DESCRIPTION

REEL SEAT AND FISHING REEL

Technical Field

[0001]

Cross Reference

The present application claims priority based on Japanese Patent Application No. 2023-016649 (filed on February 7, 2023), the contents of which are incorporated herein by reference in their entirety.

The present invention relates to a reel seat that allows a fishing reel to be attached and detached, and a fishing reel suitable for such a reel seat.

Background Art

[0002]

In the related art, a reel seat is provided on a grip (including a rod butt) of a fishing rod that allows a fishing reel to be attached and detached. The reel seat includes a pair of hoods that hold a front end and a rear end of a leg of the fishing reel, and is configured such that the leg can be clamped and fixed by relatively moving the hoods in an axial direction.

[0003]

Incidentally, as the above-described reel seat, a configuration in which the fishing reel can be attached and detached by one-touch operation is known. For example, Patent Literature 1 discloses a configuration in which a rod-shaped portion is formed in a leg of a fishing reel and is inserted into a fitting recess portion provided in a reel seat. In addition, Patent Literature 2 discloses a reel seat that holds a reel leg using a spring-biased fixing claw in an axial direction at a position offset from the

center of a rod shaft (grip). This reel seat is configured such that the fishing reel can be fixed to the reel seat by being pushed from above, and can be removed by pulling the fishing reel rearward in the axial direction against a biasing force of a spring. Furthermore, Patent Literature 3 discloses a reel seat including a pair of clamping portions that clamp and fix a front end and a rear end of a reel leg.

Citation List

Patent Literature

[0004]

Patent Literature 1: Japanese Utility Model Application Laid-Open No. S51-8993

Patent Literature 2: Japanese Utility Model Registration No. 3102305

Patent Literature 3: JP 2018-143222 A

Summary of Invention

Technical Problem

[0005]

In the configuration disclosed in Patent Literature 1 described above, since the fishing reel is fixed only by the fitting between a convex portion and a recess portion, a reel main body is easily moved when a large force is applied, and the fishing reel is not able to be stably secured. In addition, in the configuration disclosed in Patent Literature 2 described above, since the leg of the fishing reel is spring-biased in the axial direction, a fixing force is not sufficient so that play is likely to occur. Furthermore, since the reel seat disclosed in Patent Literature 3 has a configuration in which both ends of the reel leg are clamped and fixed, a fixing force is not sufficient so that play is likely to occur.

[0006]

The present invention has been made in view of the above-described problems, and an object thereof is to provide a reel seat that allows a fishing reel to be attached to and detached from the reel seat through a simple operation and in which a stable fixed state is obtained, and a fishing reel suitable for such a reel seat.

Solution to Problem

[0007]

In order to achieve the object, an aspect of the present invention is a reel seat that is provided on a grip of a fishing rod and allows a leg of a fishing reel to be attached and detached, in which a main body of the reel seat comprises a fixed hood that fixes at least a part of front and rear sides of the reel leg in an axial direction, a guide portion that is formed on the fixed hood and slides the reel leg to guide the reel leg to a predetermined installation position, a locking structure that is formed on a surface of the main body and a facing surface of the reel leg facing the surface of the main body, guides the reel leg to the guide portion, and restricts movement of the reel leg guided to the installation position, and a locking and releasing mechanism that releases a fixed state of the reel leg of which the movement is restricted by the locking structure.

[0008]

In the reel seat having the above-described configuration, a fixed hood that fixes at least a part of front and rear sides of the reel leg of a fishing reel to be attached and detached, in an axial direction is provided, and a guide portion that slides the reel leg to guide the reel leg to a predetermined installation position is formed on the fixed hood. The reel leg is guided to a predetermined installation position by sliding movement (linear sliding movement, sliding movement in a rotational direction, or

combination movement thereof) via the guide portion. In this case, since the movement of the reel leg is restricted by the fixed hood, the locking structure, and the locking and releasing mechanism so that the reel leg is in a fixed state, the reel leg can be stably fixed to the reel seat without any play. In addition, when the fishing reel is to be removed, the fixed state is released by the locking and releasing mechanism, and the reel leg is slid through the guide portion formed on the fixed hood. Therefore, the fishing reel can be attached to and detached from the reel seat by one-touch operation (simple operation).

