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(54) **TOY LAUNCHER**

(71) Applicant: **Shantou Chuanggao Toys Co., Ltd**, Shantou (CN)

(72) Inventor: **Weichuang CAI**, Shantou (CN)

(73) Assignee: **Shantou Chuanggao Toys Co., Ltd**, Shantou (CN)

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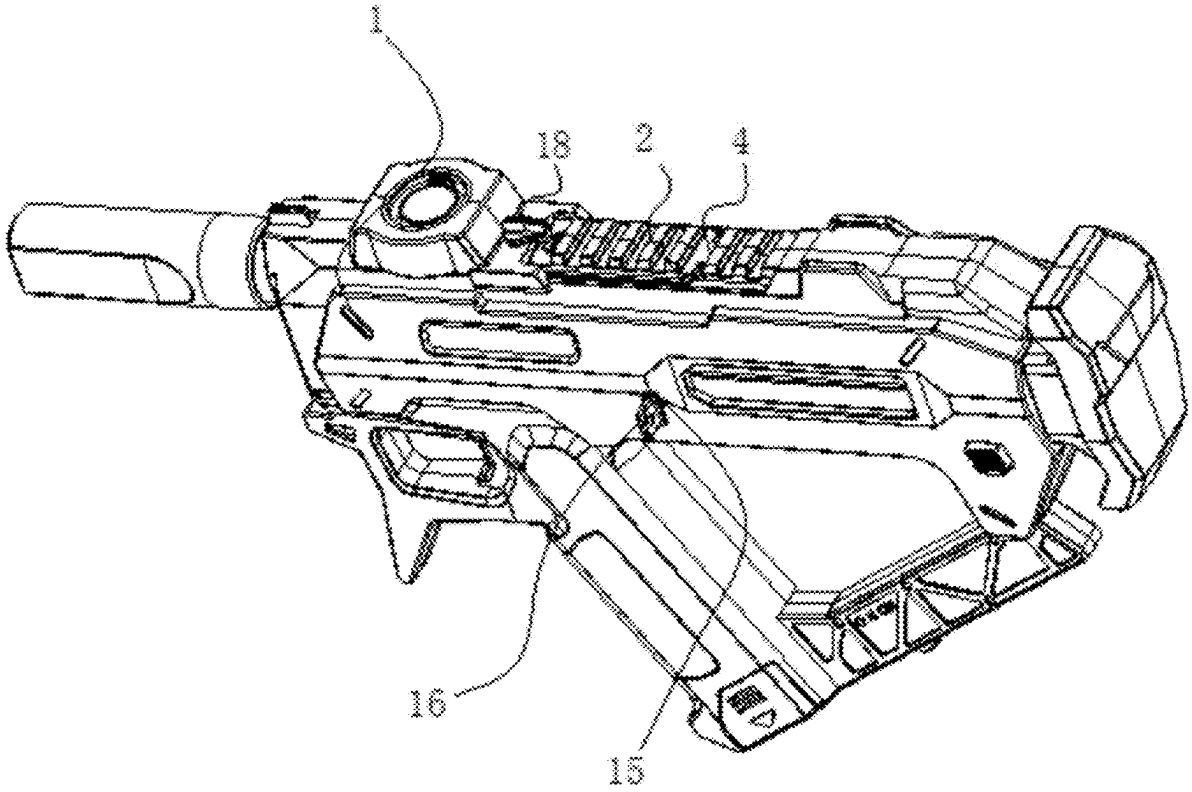
(57) **ABSTRACT**

Disclosed is a toy launcher, including: a housing, provided with a mounting cavity, and a placement hole formed in the housing, where the placement hole is communicated with the mounting cavity, and the elastic member is mounted in the mounting cavity; an elastic member, detachably mounted in the mounting cavity; a mounting part, where the elastic member is sleeved in the mounting part, and the elastic member and the mounting part are located in the mounting cavity; and a locking assembly for preventing detachment of the mounting part and the elastic member from the mounting cavity. The present disclosure has effects of facilitating replacement and mounting of the elastic member, minimizing the situation where a user encounters difficulties in mounting or replacing the elastic member due to uncertainty of a mounting position of the elastic member, and stably mounting the elastic member by the user through the locking assembly.



