



The American Fly Fisher

FALL 1991

VOLUME 17 NUMBER 3



On September 7, 1991 we were honored to entertain a prestigious visitor to our galleries. An American hero, General H. Norman Schwarzkopf, visited Manchester to participate in the first annual Orvis Sporting Clays Challenge. He graciously took time out of his hectic shooting schedule to stop at the Museum, tour our galleries, and cheerfully endure yet more picture-taking, including a session with American Museum of Fly Fishing Chairman of the Board Leigh H. Perkins and journal editor Margot Page.

SOMETIMES THE EDITOR of this journal actually leaves the office to go out into the sunlight to fish. In June/July, my husband (who gets to actually fish a lot) and I went fishing in Montana, Idaho, and Wyoming, and we brought along copies of *The American Fly Fisher*, Summer 1991, to spread around. After fishing for actual fish (the fish of the West are "as big as babies," to quote a Yellowstone friend), we were served tasty cocktails at the lodges before the hearty Western dinners, during which time we laid a copy of this magazine politely on the bar. Can you believe that people were standing in line to get a look?

It got me thinking about how to increase our visibility and our circulation. After all, the American Museum of Fly Fishing is a museum created for its members and *The American Fly Fisher* is a magazine designed for its member readership. In my particular area of concern, we have pledged to publish a quarterly journal that is not only stunning to look at (thanks to the talents of our art director Randall Perkins), but that educates, explores, and engages its readers, while adding depth to their understanding of this rich sport.

We seek to please the greatest number of readers possible and because we know we can't please every one of you, we try to offer a range of material, such as profiles of important or interesting people, perspectives on tackle and the treasures of angling, nuggets of information about our collections, and behind-the-scene insights into the goings-on of the Museum itself. As the Museum grows we have an increasing variety of readers, including

both the seasoned angler for whom the names Hewitt, LaBranche, Rhead, and McClane are biblically familiar, and the initiate who has just mastered the fly rod and is eager to find out more about our legacy.

We need our members—you—to take the time to sit down and write out your thoughts to us. Those on the East Coast will remember New York City's ex-mayor Ed Koch and his ringing refrain, "How'm I doing??" Well, we're asking. Tell us!

And while you're at it, why not help in an even more tangible way? You are our best advocate, so take this magazine, or a back issue, to a couple of friends who haven't seen it, talk us up, and show them the membership box on page 26. If every one of our nearly 2,000 members would sign up another new member, we could double our ranks without the expense and wasted paper of traditional membership drives. Consider this small effort a nonfinancial donation. And if you write to me with the name of a new member you've signed up, I pledge to publish both your names in public thanks.



IN THIS *American Fly Fisher* (Fall 1991) we focus on the almost lyrical subject of silk, chronicling its once-importance to our sport. Housed in the files of stock stories that I inherited when I took this job a year ago was a nearly indecipherable article that had been translated roughly—shall we say—from the German. But the story it told of how silkworms produce a gelatinous substance that once formed the backbone of our tackle industry was

fascinating. The more I struggled with the fractured English of this story the more attracted I became to the history of this lost (seri)culture. And shining through the translation came the obvious charm of the writing and the passion of the author for the lowly and forgotten silkworm. Over the months letters were exchanged between Germany and Manchester, seeking to clarify obscure facts and semantic difficulties. Some minor semantic quandaries never did get resolved, but with great good will from the author and the cheerful diligence of our superb copy editor, Sarah May Clarkson (who makes her precise notations and corrections in the smallest handwriting I've ever seen—and in pencil no less!), a delightful article was born.

To accompany that piece, we are honored to have received permission from *National Geographic* magazine to feature photographs by one of our members, the photojournalist Luis Marden of Washington, D. C., whose 1951 article profiled the silk industry of Murcia, Spain.

Rounding out our silk feature, John Mundt and David Klausmeyer write about the manufacture and merchandising of silk line, giving us insight into its commercial evolution and decline. And for those of you who wonder how many of your fellow fly fishers also revere that Leonard rod and Bogdan reel, Gerald Stein has polled fifty-two correspondents to rate the most beloved rods and reels of all time. I'll bet you want to see how your favorite fares.