[0009]

In addition, another aspect of the present invention is a fishing reel that allows the above-described reel seat to be attached and detached, in which the locking structure is provided at a center position of the facing surface of the reel leg of the fishing reel, and the locking and releasing mechanism is provided at an end position of the facing surface of the reel leg of the fishing reel.

[0010]

Such a fishing reel can be attached to and detached from the reel seat through a simple operation and a stable fixed state is obtained.

Note that the fishing reel only needs to be provided with a reel leg, and various types of fishing reels such as a spinning reel, a dual-bearing reel, a single-bearing reel, and an electric reel are applicable.

Advantageous Effects of Invention

[0011]

According to the present invention, it is possible to obtain a reel seat that allows a fishing reel to be attached to and detached from the reel seat through a simple

operation and in which a stable fixed state is obtained, and a fishing reel suitable for such a reel seat.

Brief Description of Drawings

[0012]

Fig. 1 is a diagram illustrating an example of a fishing rod comprising a reel seat according to a first embodiment of the present invention and a fishing reel (spinning reel).

Fig. 2 is a perspective view of the fishing reel illustrated in Fig. 1.

Fig. 3 is a diagram illustrating a main part of a reel leg of the fishing reel illustrated in Fig. 2.

Fig. 4 is a perspective view illustrating an overall configuration of the reel seat illustrated in Fig. 1.

Fig. 5(a) is a plan view of the reel seat illustrated in Fig. 4, and Fig. 5(b) is a side view of the reel seat illustrated in Fig. 4.

Fig. 6 is a sectional view of a reel seat taken along an axial direction.

Fig. 7 is a diagram (1) for describing an operation of fixing a reel leg to the reel seat.

Fig. 8 is a diagram (2) for describing an operation of fixing the reel leg to the reel seat.

Fig. 9 is a diagram (3) for describing an operation of fixing the reel leg to the reel seat.

Fig. 10 is a diagram illustrating a second embodiment of the reel seat, and is a sectional view taken along the axial direction.

Fig. 11 is a diagram illustrating a third embodiment of the reel seat (an

enlarged view illustrating a fixed hood portion on a rear side), Fig. 11(a) is a diagram illustrating a state before the reel leg is rotated, and Fig. 11(b) is a diagram illustrating a state in which the reel leg is rotated and fixed.

Fig. 12 is a diagram illustrating a fourth embodiment of the reel seat, Fig. 12(a) is a sectional view of the reel seat taken along the axial direction, Fig. 12(b) is a sectional view taken along line A-A of Fig. 12(a), and Fig. 12(c) is a diagram illustrating a configuration of a main part of the reel leg.

Fig. 13 is a diagram illustrating a fifth embodiment of the reel seat (an enlarged view illustrating a fixed hood portion on a rear side), Fig. 13(a) is a diagram illustrating a state before the reel leg is slid in the axial direction, and Fig. 13(b) is a diagram illustrating a state in which the reel leg is slid in the axial direction and fixed.

Description of Embodiments

[0013]

Fig. 1 is a diagram illustrating an example of a fishing rod comprising a reel seat according to the present invention and a spinning reel that is a fishing reel.

A fishing rod 1 illustrated in the drawings is configured as a telescopic type in which a plurality of rod shafts 7A, 7B, 7C, and 7D is accommodated in a rod butt 5 and sequentially pulled out and joined. In this case, the number of rod shafts (the number of joining rod shafts) accommodated inside the rod butt 5 is arbitrary, and in the configuration illustrated in the drawings, the rod shaft 7D having the smallest diameter is a tip rod shaft.

Note that in the following description, a rod tip side is defined as the front (forward), and the rod butt side is defined as the rear (rearward).

