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### LURE

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#### Abstract

A lure includes a front body and a rear body. A connecting member connects first and second connecting parts that face each other in the front and rear direction of the front and rear bodies. A holding part is provided in one of the first and second connecting parts. A first swinging shaft is provided in one of the first and second connecting parts, swingably supporting the connecting member, and guides the connecting member between a first position and a second position where the connecting member is held by the holding part. A second swinging shaft is provided in the other of the first and second connecting parts and swingably supporting the connecting member, when the connecting member in the one of the first and second connecting parts is in the first position, the front and rear bodies move in directions away from each other.

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## Background/Summary

### CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to Japanese Patent Application No. 2024-021231, filed on Feb. 15, 2024. The entire disclosure of Japanese Patent Application No. 2024-021231 are hereby incorporated by reference.

### BACKGROUND

#### Technical Field

[0002] The present invention relates to a lure.

#### Background Information

[0003] Conventionally, joint fishing lures having a body divided into a plurality of segments in the front-rear direction are known. See for example, the fishing lure disclosed in Japanese Laid-Open Patent Application No. 2019-97526.

### SUMMARY

[0004] In a conventional joint lure such as that described in Japanese Laid-Open Patent Application No. 2019-97526, the swingable angle of the joint is generally set to be within a range of  $\pm 90$  degrees to achieve the desired swimming action. It has been determined however, that such lures result in a flight attitude that is unstable during flight and it is difficult to achieve a large flight distance. Accordingly, there is room for improvement in this regard.

[0005] Embodiments of the present invention were conceived in light of these circumstances, and an object thereof is to provide a lure that has a stable flight attitude and that can increase the flight distance.

[0006] A first aspect of a lure according to the present disclosure comprises front and rear bodies divided into a plurality of segments in a front-rear direction, a connecting member that connects a pair of connecting parts that face each other in the front and rear direction of the bodies, a holding part provided in at least one of the pair of connecting parts, a first swinging shaft that is provided in the one connecting part, that swingably supports the connecting member, and that guides the connecting member between a first position and a second position where the connecting member is held by the holding part, and a second swinging shaft that is provided in the other connecting part, and that swingably supports the connecting member, wherein, when the connecting member in the one connecting part is in the first position, the front and rear bodies move in directions away from each other.

[0007] According to the first aspect of the lure of the present disclosure, when the lure is caused to swim, the front and rear bodies come close together and the connecting member is maintained in a second position in which the connecting member is held by the holding part provided in the one connecting part, so that the swinging of the bodies relative to each other is restricted, resulting in a swing having a small swingable angle. Therefore, the swingable angle of the rear body relative to the front body is restricted to range that allows swimming actions in the swimming attitude, such as  $\pm 90$  degrees or less. On the other hand, during flight of the lure, the front and rear bodies move away from each other due to centrifugal force generated by the flight, so that the connecting member moves away from the holding part and moves from the second position to the first position on the first swinging shaft. That is, as a result of the front and rear bodies moving away from each other, the region in which the bodies interfere with each other becomes small, thereby increasing the swingable angle. Therefore, during flight of the lure, the swingable angle can be set greater than  $\pm 90$  degrees, for example, resulting in a flight attitude in which the tail side of the rear body faces forward. Accordingly, the flight attitude of the lure during flight becomes stable and the flight distance can be increased.

[0008] A second aspect of the present disclosure is the lure according to the first aspect, wherein,

preferably, when a swingable angle in an attitude in which the front and rear bodies are positioned on a straight line in the front-rear direction is 0 degrees, the swingable angle of the rear body on the rear side relative to the front body on the front side is  $\pm 90$  degrees or less when in the second position, and the swingable angle exceeds  $\pm 90$  degrees when in the first position.

[0009] In this case, the swingable angle of the second body relative to the first body is  $\pm 90$  degree or less, so that the desired swimming action can be achieved. In addition, the swingable angle in the flight attitude exceeds  $\pm 90$  degrees, so that the flight attitude of the lure during flight can be more reliably stabilized and the flight distance can be increased.

[0010] A third aspect of the present disclosure is the lure according to the second aspect, wherein at least one of the front and rear bodies includes a restricting portion that restricts the swingable angle between the bodies when in the second position to  $\pm 90$  degrees or less.

[0011] In this case, the restricting portion can restrict the swingable angle of the connecting member when in the second position to  $\pm 90$  degrees or less.