MARGOT PAGE
EDITOR



**THE AMERICAN MUSEUM
OF FLY FISHING**

*Preserving a Rich Heritage
for Future Generations*

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Journal of The American Museum of Fly Fishing

FALL 1991

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ON THE COVER: *The town of Murcia, Spain, was formerly one of the world's great centers of silk gut production. Silk gut was used for over a century in fishing tackle and surgical supplies. The strong filaments of gut strands, ranging from 8 to 18 inches, were obtained by squeezing and stretching the silk sacs of the silkworm, as this Murcia worker demonstrates with experienced hands. Photograph by Luis Marden ©National Geographic Society.*

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SILK



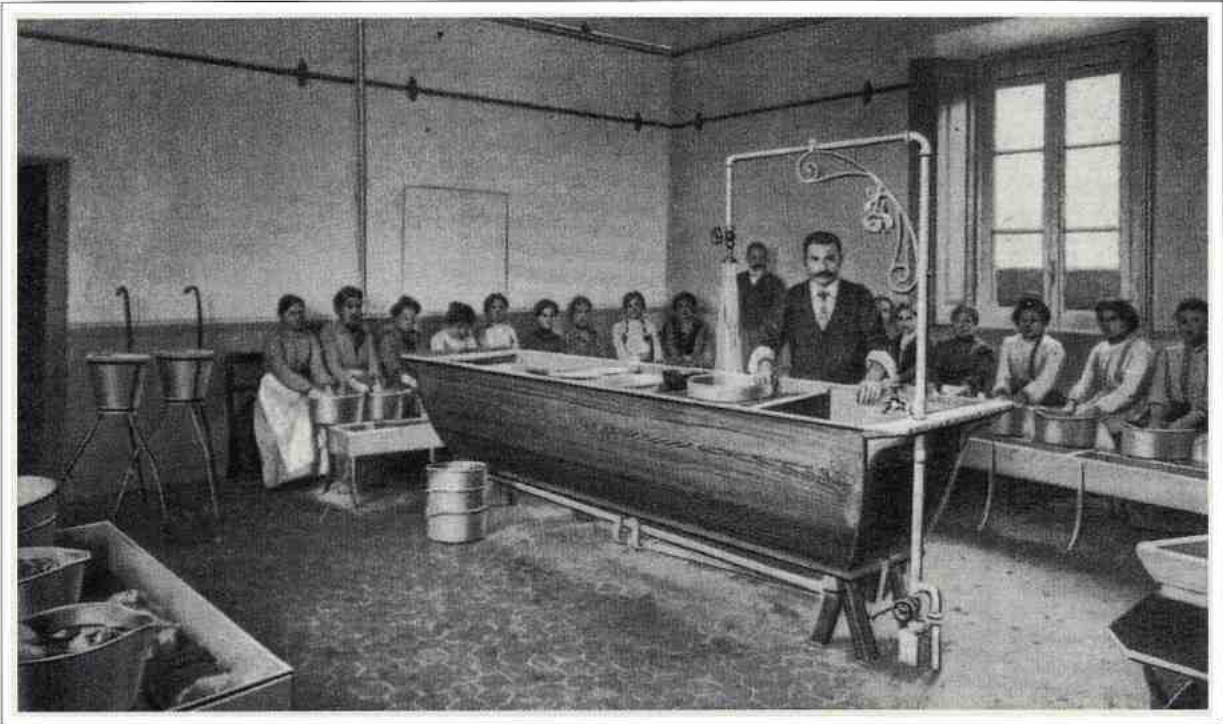
IN THE BEGINNING — or at least as close to the beginning as we know — lines made of twisted hair from a horse's tail were the ultimate in fly lines. A gadget for twisting horse hair is described and illustrated in *A Treatyse of Fishing with an Angle*, published in 1496. What came before horse hair is unknown, though it is probably safe to assume that a variety of other materials were tried.

The quantum leap in the development of fly lines came in the eighteenth century with the introduction of silk, which quickly became the dominant material for fly lines and remained so until plastic replaced it following World War II.

Compared to horsehair lines, silk lines were a joy to cast. Strictly speaking, horsehair really couldn't be cast — as we know casting — at all. There were, however, a couple of drawbacks to the silk lines. A major one was that if left wet or damp for any length of time, silk would rot, and a rotted silk line was useless. That meant, then, that silk lines had to be removed from the reel after each use. Drying racks or wooden reels of large diameter for line drying were available and in general use. Many fishers, however, simply unspooled the line and strung it along rafters, between posts, or anything else that was handy and would serve the purpose. Another disadvantage of silk was that if left too long on the reel or even the box in which the line came, the enamel with which the silk lines were coated tended to become soft and tacky, rendering the line unusable.

But the marvel was that the silk fly line was the natural product of a creature called *Bombyx mori*: the silkworm moth. The three articles that follow feature this remarkable critter and the process by which it produces the fiber that created a revolution in the development of fly fishing, as well as document the manufacture and marketing of the silk fly line in America.

JOE A. PISARRO



Turning silkworm eggs into gut leader was a complex process involving many steps. Soaking and washing the silkworm eggs helped loosen them from the fleece-paper on which they were laid, as illustrated in this circa 1925 photograph from Dr. Johann Gebbing's *Seidenraupenzucht* (1925).