[0014]

Fishing line guides 8A to 8F for guiding a fishing line are mounted to the plurality of rod shafts 7A, 7B, 7C, and 7D. These fishing line guides comprise those fixed at a tip of the rod shaft with a line stopper or the like and those (slidable guides) that are slid along the rod shaft and fixed at predetermined positions. Furthermore, a top guide 9 is mounted to the tip of the rod shaft 7D (tip rod shaft).

[0015]

In the fishing rod 1 of the present embodiment, a grip 10 is mounted to the rod butt 5, and the rod butt 5 in which the rod shafts 7A to 7D are sequentially accommodated can be attached to and detached from the grip 10. That is, a preferred type of rod shaft can be selected according to a usage mode at a fishing site or the type of fishing reel to be mounted, and can be attached to and detached from the grip 10. In this case, the structure of attachment and detachment of the rod shaft to and from the grip 10 is not limited to a threaded engagement or the like.

[0016]

Figs. 2 and 3 are diagrams illustrating a configuration of the spinning reel illustrated in Fig. 1, Fig. 2 is a perspective view, and Fig. 3 is a diagram illustrating a main part of the reel leg.

As is known, a reel leg 90 to be mounted on the reel seat is integrally formed with a reel main body 81 of a spinning reel (hereinafter, referred to as a reel) 80 according to the present embodiment. A rotor 82 that is rotatably supported and a spool 84 that is supported to be movable forward and rearward in synchronization with a rotational motion of the rotor 82 are disposed on a front side of the reel main body 81. In addition, a handle 87 for a winding operation is provided on the reel main body 81.

[0017]

The rotor 82 comprises a pair of arm portions 82a that rotates around the

spool 84, and a bail support member 83b, to which a base end of a bail 85 is attached, is rotatably supported at the front end of each arm portion 82a between a fishing line winding position and a fishing line releasing position. In this case, one base end of the bail 85 is attached to a fishing line guide portion (line roller) 86 provided integrally with the bail support member 83b.

[0018]

With the above configuration, when the handle 87 is operated for winding, the rotor 82 is rotationally driven via a known driving force transmission mechanism accommodated in the reel main body, and the spool 84 reciprocates in a front-rear direction via an oscillation mechanism. Therefore, when the handle 87 is operated for winding, the fishing line inserted through the fishing line guides 8A to 8F and the top guide 9 of the fishing rod 1 is evenly wound around the spool 84 via the fishing line guide portion 86 of the rotationally driven rotor 82.

[0019]

An attachment portion 91 that extends along a central axis direction of the fishing rod (grip) is integrally formed at the tip of the reel leg 90. The reel leg 90 (attachment portion 91) of the present embodiment comprises a facing surface 91a that faces a reel leg placement portion of the reel seat to be described later, a cylindrical convex portion 91b constituting a locking structure to be described later is provided at the center of the facing surface 91a, and a locking and releasing mechanism to be described later is provided at the end (on the rear end side in the present embodiment).

[0020]

Figs. 4 to 6 are diagrams illustrating a configuration of the reel seat, Fig. 4 is a perspective view illustrating an overall configuration, Fig. 5(a) is a plan view, Fig. 5(b) is a side view, and Fig. 6 is a sectional view of the reel seat taken along the axial

direction.

[0021]

The grip 10 comprises a reel seat 12 that allows the reel 80 to be attached and detached. Note that the reel seat 12 of the present embodiment is configured such that the reel leg 90 (attachment portion 91) of the reel 80 to be attached and detached is rotated in a plane and fixed between a pair of fixed hoods provided on the reel seat.

[0022]

A main body 12A of the reel seat 12 comprises a reel leg placement portion 13 on which the reel leg 90 (attachment portion 91) of the reel 80 is placed. In this case, the reel seat 12 (the main body 12A of the reel seat) of the present embodiment is formed integrally with the grip 10, but may be formed separately from the grip 10 and integrated with the grip 10. In addition, the grip 10 and the reel seat 12 can be formed of metal, hard resin (fiber-reinforced resin), wood, or the like, and constituent materials thereof are not limited.

