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(54) **BIT RECEPTACLE STRUCTURE**

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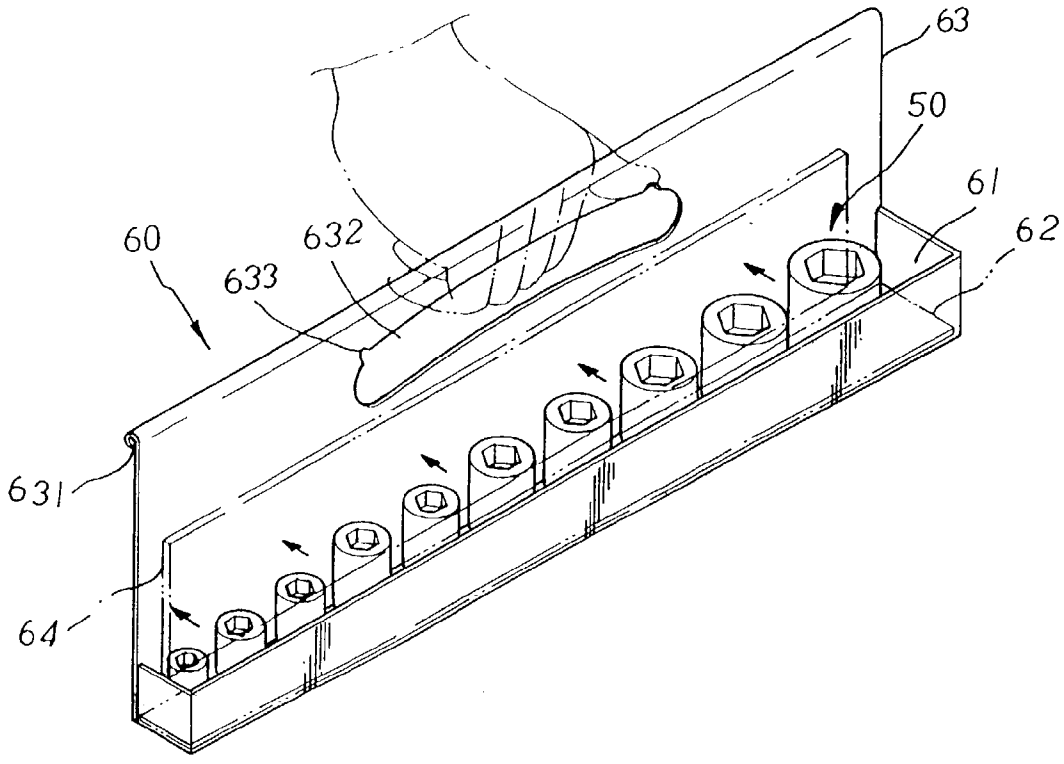
(57) **ABSTRACT**

Bit receptacle structure a lower section of which has a tapered receiving channel in which a magnet with similar shape is accommodated. A locating plate with a certain height integrally upward extends from a long side of the receiving channel. A top end of the locating plate is outward downward curled to define a gap. A certain section of the locating plate is formed with an arched holding slot. Two sides of top edge of the holding slot are respectively formed with hooking notches. A rectangular magnet attracts aback face of the locating plate. The bits are sequentially placed in the receiving channel and attracted and located by the rectangular magnet and the magnet in two directions. Therefore, the bits are more firmly located. Even if a user holds the receptacle via the holding slot and quickly walks, the bits will not randomly slip and shake within the receiving channel. By means of the holding slot, hooking notches and gap of the locating plate and the rectangular magnet, the receptacle is locatable in different manners as necessary.



