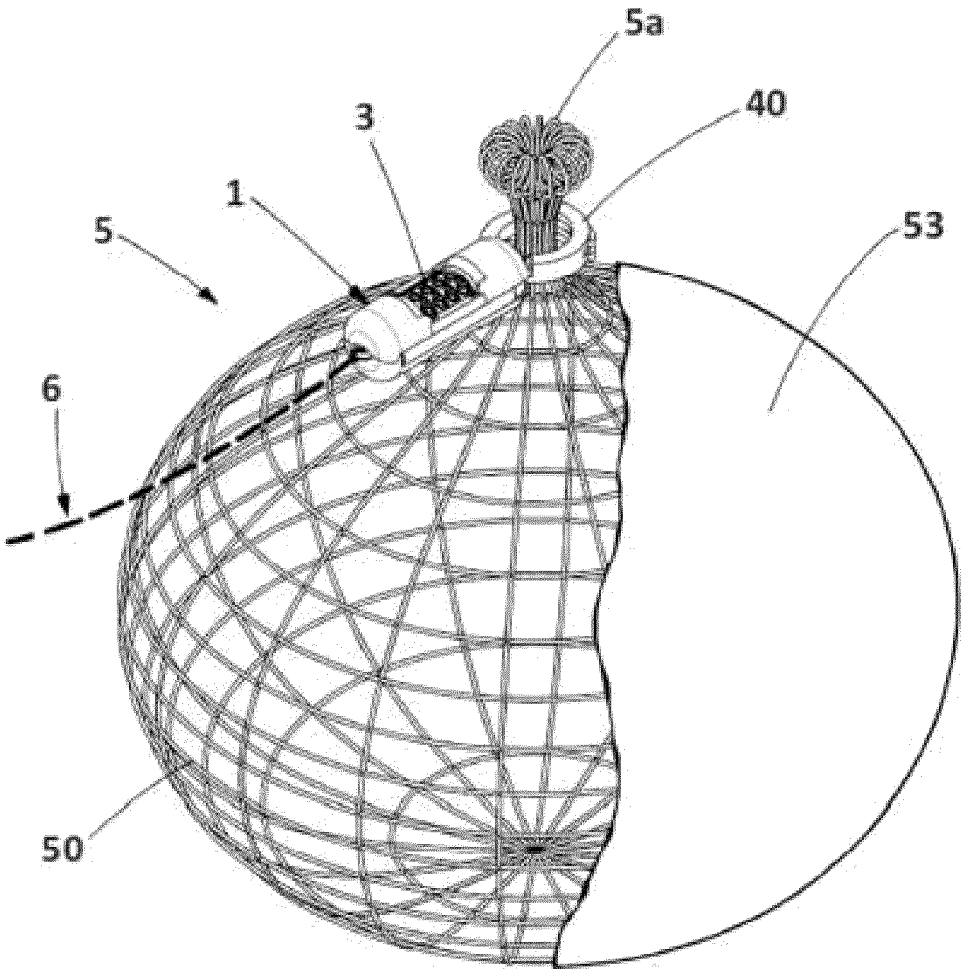


FIG. 13

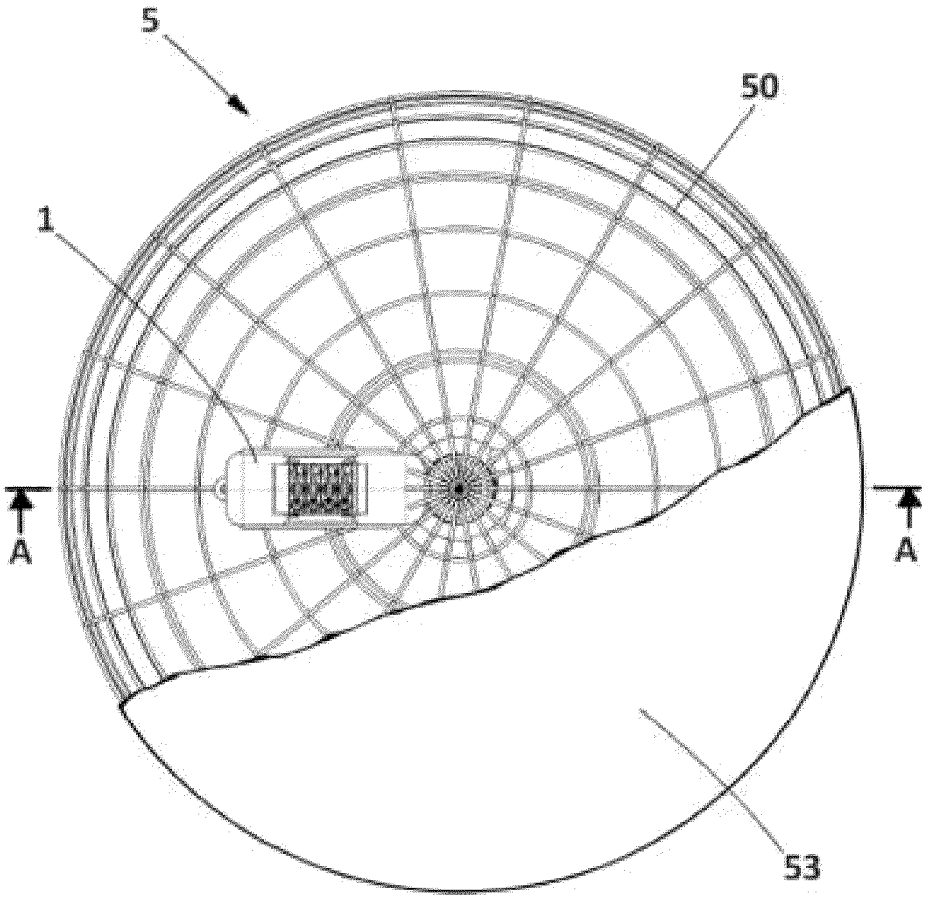