[0023]

The fixed hoods for fixing at least a part of the front side and the rear side of the reel leg in the axial direction are provided on the front and rear sides of the reel seat 12 in the axial direction. The fixed hood only needs to have a function of covering the surface on the front side and the rear side (at least partially) of the reel leg and fixing the reel, as in the reel seat of a known fishing rod. In the present embodiment, a pair of fixed hoods 15 and 16 that fastens and fixes the front and rear of the reel leg 90 placed on the reel leg placement portion 13 is provided, and the attachment portion 91 of the reel leg 90 is fixed on the front side and the rear side. Note that as illustrated in Fig. 4, the fixed hoods 15 and 16 of the present embodiment are configured to be flush with the surface of the grip 10, but may be formed in a bulging shape to conform to the shape of

the attachment portion 91.

[0024]

The fixed hoods 15 and 16 comprise receiving holes 15a and 16a that open toward the reel leg placement portion 13. The receiving holes 15a and 16a have wall portions 15b and 16b as bottom portions at the ends in the axial direction, respectively. In this case, it is preferable that the length between the wall portions in the axial direction is substantially the same as the length of the attachment portion 91 in the axial direction such that the attachment portion 91 of the reel leg 90 is accommodated and there is no play in the axial direction.

[0025]

The pair of fixed hoods 15 and 16 is provided with guide portions 15A and 16A that allow the reel leg 90 to be slid to guide the attachment portion 91 to a predetermined installation position between the pair of fixed hoods. The guide portions 15A and 16A of the present embodiment are configured as opening portions that open on the opposite side surfaces of the pair of fixed hoods 15 and 16 with respect to a central axis X of the main body 12A of the reel seat 12 (hereinafter, referred to as insertion opening portions 15A and 16A).

[0026]

As described above, the insertion opening portions 15A and 16A are formed on the opposite side surfaces of the fixed hoods 15 and 16 with respect to the central axis X of the main body, so that a fixing operation can be easily performed by abutting (placing) the attachment portion 91 of the reel leg 90 against the reel leg placement portion 13 and simply performing a rotational operation (sliding operation).

[0027]

A locking structure 13A that restricts the movement of the reel leg that has

been moved to a predetermined position (brings the reel leg into a fixed state) is provided on the surface (here, a surface 13a of the reel leg placement portion 13) of the main body 12A of the reel seat 12 and the facing surface 91a of the reel leg 90 facing the surface 13a of the main body. The locking structure 13A of the present embodiment comprises a fitting hole 13b, which is formed on the surface 13a of the main body and has a circular cross section to be a recess portion; and a cylindrical convex portion 91b (refer to Fig. 2), which is formed on the facing surface 91a of the reel leg 90 and has a circular cross section to be a convex portion. Therefore, the movement of the reel leg guided through the insertion opening portions 15A and 16A is restricted after the sliding operation due to the fitting of the recess and convex portions constituting the locking structure 13A.

[0028]

With the locking structure 13A comprising the recess and convex portions, when the recess and convex portions are fitted together and the reel leg 90 is guided to a predetermined installation position, the variation of the reel leg 90 is restricted in 360 degrees, and thus it is possible to eliminate play. In this case, the convex portion 91b is preferably formed at the center (the center in the axial direction and the width direction) of the attachment portion 91 of the reel leg 90, and thereby it is possible to obtain a stable fixed state of the entire reel without any play. In addition, at such an installation position of the reel leg 90, by configuring the front and rear ends of the attachment portion 91 of the reel leg to respectively face the wall portions 15b and 16b of the receiving holes 15a and 16a of the fixed hoods 15 and 16 with substantially no gap, it is possible to more reliably suppress play in the axial direction.

[0029]

The reel seat 12 is provided with a locking and releasing mechanism 20 that

fixes the reel leg 90 in a restriction state when the reel leg 90 is moved (accommodated) to the installation position and releases the fixed state.