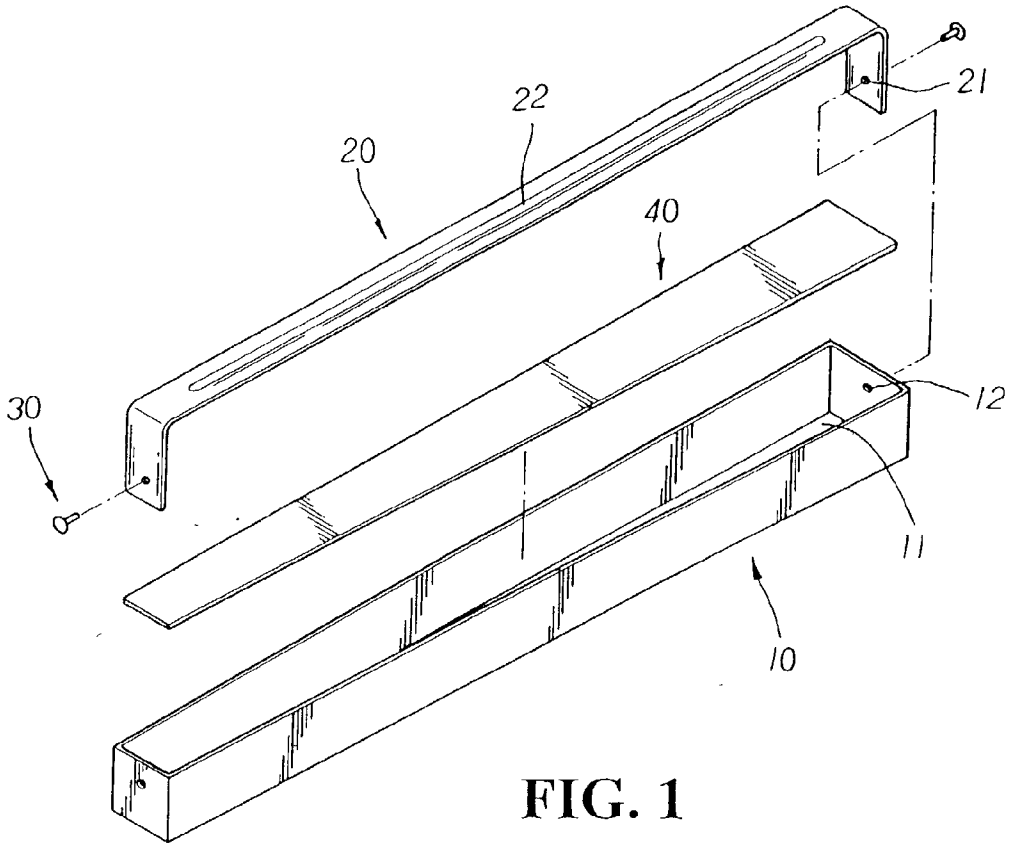


FIG. 1
PRIOR ART

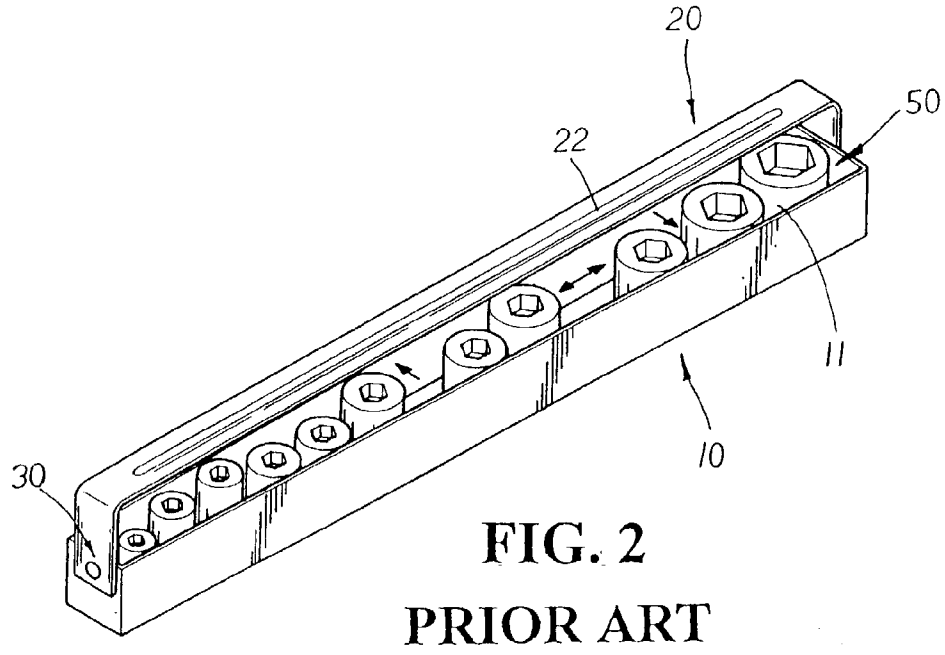


FIG. 2
PRIOR ART

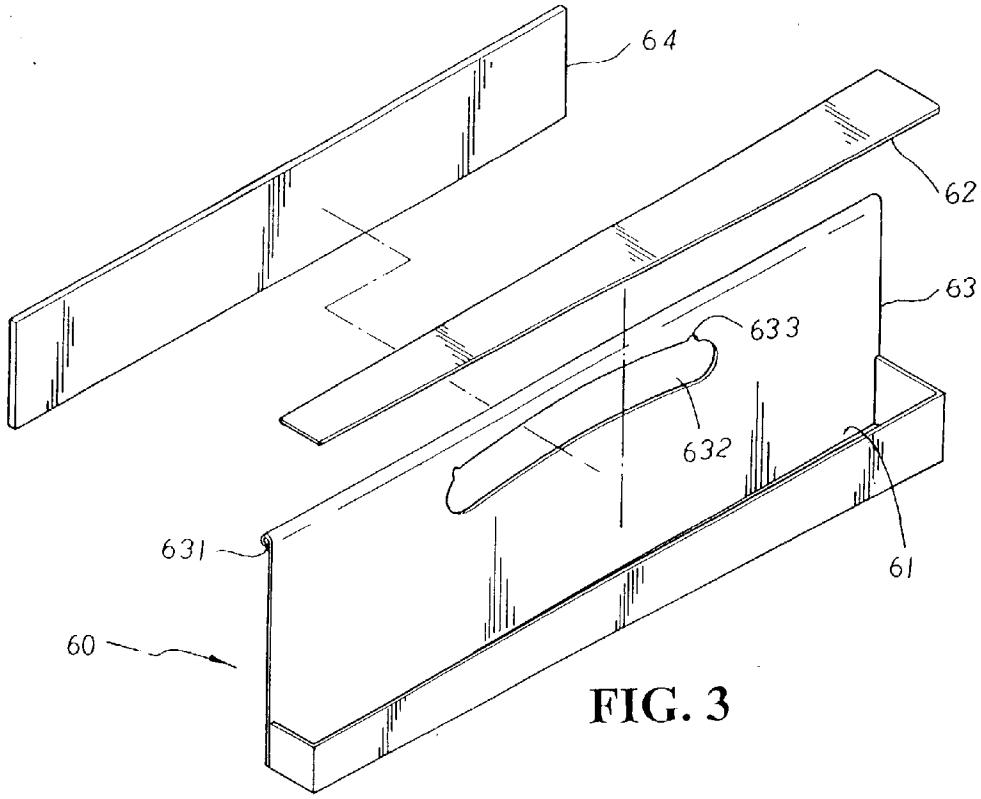


FIG. 3

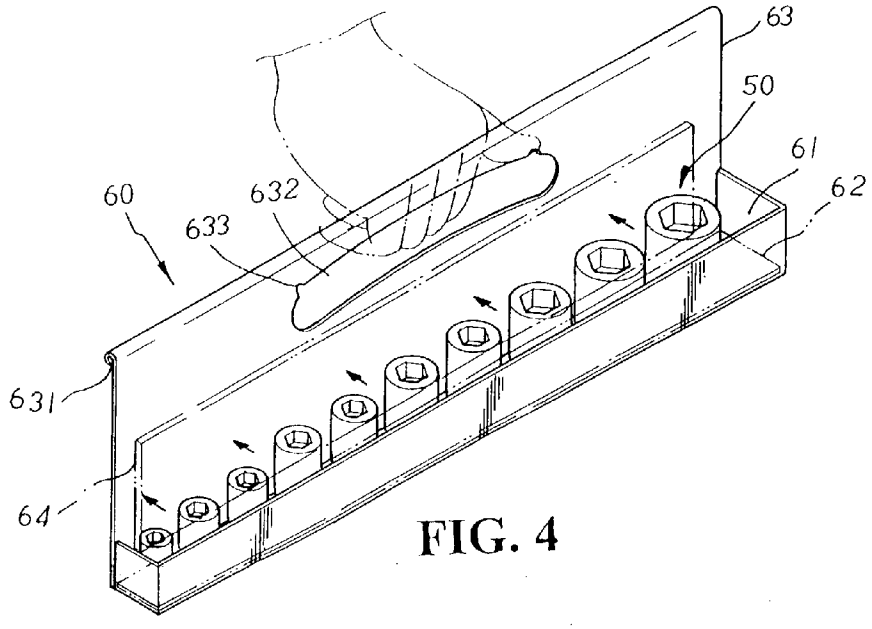


FIG. 4

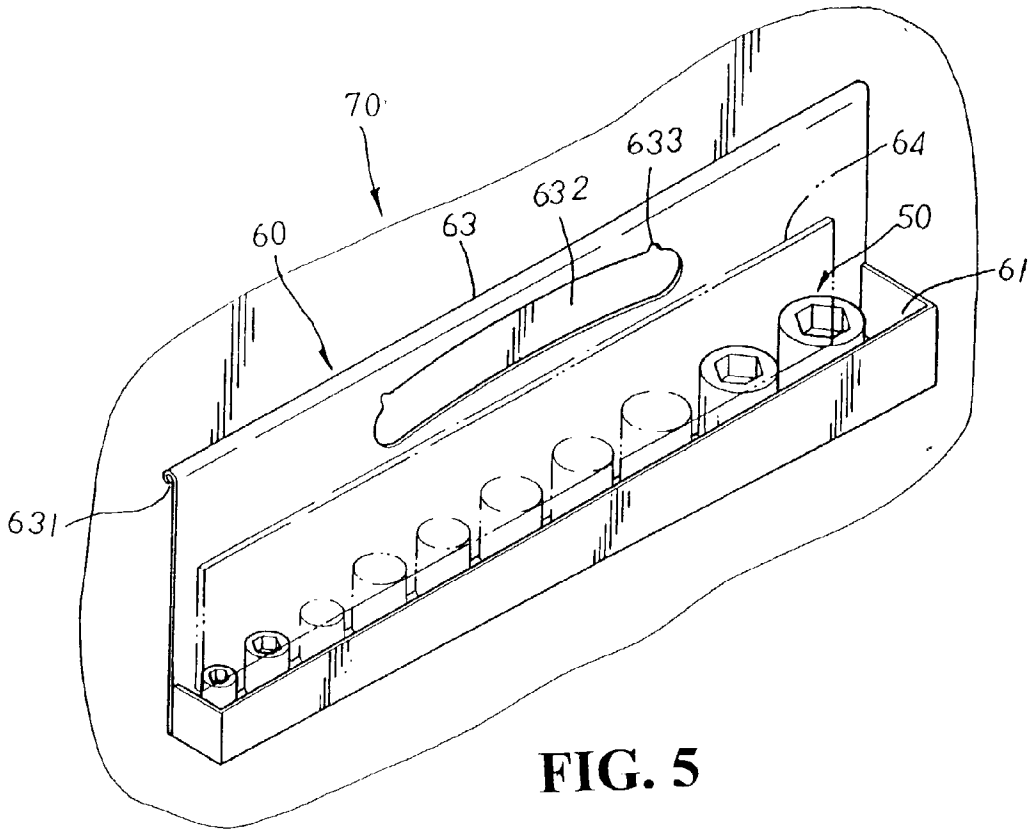


FIG. 5

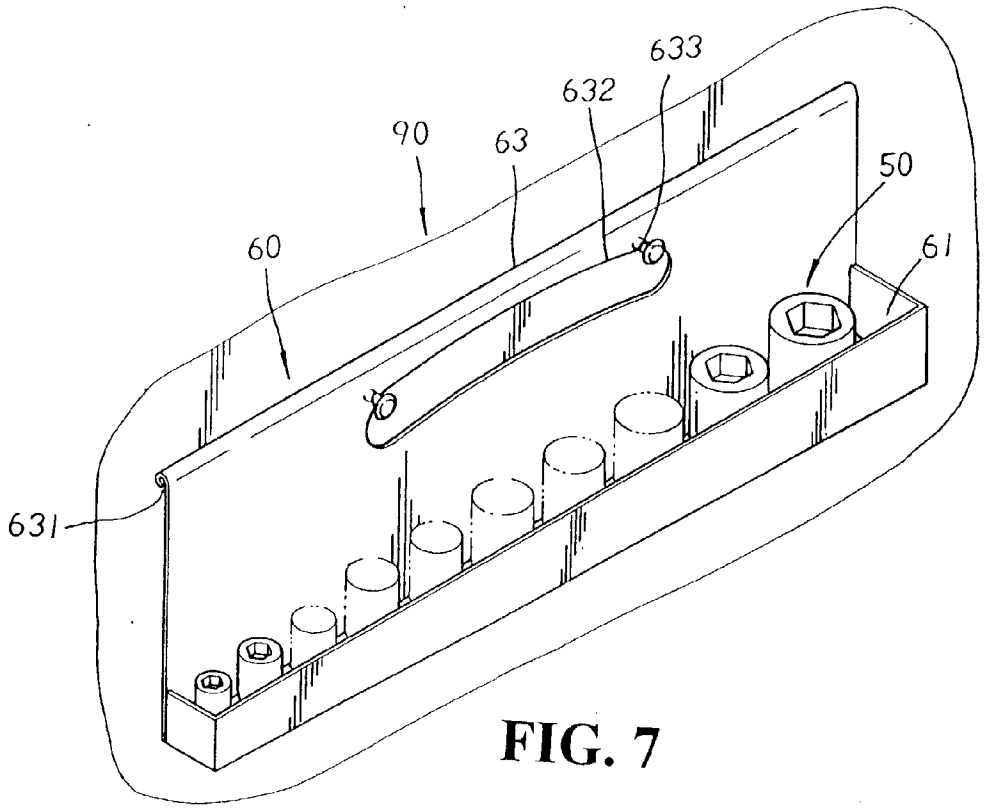


FIG. 7

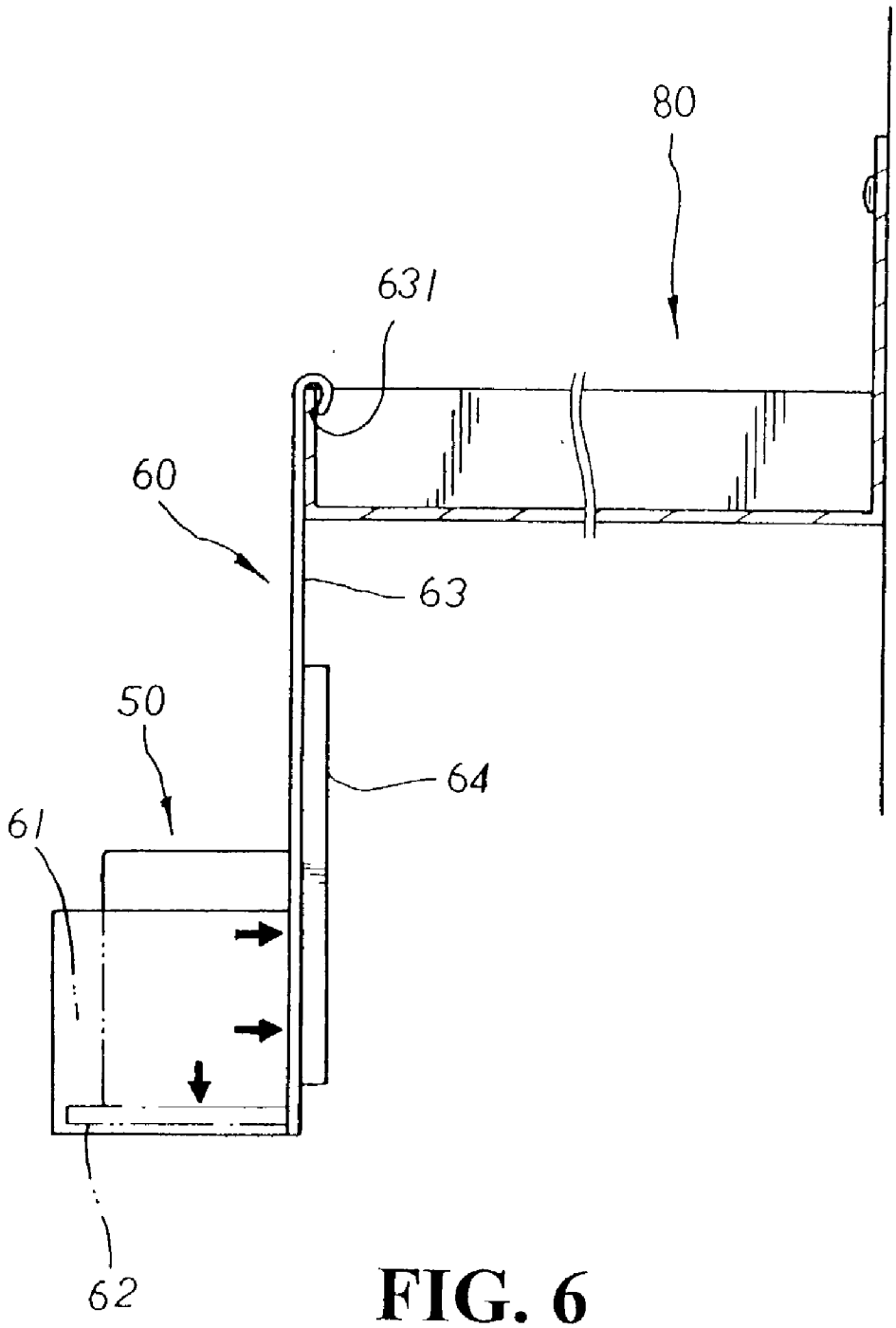


FIG. 6

BIT RECEPTACLE STRUCTURE

BACKGROUND OF THE INVENTION

[0001] The present invention is related to a bit receptacle structure which is made at low cost. The bits are sequentially placed in the receiving channel of the receptacle and attracted and located by a rectangular magnet and a magnet accommodated in the receiving channel in two directions. Therefore, the bits are more firmly located. Even if a user holds the receptacle via the holding slot and quickly walks, the bits will not randomly slip and shake within the receiving channel. By means of the holding