[0012] A fourth aspect of the present disclosure is the lure according to any one of the first to the third aspects, wherein the first swinging shaft can have a swinging shaft portion that supports the connecting member at the first position, and a guide portion that guides the connecting member from the swinging shaft portion in a direction approaching the holding part, and the guide portion can gradually incline forward with proximity to the holding part.

[0013] In this case, when centrifugal force is not acting on the lure, the connecting member is held by the holding part and guided by the first swinging shaft to move from the first position to the second position. At this time, the connecting member is guided by the inclined guide portion of the first swinging shaft and moves obliquely forward, so the front and rear bodies move in directions approaching each other. Therefore, when the connecting member is in the second position, swinging of the connecting member about the first swinging shaft is restricted, and the rear body, which swings about the second swinging shaft, approaches the front body, limiting the swing range thereof. Therefore, the swingable angle does not become large and a suitable swimming attitude can be achieved.

[0014] A fifth aspect of the present disclosure is the lure according to any one of the first to the fourth aspects, wherein the second swinging shaft can gradually incline rearward as the connecting member moves toward the second position.

[0015] In this case, when centrifugal force is not acting on the lure, the connecting member is held by the holding part and guided by the first swinging shaft and the second swinging shaft to move from the first position to the second position. At this time, the connecting member is guided by the inclined second swinging shaft and moves obliquely rearward, so the front and rear bodies move in directions approaching each other. The connecting member moves to the first position during flight when centrifugal force acts on the lure. At this time, the connecting member is guided by the inclined second swinging shaft and moves obliquely forward, so the front and rear bodies move in directions away from each other. That is, the rear body (second swinging shaft side) can also be moved in a direction in which the front and rear bodies move away from each other, increasing the distance between the front and rear bodies, so the swingable angle can be efficiently increased.

[0016] A sixth aspect of the present disclosure is the lure according to any one of the first to the fifth aspects, wherein the holding part can be a magnet, and the connecting member can be formed of a magnetic material.

[0017] In this case, the connecting member and the holding part (magnet) can be easily attached to/detached from each other with a simple structure using magnetic force.

[0018] A seventh aspect of the present invention is the lure according to any one of the first to the sixth aspects, wherein an end surface of at least one of the pair of connecting parts facing the front-rear direction includes a mounting portion to/from which a functional member can be attached/detached.

[0019] In this case, when the connecting member is in a swingable position, the swingable angle

between the front and rear bodies can be maximized to expose the end surface of the connecting part, thereby making it possible to attach/detach a functional member to/from the mounting portion provided on this end surface.

[0020] According to the lure of the present disclosure, it is possible to increase the strength of the connecting parts of the divided bodies, and to prevent the swinging shaft portions of the connecting parts from falling off.

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## Description

### BRIEF DESCRIPTION OF THE DRAWINGS

[0021] FIG. 1 is a side view of a lure according to an embodiment of the present invention.

[0022] FIG. 2 is a side view showing an internal structure of the lure shown in FIG. 1.

[0023] FIG. 3 is a perspective view showing main parts of connecting parts of bodies of the lure shown in FIG. 1.

[0024] FIG. 4 is a side view of the connecting parts shown in FIG. 3, showing a second position.

[0025] FIG. 5 is a side view showing a first position of the connecting parts shown in FIG. 4.

[0026] FIG. 6 is a cross-sectional view along line I-I shown in FIG. 4.

[0027] FIG. 7 is a horizontal cross-sectional view showing a swinging state when in the second position.

[0028] FIG. 8 is a cross-sectional view along line II-II shown in FIG. 5.

[0029] FIG. 9 is a horizontal cross-sectional view showing the swinging state when in the first position.

[0030] FIG. 10 is an exploded perspective view of an attaching state of a dorsal fin part.

### DETAILED DESCRIPTION

[0031] An embodiment of a lure according to the present disclosure is described below with reference to the figures. In each of the drawings, there are cases in which the scale of each component has been appropriately changed as required to improve the visibility of the component.

[0032] As shown in FIGS. 1 and 2, an example of a lure 1 according to the embodiment is a joint lure that is used for fishing, that has a body made of hard plastic, and that resembles the shape of a small fish.