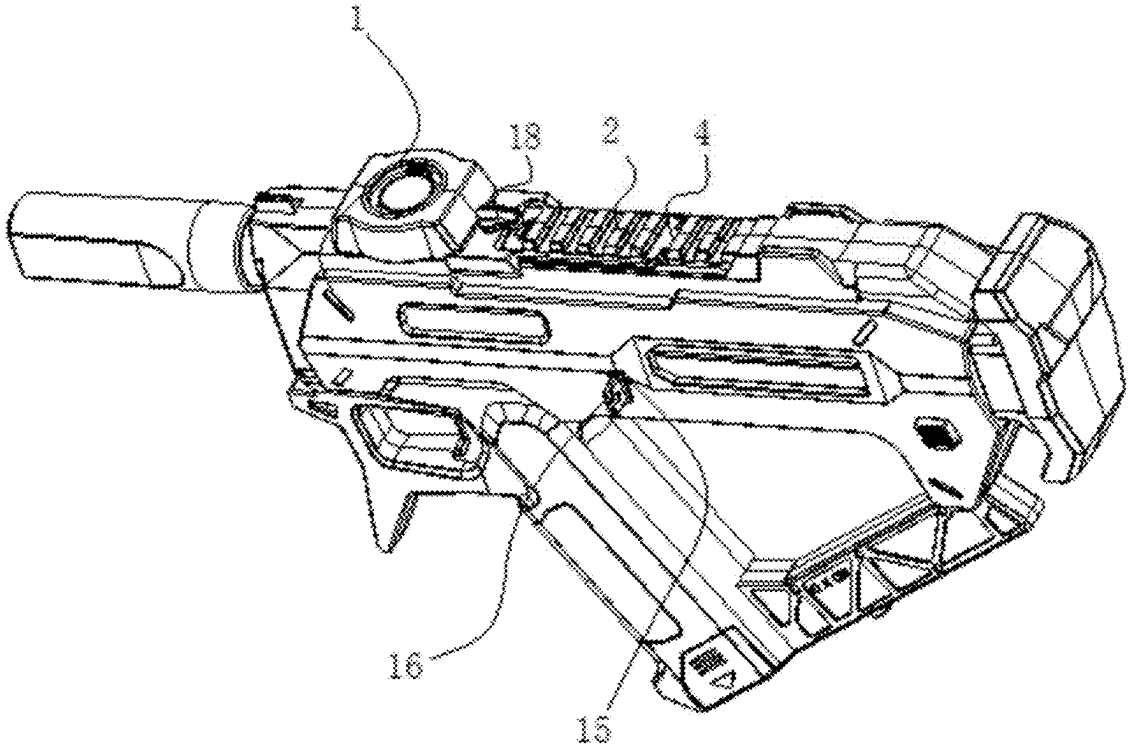


FIG. 1

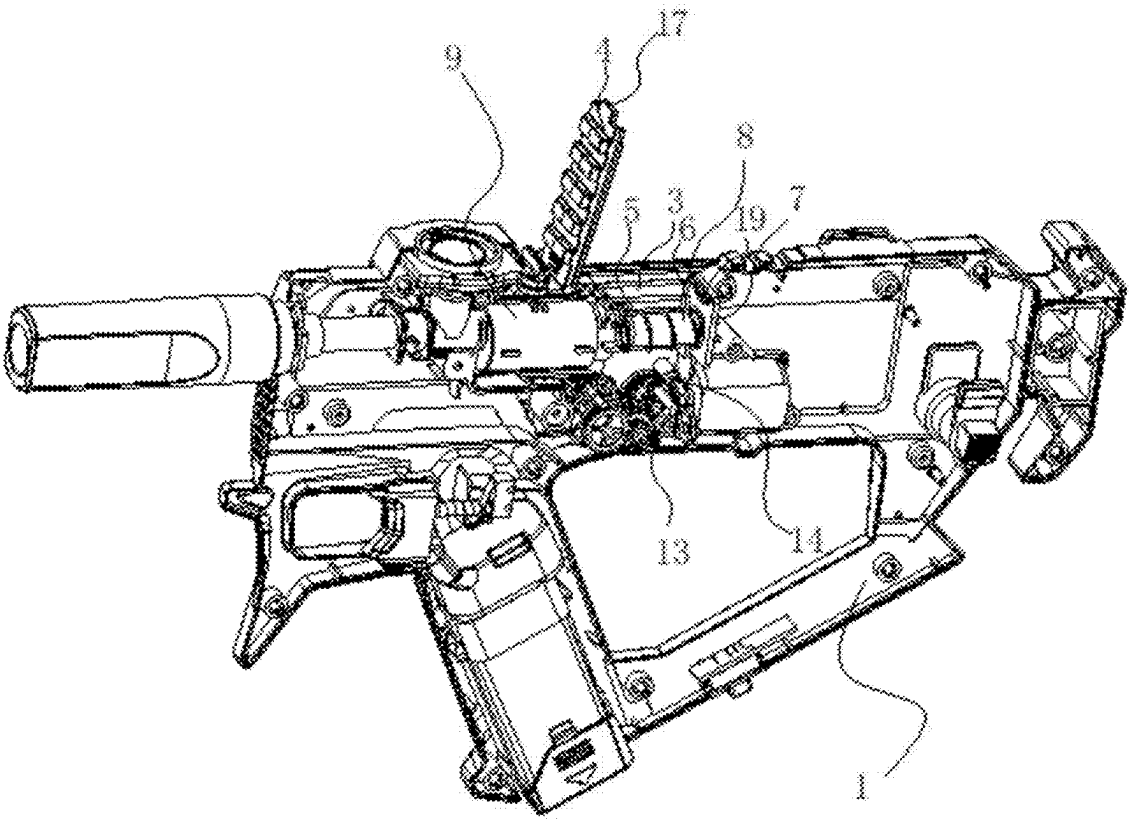


FIG. 2

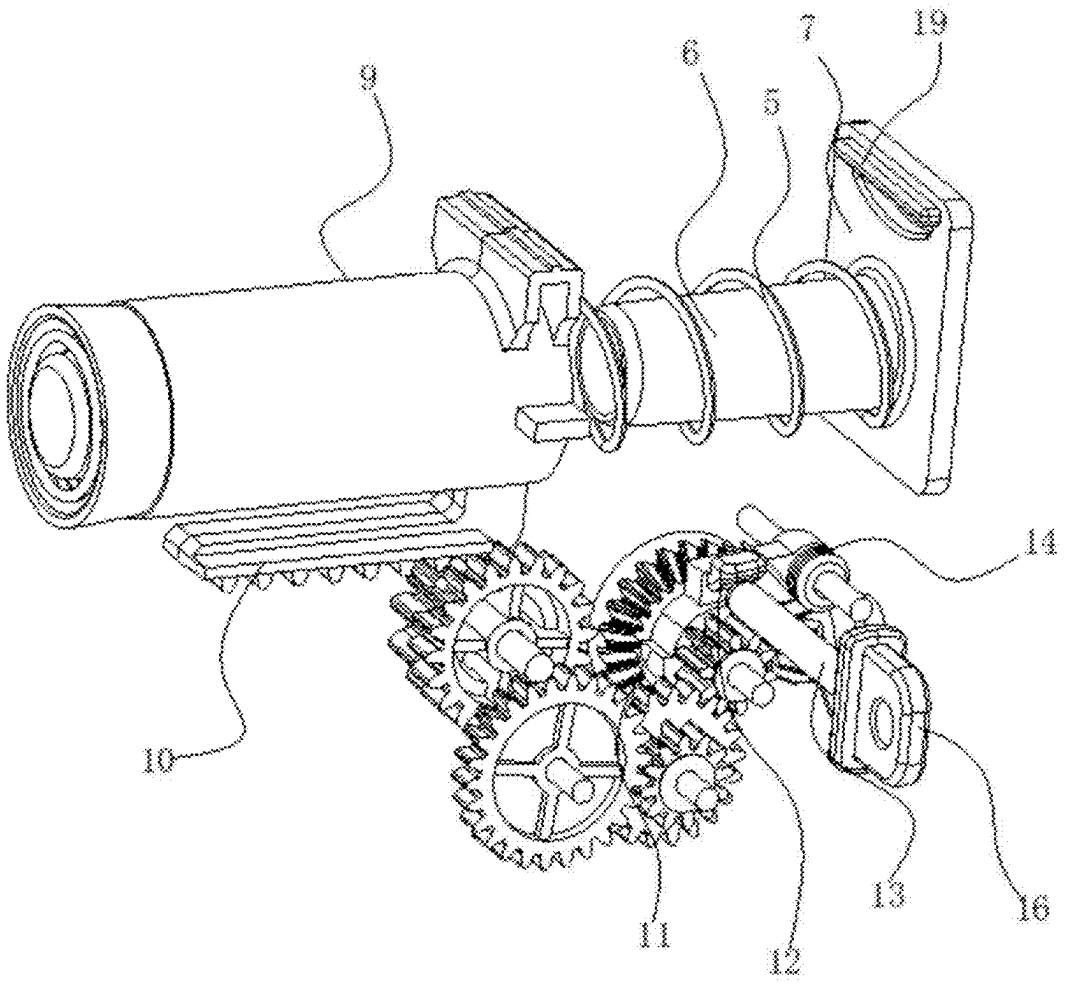


FIG. 3

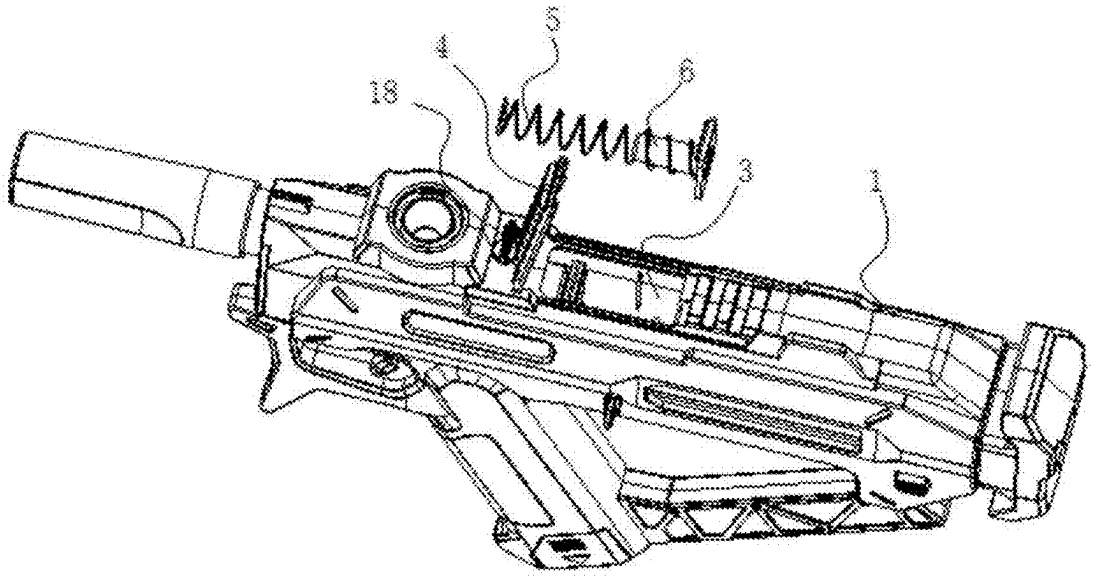


FIG. 4

TOY LAUNCHER

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The application claims priority to Chinese patent application No. 202421644794.0, filed on Jul. 11, 2024, the entire contents of which are incorporated herein by reference.

TECHNICAL FIELD

[0002] The present disclosure relates to a toy launcher.

BACKGROUND

[0003] A toy launcher, such as a toy gun, ejects contents therein through an ejection device arranged in a housing of the launcher. A toy gun includes a gun body, the gun body is provided with a cavity for accommodating the ejection device, and an elastic member contained in the ejection device is mounted in the cavity.

[0004] When a user uses the toy gun, the elastic member of the ejection device undergoes repeated compression, deformation and recovery. After a long time of use, the elastic member has a deteriorating capacity of recovery from deformation, thereby leading to a decline in a use effect of the toy gun.

SUMMARY

[0005] The present disclosure provides a toy launcher, and the toy launcher is provided with a detachable and replaceable elastic member, and a mounting structure for detachable mounting of the elastic member, such that a user can quickly and conveniently replace the elastic member.

[0006] The following technical solution is adopted for the toy launcher provided by the present disclosure:

[0007] the toy launcher, including:

[0008] a housing, provided with a mounting cavity, and a placement hole formed in the housing, where the placement hole is communicated with the mounting cavity, and an elastic member is mounted in the mounting cavity;

[0009] an elastic member, being detachably mounted in the mounting cavity;