slot, hooking notches and gap of the locating plate and the rectangular magnet, the receptacle is locatable in different manners as necessary. Therefore, the receptacle can be widely applied to various sites. Also, the receptacle is not subject to collision and can be conveniently disposed in any place.

[0002] **FIG. 1** shows a conventional bit receptacle including a cabinet **10**, a handle **20**, two rivets **30** and a magnet **40**. The cabinet **10** is formed with a tapered receiving channel **11**. Two sides of the cabinet **10** are respectively formed with two pivot holes **12**. The handle **20** is U-shaped and formed with two pivot holes **21** on two sides. A reinforcing rib **22** is formed on top face of the handle **20**. The magnet **40** is a plate body with a dimension equal to that of the receiving channel **11**.

[0003] When assembled, as shown in **FIG. 2**, the pivot holes **21** of the handle **20** are aligned with the pivot holes **12** of the cabinet **10** and the rivets **30** are passed through the pivot holes to rivet the handle **20** with the cabinet **10**. Then the magnet **40** is placed into the receiving channel **11**. At this time, the bits **50** can be sequentially placed into the receiving channel **11** according to their sizes.

[0004] The above bit receptacle has some shortcomings as follows:

[0005] 1. The bits **50** placed in the receiving channel **11** are only fixed by the magnet **40** under the bits **50**. Therefore, the bits **50** are only prevented from up and down jumping. When holding the receptacle and walking, the bits **50** tend to left and right and back and forth slip and shake within the receiving channel **11**.

[0006] 2. The bit receptacle can be only rested on the ground or on a table face. When collided, the bit receptacle is easy to displace or even fall down, making the bits scatter over the ground.