[0033] Here, in the lure 1, the direction in which the head and the tail are connected in a straight line is defined as the front-rear direction X1, the head side is defined as the front/front side, and the tail side is defined as the rear/rear side. Further, as seen from above, the lateral direction orthogonal to the front-rear direction X1 is defined as the left-right direction X2, and the up-down direction of the lure 1 when in the swimming attitude is defined as the up-down direction X3 in the following descriptions.

[0034] The lure 1 is formed in a streamlined shape that simulates a fish, and is integrally formed by joining peripheral portions of a pair of halves of a body 10 to each other by bonding, welding, or the like. The body 10 is segmented into two parts in the front-rear direction X1 into a head body 10A (first body) disposed on the front side, and a trunk body 10B (second body) disposed on the rear side and that has a tail portion 10C, which are provided so as to be able to swing freely in the left-right direction X2. Each of the bodies 10A and 10B has a hollow portion formed therein.

[0035] The lure 1 has a shape in which the cross section becomes largest at a central portion (at the connecting portion between the head body 10A and the trunk body 10B) in the front-rear direction X1. That is, the lure 1 becomes thicker from a front-end portion 10a to the central portion and becomes thinner from the central portion to a rear-end portion 10b, forming a smooth curve overall.

[0036] The head body 10A is provided on the head side and is formed in a shape imitating roughly the front half of a fish. A line eye 13 is provided on the front-end portion 10a of the head body 10A. A first hook eye 14A, to which is connected a hook 15 for hooking fish, is provided on a

lower surface **10c** of the head body **10A**.

[0037] The head body **10A** is connected to the trunk body **10B** via connecting parts **11**, **12** so as to be able to swing in the left-right direction **X2**. The front connecting part **11** is located in the rear portion of the head body **10A**. The rear connecting part **12** is located in the front portion of the trunk body **10B**. The front connecting part **11** and the rear connecting part **12** face each other in the front-rear direction **X1** when the lure **1** is not swinging. As shown in FIGS. 2-4, the head body **10A** has a pair of connecting members **2A**, **2B** that are swingably connected to the trunk body **10B**, and swinging shafts **3A**, **3B** that swingably support the connecting members **2A**, **2B**.

[0038] The pair of connecting members **2A**, **2B** connect the pair of connecting parts **11**, **12** that face each other in the front-rear direction on the respective bodies **10A**, **10B**. The pair of connecting members **2A**, **2B** are disposed spaced apart from each other above and below substantially the center of the lure **1** in the up-down direction **X3**. The pair of connecting members **2A**, **2B** are respectively provided on the head body **10A** and the trunk body **10B** in swingable fashion. That is, the connecting members **2A**, **2B** support the trunk body **10B** with respect to the head body **10A** so that the trunk body **10B** can be swung and folded to the left and right.

[0039] In the present embodiment, a pair of the connecting members **2A**, **2B** are provided in the up-down direction, but the number of the connecting members is not particularly limited. For example, there may be one connecting member, or, three or more connecting members may be arranged in the up-down direction **X3**.

[0040] The connecting members **2A**, **2B** are elongated, plate-like members that are made of, for example, stainless steel (SUS), which is a magnetic material. Shaft holes **2a**, **2b** are formed at both longitudinal ends of the connecting members **2A**, **2B**, penetrating in the thickness direction. The connecting members **2A**, **2B** are arranged such that the longitudinal directions thereof are oriented in the front-rear direction **X1**, and with the flat faces thereof perpendicular to the up-down direction **X3**. That is, the connecting members **2A**, **2B** are attached to the bodies **10A**, **10B** in a state in which the axial direction of the shaft holes **2a**, **2b** coincides with the up-down direction **X3**. The first shaft hole **2a** on the front side is disposed inside the head body **10A**, and a first swinging shaft **3A** of the head body **10A** is inserted therethrough. The second shaft hole **2b** on the rear is disposed inside the trunk body **10B**, and a second swinging shaft **3B** of the trunk body **10B**, described further below, is inserted therethrough.

[0041] The first shaft hole **2a** and the second shaft hole **2b** are elongated holes extending along the longitudinal direction of the connecting members **2A**, **2B**. The first shaft hole **2a** on the front side has a longer hole length than the second shaft hole **2b** on the rear side.

[0042] The front connecting part **11** at the rear portion of the head body **10A** includes first recesses **11a** that house the respective front portions of the pair of connecting members **2A**, **2B**. The height of the first recess **11a** is greater than the thickness of the connecting members **2A**, **2B** and is set to be a prescribed dimension that allows the connecting members **2A**, **2B** to move in the up-down direction **X3**.

