

DESCRIPTION

[Title of the Invention] Reel Seat

[Technical Field]

[0001]

Cross-reference

This application claims priority to Japanese Patent Application No. 2020-144053 (filed on August 28, 2020), which is incorporated herein by reference in its entirety.

The present invention relates to a reel seat which is mounted on a fishing rod of various types including a lure rod and a boat rod, and used to mount and fix a reel.

[Background Art]

[0002]

Conventionally, the fishing rod using a reel has a reel seat fixed to the main rod in order to mount the reel, and as such a reel seat, there is a known tubular reel seat fixed to the outer circumference surface of the main rod. In general, the tubular reel seat secures the strength with the main rod that penetrates through it, and thus it is possible to reduce its weight by using a lightweight material or reducing its thickness.

[0003]

When a double bearing reel of a round shape with circular side plates is mounted on a reel seat as described above, the position at which the fisher thumbs the fishing line on the spool shifts upward in actual fishing, causing reduction in operability as his/her palm tends to open easily when casting the rod. In addition, when the clutch lever for switching the spool to rotate freely is disposed in such a manner that it protrudes from the upper surface of

the side plate, the palm tends to open more easily when operating the clutch.

In particular, recent rods tend to be larger both in diameter and length, and if a tubular reel seat is fixed to such a large-diameter main rod, the fisher's palm tends to open easily when operating the rod in actual fishing and operability is reduced. Also, when the center of gravity is above the grip, if a force is applied to the reel from left or right, a strong rotating force (torque) is applied on the grip, and thus the grip needs to be gripped strongly (when the center of gravity of the reel is low, the torque is weak).

[0004]

For these reasons, as disclosed in Patent Literatures 1 to 3, there are known reel seats in which the position of the reel foot placing portion of the reel seat is offset in a direction that falls with respect to the central axis of the main rod (also referred to as "offset reel seat"). According to these offset reel seats, since the reel foot placing portion is shifted to the bottom side, when a round double bearing reel is mounted, the operation position of the fisher's thumb is not too high when he/she is gripping the grip portion in the rear of the reel, and it is prevented that operability is reduced as a result of his/her palm opening.

[Prior Art]

[Patent Literature]

[0005]

[Patent Literature 1] Japanese Unexamined Utility Model Application Publication No. 49-122082

[Patent Literature 2] Japanese Examined Utility Model

Application Publication No. 49-46557

[Patent Literature 3] Japanese Examined Utility Model

Application Publication No. 50-24539

[Summary of Invention]

[Technical Problem]

[0006]

According to the offset reel seats described above, the clutch is easily operated even with a double bearing reel in which the clutch lever that makes the spool rotate freely when the rod is cast is disposed to protrude from the surface of the side plates. However, many of recent double bearing reels have a clutch lever that is disposed behind the spool and between the side plates on the right and left, to be pressed up/down in the top-bottom direction. For conventional offset reel seats, however, sufficient consideration is not given to the rear side (rear wall) of the mounted reel, and thus with a double bearing reel having a clutch lever disposed between the side plates on the right and left as described above, operability in switching the clutch in actual fishing is poor, and the fisher cannot smoothly perform a series of operations.

[0007]

Specifically, if the inclination angle of the rear wall that rises up from the hood portion (fixed hood) for inserting the reel foot is steep, or if the space between the rear wall and the reel body is small, the clutch lever cannot be smoothly pressed down, and furthermore, it is difficult to insert the thumb under the bottom surface of the clutch operation lever when the fisher presses up the clutch lever to turn the clutch on. In particular, when a low-profile double-bearing reel for casting such as a small

bait reel is mounted, the clutch operation lever is also positioned at the bottom side, and as a result of the space being even smaller, the clutch might not be turned off or the clutch lever might not be pressed up.

[0008]

The present invention was created in consideration of the above problems, and an object thereof is to provide a reel seat that allows the fisher to smoothly perform a series of operations when he/she is gripping and holding the fishing rod together with the fishing reel.