[0010] a mounting part, where the elastic member is sleeved in the mounting part, and the elastic member and the mounting part are located in the mounting cavity; and

[0011] a locking assembly, configured for preventing detachment of the mounting part and the elastic member from the mounting cavity.

[0012] The mounting part mounted with the elastic member is placed in the mounting cavity of the housing, and then the locking assembly is used to limit the mounting part and the elastic member, to ensure the mounting part and the elastic member are stably mounted in the mounting cavity. To replace the elastic member as needed, the locking assembly is released to remove the mounting part and the elastic member from the mounting cavity, thereby facilitating replacement and mounting of the elastic member, which minimizes the situation where a user encounters difficulties in mounting or replacing the elastic member due to uncertainty of a mounting position of the elastic member. Further, the user can stably mount the elastic member through the locking assembly, which avoids a decline of effect in launching a gun body after disassembly due to improper mounting.

[0013] Preferably, the locking assembly includes a cover plate, the cover plate is movably connected to the placement hole to seal the placement hole, and the elastic member is a spring; the locking assembly further comprises a guide column and a support piece configured for supporting the guide column, the mounting cavity is provided with plug-in slots configured for inserted connection of the support piece, and the spring is partially sleeved around an outer periphery of the guide column.

[0014] The cover plate is opened, and the guide column is pulled until the guide column and part of the spring sleeved on the guide column are pulled out of the mounting cavity, to remove the spring. Then a new spring is sleeved around the outer periphery of the guide column, and the guide column and the spring are placed in the mounting cavity, such that the support piece is inserted into the plug-in slot, to complete mounting of the spring. Arrangement of the support piece and the plug-in slot enables the spring to be mounted in the mounting cavity in a more stable manner. The guide column is also capable of guiding the spring sleeved thereon, and preventing the spring from bending toward the placement hole, thereby avoiding a poor launching effect.

[0015] Preferably, the locking assembly further includes a sleeving cylinder, the sleeving cylinder is movably connected in the mounting cavity, and a length direction of the sleeving cylinder is consistent with that of the guide column; and when the spring is mounted in the mounting cavity, the sleeving cylinder partially wraps around one end of the guide column away from the support piece.

[0016] The sleeving cylinder partially sleeves and wraps around the guide column, such that the spring sleeved outside the guide column is restricted by both the guide column and an inner side wall of the sleeving cylinder, and the spring is less likely to detach from the guide column, thereby enhancing stability of the spring mounted in the mounting cavity. To remove the spring as needed, the sleeving cylinder is moved to disengage the sleeving cylinder from the guide column, such that the guide column can be removed from the mounting cavity.

[0017] Preferably, the locking assembly includes a rack that is fixedly connected to the sleeving cylinder and a gear set meshed with the rack; and the locking assembly further includes a blocking member that blocks rotation of the gear set, and the blocking member is movably connected in the housing.