[0007] 3. The handle **20** only enables a user to hold the bit receptacle, while the bit receptacle cannot be hung on a wall face. Therefore, the bit receptacle will occupy more room.

[0008] 4. The cabinet **10** is riveted with the handle **20** by the rivets **30** passing through the pivot holes **12**, **21**. The processing and assembling procedures are complicated and the cost for the material is increased.

SUMMARY OF THE INVENTION

[0009] It is therefore a primary object of the present invention to provide a bit receptacle structure. A magnet is accommodated in a receiving channel of the receptacle and a rectangular magnet attracts back face of a locating plate of the receptacle. The bits placed in the receiving channel are attracted and located by the magnet and the rectangular magnet in two directions. Therefore, the bits are more firmly located. Even if a user holds the receptacle and quickly walks, the bits will not randomly slip and shake within the receiving channel. Therefore, the bits are more firmly located.

[0010] It is a further object of the present invention to provide the above bit receptacle structure in which by means of the holding slot, hooking notches and gap of the locating plate and the rectangular magnet, the receptacle is locatable in different manners as necessary. Therefore, the receptacle can be widely applied to various sites. Also, the receptacle is not subject to collision and can be conveniently disposed in any place.

[0011] It is still a further object of the present invention to provide the above bit receptacle structure in which when assembled, a user only needs to place the magnet into the receiving channel of the receptacle and make the rectangular magnet attract the back face of the locating plate of the receptacle. Therefore, the cost for the material is reduced and the assembling procedure is simplified.