[0043] A central wall portion **11b** between the pair of upper and lower first recesses **11a** provided in the front connecting part **11** includes a holding part **40** made of a magnet that holds each of the pair of upper and lower connecting members **2A**, **2B** by magnetic force. The central wall portion **11b** has a hollow portion **11c**. The holding part **40** is engaged with the hollow portion **11c**. The wall thickness of the central wall portion **11b** on the side of the hollow portion **11c** and the first recesses **11a** is set to an appropriate thickness that allows the action of magnetic force capable of holding the connecting members **2A**, **2B**, which are disposed in the first recesses **11a**.

[0044] As shown in FIGS. 3-5, the first swinging shaft **3A** is a rod-like member made of metal, and, for example, a high-strength thick wire having an outer diameter of about 2 mm can be employed. The first swinging shaft **3A** is provided in the front connecting part **11**, and supports the pair of connecting members **2A**, **2B** in the first shaft holes **2a** so as to be able to swing. The first swinging shaft **3A** guides the connecting members **2A**, **2B** between a first position **P1** (refer to

FIGS. 3 and 5) away from the central wall portion **11b** in the up-down direction **X3**, and a second position **P2** (refer to FIG. 4) where the connecting members **2A**, **2B** are held by the holding part **40**. [0045] Here, in the lure **1**, the first position **P1** is an attitude in which swinging is possible such that the swingable angle  $\theta$  between the head body **10A** and the trunk body **10B** is greater than  $\pm 90$  degrees (refer to FIG. 9), and the second position **P2** is an attitude in which the swingable angle between the head body **10A** and the trunk body **10B** is  $\pm 90$  degrees or less.

[0046] In addition, the central wall portion **11b** includes a first locking hole **11d** that locks a support shaft portion **31** at the central portion of the first swinging shaft **3A** in a state in which the support shaft portion **31** is inserted in the up-down direction **X3**. The portions of the first swinging shaft **3A** above and below the support shaft portion **31** are respectively located in the first recesses **11a** in which the connecting members **2A**, **2B** are disposed.

[0047] The first swinging shaft **3A** has the support shaft portion **31** located at the center in the up-down direction **X3**, locking portions **32** that are locked to an upper wall portion **11e** and a lower wall portion **11f** of the front connecting part **11** of the head body **10A**, swinging shaft portions **33** that support the pair of connecting members **2A**, **2B** when in the first position **P1**, and guide portions **34** that guide the connecting members **2A**, **2B** from the swinging shaft portions **33** toward the holding part **40**.

[0048] The swinging shaft portions **33** and the guide portions **34** are located in the first recesses **11a**. The swinging shaft portions **33** extend in the up-down direction **X3**. The guide portions **34** are connected between the swinging shaft portions **33** and the support shaft portion **31** and gradually incline forward with proximity to the holding part **40**. The connecting members **2A**, **2B** are provided so as to be able to slide along the swinging shaft portions **33** and the guide portions **34**, as well as to be able to swing. The connecting members **2A**, **2B** can move in the first recesses **11a** in the front-rear direction **X1**. That is, the connecting members **2A**, **2B** are positioned forward and in contact with the central wall portion **11b** when in the second position **P2** held by the holding part **40**, and are positioned rearward and away from the central wall portion **11b** when in the first position **P1**. When being subjected to a force that pulls in the rearward direction, the connecting members **2A**, **2B** gradually move in directions away from the central wall portion **11b** while moving rearward in the first recesses **11a**.

[0049] The trunk body **10B** is connected to the head body **10A** via the connecting parts **11**, **12** so as to be able to swing in the left-right direction **X2**. The rear connecting part **12** at the front portion of the trunk body **10B** includes second recesses **12a** that house the respective rear portions of the pair of connecting members **2A**, **2B**. The height of the second recesses **12a** is greater than the thickness of the connecting members **2A**, **2B** and is set to be a prescribed dimension that allows the connecting members **2A**, **2B** to move in the up-down direction **X3**. The rear connecting part **12** has a central wall portion **12b** between the pair of upper and lower second recesses **12a**.