[0018] When the spring needs to be firmly fixed, the blocking member abuts against one gear in the gear set to restrict rotation of the gear, such that the entire gear set can hardly rotate, the sleeving cylinder is limited to move, and the sleeving cylinder can hardly slide to a position where it is disengaged from the guide column. When the spring needs to be removed, the blocking member is moved to detach the blocking member from the gear set, which releases rotation restriction on the gear set, such that the rack is capable of moving in a direction away from the guide column, and the sleeving cylinder is disengaged from the guide column, thereby releasing the restriction of the guide column on the spring.

[0019] Preferably, the blocking member includes an abutting block, a limiting block, and a plug-in column, where the abutting block is fixedly connected to one gear in the gear

set, the limiting block is rotatably connected to the housing, the limiting block is located on a side of an abutting gear close to the cover plate, the limiting block is provided with a torsional spring, the abutting block and the limiting block abut against each other to restrict rotation of the gear, and the torsional spring restricts the limiting block from moving in a direction away from the gear; and

[0020] the housing is provided with an inserting hole configured for inserted connection of the plug-in column, a guide surface is arranged on a side of the limiting block close to the inserting hole, and the guide surface is inclined; and when the plug-in column is inserted into the housing, the plug-in column abuts against the guide surface, and the abutting block is detached from the limiting block.

[0021] When the plug-in column is disengaged from the housing, the limiting block, due to an elastic force from the torsional spring, is hardly detached from the gear, but maintains a stable state of abutting against the gear, such that the limiting block stably restricts the rotation of the gear set, thereby effectively reducing free detachment of the limiting block from the gear after the plug-in column is disengaged from the housing.

[0022] When the limiting block is detached from the abutting block, the sleeving cylinder can be manually moved, such that the sleeving cylinder moves in a direction away from the guide column, and both the guide column and the spring can be removed from the mounting cavity.

[0023] Preferably, a wall of the placement hole is provided with a sliding groove, and sliding rods capable of sliding in the sliding groove are arranged on both sides of the cover plate in a width direction; the sliding rods are also capable of rotating in sliding grooves, the sliding groove is located at one end of the placement hole in a length direction thereof, and the other end of the placement hole away from the sliding groove is further provided with an inserting hole; an end portion of the cover plate is provided with an insertion sheet, and when the insertion sheet is inserted into the inserting hole, a side wall of the insertion sheet abuts against an inner side wall of the inserting hole tightly.

[0024] The cover plate is rotated until the cover plate is parallel to a length direction of the placement hole, then the cover plate slides until the insertion sheet is inserted into the inserting hole, and the insertion sheet abuts against the inserting hole tightly for firm engagement, such that the cover plate is fixed, and the cover plate is hardly detached from the placement hole, thereby ensuring the cover plate is capable of effectively sealing the placement hole.

[0025] Preferably, the outer wall of the housing is rotatably connected to a pressing block, and the pressing block is capable of rotating to abut against the outer side wall of the cover plate tightly.

[0026] After the cover plate covers the placement hole, the pressing block is rotated until the pressing block rotates to an outer side of the cover plate, and the pressing block abuts against the outer side wall of the cover plate tightly, such that the cover plate is less likely to slide or rotate to a position of detachment from the placement hole.

[0027] Preferably, when the spring is mounted in the mounting cavity, the spring is in a compressed state; the support piece is rectangular, and the plug-in slots are located on both sides of the mounting cavity; and when the support piece is inserted into the plug-in slot, a top end of the support piece abuts against a bottom wall of the cover plate.

[0028] As the housing has a certain thickness, when the spring is mounted in the mounting cavity, the spring is arranged deeper in the mounting cavity corresponding to a muzzle, and the support piece extends to the placement hole. When the spring needs to be removed, a force is applied to part of the support piece located at the placement hole, to remove one end of the spring. Since the spring in the mounting cavity is in a compressed state, when one end of the spring, driven by the guide column, moves to outside of the placement hole, an end portion of the spring remains abutted against the support piece. When one end of the spring is moved to the outside of the placement hole, the spring, due to its increased length, can hardly fall into the mounting cavity, such that the spring can be removed from the mounting cavity in an easier manner.

[0029] Preferably, a protruding strip is arranged at one end of the support piece close to the cover plate.

[0030] In a process of removing the support piece from the plug-in slot, friction with the plug-in slot occurs, and arrangement of the protruding strip makes it easier to apply a force through the support piece, thereby facilitating removal of the support piece from the mounting cavity.

[0031] To sum up, the present disclosure has the following beneficial effects:

[0032] The mounting part mounted with the elastic member is placed in the mounting cavity of the housing, and then the locking assembly is used to limit the mounting part and the elastic member, to ensure the mounting part and the elastic member are stably mounted in the mounting cavity. To replace the elastic member as needed, the locking assembly is released to remove the mounting part and the elastic member from the mounting cavity, thereby facilitating replacement and mounting of the elastic member, which minimizes the situation where a user encounters difficulties in mounting or replacing the elastic member due to uncertainty of a mounting position of the elastic member. Further, the user can stably mount the elastic member through the locking assembly, which avoids a decline of effect in launching a gun body after disassembly due to improper mounting.