The locking and releasing mechanism 20 according to the present embodiment is configured such that, by fitting the reel leg 90 to the fitting hole 13b formed on the surface 13a of the main body 12A and rotating the reel leg 90 as it is to be moved to the installation position, the reel leg 90 is in the fixed state when the reel leg 90 is at the installation position, and the fixed state can be released by a user's operation. The locking and releasing mechanism 20 is preferably provided on the end side of the reel seat 12 (attachment portion 91), and thereby a stable fixed state can be obtained by each restriction by the locking structure 13A provided at the central portion and the locking and releasing mechanism 20 provided on the end side.

[0030]

The locking and releasing mechanism 20 of the present embodiment is provided on both the reel seat 12 side and the facing surface 91a side of the reel leg 90 corresponding thereto. Specifically, the locking and releasing mechanism 20 comprises a protrusion 23a that is provided on the surface 13a of the main body 12A so as to protrude and retract and is biased by a spring 22; a fitting hole 95 that is formed on the facing surface 91a of the reel leg 90 and into which the protrusion 23a is fitted; and a release mechanism 40 that is provided on the main body 12A and releases a state in which the protrusion 23a and the fitting hole 95 are fitted by the biasing force of the spring 22.

Note that the protrusion 23a is located inside the fixed hood 15 and is provided at a position closed off from the outside.

[0031]

As illustrated in Fig. 6, the locking and releasing mechanism 20 is configured

by fitting and fixing a block body 20A, which holds the main components, into a recess 12B formed on a side of the main body 12A (grip 10) of the reel seat opposite to the reel leg placement portion 13. The block body 20A is configured to be attachable to and detachable from the recess 12B by a locking screw 25, and when the block body 20A is mounted, the surface of the main body 12A (grip 10) and the surface of the block body 20A are flush with each other, so that the grip performance is not affected.

Note that the locking and releasing mechanism 20 may be integrally formed with the main body 12A (grip 10) of the reel seat without being held by the block body.

[0032]

A bottomed retaining hole 20a is formed inside the block body 20A, and a base portion 23c of an engagement operation member 23 is fitted into this retaining hole 20a in a state where the spring 22 is wound. An operation button 41 constituting the release mechanism 40 is integrally formed with the engagement operation member 23, and extends coaxially with the base portion 23c, and an end of the operation button 41 protrudes from the surface of the main body 12A of the reel seat (surface of the fixed hood 15).

[0033]

The engagement operation member 23 is integrally formed with the protrusion 23a that branches at an intermediate position of the engagement operation member 23 and can protrude and retract with respect to the surface 13a of the main body 12A. The protrusion 23a and the operation button 41 extend substantially in parallel, and can be moved up and down integrally (D1 and D2 directions in Fig. 6). Therefore, a gap S is formed in the main body 12A of the reel seat such that the engagement operation member 23 can be moved up and down.

[0034]

As illustrated in Figs. 2 and 3, it is preferable that a groove (guide portion) 97 that guides the fitting hole 95 toward the protrusion 23a of the locking and releasing mechanism 20 is formed in the attachment portion 91 of the reel leg 90. As described above, when the reel 80 is mounted on the reel seat 12, the reel leg 90 is rotated about the convex portion 91b with respect to the surface 13a of the reel leg placement portion 13 of the reel seat 12. Therefore, by forming the arc-shaped groove 97 about the convex portion 91b, the fitting hole 95 of the reel leg 90 is smoothly guided toward the position (predetermined position) of the protrusion 23a by the groove 97.

[0035]

In this case, the groove 97 is preferably formed in an inclined shape such that a contact portion (bottom surface 97a) with the protrusion 23a, which is elastically biased by the spring 22, allows the protrusion 23a to gradually retract as the reel leg 90 is rotated. With such a guiding shape, the operation button 41 integrally formed with the protrusion 23a gradually retracts as the reel leg 90 is moved toward the installation position, so that this state can be visually checked. Furthermore, when the protrusion 23a is fitted into the fitting hole 95, a click sound is generated and the operation button 41 protrudes, and thus it is easier to intuitively recognize the fixed state of the reel leg.

[0036]

Next, an operation of fixing the reel leg 90 to the reel seat 12 will be described with reference to Figs. 7 to 9.