[0050] The second swinging shaft **3B** is a rod-like member made of metal, and, for example, a high-strength thick wire having an outer diameter of about 2 mm can be employed. The second swinging shaft **3B** is provided in the rear connecting part **12**, and supports the pair of connecting members **2A**, **2B** in the second shaft holes **2b** so as to be able to swing. The second swinging shaft **3B** guides the connecting members **2A**, **2B** between a position (same position as the first position **P1**) away from the central wall portion **12b** in the up-down direction **X3**, and a position (same position as the second position **P2**) close to the central wall portion **12b**.

[0051] In addition, the central wall portion **12b** includes a second locking hole **12d** that locks a support shaft portion **35** at the central portion of the second swinging shaft **3B** in a state in which the support shaft portion **35** is inserted in the up-down direction **X3**. The portions of the second swinging shaft **3B** above and below the support shaft portion **35** are respectively located in the second recesses **12a** in which the connecting members **2A**, **2B** are disposed.

[0052] The second swinging shaft **3B** has the support shaft portion **35** located at the center in the up-down direction **X3**, locking portions **36** that are locked to an upper wall portion **12e** and a lower

wall portion **12f** of the trunk connecting part **12** of the trunk body **10B**, and swinging shaft portions **37** that support the pair of connecting members **2A**, **2B** in the first position **P1** and the second position **P2**.

[0053] The swinging shaft portions **37** are located in the second recesses **12a**. The swinging shaft portions **37** are connected between the locking portions **36** and the support shaft portion **35** and gradually incline rearward with proximity to the central wall portion **12b**, which is the second position **P2**. The connecting members **2A**, **2B** are provided so as to be able to slide along the swinging shaft portions **3**, as well as to be able to swing. The connecting members **2A**, **2B** can move in the second recesses **12a** in the front-rear direction **X1**. That is, the connecting members **2A**, **2B** are positioned forward and in contact with the central wall portion **12b** when in the second position **P2**, and are positioned rearward and away from the central wall portion **12b** when in the first position **P1**.

[0054] In the lure **1** configured in this manner, the front and rear bodies **10A**, **10B** move in directions away from each other when the connecting members **2A**, **2B** in the front connecting part **11** are in the first position **P1**.

[0055] The swing range and the swingable angle  $\theta$  of the front and rear bodies **10A**, **10B** of the lure **1** will be described next.

[0056] As shown in FIGS. **6-9**, in the lure **1**, when the swingable angle  $\theta$  is 0 degrees when the front and rear bodies **10A**, **10B** are positioned on a straight line in the front-rear direction **X1**, the swingable angle  $\theta$  of the second body on the rear side relative to the head body **10A** on the front side is  $\pm 90$  degrees or less when in the second position **P2**, and the swingable angle  $\theta$  exceeds  $\pm 90$  degrees when in the first position **P1**.

[0057] As shown in FIGS. **4** and **6**, the first recesses **11a** in the front connecting part **11** have first restricting walls **11g** (restricting portions) that prevent the connecting members **2A**, **2B** from swinging relative to the first swinging shaft **3A** when in the second position **P2**. In addition, the second recesses **12a** in the rear connecting part **12** have second restricting walls **12g** (restricting portions) that restrict the swinging of the connecting members **2A**, **2B** relative to the second swinging shaft **3B** when in the second position **P2**.

[0058] The first restricting walls **11g** are disposed in front of the first recesses **11a** and are positioned on the left and right sides of the connecting members **2A**, **2B**. The distance between the opposing first restricting walls **11g** is about the same as the width of the front portions of the connecting members **2A**, **2B** in the left-right direction **X2**. In the head body **10A**, the connecting members **2A**, **2B** are prevented from swinging by the first restricting walls **11g** when in the second position **P2** shown in FIG. **6**, and become swingable with the restriction by the first restricting walls **11g** being released when in the first position **P1** shown in FIG. **8**.

[0059] The second restricting walls **12g** are disposed in front of the second recesses **12a** and are positioned on the left and right sides of the connecting members **2A**, **2B**. The left and right pair of second restricting walls **12g** are inclined such that the distance therebetween increases toward the front. The swingable angle  $\theta$  of the connecting members **2A**, **2B** is  $\pm 90$  degrees or less when in the second position **P2** restricted by the pair of second restricting walls **12g**. In the trunk body **10B**, the connecting members **2A**, **2B** have a swing range that is restricted by the second restricting walls **12g** when in the second position **P2** shown in FIG. **7**, and become swingable with a swing range that is larger than when in the second position **P2**, with the restriction by the second restricting walls **12g** being released, when in the first position **P1** shown in FIG. **9**.