[Solution to Problem]

[0009]

In order to achieve the above-mentioned object, a reel seat according of the present invention comprises: a seat body including: a reel foot placing portion on which a reel foot of a fishing reel is placed, a fixed hood provided in the rear of the reel foot placing portion in terms of the axial direction, and a movable hood disposed in the front of the reel foot placing portion in terms of the axial direction, wherein when the seat body is fixed to a rod, the position of the reel foot placing portion is offset in a direction that falls with respect to the position of the central axis of the rod; wherein the reel seat comprises, in the rear of the fishing reel mounted and fixed on the reel foot placing portion, an inclined surface that connects an upper end position of a hood portion, which defines an opening of the fixed hood, and an upper surface of a grip gripped by a fisher in the rear of the fishing reel; and the inclined surface has, in a side view, an inclination angle of 45° or less at which the inclined surface rises up from the upper end position of the hood portion toward the upper

surface of the grip, and an inclination angle of 35° or less at which the inclined surface falls from the upper surface of the grip.

[0010]

In the seat body of the reel seat described above, the reel foot placing portion is offset in a direction that falls with respect to the central axis of the fixed rod, and thus, the fisher can operate the clutch lever without opening his/her palm wide when he/she is gripping the grip portion in the rear of the mounted and fixed fishing reel. In this case, the inclined surface provided in the rear of the fishing reel mounted and fixed on the reel foot placing portion has, in a side view, an inclination angle of 45° less at which the inclined surface rises up from the upper end position of the hood portion toward the upper surface of the grip, and thus the inclination angle is gentle and a space is secured in the rear of the clutch lever, allowing for easy operation of the clutch lever. In particular, the inclination of the upper end is gentle since the inclination angle that falls from the upper surface of the grip is 35° or less, and this allows for good operation of the clutch lever even when a low-profile double bearing reel in which the operating position of the clutch lever is low is mounted.

[0011]

Also, in order to achieve the above-mentioned object, a reel seat according to of the present invention comprises: a seat body including: a reel foot placing portion on which a reel foot of a fishing reel is placed, a fixed hood provided in the rear of the reel foot placing portion in terms of the axial direction, and a movable hood disposed in the front of

the reel foot placing portion in terms of the axial direction, wherein when the seat body is fixed to a rod, the position of the reel foot placing portion is offset in a direction that falls with respect to the position of the central axis of the rod; wherein the reel seat comprises, in the rear of the fishing reel mounted and fixed on the reel foot placing portion, an inclined surface that connects an upper end position of a hood portion, which defines an opening of the fixed hood, and an upper surface of a grip gripped by a fisher in the rear of the fishing reel; and the inclined surface has a surface cross-sectional shape of a concave portion with a depressed central area, in a direction perpendicular to the axial direction.

[0012]

The inclined surface of the seat body of the reel seat described above has a surface cross-sectional shape, in a direction perpendicular to the axial direction, of a concave portion with a depressed central area, and thus, the fisher can make the underside of his/her thumb stably contact the inclined surface and easily presses down/up the clutch lever by keep moving the thumb toward the front.

[Advantageous Effects of Invention]

[0013]

According to the reel seat of the present invention, a series of operations is smoothly performed when the fishing rod is gripped and held together with the fishing reel.

[Brief Description of Drawings]

[0014]

[Fig. 1] Fig. 1 is a section view cut along the axial direction of a reel seat according to the present invention with a low-profile fishing reel mounted and fixed thereon.

[Fig. 2] Fig. 2 is an exploded perspective view of the reel seat shown in Fig. 1.

[Fig. 3] Fig. 3 shows the reel seat shown in Fig. 1 with Fig. 3(a) being a plan view, Fig. 3(b) being a side view and Fig. 3(c) being a bottom view.

[Fig. 4] Fig. 4(a) is a section view cut along the axial direction of a seat body of the reel seat shown in Fig. 1, and Fig. 4(b) is a section view of an inclined surface viewed from a direction perpendicular to the axial direction.

[Fig. 5] Fig. 5 shows the reel seat in the state of use, with Fig. 5(a) showing the clutch ON state of the mounted fishing reel, Fig. 5(b) showing the state of the thumb switching the clutch OFF and Fig. 5(c) showing the state of the thumb switching the clutch ON.

[Fig. 6] Fig. 6 shows a modification example of the reel seat, with Fig. 6(a) being a section view cut along the axial direction of the reel seat with a round fishing reel mounted and fixed thereon, and Fig. 6(b) being a section view of an inclined surface viewed from a direction perpendicular to the axial direction.

[Fig. 7] Fig. 7 shows a second modification example of the reel seat, with Fig. 7(a) being a section view cut along the axial direction, Fig. 7(b) being a plan view and Fig. 7(c) being a section view cut along the direction A shown in Fig. 7(a).

