

HIRAM LEONARD AT WORK HAND TOOLING ONE OF HIS FIRST SPLIT-BAMBOO RODS WHICH SET THE STANDARD FOR THE WORLD

## FATHER of the FLY ROD

by SPARSE GREY HACKLE



THE TRUE PURPOSE of a fly rod is to prevent its bearer from being arrested for vagrancy, for the delight of trout fishing is not the full creel but things seen and people met. A roughly dressed man idling with a rod in his hand is an angler; without it he is a vagabond.

And yet a fine fly rod is a magnificent thing, a strain of music made visible, a living part of the hand that holds it.

Many an angler becomes so enchanted with the casting of a perfect rod that he resents interruption by trout.

The fly rod is, in fact, a sort of miracle. A typical 8-footer contains only two-and-a-fraction ounces of bamboo, but it can throw a fly 100 feet or kill a 20-pound salmon and after a quarter of a million casts still be a good rod.

The miracle is a modern one, for although fly rods of a sort are older than recorded history, the first that was anything more than a limber stick was made only about 75 years ago. Many men contributed to the development of the fly rod, but the man who took the last great steps in creating the fly rod that we know today was an American. He made the American fly rod the world's standard. And from the remote community of Bangor, Maine this American's name went round the world until it was recognized wherever flies were cast for trout. But only his name; even in his own country the man himself is almost unknown.

The man was Hiram L. Leonard, who not only achieved genius in several fields but was one of the most colorful and individualistic characters in the history of American angling.

He was born in Maine but grew up near Honesdale, Pa. By the time he was 20 he was "in charge of the machinery" of a coal mining company. Then he went to Bangor, Me., and was, successively, a taxidermist, a gunsmith, a professional market hunter and fur trader, and a taxidermist again, before he took up rodmaking.

Henry David Thoreau met him in 1857, when he was a hunter, and described him in Canoeing in the Wilderness as a handsome man of good height but not apparently robust, of gentlemanly address and faultless grooming (see

above). He was a spiritualist, a vegetarian who abhorred liquor and detested tobacco. He was a good musician, playing the flute and bass viol, and held the entertaining belief that a man could not make a good fishing rod unless he loved music and could play at least one instrument.

Leonard set foot on the path to fame when a Boston sporting-goods house, Bradford & Anthony, was so impressed with the workmanship of a wooden rod that he had made for his own use that they started him making split bamboo rods for them. This type was becoming popular and the firm was having trouble getting well-made rods.

That was in 1871, when Leonard was 40 years old. From the start, he had more work than he could handle, even though he soon hired Fred Thomas to help him and, subsequently, Ed Payne, Billy Edwards and two of his cousins, Hiram and Loman Hawes, whom he brought up from Honesdale. Incidentally, all of those names—Thomas, Payne, Edwards and Hawes—were given to famous brands of fine fly rods in after years.

Fly rods had been made of strips split from a stalk of bamboo, planed to a fit and glued together to form a rod joint, well over 100 years before Leonard ever saw one. But they were so badly designed and made that none of them could cast 70 feet, a distance to which a man can throw a line with his bare hand if he knows how. It was the nature of Leonard's art that he converted those old switches into the modern miracle through three subsidiary miracles of his own—engineering design, craftsmanship and a new secret material.

He was the first man to make, in 1871 or 1872, a six-strip rod instead of the four-strip construction previously used. Anyone who can calculate things like longitudinal shear and bent-beam stresses can prove by immutable mathematical principles that the six-strip rod of hexagonal cross-section is inherently the best. I can't. But it is.

Leonard was also the first to use compound tapers of calculated design. And what that amounts to is this: tapers

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are vital in implements that deliver a stroke—golf clubs, racing oars, polo mallets, horsewhips and the like—because such implements increase their effectiveness by bending at the start of the stroke and straightening at the finish. Shaping the shaft with varying tapers at different points permits the force of the stroke to be controlled, timed and directed.

Leonard's second contribution was a perfection of workmanship never previously approached. He was a superb craftsman, with genius in his hands, and could make the good rods that he did, at the start, with simple hand tools. But he never could have kept up with his orders by such methods, even though he had hired and trained help. So he designed some tools of his own.

## SECRET OF THE BEVELER

Chief of the several machines which he invented was the "beveler," which Leonard had in use certainly in 1877 and probably in 1876. It cut the triangular, tapered strips, six of which go into each section of a rod. It cutand still cuts, for makers of Leonard, Thomas and Payne rods, and maybe others, still use the beveler unchanged today-the strip complete with all the varying compound tapers on its outer surface. The beveler produced gluejoints so closely fitted as to be invisible under a 20-power microscope and dimensions accurate to within a few thousandths of an inch at any point on the rod.