The History of Silkworm Gut

by Lothar H. H. Martin

BEFORE THE MARVELS of silkworm gut were discovered, the hair of horses was used not only to tie artificial flies to our line, but by doctors to sew up wounds (white horsehair was preferred). According to a July 1951 National Geographic article by one of our members, Luis Marden, it took a legendary accident to reveal the wondrous properties of a new and unusual silk product which would revolutionize both angling and medicine — silkworm gut. The story he cites is that of a Spanish silk worker from Murcia — a town already famous for its thread silk production when it was mentioned by Cervantes in *Don Quixote* in 1605 — who threw unsuitable worms in the trash, whereupon some locals, picking through the refuse, tore a worm open and

stretched its two sticky silk glands into threads of durable, opaque silk. Eventually Murcia became one of the world's great centers for the manufacture of silk gut leaders, famous for its tensile strength, its lightness, and its unique pearly white color. By the 1800s, 70 percent of it was bought by fishermen, the rest used by surgeons.

The processing of silk gut absorbed at least two famous writers, G. M. Kelson and John Harrington Keene, who studied the subject in detail. Angling businessman Charles Orvis, in an 1888 article (reprinted in *The American Fly Fisher*, Summer 1977 [vol. 4, no. 3]) that chronicles his unsuccessful attempts to cultivate silkworms in order to produce his own supply of gut, called silk gut "a transparent strand of great

strength and lightness." Later generations, surfing atop the efficient wave of synthetics, have for the most part lost knowledge of, or interest in, this once organic leader material.

The following article by Lothar H. H. Martin has been translated and adapted from a small booklet, which he published in Germany in 1988 and distributed to fifty of his friends. It affords us a fascinating look at the centuries-old art, now lost, of silkworm gut production — all you ever wanted to know about the subject — as well as revealing a warm affection by the author for the little worm, the almost forgotten *Bombyx mori*, that played such a critical role in the evolution of our sport.

EDITOR

OVER 4,000 YEARS AGO, according to legend, the Chinese emperor Huang-ti was amazed by the spectacle of a silkworm changing into a chrysalis; the delicate webbing of the cocoon inspired him to use the fine silk threads in a profitable way for his people. Chinese and, later, Japanese silk clothing are examples of his successful effort to cultivate the silkworm (*Bombyx mori*).

By the end of the sixth century, sericulture had reached Europe. The scholar Gebbing informs us that Greek missionaries [the *Encyclopedia Britannica* states it was Persian monks] smuggled the eggs of the silkworm in wooden tubes into Constantinople. In the eighth century silkworm culture was spread by the Arabs who cultivated the essential mulberry tree and took their knowledge to Spain, North Africa, and the Caucasus Mountains.

Ruggero, the king of Sicily, became familiar with the silkworm during his wars with Greece, and he imported silkworm culture to southern Italy in the twelfth century. The process came to France in the fourteenth century, but it would not blossom for another 300 years. Germany's "Friedrich the Great" encouraged the planting of mulberry trees, the leaves of which were found by the ancient Huguenots to promote the maturation of silkworms.

MURCIA'S IMPORTANT ROLE

The little Spanish town of Murcia, on the banks of the Rio Seguro, is the capital of the province by the same name. Its inhabitants have struggled since ancient times to cultivate their tide-dependent land — lowland territory which is surrounded by mountains in one of the most fertile parts of Spain. The soft and constant Mediterranean climate and the unique irrigation system turned out to be ideal for silkworm culture. The diligence of Murcia's residents who were employed to grow silkworms soon helped to increase the reputation for their products on the worldwide fishing-tackle market, an industry which bloomed during the early to mid-1900s. At peak production, Spain turned out 90,000,000 strands of gut a year — comparable to the volume of tackle produced in Redditch, England — with some twenty manufacturers making gut and fishing equipment.



George M. Kelson writes about Murcia in *The Salmon Fly* (1895): "Looking from the cathedral tower in the town of Murcia the eyes survey miles of country closely dotted with a countless number of little houses surrounded by plantations of mulberry trees." The combination of the work force — highly qualified residents who were well worth their price — and the intense sun of southern Spain, motivated most silk manufacturing enterprises to locate in Murcia. Only in Murcia could gut be produced with a special pearly white look that earned it a worldwide reputation. The finest fishing tackle companies were directly or indirectly connected with Murcia, and it was no wonder that agencies were set up in Murcia for the brokering of raw silk. Sole and the Pilot Gut Company (circa 1936) were just two of many such manufacturers that also included Allcock, Golden Perch under G. Partridge, Giles Little, R. Ramsbottom, John Enright & Son, G. Gillet, and probably Chevalier Bowness & Son, Foster Bros., A. Carters, and many more. Later came Hardy Bros. and other well-known producers.