BRIEF DESCRIPTION OF DRAWINGS

[0033] FIG. **1** is a schematic diagram of an overall structure of a toy launcher according to the present disclosure.

[0034] FIG. **2** is a schematic diagram illustrating a structure of a mounting part.

[0035] FIG. **3** is a schematic diagram illustrating a structure of a locking assembly.

[0036] FIG. **4** is a schematic diagram illustrating an overall state of a toy launcher when an elastic member is removed.

[0037] Reference numerals in the figures: **1**. housing; **2**. placement hole; **3**. mounting cavity; **4**. cover plate; **5**. spring; **6**. guide column; **7**. support piece; **8**. plug-in slot; **9**. sleeving cylinder; **10**. rack; **11**. abutting block; **12**. limiting block; **13**. plug-in column; **14**. torsional spring; **15**. inserting hole; **16**. force applying part; **17**. insertion sheet; **18**. pressing block; and **19**. protruding strip.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0038] The present disclosure is further described in detail below with reference to FIGS. **1-4**.

[0039] In an example of the present disclosure, there is provided a toy launcher.

[0040] With reference to FIGS. **1** and **2**, the toy launcher includes:

[0041] a housing **1**, provided with a mounting cavity **3**, and a placement hole **2** formed in the housing **1**, where the placement hole **2** is communicated with the mounting cavity **3**, and the elastic member is mounted in the mounting cavity **3**;

[0042] an elastic member, detachably mounted in the mounting cavity **3**;

[0043] a mounting part, where the elastic member is sleeved in the mounting part, and the elastic member and the mounting part are located in the mounting cavity **3**; and

[0044] a locking assembly, configured for preventing detachment of the mounting part and the elastic member from the mounting cavity **3**.

[0045] The mounting part mounted with the elastic member is placed in the mounting cavity **3** of the housing **1**, and then the locking assembly is used to limit the mounting part and the elastic member, to ensure the mounting part and the elastic member are stably mounted in the mounting cavity **3**. To replace the elastic member as needed, the locking assembly is released to remove the mounting part and the elastic member from the mounting cavity **3**, thereby facilitating replacement and mounting of the elastic member, which minimizes the situation where a user encounters difficulties in mounting or replacing the elastic member due to uncertainty of a mounting position of the elastic member. Further, the user can stably mount the elastic member through the locking assembly, which avoids a decline of effect in launching a gun body after disassembly due to improper mounting.

[0046] With reference to FIGS. **3** and **4**, in this example, the locking assembly includes a cover plate **4**, the cover plate **4** is movably connected to the placement hole **2** to seal the placement hole **2**, and the elastic member is a spring **5**. The locking assembly further includes a guide column **6** and a support piece **7** configured for supporting the guide column **6**, the mounting cavity **3** is provided with plug-in slots **8** configured for inserted connection of the support piece **7**, and the spring **5** is partially sleeved around an outer periphery of the guide column **6**.

[0047] The cover plate **4** is opened, and the guide column **6** is pulled until the guide column **6** and part of the spring **5** sleeved on the guide column **6** are pulled out of the mounting cavity **3**, to remove the spring **5**. Then a new spring **5** is sleeved around the outer periphery of the guide column **6**, and the guide column **6** and the spring **5** are placed in the mounting cavity **3**, such that the support piece **7** is inserted into the plug-in slot **8**, to complete mounting of the spring **5**. Arrangement of the support piece **7** and the plug-in slot **8** enables the spring **5** to be mounted in the mounting cavity **3** in a more stable manner. The guide column **6** is also capable of guiding the spring **5** sleeved thereon, and preventing the spring **5** from bending toward the placement hole **2**, thereby avoiding a poor launching effect.

[0048] With reference to FIGS. **2** and **3**, in this example, the locking assembly further includes a sleeving cylinder **9**, the sleeving cylinder **9** is movably connected in the mounting cavity **3**, and a length direction of the sleeving cylinder **9** is consistent with that of the guide column **6**. When the spring **5** is mounted in the mounting cavity **3**, the sleeving cylinder **9** partially wraps around one end of the guide column **6** away from the support piece **7**.

[0049] The sleeving cylinder **9** partially sleeves and wraps around the guide column **6**, such that the spring **5** sleeved outside the guide column **6** is restricted by both the guide column **6** and an inner side wall of the sleeving cylinder **9**, and the spring **5** is less likely to detach from the guide column **6**, thereby enhancing stability of the spring **5** mounted in the mounting cavity **3**. To remove the spring **5** as needed, the sleeving cylinder **9** is moved to disengage the sleeving cylinder **9** from the guide column **6**, such that the guide column **6** can be removed from the mounting cavity **3**.

[0050] With reference to FIGS. **2** and **3**, in this example, the locking assembly includes a rack **10** that is fixedly connected to the sleeving cylinder **9** and a gear set meshed with the rack **10**. The locking assembly further includes a blocking member that blocks rotation of the gear set, and the blocking member is movably connected in the housing **1**.