[Description of Embodiments]

[0015]

Now, embodiments of a reel seat of the present invention will be specifically described with reference to the accompanying drawings.

Figs. 1 to 4 show an embodiment of a reel seat according to the present invention: Fig. 1 shows the reel seat with a low-profile fishing reel mounted and fixed thereon. Figs. 2, 3(a), 3(b), and 3(c) are respectively an exploded perspective view, a plan view, a side view, and a bottom view of the reel seat of Fig. 1. Fig. 4(a) is a section view cut along the axial direction of a seat body, and Fig. 4(b) is a section view of an inclined surface viewed from a direction perpendicular to the axial direction.

[0016]

In the following descriptions, the axial direction (front-rear direction) and the top-bottom directions mean the directions shown in Fig. 1, and the right-left direction (lateral direction) means the direction perpendicular to the paper surface of Fig. 1. In other words, the front means the tip side of the fishing rod and the rear means the base side thereof, while the top means, with a double bearing reel mounted, the reel side with respect to the central axis X of the main rod (rod), and the bottom means the opposite side. As described above, the present invention covers a reel seat (offset reel seat) in which the position of a reel foot placing portion is offset in a direction that falls with respect to the central axis X of the main rod fixed thereon. The direction that falls means the bottom direction shown in Fig. 1. Thus, when a double bearing reel is mounted on the reel foot placing portion of such a reel seat, the position of the reel foot is shifted to the bottom side with respect to the central axis X of the main rod fixed thereon, and thus when the fisher holds the grip portion in the rear of the reel, his/her thumb contacts the reel body without him/her having to open the palm wide.

[0017]

A seat body 1A of a reel seat 1 of the present invention includes, in the front, a front tube portion 4A formed with a protruding, substantially cylindrical cylinder portion 2, and a grip portion (rear grip) 50 is fixed to the rear of the seat body 1A for the fisher to grip and hold. To the inner surface of the cylinder portion 2, the outer circumference surface of the base side of a rod (main rod) 10 of a fishing rod is fixed by adhesion or the like, and the grip portion 50 is fixed to the outer circumference surface of a tubular protrusion 4a that protrudes along the direction of the central axis X in the rear of the seat body 1A (rear tube portion 4B formed with an inclined surface, as described later). The grip portion 50 is flush with the surface of the rear tube portion 4B. In this case, the rear tube portion 4B is also a grip to be gripped and held together with the grip portion 50.

The configuration of the fishing rod to which the reel seat 1 is fixed is not limited and may be telescopic, a joint type, a single piece rod, etc., and Fig. 1 shows a part of the fishing rod (rear end of the main rod) without illustration of the whole structure. On the illustrated reel seat 1, a fishing reel 200 that is a low-profile double bearing reel (hereinafter also referred to as the reel) is mounted and fixed as an example.

[0018]

The seat body 1A includes a reel foot placing portion 3 on which a reel foot 201 of the fishing reel 200 is placed and a fixed hood 8 disposed in the rear of the reel foot placing portion 3 in terms of the axial direction, and a movable hood 9 is disposed in the front of the seat body 1A

in terms of the axial direction, in the front of the reel foot placing portion 3. Thus, the fishing reel 200 is mounted and fixed on the reel seat 1 by placing the reel foot 201 on the reel foot placing portion 3, and with its rear end fitted into the fixed hood 8, tightening its front end with the movable hood 9 that moves in the axial direction.

[0019]

The seat body 1A includes a middle connecting portion (also referred to as a bridge portion) 5 that connects the front tube portion 4A and the rear tube portion 4B in the axial direction, and they are integrally formed. The bridge portion 5 is formed substantially in a semi-cylindrical shape with an open top and recesses 5a on both sides, and the reel foot placing portion 3 is formed integrally between the recesses 5a on both sides. In this case, the reel foot placing portion 3 may be formed along the axial direction, but in order to reduce weight, it may also be divided into front and rear parts, separated in the middle, into a placing surface 3a that supports the bottom surface of the front end of the reel foot 201 and a placing surface 3b that supports the rear end thereof.

[0020]

At the bottom of the bridge portion 5 (on the side opposite to the surface of the grip portion 50), a bulge 5b is formed and bulges radially along the axial direction. This bulge 5b is a portion with which the underside of the index finger or the middle finger of the fisher makes contact (gripped) when he/she grips the grip portion 50, and in order to provide the finger with a good contacting feel, the surface of the bulge 5b is preferably curved along the

axial direction (e.g., as shown in Figs. 3 and 4, in a curved shape with a central area bulged downward). When forming the bulge 5b, it is preferable to form the interior thereof in a hollow shape to reduce the weight.