FROM SILKWORM TO SILK

When the right time approaches for the Chinese silkworm spinner moths to couple (it is possible to "wake up" the eggs by temperature control), many small bags made of fleece-paper and tissue are sown and folded. Only the skilled eyes of silkworm farmers are able to discern the subtle differences between the butterflies indicating their readiness to mate. When the appropriate time has come, each couple is carefully locked up into a bag,

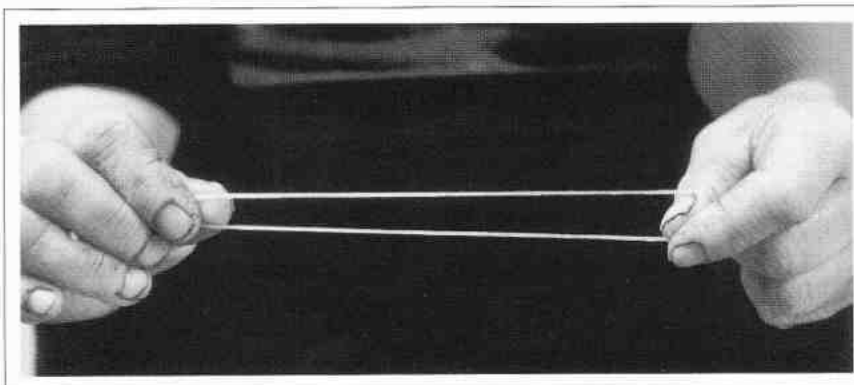
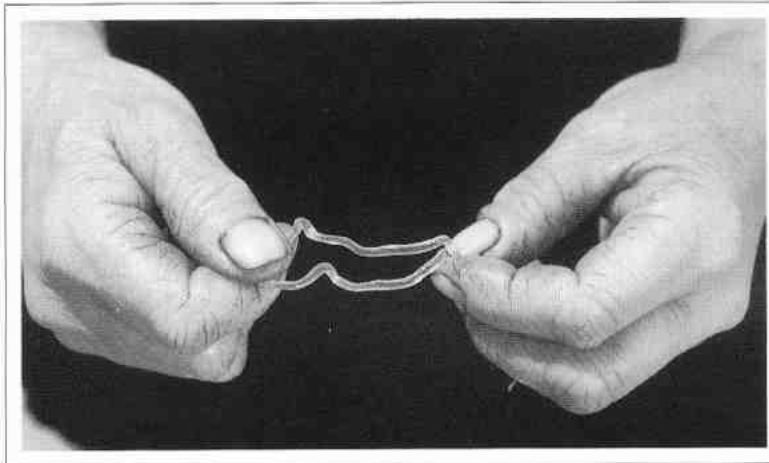
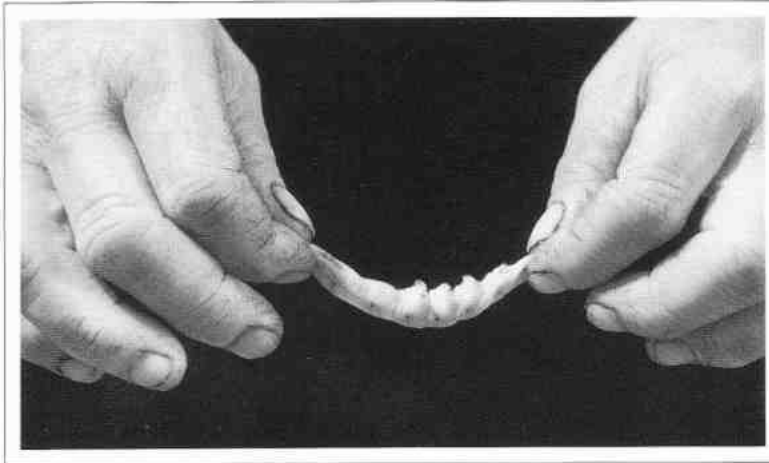
called a cell, and stored by hanging them on strings. The farmers control the cells at regular intervals until they have laid their eggs, usually counting on about 200 eggs from each female. The moths die just after laying their eggs, and it's important that their corpses are removed, because some parasites specialize in eating eggs, which would mean a loss of the entire harvest.

Only cells with perfect, tiny eggs are stored in garlands (100 cells each) in well-ventilated rooms. The room temperature cannot rise above 9 or 10° C, because higher temperatures cause premature broods.

In the last days of October the rooms and working places for the washing and drying of the eggs are prepared. In the center of the bright laboratories they build water basins, surrounded by smaller basins with benches in front of them for the washerwomen.

The main basin with adequate water is warmed up to normal room temperature and shared amongst the washerwomen. A foreman distributes about 400 cells to each woman, some of which are deposited in the basins for soaking. A sticky gelatin, which the moths created to hook their eggs up to the cellular fiber of the cell, has to be soaked so that most of the eggs can be carefully loosened from the fleece-paper. Cells with eggs that remain after soaking are stored in special containers and are treated again later in floor-ventilated chambers. During the washing procedure, which separates the eggs from the strands, assistants are busy spreading the single eggs over cotton frames. These frames get attached to racks for drying over the winter by storing them in chambers or mountain caves at a strictly stable temperature. Rather than being stored over the winter, some eggs will be prepared for export.

