No. 799,491. PATENTED SEPT. 12, 1905.

L. PALMER.

LINE HOLDING DEVICE.

APPLICATION FILED FEB. 6, 1905.

Fig. 1.

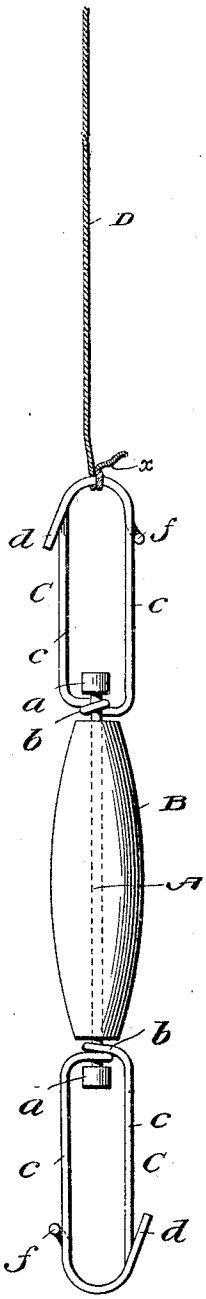


Fig. 2.

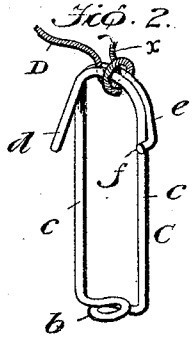


Fig. 3.

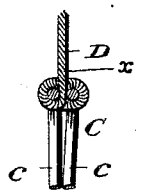
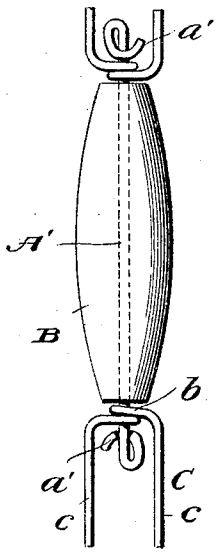


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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LINE-HOLDING DEVICE.

No. 799,491. Specification of Letters Patent. Patented Sept. 12, 1905.

Application filed February 6, 1905. Serial No. 244,428.

To all whom it may concern:

Be it known that I, LLEWELLYN PALMER, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Line-Holding Devices, of which the following is a specification.

My invention pertains to line-holding devices, more particularly swivel-joints for use in fishing-tackle; and it contemplates the provision of a swivel-joint the members of which are so connected as to assure the free turning of the one with respect to the other and one of the members of which is adapted for the expeditious connection of a cord or the like without entailing the provision of a knot or loop on the cord.

Other objects and advantages of the invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view of a swivel-joint comprising three members, the intermediate one of which is provided with a sinker, and the outer members are shown as connected to cords in accordance with my invention. Fig. 2 is a perspective view of one of the outer members of the joint with a cord properly applied thereto. Fig. 3 is an enlarged detail transverse section taken through the outer portion of the said outer member in a plane at one side of the cord, and Fig. 4 is a view of a modification hereinafter referred to in detail.

Referring by letter to the said drawings, and more particularly to Figs. 1 to 3 thereof, A is the intermediate member of the swivel-joint constituting one embodiment of my invention. The said member is provided at its ends with heads *a* and is shown as equipped with a sinker B, although the latter does not form an essential part of my invention. C C are the outer members of the joint. These outer members are identical in construction, and therefore a detailed description of the one shown in Figs. 2 and 3 will suffice to impart a definite understanding of both. The said outer member, Figs. 2 and 3, is formed of a single piece of wire of suitable caliber and comprises a base-coil *b*, which surrounds the intermediate member A at the inner side of one head *a* thereof, approximately parallel side bars *c* of about the proportional length illustrated, an arm *d*, which extends laterally and downwardly from one of the bars *c*, and an arm *e*, which extends downwardly and laterally from the other bar *c*. The said arms *d* and *e* lie side by side, and the arm *e* terminates in a lateral portion *f*, arranged to bring up against the bar carrying the arm *d* after the manner illustrated. D is the cord which is connected to the member C in accordance with my invention and without entailing the provision of a knot, loop, or the like on the cord. In so applying the cord the joint member C is held with the end of the arm *d* toward the user, and the end portion *x* of the cord is passed through the member from the left toward the right. The end portion *x* of the cord is then drawn up between the arms *d* and *e*, after which the major portion of the cord is wrapped toward the right around both arms *d* and *e*. The wrap is located between the end portions *x* and the portion *f* of arm *e*, and after it is made the major portion of the cord is drawn between the two arms *d* and *e*, so as to rest at the opposite side of the end portion *x* with reference to the said wrap. With this done it will be observed that the end portion *x* of the cord will be clamped between the major portion of the cord and the wrap of the cord above, while the wrap of cord passing around the two arms *d* and *e* has the effect of binding the whole tightly together after the manner of a tight knot, and it will also be observed that the greater the pull imposed on the major portion of the cord the more securely will the end portion *x* thereof be held. To disconnect the cord from the member C, it is simply necessary to draw the major portion of the cord back from between the arms *d* and *e* and past the end of arm *d* and then unwrap the cord from about the two arms, when the end portion *x* of the cord may be quickly and easily drawn from between the said arms. It will be readily appreciated from the foregoing that the cord or cords D may be connected to the member or members C in the manner described and as readily disconnected therefrom without knotting, looping, or otherwise deteriorating the cords, which is an important advantage, especially when the cords constitute parts of a fishing-line.