In an age of industrial secrecy Leonard was notable for his secretiveness. He realized that he had the rodmaking world by the tail and took steps to maintain his hold. The beveler was always kept in a locked room and only he and his nephew, Reub Leonard, operated it. If Fred Thomas had not hung around and peeked until he found out how it worked, he and Payne and Edwards and Hawes would not have been able to make the rods they did when they quit the Leonard plant. To this day, according to my information, the beveler at the Leonard plant is kept in a locked room, and only one man knows how to run it.

Leonard was, if possible, even more secretive about his third contribution to the modern fly rod—the use of Tonkin cane as a rodmaking material.

Tonkin (a misnomer), the bamboo used for fly rods today, is a thick-walled and heavy-fibered cane found in China which, weight for weight, is

unequaled for elasticity and resilience by any other material.

William Mitchell, a celebrated rodmaker of the Civil War period, stated in the '80s that he had made a rod of "Chinese cane" in 1869, but apparently it made no impression on him.

But Mrs. Hiram Hawes, H. L. Leonard's daughter, recalls that in 1877 Loman Hawes got hold of an umbrella, down in Bangor, that had bamboo ribs and knew that it must be something other than Calcutta, the Indian cane which up until that time was used for fly rods. Calcutta would not have stood such treatment. He and Leonard—or maybe just Leonard—found out that the stuff was Tonkin and located a source of supply (it has always been the monopoly of a few British dealers in Hong Kong).

With it Leonard's nephew Reub increased the title-winning distance cast from 80 feet in 1882 to 102 feet in 1888. (Today's record: 194 feet.)

In 1877 Leonard lost control of his name and business by going into part-

nership with a Boston man named Kidder and forming the H. L. Leonard Rod Co., to which he gave the exclusive right to his name and services in a cast-iron contract. A year later Kidder sold out his interest to William Mills & Son of New York, who had recently become sole agents for the Leonard rod.

The Mills firm wanted Leonard closer to New York, so in 1881 he moved his plant to Central Valley, N.Y., where it still is. About 1896 there was a big all-round row of some sort, with the result that Leonard sold his interest in the H. L. Leonard Rod Co. to the Mills firm, and all his key workmen—Thomas, Payne, Edwards and the Hawes brothers—quit and started rod businesses of their own. Thereafter Leonard had little to do with the firm. He died in 1907 at the age of 76.

There is only one more thing to note about Leonard. He never taught anyone, even his own nephews, anything about the calculation of rod tapers. After his death there was no one in the



"Nothing elaborate. They're just going up the Hudson."

world for a good many years who could calculate the design of a fly rod as Leonard had, on an engineering basis. It took years of fumbling experiment, suggestions from customers and the imaginative thinking of a few advanced amateurs like the late Robert W. Crompton of Minneapolis before the custom industry began making good rods again.

## CUSTOM ROD COSTS \$150

It is probable that the total output of strictly first-class custom fly rods since Hiram L. Leonard made the first one is today not greatly in excess of 100,000 and that the current output is nearer 2,500 rods a year than 5,000. As to price, Leonard's first rods sold for \$35 in a time when workmen supported their families on \$1 a day. The price of a first-class custom trout rod today is from \$100 to \$150, depending on the maker.

And what of the future? Glass rods are the thing today, and they are marvelously practical although even the best falls far short of perfection. As a man who is considered a judge of rods told me recently:

"You can get from any sports shop for about \$7.50 a glass rod that is just as good as any of them except that it needs a few more guides. You can fish with it all day, lick the cows out of the way and knock down a few apples and when you are through give it to the farm boy whose father let you fish and he will be in ecstasies. It wouldn't suit you or me, but it is a perfectly good rod for an awful lot of fishermen who don't know any better and don't want to."

It seems more likely that progress toward that exquisite, marvelous non-existent treasure, the perfect fly rod, will come from the experimentation of one or two present custom-rod makers like Garrison and Stoner, who carry on the Leonard tradition.

Is it worth the agony? Yes, if there continue to be others like me. Logically, I should stick to a glass rod, since I am convinced that the intangibles which surround fishing are so much more important than the fishing itself. I can't cast well, and I can't tell a good rod from a bad one. Still and all, my wife and I have eight or 10 custom rods, including a Payne and four Garrisons that we would not part with. And I would cheerfully go to the loan sharks for money to pay \$300 apiece, or even more, for three Garrisons that I know of if the owners (none of whom fishes any longer) would change their minds and sell them. END