At the end of February the hibernating eggs are awakened. Day after day the temperature is raised about 2° C, until the incubators and storing rooms reach the ideal temperature of 18 to 20° C. Between the sixth and the seventh day the shells of the tiny eggs start to look transparent and the little worm becomes recognizable. After fifteen to seventeen days the egg's food supply is used up and the worm bites its way through the point of the shell. As tiny as it is, the worm has all the necessary organs for life outside of the egg, and after a short time of drying in the air, it imme-



To obtain gut, the pickled silkworm must first be opened and the silk sacs removed. The silk glands were then stretched by a Murcia woman's experienced hands that are worn and stained by vinegar-water solution, into raw strands which had to dry and harden before they could be straightened. Photographs by Luis Marden ©National Geographic Society.

diately craves food: the lovely fresh leaves of the mulberry tree.

Voilà, *Bombyx mori*, a glutton!

FROM *BOMBYX MORI* TO GUT

On the left and right side of the worm's intestine, are two long tube systems. They are joined together inside the spinning gland and end as one canal in an opening at the head. At the back part of each system — the so-called silk apparatus — are the secretion tubes in which the silk material is produced. It gets stored in the middle of the tube system, the diameter of which is much wider. The more delicate front part is called the secretion tube. The silk material dries in the air, and at this stage has been described as viscous, sticky fluid. Both tubes will each then produce an independent silk thread.

During the spinning process both threads are pushed through the spinning gland, and by adding sticky gelatin, it is led through the canal to the opening of the head. These sticky spots on the silk threads are perfectly visible under a microscope.

THE FINE ART OF SILK "FARMING"

The silkworm usually chooses the early morning hours (between 6 and 8 A.M.) to hatch. The farmers delicately slide a piece of fleece-paper underneath it and put it into a food frame, called a fold. Every time a farmer passes the fold he pushes it softly, because the silkworm develops best when there is a breeze.

It will go through five life stages by eating constantly. Each stage ends when the larva sheds its skin, and between the changes it stays passive, which is why the farmers say the larvae are "sleeping." During its active time, leaves of the mulberry tree are spread over it, and remnants of leaves are carefully taken away. For each of its life stages it gets a fresh leaf.

At the end of the fifth stage the larvae show a little discoloration and become restless, signalling preparation for spinning a cocoon. The next stages must be critically timed; as Kelson said, "Not an hour before or after!"

In preparation for this time of maturation, the workers concoct a mixture of wine vinegar plus water, referred to by Kelson as a "pickle," the concentration of which regulates the diameter and the length of the gut produced. A highly concentrated pickle results in a short but strong gut, whereas weaker solutions cause the gut to become long and thin.

The ripe larvae are picked from the folds and bathed in the vinegar-water solution, which causes the worm to die immediately.

Twelve hours later the workers remove the corpses from the pickle, break up the larvae, and remove the silk apparatus. They hold each larva behind its spinning gland and stretch both tube systems, so that the silk is spread equally over the silk apparatus. These "strands" are then laid out on the floor for drying, and after a time are collected again when they have curled a little. The raw silk gut becomes hard and is then washed again in clear water.

After drying, the farmers bundle up 5,000 to 10,000 strands of this raw material and offer it to manufacturers and agencies, who sell the raw gut by the kilogram. At this point the strands are still covered with the yellowish skin of the silk apparatus, called "carne" (Spanish for meat), and have to be prepared for other uses within so many working days. Gut in this condition was graded into fourteen categories, according to diameter. After drying it takes three hours to measure the thickness of the strands.

Then the workers bundle up all gut strands of the same diameter, put those of the same length together, and straighten out the curly ends before both ends are tied with wire. The still-moist gut gets polished with damp, fine leather rags until the strands turn white. The time has come for the naturally curved gut to be turned into straight leaders.

In the straightening process a woman takes ten to twelve strands and by straddling them she tightens up one end in a vise, which is wrapped with soft leather. A second vise holds the other end. The gut gets stretched by turning a screw. A third hand vise is moved back and forth between the other vises. After ten to twenty movements the gut remains stretched, because the friction creates heat, which reduces the natural curves in the strand.

Once again the nearly raw gut is classified, this time according to quality. The following classifications are commercial terms, which provided important information to the buying customers of yesteryear, who used to prepare their material themselves up until the 1920s.

Natural Selecta—Perfect gut with no mistakes at all.

Selecta—Good quality with smallest mistakes, such as discoloration.

Natural Superior—Good quality that can't be improved.



The fresh filaments of silkworm gut were combed and then tied into wiglike hanks at Murcia, the world's silkworm-gut center for more than a century. Photograph by Luis Marden ©National Geographic Society.

Superior—Second class; quality can be improved with work.

Estradia—Third class.