FIG. 14

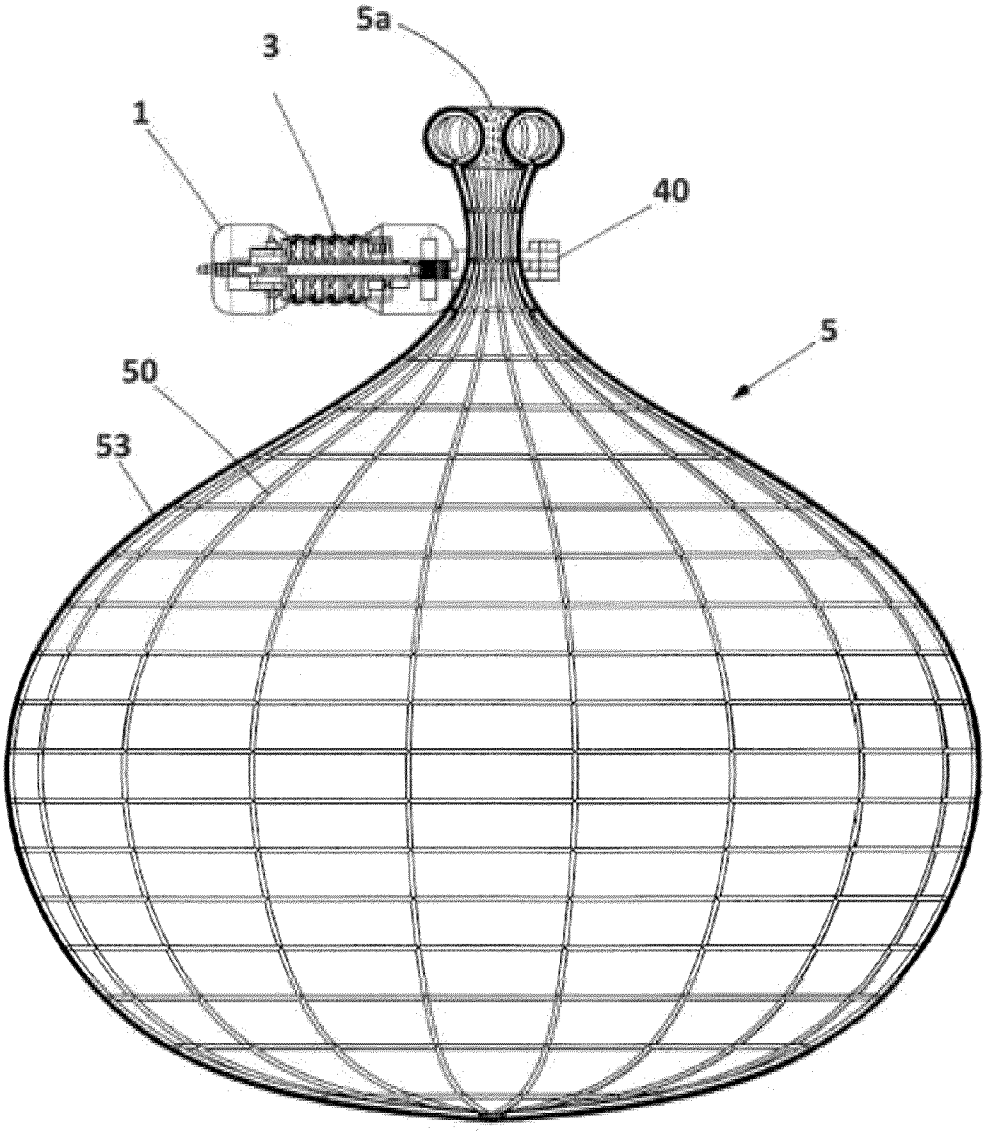