[0012] The present invention can be best understood through the following description and accompanying drawings wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] **FIG. 1** is a perspective exploded view of a conventional bit receptacle;

[0014] **FIG. 2** shows the use of the conventional bit receptacle;

[0015] **FIG. 3** is a perspective exploded view of the bit receptacle of the present invention;

[0016] **FIG. 4** shows that the bit receptacle of the present invention is held by a user with one hand;

[0017] **FIG. 5** shows that the bit receptacle of the present invention attracts and attaches to a metallic wall face;

[0018] **FIG. 6** shows that the bit receptacle of the present invention is hung on a kit; and

[0019] **FIG. 7** shows that the bit receptacle of the present invention is hung on a cement wall face.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0020] Please refer to **FIG. 3**. The bit receptacle structure **60** of the present invention is made of metallic material. A lower section of the bit receptacle **60** is formed with a tapered receiving channel **61** in which a magnet **62** with similar shape is accommodated. The height of a long side of the receiving channel **61** is gradually increased. A locating plate **63** having a certain height integrally upward extends from the other long side of the receiving channel **61**. The top end of the locating plate **63** is outward downward curled to define a gap **631**. In addition, an upper section of the locating plate **63** is formed with an arched holding slot **632**. Two sides of the top edge of the holding slot **632** are respectively formed with two hooking notches **633**. A rectangular magnet **64** attracts the back face of the locating plate **63**.

[0021] When assembled, referring to **FIG. 4**, the magnet **62** is first placed into the receiving channel **61** of the receptacle **60**. Then the rectangular magnet **64** attracts the back face of the locating plate **63**.

[0022] In use, according to the sizes of the bits **50**, the bits **50** are sequentially placed into the receiving channel **61**. At this time, the bits **50** are attracted and located by the rectangular magnet **64** and the magnet **62** in two directions. Therefore, the bits **50** are more firmly located. Even if a user holds the receptacle **60** via the holding slot **632** and quickly walks, the bits **50** will not randomly slip and shake within the receiving channel **61**.

[0023] **FIG. 5** shows that the present invention is attached to a metal face (wall). By means of the rectangular magnet **64** attracting the back face of the locating plate **63**, the entire receptacle **60** can attract and attach to a metal face (wall) **70**. In the case that the receptacle **60** is co-used with a shallow or nonmetallic kit **80**, the gap **631** of the locating plate **63** can be downward fitted onto one side of the kit **80** and hung thereon as shown in **FIG. 6**. Alternatively, by means of the hooking notches **633** of two sides of the holding slot **632**, the receptacle **60** can be hung on a cement wall face **90** as shown in **FIG. 7**. Accordingly, the receptacle **60** can be located in different manners as necessary. Therefore, the receptacle **60** can be widely applied to various sites. Also, the receptacle **60** is not subject to collision and can be conveniently disposed in any place.

[0024] The above embodiments are only used to illustrate the present invention, not intended to limit the scope thereof. Many modifications of the above embodiments can be made without departing from the spirit of the present invention.

What is claimed is:

1. Bit receptacle structure, a lower section of the bit receptacle being formed with a tapered receiving channel in which bits and a magnet with similar shape are accommodated, the height of a long side of the receiving channel being gradually increased, said bit receptacle structure being characterized in that a locating plate having a certain height integrally upward extends from the other long side of the receiving channel, a top end of the locating plate being outward downward curled to define a gap, a certain section of the locating plate being formed with an arched holding slot, two sides of top edge of the holding slot being respectively formed with hooking notches, a rectangular magnet attracting a back face of the locating plate, the bits being sequentially placed in the receiving channel and attracted and located by the rectangular magnet and the magnet in two directions, whereby the bits are more firmly located and even if a user holds the receptacle via the holding slot and quickly walks, the bits will not randomly slip and shake within the receiving channel, by means of the rectangular magnet, the entire receptacle can attract and attach to a metal face, in the case that the receptacle is co-used with a shallow or nonmetallic kit, the gap of the locating plate being downward fitted onto one side of the kit and hung thereon, by means of the hooking notches of two sides of the holding slot, the receptacle being able to be hung on a cement wall face, the receptacle being locatable in different manners as necessary.

2. Bit receptacle structure as claimed in claim 1, wherein the receptacle is made of metallic material.

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