[0060] As a result of the lure **1** configured in this manner, by providing the first restricting walls **11g** and the second restricting walls **12g**, the swingable angle  $\theta$  between the bodies **10A**, **10B** is restricted to  $\pm 90$  degrees or less when in the second position **P2**, and, when in the first position **P1**, the front and rear bodies **10A**, **10B** move in directions away from each other, the restriction on the swinging by the first and second restricting walls **11g**, **12g** is released, and the swingable angle  $\theta$  between the bodies **10A**, **10B** becomes greater than  $\pm 90$  degrees.

[0061] In addition, as shown in FIG. 10, a rear end surface **11h** of the front connecting part **11** has, at the upper end portion of the rear end surface **11h**, a mounting portion **17** to/from which a dorsal fin part **16** (functional member) can be attached/detached. The dorsal fin part **16** has a flange portion **16a** protruding to the left and right. The mounting portion **17** has an insertion opening **17a** that opens at the rear end surface **11h**, and an engagement groove **17b** into which the flange portion **16a** of the dorsal fin part **16** is inserted from the opening side to achieve an engagement. When the trunk body **10B** swings more than 90 degrees with respect to the head body **10A** when in the first position **P1**, the insertion opening **17a** of the mounting portion **17** exposes the dorsal fin part **16** such that detachment thereof becomes possible.

[0062] Next, the operation of the lure **1** configured in this manner will be described in detail based on FIGS. 1-10.

[0063] The lure **1** according to the present embodiment comprises: the bodies **10A**, **10B** divided into a plurality of segments in a front-rear direction **X1**; the connecting members **2A**, **2B** that connect the pair of connecting parts **11**, **12** that face each other in the front and rear direction of the bodies **10A**, **10B**; the holding part **40** provided in the front connecting part **11** of the pair of connecting parts **11**, **12**; the first swinging shaft **3A** that is provided in the front connecting part **11**, that swingably supports the connecting members **2A**, **2B**, and that guides the connecting members **2A**, **2B** between the first position **P12** and the second position **P2** where the connecting members **2A**, **2B** are held by the holding part **40**; and the second swinging shaft **3B** that is provided in the other rear connecting part **12**, and that swingably supports the connecting members **2A**, **2B**. The front and rear bodies **10A**, **10B** move in directions away from each other when the connecting members **2A**, **2B** in the front connecting part **11** are in the first position **P1**.

[0064] In the present embodiment, when the lure **1** is caused to swim, the front and rear bodies **10A**, **10B** come close together and the connecting members **2A**, **2B** are maintained in the second position **P2** where the connecting members **2A**, **2B** are held by the holding member **40** provided in the front connecting part **11**, so that the swinging of the bodies **10A**, **10B** relative to each other is restricted, resulting in a swing with a small swingable angle  $\theta$ . Therefore, the swingable angle  $\theta$  of the trunk body **10B** on the rear side relative to the head body **10A** on the front side is restricted to a range that allows swimming action in the swimming attitude, such as  $\pm 90$  degrees or less. On the other hand, during flight of the lure **1**, the front and rear bodies **10A**, **10B** move away from each other due to centrifugal force generated by the flight, so that the connecting members **2A**, **2B** move away from the holding part **40** and move from the second position **P2** to the first position **P1** on the first swinging shaft **3A**. That is, as a result of the front and rear bodies **10A**, **10B** moving away from each other, the region in which the bodies **10A**, **10B** interfere with each other becomes small, thereby increasing the swingable angle  $\theta$ . Therefore, during flight of the lure **1**, the swingable angle  $\theta$  can be set greater than  $\pm 90$  degrees, for example, resulting in a flight attitude in which the tail side of the trunk body **10B** on the rear side faces forward. Accordingly, the flight attitude of the lure **1** during flight becomes stable and the flight distance can be increased.

[0065] In addition, in the present embodiment, when the swingable angle  $\theta$  is 0 degrees when the front and rear bodies **10A**, **10B** are positioned on a straight line in the front-rear direction **X1**, the swingable angle  $\theta$  of the trunk body **10B** on the rear side relative to the head body **10A** on the front side is  $\pm 90$  degrees or less when in the second position **P2**, and the swingable angle  $\theta$  exceeds  $\pm 90$  degrees when in the first position **P1**. With this configuration, the swingable angle of the trunk body **10B** relative to the head body **10A** becomes  $\pm 90$  degree or less, so that the desired swimming action can be achieved. In addition, the swingable angle  $\theta$  in the flight attitude exceeds  $\pm 90$  degrees, so that the flight attitude of the lure **1** during flight can be more reliably stabilized and the flight distance can be increased.