FIG. 15
A-A

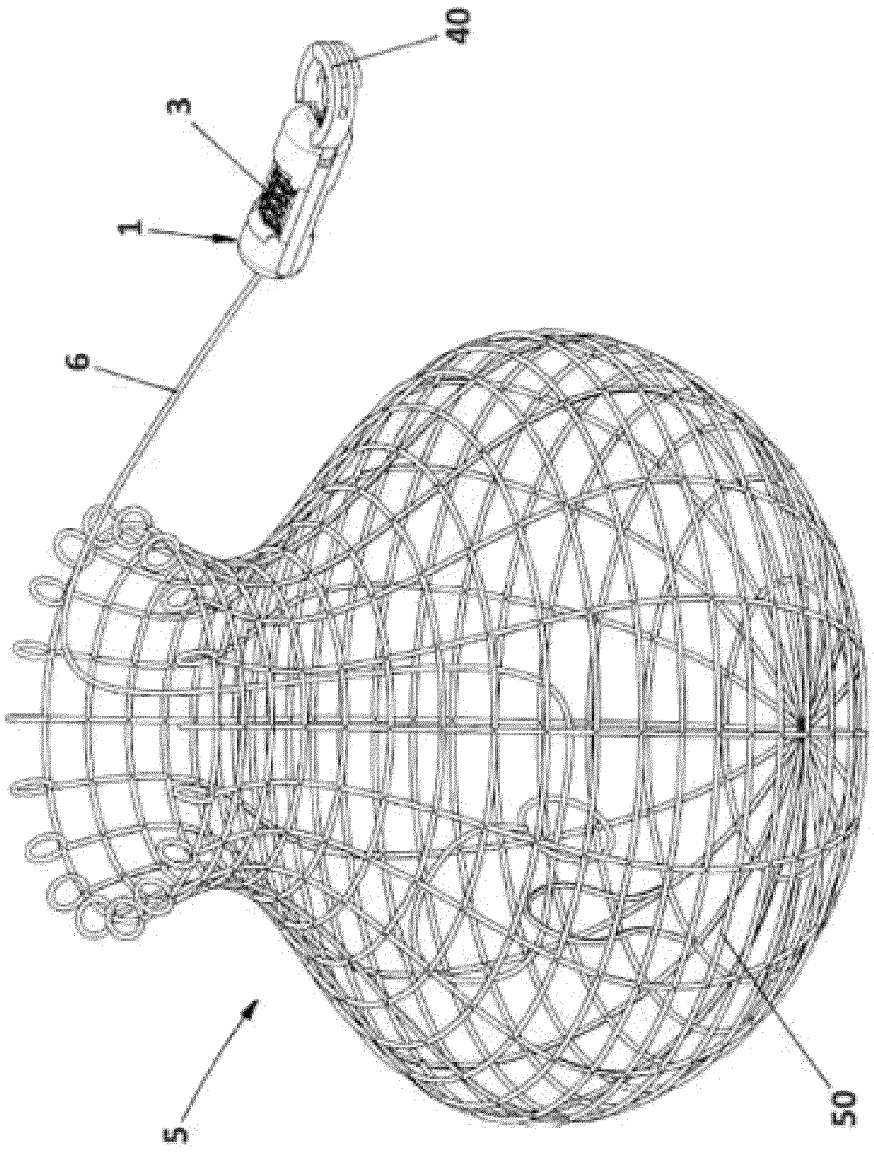


FIG. 16