[0021]

When forming the interior of the bulge 5b in a hollow shape, it is preferable to form a reinforcement rib 5c on the inner surface of the bulge 5b in order to reduce the thickness while maintaining its strength. As shown in Fig. 3(a), the reinforcement rib 5c may be modified as appropriate by forming it on the inner surface of the bulge 5b along the axial direction or along the lateral direction, or by combination thereof. A part of the reinforcement rib may have a height that matches the placing surfaces 3a, 3b in order to serve as a reel foot placing portion.

[0022]

As shown in Fig. 3(b), an upper edge 5a' defining the recesses 5a on both sides of the bridge portion 5 of the seat body 1A is most depressed in the middle and extends horizontally in such a manner that it inclines upward as it extends toward the front and rear, and the front of the upper edge 5a' is connected to the front tube portion 4A of the seat body, whereas its rear is connected to the rear tube portion 4B of the seat body. In the front of the front tube portion 4A, the cylinder portion 2 having a smaller diameter than the cylinder portion 4A is protruded toward the front. The placing surface 3b is formed in the rear tube portion 4B, and the fixed hood 8 is formed in the rear of this placing surface 3b and defines an opening 8a into which the reel foot 201 is fitted.

[0023]

In the rear of the fishing reel 200 mounted and fixed on the reel foot placing portion 3 (placing surface 3b), the seat body 1A further includes an inclined surface 10 that connects an upper end position P1 of a hood portion 8A, which defines the opening 8a of the fixed hood 8, and the surface of the grip portion 50 to be gripped in the rear of the fishing reel 200. When the reel foot placing portion 3 of the seat body 1A is offset, this inclined surface 10 is naturally formed in the seat body 1A and, as described below, formed in the rear tube portion 4B (the inclined surface 10 is configured to facilitate the operation of a clutch member 205 of the fishing reel 200, as described below).

[0024]

The movable hood 9 that is moved in the axial direction is disposed at the cylinder portion 2 in the front of the seat body 1A. The movable hood 9 of the present embodiment includes a movable member 9a disposed in a cutout formed in the surface of the cylinder portion 2. In other words, as shown in Fig. 2, the cylinder portion 2 includes a large-diameter portion 2A in the rear and a small-diameter portion 2B in the front, and an arc-shaped cutout 2c is formed along the axial direction in a certain range of the bottom area of the large-diameter portion 2A and the small-diameter portion 2B. The movable member 9a is formed in an arc shape along the axial direction and disposed integrally on the large-diameter portion 2A side of the cutout 2c, and the large-diameter portion 2A of a cylinder shape is formed with the movable member 9a positioned in the cutout 2c.

[0025]

A male thread 9b is formed on the surface of the front

side of the movable member 9a, and a hood portion 9A is formed on the rear side to receive the reel foot 201 and defines an opening 9c that is curved radially inward and receives the reel foot. The hood portion 9A of the movable member 9a is disposed in such a manner that it enters an opening 5A formed at the bottom of a front end surface of the bridge portion 5 (end surface of the front tube portion 4A), and as shown in Fig. 4(a), the opening 5A connects with the reel foot placing portion 3 (placing surface 3A). Thus, when the movable member 9a is moved to the rear, the hood portion 9A in the opening 5A is fitted into the front end of the reel foot 201 placed on the placing surface 3A.

[0026]

The male thread 9b of the movable member 9a is screwed with a female thread 12a formed on the inner surface of a nut member 12 that is externally fitted onto the large-diameter portion 2A. Thus, when the nut member 12 is rotated in one direction, the movable member 9a moves to the rear in the axial direction and tightens the front end of the reel foot 201 (the reel is mounted and fixed), and when the nut member 12 is rotated in the other direction, the movable member 9a moves to the front in the axial direction and releases the front end of the reel foot 201 (the reel is removed). A circumference notch 2d is formed along the circumferential direction at the front end of the large-diameter portion 2A, and a ring-shaped member 12b is mounted thereon so as to prevent the nut member 12 from falling toward the front. When the nut member 12 is externally fitted onto the large-diameter portion 2A, its surface becomes flush with the surface of the front tube portion 4A, as shown in Fig. 1. The surface of the nut member 12 becomes

flush with the surface of the front tube portion 4A, as shown in Fig. 1, and is easy to grip since there is no difference in level.