[0066] In addition, in the present embodiment, the front and rear bodies **10A**, **10B** comprise the restricting walls **11g**, **12g** that restrict the swingable angle  $\theta$  between the bodies **10A**, **10B** to  $\pm 90$  degrees or less when in the second position **P2**. With this configuration, the swingable angle  $\theta$  of



the connecting members 2A, 2B can be restricted to  $\pm 90$  degrees or less by the restricting walls **11g**, **12g** when in the second position P2.

[0067] Furthermore, in the present embodiment, the first swinging shaft **3A** comprises the swinging shaft portions **33** that support the connecting members 2A, 2B when in the first position P1, and the guide portions **34** that guide the connecting members 2A, 2B from the swinging shaft portions **33** toward the holding part **40**. The guide portions **34** gradually incline forward with proximity to the holding part **40**. With this configuration, when centrifugal force is not acting on the lure **1**, the connecting members 2A, 2B are held by the holding part **40** and guided by the first swinging shaft **3A** to move from the first position P1 to the second position P2. At this time, the connecting members 2A, 2B are guided by the inclined guide portions **34** of the first swinging shaft **3A** and move obliquely forward, so the front and rear bodies **10A**, **10B** move in directions approaching each other. Therefore, when the connecting members 2A, 2B are in the second position P2, swinging of the connecting members 2A, 2B about the first swinging shaft **3A** is restricted, and the trunk body **10B** on the rear side, which swings about the second swinging shaft **3B**, approaches the head body **10A** on the front side, limiting the swing range thereof. Therefore, the swingable angle  $\theta$  does not become large and a suitable swimming attitude can be achieved.

[0068] In addition, in the present embodiment, the second swinging shaft gradually inclines rearward as the connecting members 2A, 2B move toward the second position P2. As a result, when centrifugal force is not acting on the lure **1**, the connecting members 2A, 2B are held by the holding part **40** and guided by the first swinging shaft **3A** and the second swinging shaft **3B** to move from the first position P1 to the second position P2. At this time, the connecting members 2A, 2B are guided by the inclined second swinging shaft **3B** and move obliquely rearward, so the front and rear bodies **10A**, **10B** move in directions approaching each other. The connecting members 2A, 2B move to the first position P1 during flight when centrifugal force acts on the lure **1**. At this time, the connecting members 2A, 2B are guided by the inclined second swinging shaft **3B** and move obliquely forward, so the front and rear bodies **10A**, **10B** move in directions away from each other. That is, the trunk body **10B** on the rear side (second swinging shaft **3B** side) can also be moved in a direction in which the front and rear bodies **10A**, **10B** move away from each other, increasing the distance between the front and rear bodies **10A**, **10B**, so the swingable angle  $\theta$  can be efficiently increased.

[0069] In addition, in the present embodiment, the holding part **40** is a magnet. The connecting members 2A, 2B are made of a magnetic material. As a result, the connecting members 2A, 2B and the holding part **40** made of a magnet can be easily attached to/detached from each other with a simple structure using magnetic force.

[0070] In addition, in the present embodiment, an end surface (rear end surface **11h**) of the front connecting part **11** oriented in the front-rear direction has the mounting portion **17** to/from which the dorsal fin part **16** can be attached/detached. As a result, when the connecting members 2A, 2B are in a swingable position, the swingable angle  $\theta$  between the front and rear bodies **10A**, **10B** can be maximized to expose the rear end surface **11h** of the front connecting part **11**, thereby making it possible to attach/detach the dorsal fin part **16** to/from the mounting portion **17** provided on this end surface.

[0071] In the lure **1** according to the present embodiment configured as described above, the flight attitude of the lure **1** during flight becomes stable and the flight distance can be increased.

[0072] The above-described embodiments of the lure according to the invention are presented as examples and are not intended to limit the scope of the invention. The embodiments may be implemented in a variety of other forms; furthermore, various omissions, substitutions and changes may be made without departing from the essence of the invention. Embodiments and modifications thereof include those that can be easily conceived of by a person skilled in the art, those that are substantially the same, and those that are of equivalent scope.