After quality classification the strands were bundled into hanks; one hank had 104 strands. Fly fishermen mostly needed smaller sizes for their tippets, but for such purposes the gut had to be drawn (polished) by sharpening one end of a strand and pulling it in turning move-

ments through the calibrated opening of a gut draw plate, until the right size was reached.

In case strong leaders were needed, the gut was prepared as follows, according to Kelson: "Knit together three strands of gut at one side. Wind the other ends around the hooks of the 'gut twisting apparatus' and fix them. Around eight turns with the handle will straighten the strands, and help prevent [a later expand-



The yarn-wrapped hanks of silk gut were straightened, sorted, polished, and trimmed to ready them for commercial sale to tackle companies and medical suppliers. These 36,000 strands of gut are the products of 18,000 silkworms. Photograph by Luis Marden © National Geographic Society.

ing]. A slide-bar made of wood with three furrows is shifted between the strands and slit towards the apparatus.”

Suggestions for the necessary moistening of gut before usage on the stream, and the necessity for moth-, and light-proofed storage could be offered here, but everyone has his or her own formulas for maintaining usefulness. Instead, there should just be one mentioned by John Harrington Keene: “In all cases the gut or hair to be tied should be soaked in warm water. I have found that the addition of a little glycerine to the water is beneficial with the coarser kinds of gut, as seems to keep it moist and soft longer than water seems to do, especially if it be hard. The bath should not be continued too long, as it is apt to injure the texture of the hair or gut.”

Keene also describes how to color the shiny white gut for adaptation to the re-

quirements of home waters. “Light yellow or amber — 3 scruples (1.296 g) lemon peel [.432 grams per scruple], 2 scruples alum, 2 scruples potassium bitartrate, 12 grains (0.0648 g) red pigment, and 8 drops of ferric chloride. Soak the gut three minutes in it and hang it for drying in warm rooms. Or: take a handful of berisberries, put the gut one to two hours in it and let it dry then. Green, the color of waterweed: boil gut or hair in a solution of alum, then indigo, and later yellow root. Easier: color it in hot, green tea. Good french coffee gives a brown color to the gut.” Or, color the gut in a pint of good, dark beer!

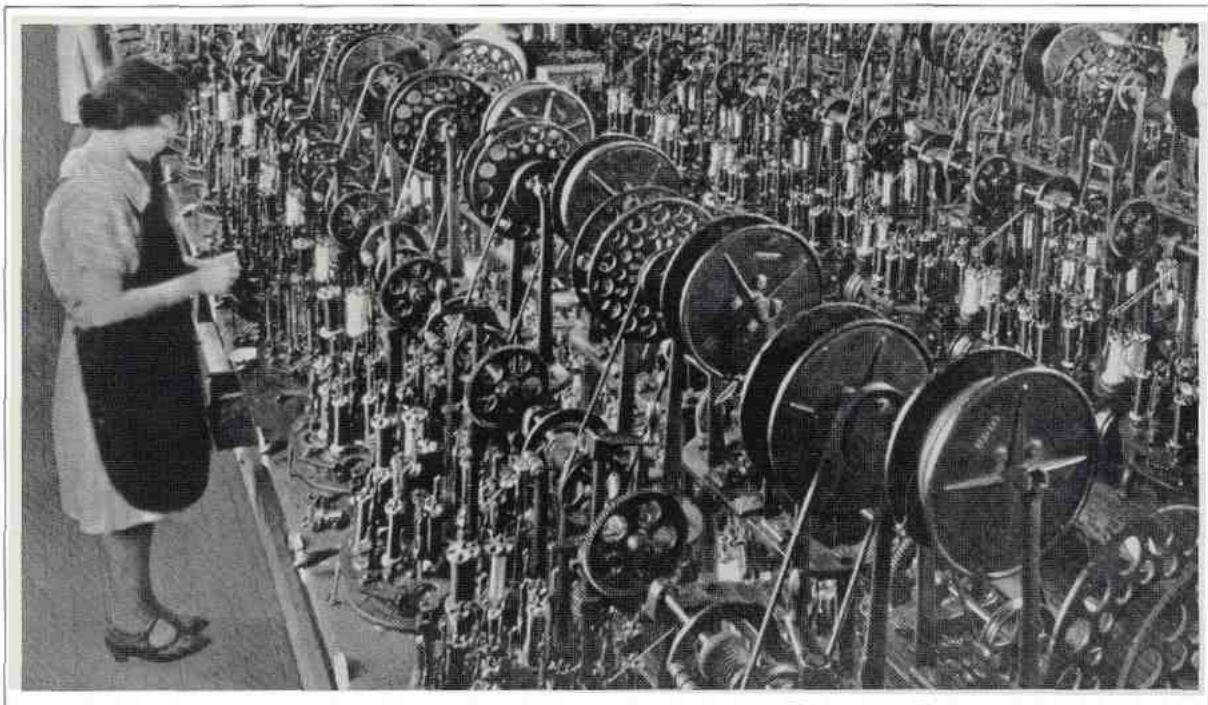
It’s not the beer that makes me sad when I think about the era of silkworm gut, or about our modern times with our nondegradable synthetics. It is our attitude toward fishing — we handle our leaders in a thoughtless way. Perhaps the

best thing about gut is that it is a natural material that decays in a relatively short time, unlike synthetics, strands of which will litter our waterways for decades.