[0051] When the spring **5** needs to be firmly fixed, the blocking member abuts against one gear in the gear set to restrict rotation of the gear, such that the entire gear set can hardly rotate, the sleeving cylinder **9** is limited to move, and the sleeving cylinder **9** can hardly slide to a position where it is disengaged from the guide column **6**. When the spring **5** needs to be removed, the blocking member is moved to detach the blocking member from the gear set, which releases rotation restriction on the gear set, such that the rack **10** is capable of moving in a direction away from the guide column **6**, and the sleeving cylinder **9** is disengaged from the guide column **6**, thereby releasing the restriction of the guide column **6** on the spring **5**.

[0052] With reference to FIGS. **2** and **3**, in this example, the blocking member includes an abutting block **11**, a limiting block **12**, and a plug-in column **13**, where the abutting block **11** is fixedly connected to one gear in the gear set, the limiting block **12** is rotatably connected to the housing **1**, the limiting block **12** is located on a side of an abutting gear close to the cover plate **4**, the limiting block **12** is provided with a torsional spring **14**, the abutting block **11** and the limiting block **12** abut against each other to restrict rotation of the gear, and the torsional spring **14** restricts the limiting block **12** from moving in a direction away from the gear.

[0053] The housing **1** is provided with an inserting hole **15** configured for inserted connection of the plug-in column **13**, a guide surface is arranged on a side of the limiting block **12** close to the inserting hole **15**, and the guide surface is inclined. When the plug-in column **13** is inserted into the housing **1**, the plug-in column **13** abuts against the guide surface, and the abutting block **11** is detached from the limiting block **12**.

[0054] When the sleeving cylinder **9** needs to be moved, the plug-in column **13** is inserted into the inserting hole **15**, such that the plug-in column **13** abuts against and slides along the guide surface, and a height of the plug-in column **13** remains unchanged. The limiting block **12** is pushed by cooperation between the guide surface and the plug-in column **13**, causing the limiting block **12** to move in a direction of approaching the placement hole **2**, such that the limiting block **12** is lifted, the limiting block **12** is detached from the abutting block **11**, and the limiting block **12** in the housing **1** is moved from outside of the housing **1**.

[0055] When the plug-in column **13** is disengaged from the housing **1**, the limiting block **12**, due to an elastic force

from the torsional spring **14**, is hardly detached from the gear, but maintains a stable state of abutting against the gear, such that the limiting block **12** stably restricts the rotation of the gear set, thereby effectively reducing free detachment of the limiting block **12** from the gear after the plug-in column **13** is disengaged from the housing **1**.

[0056] When the limiting block **12** is detached from the abutting block **11**, the sleeving cylinder **9** can be manually moved, such that the sleeving cylinder **9** moves in a direction away from the guide column **6**, and both the guide column **6** and the spring **5** can be removed from the mounting cavity **3**.

[0057] In this example, one end of the plug-in column **13** is further provided with a larger force applying part **16**, such that the plug-in column **13** forms a "key" structure, thereby facilitating movement and force application of the plug-in column **13**.

[0058] With reference to FIGS. **2** and **3**, in this example, a wall of the placement hole **2** is provided with a sliding groove, and sliding rods capable of sliding in the sliding groove are arranged on both sides of the cover plate **4** in a width direction. The sliding rods are also capable of rotating in sliding grooves, the sliding groove is located at one end of the placement hole **2** in a length direction thereof, and the other end of the placement hole **2** away from the sliding groove is further provided with an inserting hole. An end portion of the cover plate **4** is provided with an insertion sheet **17**, and when the insertion sheet **17** is inserted into the inserting hole, a side wall of the insertion sheet **17** abuts against an inner side wall of the inserting hole tightly.

[0059] The cover plate **4** is rotated until the cover plate **4** is parallel to a length direction of the placement hole **2**, then the cover plate **4** slides until the insertion sheet **17** is inserted into the inserting hole, and the insertion sheet **17** abuts against the inserting hole tightly for firm engagement, such that the cover plate **4** is fixed, and the cover plate **4** is hardly detached from the placement hole **2**, thereby ensuring the cover plate **4** is capable of effectively sealing the placement hole **2**.

[0060] An outer side wall of the cover plate **4** is further provided with an anti-slip pattern that facilitates sliding of the cover plate **4**, such that the cover plate **4** slides in an easier manner.

[0061] With reference to FIGS. **2** and **3**, in this example, the outer side wall of the housing **1** is rotatably connected to a pressing block **18**, and the pressing block **18** is capable of rotating to abut against the outer side wall of the cover plate **4** tightly.

[0062] After the cover plate **4** covers the placement hole **2**, the pressing block **18** is rotated until the pressing block **18** rotates to an outer side of the cover plate **4**, and the pressing block **18** abuts against the outer side wall of the cover plate **4** tightly, such that the cover plate **4** is less likely to slide or rotate to a position of detachment from the placement hole **2**.

[0063] With reference to FIGS. **2** and **3**, in this example, when the spring **5** is mounted in the mounting cavity **3**, the spring **5** is in a compressed state. The support piece **7** is rectangular, and the plug-in slots **8** are located on both sides of the mounting cavity **3**. When the support piece **7** is inserted into the plug-in slot **8**, a top end of the support piece **7** abuts against a bottom wall of the cover plate **4**.