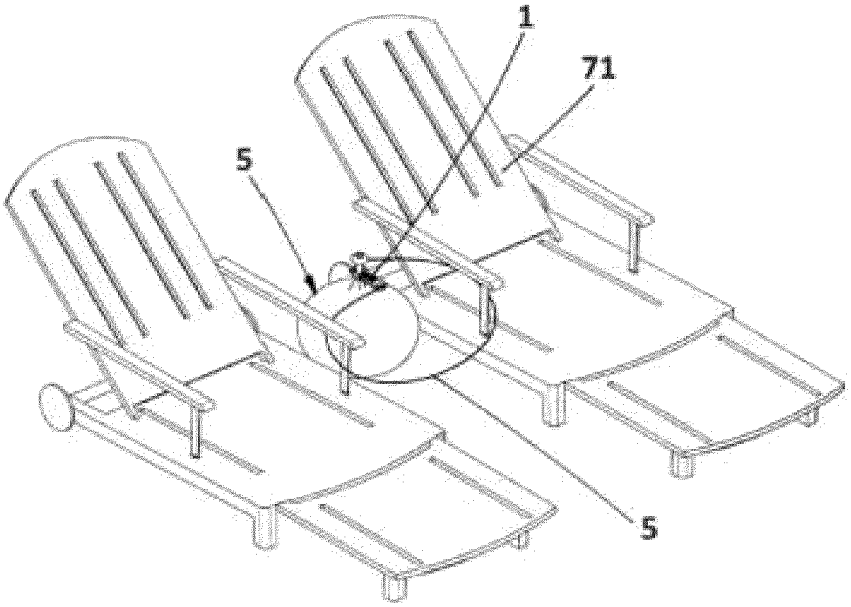


FIG. 17

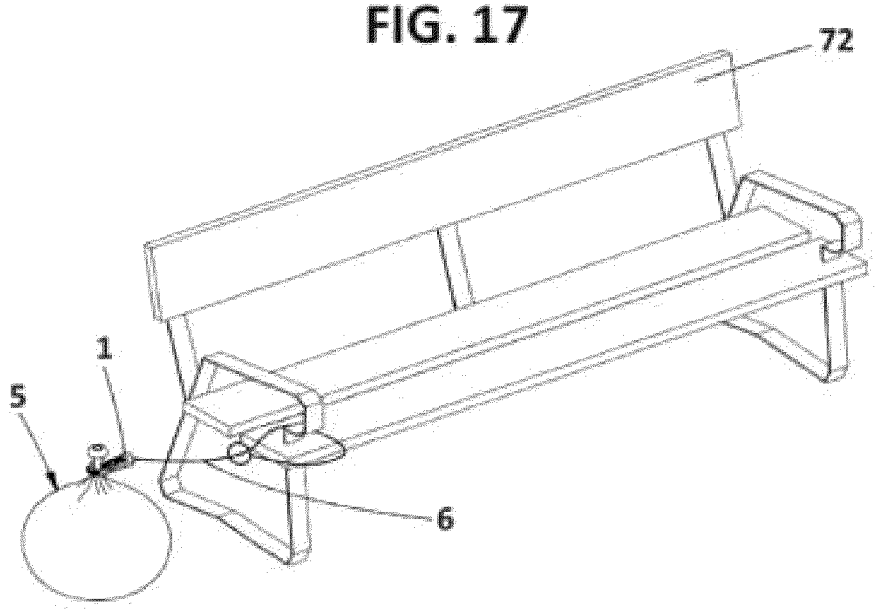