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Silk Fly Line Manufacturing:



A Brief History

by John Mundt

THE PRACTICE OF USING fly lines made of horse hair and silk is well documented in the lore of angling, however, information on the actual manufacture of these lines is much more limited. Early English publications, such as *A Treatyse of Fishing with an Angle* (1496), author undocumented but popularly attributed to Dame Juliana Berners, and *The Compleat Angler or The Contemplative Man's Recreation* (1653), by Izaak Walton and Charles Cotton, provided detailed instructions on how to fabricate lines made of horse hair, as well as other tackle. From the fifteenth through the seventeenth centuries there was no firmly established tackle industry, thus prospective anglers had to rely on these and other reference books in order

to equip themselves. As the tackle industry developed over several centuries, an angler no longer had to produce his or her own tackle, but could readily purchase the required items. When the market grew enough so that demand could be met, published material on how to make lines diminished and what had been published was not always archived. This explains why there is only nominal documentation on the subject available today.

By tracing the evolution of the fly line, it is possible to gain a more detailed perspective on the construction methods used over the ages. *The Compleat Angler* by Walton and Cotton (fourth London edition) gives the reader instructions on how to properly select and prepare horse

hair for weaving or "twisting" into a functional line. This classic volume goes a step further by describing the various methods of "dyeing your hairs." In the following passage Sir Izaak instructs the reader how to collect raw material and prepare it for assembly into a line.

And for making your line, observe this rule, first let your hair be clean washed ere you go about to twist it: and then choose not only the cleanest hair for it, but hairs that be of equal bigness, for such do usually stretch all together, which hairs of unequal bigness never do, but break singly, and so deceive the Angler that trusts to them . . .

When you have twisted your links, lay them in water for a quarter of an hour at least, and then twist them over again before you tie them into a line.



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Size D. 30 yards, \$4.00;	40 yards, \$3.20;	30 yards, \$2.40;	25 yards, \$2.00 each.
" E. 40 " 2.80;	35 " 2.45;	30 " 2.10;	25 " 1.75 each.
" F. 40 " 2.70;	35 " 2.45;	30 " 2.10;	25 " 1.75 each.

Level Lines.—D. 8c., E. 7c., F. 6c., G. and H., 5c. per yard.

Level lines are in 25-yard lengths, 4 connecting.

Salmon Tapered Fly Lines.

Size H. 100 yards, \$11.00 each.	Size B. 120 yards, \$12.50 each.
" C. 100 " 9.50 "	" C. 120 " 11.00 "
" D. 100 " 8.50 "	" D. 120 " 10.00 "

that were manufactured by John Shields & Company of Brookline, Massachusetts. An Orvis catalog shows that they marketed silk lines under their own label as early as 1889.⁴ And J. Cheek of London, "Manufacturer of Walking Sticks and Riding Whips," made rod and silk lines for sale through his 1839 catalog.⁵

The J. Cheek catalog reference is significant because it shows that Mr. Cheek was proficient in whip braiding, an early technique in the evolution of silk line manufacturing. More efficient textile manufacturing methods were implemented during the industrial revolution, and it is presumed that automated silk line production was derived from this technology, affording it much greater availability. In hopes of learning more about the actual manufacture of silk lines, interviews were conducted with two

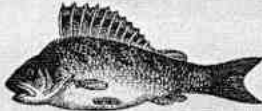
gentlemen who have had firsthand experience with mechanized silk-line production.

The Cortland Line Company was founded in 1915 under the leadership of Ray F. Smith, in Cortland, New York, and began mass producing silk fly lines in the early 1930s. Leon Chandler, president of the company, recalled in an interview how silk filaments were imported directly from Japan and were then built into threads by doubling and twisting at Cortland's mill. This thread was given to a Cortland operator who worked on a modified braiding machine. To produce a double taper line, the operator would begin with sixteen small threads at the line tip and develop the gradual taper by removing the smaller threads and replacing them by splicing in larger threads until the body of the line was formed.

This process was then reversed to complete the tailing taper. Ninety-six total thread changes were required in order to complete a single line. The operator was responsible for eight machines, completing one 90-foot line per machine in an eight-hour shift. The production schedule called for two shifts: the first from 6:00 A.M. to 2:00 P.M., and the second from 2:00 to 10:00 P.M.