[0064] As the housing **1** has a certain thickness, when the spring **5** is mounted in the mounting cavity **3**, the spring **5** is arranged deeper in the mounting cavity **3** corresponding to a muzzle, and the support piece **7** extends to the placement hole **2**. When the spring **5** needs to be removed, a force is applied to part of the support piece **7** located at the placement hole **2**, to remove one end of the spring **5**. Since the spring **5** in the mounting cavity **3** is in a compressed state, when one end of the spring **5**, driven by the guide column **6**, moves to outside of the placement hole **2**, an end portion of the spring **5** remains abutted against the support piece **7**. When one end of the spring **5** is moved to the outside of the placement hole **2**, the spring **5**, due to its increased length, can hardly fall into the mounting cavity **3**, such that the spring **5** can be removed from the mounting cavity **3** in an easier manner.

[0065] With reference to FIGS. **2** and **3**, in this example, a protruding strip **19** is arranged at one end of the support piece **7** close to the cover plate **4**.

[0066] In a process of removing the support piece **7** from the plug-in slot **8**, friction with the plug-in slot **8** occurs, and arrangement of the protruding strip **19** makes it easier to apply an force through the support piece **7**, thereby facilitating removal of the support piece **7** from the mounting cavity **3**.

[0067] The above are preferred embodiments of the present disclosure and are not intended to limit the protection scope of the present disclosure. Therefore, any equivalent changes made based on the structure, shape and principles of the present disclosure shall fall within the protection scope of the present disclosure.

What is claimed is:

1. A toy launcher, comprising:

a housing, being provided with a mounting cavity, and a placement hole formed in the housing, wherein the placement hole is communicated with the mounting cavity, and the elastic member is mounted in the mounting cavity;

an elastic member, being detachably mounted in the mounting cavity;

a mounting part, wherein the elastic member is sleeved in the mounting part, and the elastic member and the mounting part are located in the mounting cavity; and

a locking assembly, being configured for preventing detachment of the mounting part and the elastic member from the mounting cavity.

2. The toy launcher according to claim **1**, wherein the locking assembly comprises a cover plate, the cover plate is movably connected to the placement hole to seal the placement hole, and the elastic member is a spring; the locking assembly further comprises a guide column and a support piece configured for supporting the guide column, the mounting cavity is provided with plug-in slots configured for inserted connection of the support piece, and the spring is partially sleeved around an outer periphery of the guide column.

3. The toy launcher according to claim **2**, wherein the locking assembly further comprises a sleeving cylinder, the sleeving cylinder is movably connected in the mounting cavity, and a length direction of the sleeving cylinder is consistent with that of the guide column; and when the spring is mounted in the mounting cavity, the sleeving cylinder partially wraps around one end of the guide column away from the support piece.

4. The toy launcher according to claim **3**, wherein the locking assembly comprises a rack that is fixedly connected

to the sleeving cylinder and a gear set meshed with the rack; and the locking assembly further comprises a blocking member that blocks rotation of the gear set, and the blocking member is movably connected in the housing.

5. The toy launcher according to claim **4**, wherein the blocking member comprises an abutting block, a limiting block, and a plug-in column, wherein the abutting block is fixedly connected to one gear in the gear set, the limiting block is rotatably connected to the housing, the limiting block is located on a side of an abutting gear close to the cover plate, the limiting block is provided with a torsional spring, the abutting block and the limiting block abut against each other to restrict rotation of the gear, and the torsional spring restricts the limiting block from moving in a direction away from the gear; and

the housing is provided with an inserting hole configured for inserted connection of the plug-in column, a guide surface is arranged on a side of the limiting block close to the inserting hole, and the guide surface is inclined; and when the plug-in column is inserted into the housing, the plug-in column abuts against the guide surface, and the abutting block is detached from the limiting block.

6. The toy launcher according to claim **2**, wherein a wall of the placement hole is provided with a sliding groove, and sliding rods capable of sliding in the sliding groove are arranged on both sides of the cover plate in a width direction; the sliding rods are also capable of rotating in sliding grooves, the sliding groove is located at one end of the placement hole in a length direction thereof, and the other end of the placement hole away from the sliding groove is further provided with an inserting hole; an end portion of the cover plate is provided with an insertion sheet, and when the insertion sheet is inserted into the inserting hole, a side wall of the insertion sheet abuts against an inner side wall of the inserting hole tightly.

7. The toy launcher according to claim **2**, wherein the outer side wall of the housing is rotatably connected to a pressing block, and the pressing block is capable of rotating to abut against the outer side wall of the cover plate tightly.

8. The toy launcher according to claim **3**, wherein when the spring is mounted in the mounting cavity, the spring is in a compressed state; the support piece is rectangular, and the plug-in slots are located on both sides of the mounting cavity; and when the support piece is inserted into the plug-in slot, a top end of the support piece abuts against a bottom wall of the cover plate.

9. The toy launcher according to claim **8**, wherein a protruding strip is arranged at one end of the support piece close to the cover plate.

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