FIG. 18

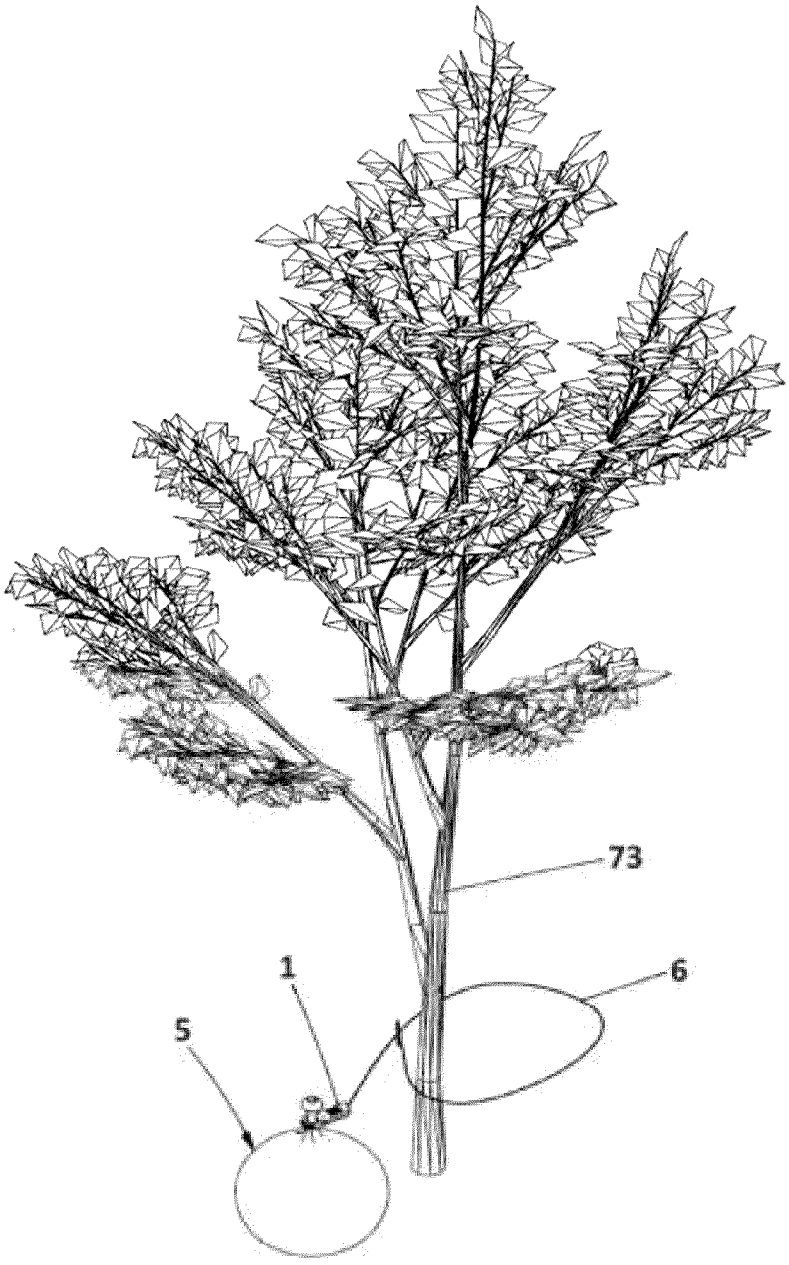


FIG. 19