The modification of my invention shown in Fig. 4 comprises outer members C identical with the corresponding parts shown in

Figs. 1 to 3. The intermediate member A′ of said modification, however, differs from the member A, Figs. 1 to 3, in that its heads *a′* are formed by bending its ends. In this connection it will be noticed that one side bar of each outer member C forms a shoulder in connection with that portion of the coil of the member back of it. For this reason I bend each end of the intermediate member A′ so that when said end is turned against the shoulder of the complementary outer member it will present an inclination to, and hence be enabled to mount, the shoulder. In this manner the minimum of resistance is secured when the movement of either member C is such in relation to the corresponding head *a′* as to bring the obstruction presented by the head against the shoulder. Independent of this, however, it will be noticed that the base-coils of the two members C are turned in opposite directions as compared one with the other, so that under any circumstances the motion of one base-coil upon its complementary head is the reverse of that at the other end. Hence where the motion is such as to bring the obstruction presented by one head *a′* against the shoulder in its complementary base-coil the obstruction presented by the head *a′* at the other end of the intermediate member A′ will move toward the shoulder of its complementary base-coil from the higher side and drop over it without resistance. The entire effect, therefore, is to secure perfect freedom of motion at one end and the minimum of resistance at the other.

While I have described the outer members of my novel swivel-joint as being adapted for the expeditious connection of cords or the like having no loops, it is obvious that cords having loops may be readily used in connection with the members. This will be appreciated as an additional advantage, inasmuch as considerable fishing-tackle is sold with loops formed on the lines.

Notwithstanding the practical advantages peculiar to my novel swivel-joint it will be apparent by reference to the drawings that the said joint is simple and inexpensive in construction and is well adapted to withstand the usage to which such devices are ordinarily subjected.

I have entered into a detailed description of the present embodiments of my invention in order to impart a full, clear, and exact understanding of the said embodiments. I do not desire, however, to be understood as confining myself to the specific construction and relative arrangement of parts as shown and described, as such changes or modifications may be made in practice as fairly fall within the scope of my invention as claimed.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a line-holding device, a swivel-joint comprising a member having a head, and a second member formed of wire and having a base-coil surrounding the first-mentioned member at the inner side of the head thereof, bars extending from the base-coil, an arm extending laterally from one bar and an arm extending laterally from the other bar, resting alongside the first-mentioned arm and terminating in a portion arranged to bring up against the outer side of the first-mentioned bar.

2. The combination with a member formed of wire and having parallel bars, an arm extending laterally from one bar and an arm extending laterally from the other bar, resting alongside the first-mentioned arm and terminating in a portion arranged to bring up against the outer side of the first-mentioned bar; of a cord having an end portion drawn up between the arms and a major portion wrapped around the arms and then drawn up between the arms.

3. A device for the purpose described formed of wire and comprising parallel bars, an arm extending laterally from one of the bars, and an arm extending laterally from the other bar, resting alongside the first-mentioned arm and terminating in a portion arranged to bring up against the outer side of the first-mentioned bar.

4. In a line-holding device, a swivel-joint comprising an intermediate member having heads at its ends, and outer members each formed of a single piece of wire and respectively comprising a base-coil disposed at the inner side of one head of the intermediate member, parallel bars extending from the base-coil, an arm reaching laterally from one bar, and an arm reaching laterally from the other bar, resting alongside the first-mentioned arm and provided with a portion arranged to bring up against the outer side of the first-mentioned bar.

5. The combination with a device comprising bars, a resilient arm extending laterally from one of the bars, and a resilient arm extending laterally from the other bar and resting alongside the first-mentioned arm; of a cord having a major portion wrapped around the arms and an end portion extending between the arms and interposed between the wrap of the major portion and the remainder of said major portion.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LLEWELLYN PALMER.

Witnesses:

ALLAN R. BEAN,

JOHN RITTER.