[0027]

A cylinder member 2e is adhered to the small-diameter portion 2B, and a grip portion (front grip) 51 is fixed on the cylinder member 2e and disposed to be flush with the surface of the nut member 12 that is rotated. The inner surface of the cylinder member 2e is formed with a projection 2e' that projects inward along the axial direction and fits into the cutout 2c formed at the bottom area of the small-diameter portion 2B, and the cylinder member 2e is adhered to the small-diameter portion 2B in such a manner that its loosening is prevented. The grip portion 51 may not be provided.

[0028]

As described above, the inclined surface 10 formed on the rear tube portion 4B gradually rises from the upper end position P1 of the hood portion 8A that defines the opening 8a of the fixed hood 8, toward the rear, and connects with the surface of the grip portion 50. In the present invention, there is no limit on the offset amount of the reel foot placing portion 3 with respect to the central axis X, but if the offset amount is much, the position of the clutch lever disposed between the side plates is also lowered when a low-profile double bearing reel is mounted, which makes it difficult to turn on/off the clutch as there is not enough space between the clutch lever and the inclined surface 10.

[0029]

For this reason, as shown in Fig. 4, the inclined

surface 10 has an inclination angle (inclination angle of the upward inclination with respect to the central axis X) α of 45° or less at which it rises up from the upper end position P1 of the hood portion 8 toward the upper surface of the grip, in a side view, so that even when a small reel 200 is mounted, its clutch lever 205 disposed between the side plates can be operated without difficulty. In other words, the inclined surface that rises up from the upper end position P1 of the hood portion 8 has an inclination angle of 45° or less, and thus enough space, especially a space enough to make it easy to press a finger against the bottom surface of the clutch lever, when switching the clutch from the off state to the on state, is secured between the clutch lever 205 and the inclined surface 10. In fact, the inclined surface becomes steep when the inclination angle α of the inclined surface 10 is larger than 45° , and the clutch is difficult to operate, especially if the offset amount is much. The inclination angle 45° is an angle between the horizontal state and the vertical state, which provides a good gripping feel, and if the inclined surface rises at a larger angle, the fisher tends to feel discomfort as the angle is felt as acute, and thus, setting the angle to be 45° or less reduces such discomfort.

[0030]

Further, the inclined surface 10 has an inclination angle (the inclination angle of the downward inclination with respect to the central axis X) β of 35° or less, at which it falls downward from the upper surface (surface) of the grip portion 50. The inclination angle β here is defined as the angle of fall at the position P2 where it starts falling to the front from the upper surface of the grip

portion 50, and is configured not to fall sharply at an angle larger than 35° .

[0031]

As described here, the inclined surface 10 of the seat body has the inclination angle α of 45° or less at which it rises up from the upper end position P1 of the hood portion 8 toward the upper surface of the grip, and the inclination angle β of 35° or less at which it falls from the upper surface (the position P2 where it starts falling) of the grip portion 50, and thus, a space is secured at the bottom end of the inclined surface while enough space to insert a finger is secured between the reel (clutch lever 205) and the inclined surface 10 as the inclination at the upper end is gentle. In other words, if the inclination angle α that rises toward the upper surface of the grip is constant (constant at 45° or less), when the fisher inserts his/her thumb under the bottom surface of the clutch lever 205 from the upper surface of the grip portion 50, he/she feels discomfort as the falling angle is too large, and thus, setting the inclination angle β of the fall to be 35° or less as described above makes it easier to move the thumb on the upper surface of the grip portion 50, or at the top of the inclined surface, along the inclined surface to smoothly insert it under the bottom surface of the clutch lever 205. This allows the fisher to smoothly repeat a series of operations including turning off the clutch lever 205 while gripping the reel seat 1 of the fishing rod, and reeling-in by pushing up the clutch lever 205 with the thumb to turn it on after the bait landed on the water, and the thumb is also not hurt.

[0032]

In the configuration described above, the inclined surface 10 may be configured, in a side view, as a composite surface in a straight line having a rising angle and a falling angle that are different, but as shown in Figs. 1 and 4, the inclined surface 10 is preferably formed as a curved surface that rises up from the upper end position P1 of the hood portion and becomes less inclined as it extends closer to the upper surface of the grip.

