J. A. ROBERTSON.
Fishing-Rod.

No. 206,264. Patented July 23, 1878.

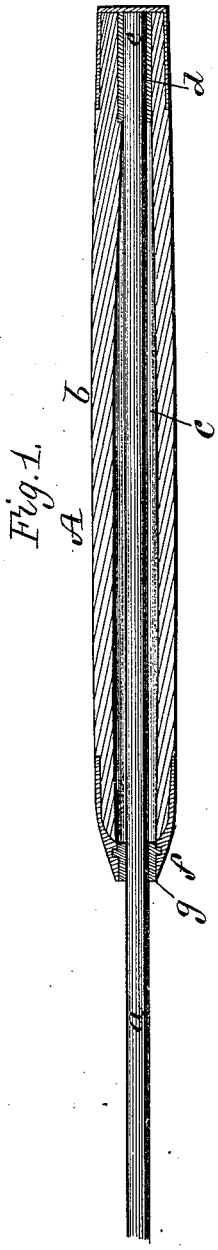

Fig. 1.

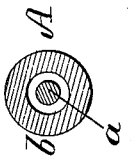

Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN A. ROBERTSON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN FISHING-RODS.

Specification forming part of Letters Patent No. **206,264**, dated July 23, 1878; application filed June 8, 1878.

To all whom it may concern:

Be it known that I, JOHN A. ROBERTSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Fishing-Rods, of which the following is a specification:

This invention relates to improvements in fishing-rods where the elasticity of the rod is preserved entire from the "tip" to the extreme end of the "butt;" and consists in making the butt in two portions, the smaller being inclosed in the larger, which is tubular and of sufficiently large bore to permit the smaller to describe throughout its whole length the curve it would naturally assume when bent, and which is now lost in the hand portion of the butt.

The drawings accompanying this specification represent, in Figure 1, a longitudinal central section of so much of a fishing-rod as needed to illustrate my invention. Fig. 2 is a transverse section of the same.

In the above-named drawings, A represents the "butt," so called, of a fishing-rod, or the largest length of a rod, which is held at one end in the angler's hand, such butt being composed of two pieces, *a b*, the former, *a*, being the last or largest length of the rod, and containing at its smallest end the female ferrule, which receives the large end of the next length, while *b* represents the band portion or handle of the butt, which is held in the angler's hand, and is provided with means for confining the reel to it.

Heretofore the butts of fishing-rods have been made in one piece—that is to say, in such manner that no slip movement or other play is permitted between one portion and another; consequently the elasticity and play of the rod cease at the point where the swell of the handle begins.

In carrying out my invention I make the piece *a* independent of the piece *b*, and I bore out the piece *b*, as shown at *c*, to receive the inner end of the said piece *a*.

The bore or inclosure *c* is of larger diameter in its center than at its ends—that is to say, is elliptical in shape—in order that when the piece *a* is bent into a curved form by the strain upon the rod this curve shall extend from end to end, as the bore of the handle *b* is sufficiently large to permit of this.

To properly steady the inner end of the piece *a* within the bore *c* of the handle and prevent tendency to rattle or looseness therein, as well as to prevent in part separation of the two, I provide, at the bottom of such bore, a socket, *d*, into which the end *e* of the piece *a* tightly fits, while, to prevent play or looseness between the said piece and the outer end *f* of the handle, the bore *c* at this point should be sufficiently small to tightly inclose *a*, and, if desirable, an india-rubber or other packing, *g*, may be employed at the joint to insure the desired result and prevent water from getting access to the interior of the handle.

A screw-cap may, if desirable, inclose the piece *a* and screw down upon the outer end of the handle to conceal the joint at *f*. The said joint at *f* permits of the slight endwise slip between the piece *a* and handle *b* which occurs when the rod is bent into a curve.

The socket *d* may be a female screw, into which the end of the length *a* screws, or the joint may be simply a tenon and socket.

I have contemplated employing a spline and groove or other connection at the joint *f* to prevent liability of the length *a* turning in the handle *b*; but in practice the joint at *d* will probably answer all requirements.

By the above-described construction of fishing-rod I obtain many advantages, among which the following are prominent: First, the elasticity of the rod is preserved entire from the tip to the extreme end of the butt, and the rod practically lengthened to the extent of the length of the handle, and more in the case of split bamboo rods, so called. Second, I am enabled to utilize many valuable pieces of wood for the first length of a rod which are not of sufficient diameter to make the handle of the butt. Third, one handle can be made interchangeable with and available for several rods, and many beautiful varieties of wood may be used for a handle which are not sufficiently strong or elastic to make the length. Fourth, in the manufacture of rods from rent and glued bamboo, which are now eagerly sought after by anglers, it is impossible to effect a sudden swell of the handle; but this

swell must be continued some distance outward from such handle, thereby impairing the elasticity of the whole rod to a greater extent than in wooden rods whose handle portion may be turned to any desired shape.

With my method the first length of a rent bamboo rod may be made of uniform taper with the other lengths, and the handle be made of wood or other material, thereby greatly lessening the labor and cost of manufacturing the rod and greatly improving its play and power.

Having thus described the nature and purposes of my invention and the manner in which the same is to be carried into effect, I claim as my invention, and desire to secure by Letters Patent of the United States, as follows:

1. A fishing-rod in which the butt is in two parts, the handle portion being tubular, and the other, the first or largest length of the rod, inclosed partially within the handle, while the bore of the handle is elliptical or thereabout in form, to enable the portion of the rod's length within such bore to adapt itself to the curve of the remainder, substantially as and for purposes stated.

2. In a fishing-rod in which the butt is in two portions, as stated, the bearing between the two, as shown at *f*, in combination with the socket in the bottom of the bore of the handle, the joint permitting of the requisite slip between the parts and serving to exclude water from such bore, substantially as and for purposes stated.

3. In a fishing-rod, the combination, with the butt or lower end of the rod, of an external tubular handle, forming a butt in two parts, a portion of one being inclosed in the bore of the other, and with requisite slip motion between them to allow of the various degrees of curvature with the bearing of the rod, substantially as and for purposes stated.

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Witnesses:

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