First, as illustrated in Fig. 7, the attachment portion 91 of the reel leg 90 is disposed in an oblique direction (obliquely with respect to central axis X) with respect to the reel leg placement portion 13 of the reel seat 12, and convex portion 91b of the attachment portion 91 is fitted into the fitting hole 13b of the reel seat. With this fitting operation, the surface 13a of the reel leg placement portion 13 and the facing

surface 91a of the attachment portion 91 of the reel leg 90 come into surface contact to obtain a locked state.

[0037]

In this state, when the reel leg 90 is rotated (slid) about convex portion 91b as illustrated in Fig. 8, both sides of the attachment portion 91 of the reel leg 90 pass through the insertion opening portions 15A and 16A of the fixed hoods 15 and 16, and are moved to the predetermined installation position as illustrated in Fig. 9.

[0038]

During the rotational operation, the protrusion 23a is smoothly guided by the groove 97 so that the reel leg 90 is moved toward the predetermined position, while the protrusion 23a gradually retracts along the bottom surface 97a of the groove 97. Therefore, since the operation button 41, which is integrally formed with the protrusion 23a, also gradually retracts in the same manner (in the D1 direction in Fig. 6), the proper engagement state can be visually checked by the operation of the operation button 41. In addition, as the reel leg 90 is moved toward the installation position, the operation button 41 gradually retracts, and when the protrusion 23a is fully fitted into the fitting hole 95, the protrusion 23a returns under the biasing force of the spring 22 (in the D2 direction in Fig. 6), so that a click sound is generated. This makes it easier to intuitively recognize the fixed state of the reel leg 90.

[0039]

Note that in a case where the fishing reel is to be removed from the reel seat 12, it is sufficient to press the operation button 41 constituting the release mechanism 40, against the biasing force of the spring 22. When the operation button 41 is pressed against the biasing force of the spring 22, the fitting between the protrusion 23a and the fitting hole 95 is released, so that the reel 80 can be easily removed from the reel seat 12

by rotating the reel leg 90 in the opposite direction.

[0040]

As described above, the fishing reel 80 can be easily attached to and detached from the reel seat 12 by a simple operation of only performing the rotational operation (sliding operation) in the same plane as the reel leg placement portion 13. In addition, since the convex portion 91b of the attachment portion 91 of the reel leg 90 and the fitting hole 13b of the reel seat 12 are in the fitted state, the movement of the reel 80 (reel leg 90) in the axial direction and the width direction is restricted. In addition, in this restriction state, since the fixed hoods 15 and 16 press the attachment portion 91 of the reel leg 90, play is suppressed also in an up-down direction, and a stable fixed state of the reel leg can be obtained.

[0041]

Furthermore, in the locking and releasing mechanism 20 and the release mechanism 40 described above, since the operation direction of the constituent member is a direction perpendicular to a sliding direction of the reel leg, that is, a direction perpendicular to the reel leg placement portion 13, when the reel leg 90 is in the fixed state, the reel is restricted without any play in the axial direction so that a stable fixed state can be obtained.

[0042]

Next, other embodiments of the present invention will be described. Note that, in the embodiments to be described below, portions having functions similar to those of the first embodiment described above are denoted by the same reference numerals, and detailed description thereof will be omitted.

[0043]

Fig. 10 is a diagram illustrating a second embodiment of the reel seat, and is a

sectional view taken along the axial direction.

As in the above-described embodiment, the fixed hood of the reel seat according to the present invention be configured to fix both the front and rear sides of the reel leg in the axial direction, or may be configured to fix only one of the front and rear sides. In the embodiment illustrated in Fig. 10, as in the first embodiment, the rear side of the reel leg 90 is fixed by the fixed hood 15, and the front side of the reel leg 90 is fixed by the locking structure 13A.

[0044]

The locking structure 13A of the present embodiment is provided on the front end side of the attachment portion 91 of the reel leg 90, and as in the first embodiment, comprises the fitting hole 13b which is formed on the surface 13a of the main body of the reel seat and has a circular cross section to be a recess portion; and the cylindrical convex portion 91b which is formed on the facing surface 91a of the reel leg 90 and has a circular cross section to be a convex portion, and the fitting hole 13b and the convex portion 91b are fitted to constitute the locking structure 13A.

