(No Model.)

J. B. THURSTON.

JOINT CLAMP FOR FISHING RODS.

No. 475,024. Patented May 17, 1892.

Fig. 1.

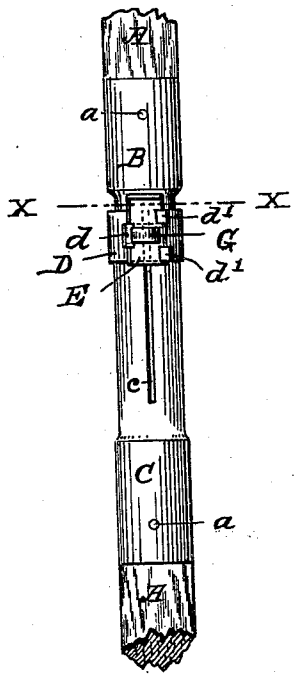

Fig. 3.

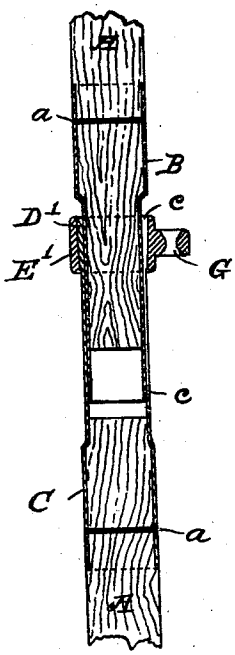

Fig. 5.

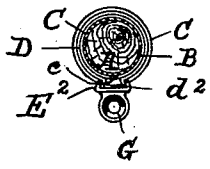

Fig. 2.

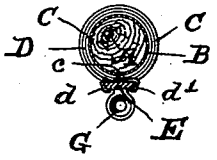

Fig. 4.

Witnesses
F. J. Sexton.
F. A. Merrick

Inventor
J. B. Thurston

UNITED STATES PATENT OFFICE.

JAMES B. THURSTON, OF CONCORD, ASSIGNOR OF ONE-HALF TO WINFIELD S. HEAD, OF HOOKSETT, NEW HAMPSHIRE.

JOINT-CLAMP FOR FISHING-RODS.

SPECIFICATION forming part of Letters Patent No. 475,024, dated May 17, 1892.

Application filed September 7, 1891. Serial No. 404,984. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. THURSTON, a citizen of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improved Joint-Clamps for Fishing-Rods; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the metallic ferrules used to unite the several sections of a fishing-rod. The ordinary method of joining these sections, consisting of plug-and-socket ferrules, while affording a most rapid and convenient means of adjustment at the same time proves a source of considerable annoyance to sportsmen when separating the joints. The firmness of the rod being wholly dependent upon the nicety of workmanship bestowed upon the plug-and-socket ferrules by which the sections are connected, a closely-fitted plug-and-socket joint may be quite easily united; but when the time comes to separate the joint, owing to atmospheric conditions, it may be quite a difficult matter, and in some cases rods are broken in the attempt to pull the ferrules apart.

The object of the present invention is to overcome the foregoing difficulties by making the socket portion of the joint capable of being tightened upon its plug when properly adjusted thereon and of ready relaxation for removal therefrom.

The invention consists in providing the socket portion of a plug-and-socket joint with a slot, admitting of its expansion and contraction, and a tapering slide operating in conjunction with tapering portions of the said socket, as fully set forth in the following specification and claims, and clearly illustrated in the accompanying drawings, forming a part thereof, of which—

Figure 1 is an elevation of a metallic joint for fishing-rods, showing the slot in the socket and one of my improved methods for the contraction of said socket, Fig. 2 being a cross-section of the joint taken at X X, and Fig. 3 being a longitudinal section of one of my improved plug-and-socket joints, showing a modified form of slide for contracting the socket-ferrule. Fig. 4 is a perspective view of the form of slide shown in Figs. 1 and 2, and Fig. 5 is a cross-section showing another modification.

Similar letters of reference indicate like parts throughout the various views.

A represents sections of a rod, B the plug-ferrule, and C the socket-ferrule of metallic joints for fishing-rods, the ferrules being secured to the rod-sections each by a rivet *a*, as shown. The socket is made a snug fit for the plug, and in order to facilitate the union of the two I form the slot *c* in the socket-ferrule C sufficiently long to extend beyond the point reached by the plug-ferrule B, and then some handy means for closing the outer upon the inner ferrule is necessary in order to secure a firm joint. For practical utility this joint should be as easy and quickly relaxed as it is tightened, and the means employed to adjust it should be as compact and close to the ferrule C as possible in order to avoid catching bushes, twigs, and the like in transit. For this reason I employ a tapering slide, which, acting against tapering portions of the ferrule C, by a slight movement of about one-eighth of an inch in one direction causes said ferrule to tighten itself upon the ferrule B, while a similar movement in the opposite direction causes said outside ferrule to relax its hold, when it can be easily removed from the ferrule B.

I show in the drawings two forms of slide—viz., E E′—and to either of these I attach the loop or eye G, which serves two purposes—*i. e.*, carrying the fish-line and acting as a handle by which the slide is moved when required. The slide E is a rectangular oblong tapering piece of metal resting in ways *d d′*, which may be formed integral with the ferrule C or with a sleeve D, secured to or formed integral with said ferrule, the latter being the construction shown in Fig. 1, said way *d* extending from the right side of the said sleeve and that way *d′* nearest to the end of the said ferrule C being also nearest to the said slot *c* in said ferrule. The slide E′ encircles the said ferrule C and is bored tapering to correspond with

the tapering sleeve D′, secured to or formed integral with said ferrule, while the slide E^2 is fitted to the outer edges of the ways d^2, which are tapering, either construction involving the same principle and accomplishing the same result—viz., to tighten or loosen one upon the other ferrule by moving a slide.

Having described my invention, what I claim is—

1. In plug-and-socket ferrule-joints for fishing-rods, a socket-ferrule provided with a slot, a tapering slide, and a tapering way provided upon said socket-ferrule for mounting said slide, substantially for the purpose set forth.

2. In plug-and-socket ferrules, a slotted socket-ferrule and a tapered sliding clamp capable of securing the outer to the inner ferrule.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES B. THURSTON.

Witnesses:
DANIEL B. DONOVAN,
F. A. MERRILL.