[0073] For example, in the embodiment described above, the swing mechanism is composed of the

connecting parts **11**, **12** between the head body **10A** and the trunk body **10B** that are segmented into two parts in the front-rear direction **X1**, but the number of segments of the lure body in the front-rear direction is not limited to two, and may be three, for example. In the case of a body segmented into three parts, a swing mechanism similar to the connecting parts **11**, **12** of the above-mentioned embodiment may be provided in the connecting part of each body.

[0074] In addition, in the present embodiment, the holding part **40** is provided in the front connecting part **11** of the head body **10A** on the front side; however, the holding part **40** may be provided in only the rear connecting part **12** of the trunk body **10B** on the rear side, or be provided in both the front connecting part **11** and the rear connecting part **12**.

[0075] Additionally, in the present embodiment, the restricting walls **11g**, **12g** are provided in the respective recesses **11a**, **12a** of the head body **10A** and the trunk body **10B**, but no limitation is imposed thereby. That is, it is sufficient if either the first restricting walls **11g** or the second restricting walls **12g** are provided. In addition, the mechanism for restricting the swingable angle between the bodies **10A**, **10B** when in the second position to  $\pm 90$  degrees or less is not limited to the restricting walls **11g**, **12g** described above, and a restricting portion having a another configuration may be used. Alternatively, the restricting portion itself may be omitted.

[0076] Furthermore, in the present embodiment, the first swinging shaft **3A** comprises the swinging shaft portions **33** that support the connecting members **2A**, **2B** when in the first position **P1**, and the guide portions **34** that guide the connecting members **2A**, **2B** from the swinging shaft portions **22** toward the holding part **40**, and the guide portions **34** gradually incline forward with proximity to the holding part **40**, but the invention is not limited to such a configuration. Similarly, in the present embodiment, the second swinging shaft **3B** gradually inclines rearward as the connecting members **2A**, **2B** move toward the second position **P2**, but no limitation is imposed thereby.

[0077] Additionally, in the present embodiment, a configuration in which the holding part **40** is a magnet is illustrated as an example, but the holding part **40** is not limited to being a magnet. For example, it is sufficient if the configuration uses an elastic member, a biasing member (spring member), or the like, to hold the connecting members **2A**, **2B** at the second position **P2**, and the connecting members **2A**, **2B** are moved to the first position **P1** when the front and rear bodies move away from each other.

## Claims

1. A lure, comprising: a front body; a rear body divided from the front body to form a plurality of segments in a front-rear direction; a connecting member connecting first and second connecting parts that face each other in the front and rear direction of the front and rear bodies; a holding part provided in at least one of the first and second connecting parts, a first swinging shaft provided in the at least one of the first and second connecting parts, swingably supporting the connecting member, and configured to guide the connecting member between a first position and a second position where the connecting member is held by the holding part; and a second swinging shaft provided in the other of the first and second connecting parts and swingably supporting the connecting member, when the connecting member in the one of the first and second connecting parts is in the first position, the front and rear bodies move in directions away from each other.
2. The lure according to claim 1, wherein when a swingable angle in an attitude in which the front and rear bodies are positioned on a straight line in the front-rear direction is 0 degrees, the swingable angle of rear body on the rear side relative to the front body on the front side becomes  $\pm 90$  degrees or less when in the second position, and the swingable angle exceeds  $\pm 90$  degrees when in the first position.
3. The lure according to claim 2, wherein at least one of the front and rear bodies includes a restricting portion configured to restrict the swingable angle between the bodies when in the second position to  $\pm 90$  degrees or less.

4. The lure according to claim 1, wherein the first swinging shaft has a swinging shaft portion supporting the connecting member at the first position, and a guide portion configured to guide the connecting member from the swinging shaft portion in a direction approaching the holding part, and the guide portion gradually inclines forward with proximity to the holding part.
  5. The lure according to claim 1, wherein the second swinging shaft gradually inclines rearward as the connecting member moves toward the second position.
  6. The lure according to claim 1, wherein the holding part is a magnet, and the connecting member is made of a magnetic material.
  7. The lure according to claim 1, wherein an end surface of at least one of the pair of connecting parts facing the front-rear direction includes a mounting portion to/from which a functional member is capable of being attached/detached.
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