[0045]

In addition, the locking and releasing mechanism 20 is configured as in the first embodiment described above (similar to the configuration illustrated in Fig. 6) by fitting the base portion 23c of the engagement operation member 23 into the bottomed retaining hole 20a in a state where the spring 22 is wound. The operation button 41 constituting the release mechanism 40 is integrally formed with the engagement operation member 23, and extends coaxially with the base portion 23c, and an end of the operation button 41 protrudes from the surface of the main body 12A of the reel seat (surface of the fixed hood 15).

[0046]

As described above, even in a case where the fixed hood is provided on at least one end of the attachment portion 91 (provided on the rear end in the second embodiment, but may be provided on the front end) and the locking structure is provided on the opposite side, the same operational effects as in the first embodiment can be obtained. In the present embodiment, since it is not necessary to provide the fixed hood on the front side, the configuration of the reel seat can be simplified.

[0047]

Fig. 11 is a diagram illustrating a third embodiment of the reel seat (an enlarged view illustrating a fixed hood portion on a rear side), Fig. 11(a) is a diagram illustrating a state before the reel leg is rotated, and Fig. 11(b) is a diagram illustrating a state in which the reel leg is rotated and fixed.

[0048]

In this embodiment, the configuration of the locking and releasing mechanism 20 described above is modified.

The locking and releasing mechanism may have any configuration as long as the reel leg 90 can be fixed when the reel leg 90 is guided to a predetermined position of the reel leg placement portion 13 and accommodated and the fixed state can be released.

[0049]

A locking and releasing mechanism 20B of the present embodiment has a configuration in which an elastically deformable locking protrusion portion 15d is provided at the front edge of the receiving hole 15a of the fixed hood 15 and a protrusion portion 91d, which is brought into an engagement state with the locking protrusion portion 15d when the reel leg is rotated to a predetermined installation position, is provided on the surface of the attachment portion 91 of the reel leg 90. In addition, the guide portion formed in the fixed hood 15 is constituted by the insertion

opening portion formed on the side surface of the fixed hood, as in the above-described embodiment.

[0050]

In the locking and releasing mechanism 20B, when the reel leg is rotated toward the predetermined installation position, the locking protrusion portion 15d and the protrusion portion 91d are brought into the engagement state, and the movement of the reel leg in the axial direction can be restricted. In addition, also in a direction perpendicular to the axial direction, by providing a locking protrusion portion having the similar function to the fixed hood and providing a protrusion portion having the similar function to the attachment portion of the reel leg, the movement in the width direction can be restricted.

[0051]

With such a locking and releasing mechanism 20B, the structure can be further simplified.

Note that the locking structure can be configured as in the first embodiment and the second embodiment described above.

[0052]

Fig. 12 is a diagram illustrating a fourth embodiment of the reel seat, Fig. 12(a) is a sectional view of the reel seat taken along the axial direction, Fig. 12(b) is a sectional view taken along line A-A of Fig. 12(a), and Fig. 12(c) is a diagram illustrating a configuration of a main part of the reel leg.

In this embodiment, as in the first embodiment, the pair of fixed hoods 15 and 16 is provided on the reel seat, and the reel leg is slid in a direction perpendicular to the axial direction through the guide portions (insertion opening portions) 15A and 16A formed on the same side surface.

[0053]

A locking structure 13C is provided between the fixed hoods 15 and 16 to lock the reel leg to the surface of the main body 12A of the reel seat and the facing surface of the reel leg facing the surface of the main body.

The locking structure 13C comprises a fitting groove 13e which is formed on the surface 13a of the main body to extend in a direction perpendicular to the axial direction and has an inverted triangular cross section to be a recess portion; and a convex portion 91e which is formed on the facing surface 91a of the reel leg 90 and has an inverted triangular cross section to be a convex portion, and the fitting groove 13e and the convex portion 91e are slidably fitted to constitute the locking structure 13C.