As described here, configuring the inclined surface 10 with a curved surface prevents the thumb from getting hurt after long hours of use and allows the fisher to smoothly carry out a series of operations from casting to reeling-in. As long as the above-mentioned inclination angle α that rises is 45° or less and the inclination angle β that falls is 35° or less, the shape of the middle portion may be modified with a bulge, etc. as appropriate.

[0033]

As long as the rising inclination angle α and the falling inclination angle β of the inclined surface 10 satisfy the above-mentioned conditions, they may be configured in the same manner, or may have a relation of $\alpha < \beta$. With the inclination angle α of 35° or less, the space between the reel and the inclined surface becomes wider and allows for easier operation of the clutch.

[0034]

The cross-sectional shape, in the direction perpendicular to the axial direction, of the surface of the inclined surface 10 may be a flat or curved surface. As shown in Fig. 4(b), the cross-sectional shape of the surface of the inclined surface 10 in this embodiment has a concave portion 10a having a depressed central area. In the concave

portion 10a, the entire surface of the inclined surface 10 is configured as a curved surface (a surface curved at the substantially same curvature in a section view), and as shown in Figs. 5(a) to 5(c), this concave portion 10a allows the underside of the thumb to easily fit the inclined surface (the surface of the concave portion 10a), and thus the clutch is operated stably and easily. In particular, when the fisher presses down the clutch lever to switch the clutch from the on state to the off state, he/she can keep moving the thumb to the rear and then to the front to smoothly guide the thumb to the bottom surface of the clutch lever, in order to easily switch the clutch lever from the off state to the on state.

[0035]

The seat body 1A of the present embodiment further includes, on the side opposite to the upper surface of the grip, a trigger 20 that protrudes from a position corresponding to the upper end position P1 of the hood portion 8A (at the bottom of P1) while gradually curving downward. The trigger 20 protrudes at a position within the range of the axial direction of the inclined surface 10, and thus when the fisher hooks a finger on the trigger 20, the thumb can be moved stably without him/her having to open the palm, and the clutch operation described above is performed stably.

[0036]

To reduce the weight, it is preferable to integrally form the seat body 1A, the movable hood 9 and the nut member 12, with a hard resin material or a fiber-reinforced resin material. For example, integrally forming them with a hard synthetic resin material such as nylon and ABS, or a plastic

composite material (FRP) mixed with reinforcing fibers such as glass fibers or carbon fibers allows to effectively reduce the weight while maintaining their strength. Alternatively, they may be formed with a lightweight metal material such as aluminum.

[0037]

The grip portions 50, 51 may be formed of a soft material that improves the feel of gripping, grip performance and appearance while reducing their weight, such as natural cork, urethane, EVA, thermoplastic elastomer, and rubber, or may be fitted with one of these materials.

[0038]

Fig. 6 shows a modification example of the reel seat, with Fig. 6(a) being a section view cut along the axial direction of the reel seat with a round fishing reel mounted and fixed thereon, and Fig. 6(b) being a section view of the inclined surface viewed from a direction perpendicular to the axial direction.

In this modification example, a fishing reel 200A with round side plates is mounted on the reel seat 1, and as shown in Fig. 6(b), its inclined surface 10A has a flat surface cross-sectional shape in a direction perpendicular to the axial direction.

[0039]

When the round fishing reel 200A is mounted, the position of its clutch lever 205 is shifted to a position higher than that of the low-profile fishing reel shown in Fig. 1, and thus, more space is provided in the rear of the clutch lever, and a series of operations is performed more easily. Further, even if the surface of the inclined surface 10A is flat, the thumb is not hurt and a series of

operations is performed smoothly.

[0040]

Fig. 7 shows a second modification example of the reel seat, with Fig. 7(a) being a section view in the axial direction, Fig. 7(b) being a plan view and Fig. 7(c) being a section view cut along the direction A shown in (a).

The concave portion 10b of the inclined surface 10 of this modification example is formed of a curved surface with its central area depressed the most, substantially in an oval shape in a plan view. According to the concave portion 10b depressed in this manner, more space for inserting the finger is provided between the clutch lever 205 of the reel and the inclined surface 10, and thus, switching the clutch lever, in particular, returning it from the off state to the on state is performed more easily.

[0041]

Although the embodiments of the present invention have been described above, the present invention is not limited to the above-described embodiments and may be modified in various manners.

[0042]

In the above-described configuration, the inclination angle of the inclined surface 10 formed in the seat body 1A is determined as appropriate, and its surface shape may be modified as appropriate to be curved or flat, or to be a composite surfaces of those. The surface shape of the concave portion in the inclined surface may also be modified as appropriate by making it partially depressed, depressed as a composite surface of a flat depression and a curved depression, or partially bulged, for example. The configuration of the movable hood (method of moving in the

axial direction, the structure of position-stopping, etc.) may be modified in various manners, and the means for moving the movable hood in the axial direction is not limited to the method using the nut member 12 described above.

[0043]

The shape of the seat body 1A is not limited to those shown in the figures and may be modified in various manners. For example, to make it fit the underside of the finger or the palm, it may be modified in various manners including forming a bulge or concave portion (curved portion) with a partially curved or inclined surface, or a thin-out, cutout or opening. It is preferable to form such a thin-out, cutout, depression, projection, etc. in a portion that does not affect the gripping performance, and the thickness of the seat body 1A is not also limited in any way.

[Reference Signs List]

[0044]

1: reel seat

1A: seat body

3, 3a, 3b: reel foot placing portion

5: middle connecting portion (bridge portion)

8: fixed hood

9: movable hood

10: inclined surface

10a, 10b: concave portion

50, 51: grip portion

200, 200A: fishing reel

205: clutch lever

CLAIMS

[Claim 1]

A reel seat comprising:

a seat body including:

a reel foot placing portion on which a reel foot of a fishing reel is placed,

a fixed hood provided in the rear of the reel foot placing portion in terms of the axial direction, and

a movable hood disposed in the front of the reel foot placing portion in terms of the axial direction, wherein

when the seat body is fixed to a rod, the position of the reel foot placing portion is offset in a direction that falls with respect to the position of the central axis of the rod; wherein

the reel seat comprises, in the rear of the fishing reel mounted and fixed on the reel foot placing portion, an inclined surface that connects an upper end position of a hood portion, which defines an opening of the fixed hood, and an upper surface of a grip gripped by a fisher in the rear of the fishing reel; and

the inclined surface has, in a side view, an inclination angle of 45° or less at which the inclined surface rises from the upper end position of the hood toward the upper surface of the grip, and an inclination angle of 35° or less at which the inclined surface falls from the upper surface of the grip.

[Claim 2]

The reel seat according to claim 1, wherein the inclined surface is formed of a curved surface that, in a side view, rises up from the upper end position of the hood portion and

becomes less inclined as it extends closer to the upper surface of the grip.

[Claim 3]

The reel seat according to claim 1 or 2, wherein the surface of the inclined surface has a flat cross-sectional shape in a direction perpendicular to the axial direction.

[Claim 4]

The reel seat according to any one of claims 1 to 3, wherein the inclined surface has a surface cross-sectional shape of a concave portion with a depressed central area, in a direction perpendicular to the axial direction.

[Claim 5]

A reel seat comprising:

a seat body including:

a reel foot placing portion on which a reel foot of a fishing reel is placed,

a fixed hood provided in the rear of the reel foot placing portion in terms of the axial direction, and

a movable hood disposed in the front of the reel foot placing portion in terms of the axial direction, wherein

when the seat body is fixed to a rod, the position of the reel foot placing portion is offset in a direction that falls with respect to the position of the central axis of the rod; wherein

the reel seat comprises, in the rear of the fishing reel mounted and fixed on the reel foot placing portion, an inclined surface that connects an upper end position of a hood portion, which defines an opening of the fixed hood, and an upper surface of a grip gripped by a fisher in the rear of the fishing reel; and

the inclined surface has a surface cross-sectional shape

of a concave portion with a depressed central area, in a direction perpendicular to the axial direction.

[Claim 6]

The reel seat according to any one of claims 1 to 5 further comprising a trigger that protrudes on the seat body on the side opposite to the upper surface of the grip, and the trigger is curved from a position corresponding to the upper end position of the hood portion.

[Claim 7]

The reel seat according to any one of claims 1 to 6, wherein the seat body includes a hollow bulge that bulges radially along the axial direction, on the side opposite to the upper surface of the grip.

[Claim 8]

The reel seat according to any one of claims 1 to 7, wherein the seat body is integrally formed of a hard resin material or a fiber-reinforced resin material.

[Claim 9]

A fishing rod comprising a reel seat according to any one of claims 1 to 8 fixed thereto.