[0054]

In addition, in the locking and releasing mechanism 20A of the present embodiment, the protrusion 23a in a spring-biased state comes into contact with a side surface 91f of the attachment portion 91 of the reel leg 90 to fix the reel leg 90. In this case, when the attachment portion 91 of the reel leg 90 is inserted through the insertion opening portion 15A of the fixed hood 15, a side surface 91g on the opposite side of the attachment portion 91 comes into contact with an inner surface 15D of the side wall of the fixed hood 15, and the side surface 91f of the attachment portion 91 comes into contact with the spring-biased protrusion 23a of the locking and releasing mechanism 20A, so that the attachment portion 91 is also restricted in a direction perpendicular to the axial direction, and the attachment state of the reel is stabilized.

As described above, by simply sliding the reel leg 90 within the same plane, it is possible to easily mount the reel leg 90 to a predetermined installation position of the reel seat 12, and the configuration of the locking structure and the locking and releasing mechanism can be variously modified.

[0055]

Fig. 13 is a sectional view illustrating a fifth embodiment of the reel seat (an enlarged view illustrating a fixed hood portion on a rear side).

In the present embodiment, a sliding operation is performed on the reel leg 90 along a direction of the central axis X of the main body 12A of the reel seat 12 to fix the reel leg 90 to the reel seat 12.

[0056]

A locking and releasing mechanism 20C of the present embodiment has a configuration in which an elastically deformable locking protrusion portion 15g is provided at the front edge of the receiving hole 15a of the fixed hood 15 and a recess portion 91g, which is brought into an engagement state with the locking protrusion portion 15g, is provided on the attachment portion 91 of the reel leg. The surface of the main body 12A of the reel seat and the facing surface of the reel leg facing the surface of the main body are provided with, for example, a locking structure constituted by forming recess and convex portions 13e and 91e as illustrated in Fig. 12 along the axial direction.

[0057]

With such a configuration, when a sliding operation is performed on the attachment portion 91 of the reel leg 90 along the axial direction X indicated by an arrow along the locking structure so that the attachment portion 91 is moved to a predetermined installation position, the locking protrusion portion 15g and the recess portion 91g are engaged with each other to bring the reel leg 90 into the fixed state. In this case, the guide portion that is formed in the fixed hood 15 and slides the reel leg to guide the reel leg to the predetermined installation position is configured by the receiving hole 15a of the fixed hood 15.

[0058]

As described above, the reel leg and the reel seat can be attached to each other and detached from each other by being slid in the axial direction, and the structure can be further simplified.

[0059]

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

The above-described locking structure has a function of guiding the reel leg 90 to the guide portion when the reel leg 90 is fixed to the reel seat 12, and the configuration of the locking structure may be variously modified as long as the locking structure can restrict the movement of the reel leg that has been moved to a predetermined installation position through the guide portion. In addition, the locking and releasing mechanism may be variously modified as long as the reel leg 90 can be fixed when the reel leg 90 is guided (accommodated) to a predetermined position of the reel leg placement portion 13 and the fixed state can be released. In addition, the fixed hood only needs to have a function of fixing at least a part of the front and rear sides of the reel leg in the axial direction, and the shape thereof may be variously modified, such as partially covering the reel leg or forming a flush structure with the grip.

[0060]

Furthermore, in the configuration described above, the contact points between the two components, for example, the recess and convex portions 13b and 91b illustrated in Fig. 6, may be electrically connected so that power can be supplied between the reel side and the fishing rod side (comprising an external device capable of transmitting and receiving signals to and from the fishing rod) and various signals can

be transmitted and received.

Reference Signs List

[0061]

1	fishing rod
10	grip
12	reel seat
13	reel leg placement portion
13b	recess portion (fitting hole)
15, 16	fixed hood
20, 20B, 20C	locking and releasing mechanism
23a	protrusion
40	release mechanism
80	spinning reel (fishing reel)
90	reel leg
91	attachment portion
91b	convex portion