After the braiding was completed, the lines would undergo an oil impregnation process during which a continuous row of lines would be drawn through a blend of tongue and linseed oils and then fed into a two-story oven for drying. This impregnating process would be repeated a number of times. Once dry, a grinder was used to remove the excess oil buildup on the outside surface of the line. The entire manufacturing process would take

J. CHEEK,
FISHING ROD AND TACKLE,
 UMBRELLA, PARASOL,
 WALKING STICK AND RIDING WHIP
 MANUFACTURER.




THE GOLDEN PERCH,
 No. 52, STRAND,
 OPPOSITE THE BRITISH FIRE OFFICE.

LONDON:
 HOWLETT AND SON, PRINTERS,
 10, Fench Street, Barb.

1839.
 C.M.W.

CORTLAND LINE CO.



IVANHOE LEVEL FLY LINE
 OIL IMPREGNATED SPECIAL PROCESS—Patent Pending

Like the Ivanhoe Double Taper, this Ivanhoe Level is made from special importation of finest choice Japan silk. The construction of the line, plus the special process of oil impregnation (See page 6), makes this a line of unusual casting qualities, as well as one that will give satisfactory service over a longer period than was ever supposed possible under the old manufacturing methods.

COLOR:	Russet Brown.					
PUT UP:	25 yd. coils, 4 connected—100 yds. in a special hinged cover display box.					
SIZES:	11	G	F	E	D	C
TESTS: lbs.	14	15	24	28	32	38

Also put up at 1/3 yd coils, 5 connected.

EVERY LINE TRUE TO TEST

- 9 -

several days to complete. Ivanhoe silk lines were one of Cortland's earliest introductions.

Chet Cook of the U.S. Line Company of Westfield, Massachusetts, was involved with silk line production from the mid-1940s through the early 1960s. U. S. Line was originally known as the U. S. Whip Company (another example of how silk line production evolved from whip making). They were once the largest manufacturer of whips in the world and helped Westfield earn its reputation as the Whip City. But when the automobile came into widespread use, they had to adapt their product line in order to survive. Company management assumed that they could readily convert their braiding equipment from whipmaking to fishing line production. Unfortunately, this was not the case, so they purchased the necessary equipment and began

operation as the U. S. Line Company.

Chet recalls in an interview that U. S. Line purchased its silk directly from Japan and had it refined and spun into thread by the now defunct Mason Silk Company of Winsted, Connecticut. Each thread was built by twisting three filaments into a strand and then twisting the three strands together to form a working thread. Sixteen threads were needed to braid a line.

The factory assigned 100 out of 600 braiding machines to tapered fly line production; the remainder were used for bait casting and trolling lines. Each operator working on fly lines was responsible for five machines. On these machines, mechanized counters would feed specified amounts of thread into production and then shut off, enabling the operator to splice in the various sized threads required for developing the taper.

As each line was completed, a colored

marker was tied in and the operator would begin the next line; up to thirty lines were braided in one continuous length. This parade of lines was wound onto a skein that was then dipped into boiling linseed oil for impregnating. They were drip dried by rotating the skein every half hour for several hours, and were dried further by being placed in a 200-degree oven for four hours.

After sitting for a day, they were honed by being fed over a curved metal disk that would rotate in place. The lines went through this entire process six or seven times until a smooth surface was achieved. When hand and visual inspections of the final finish were complete, the lines would be coiled as they were unwound from the skeins. Workers would then remove the thread marker that was tied in during braiding and cut the individual lines off.

Although Cortland and U. S. Line began mass producing silk lines during the early 1930s, lines made by similar processes were being marketed by Abercrombie & Fitch as early as 1911. These lines were produced according to the British "Halford Process," in which a braided silk line was immersed in a container of boiling linseed oil and kauri gum varnish.⁶ The container was sealed and had the air pressure within it reduced with a pump. By reducing the pressure, air

was able to escape from the line so that when the pressure was brought back to normal, oil would penetrate the line. A smooth surface was achieved by repeated coating and drying. The excess coating was removed by hand with a pumice stone and the line was polished with talcum powder. These and many other lines made of silk were marketed during the late nineteenth and early twentieth centuries.

Silk line specifications were based on


an alphabetical system, believed to be British in origin, each letter designating the diameter of the line tapers.⁷ For example, an HDH line had a front taper of $2\frac{5}{16}$, 0.000 of an inch, $4\frac{5}{16}$, 0.000 inch body, and an end taper of $2\frac{5}{16}$, 0.000 of an inch. A CBC was $3\frac{0}{16}$, 0.000 inch, $5\frac{5}{16}$, 0.000 inch, and $3\frac{0}{16}$, 0.000 inch. Thus B signifies $5\frac{5}{16}$, 0.000 of an inch; C is $3\frac{0}{16}$, 0.000; D is $4\frac{5}{16}$, 0.000; and H is $2\frac{5}{16}$, 0.000. This gauging system was widely accepted by line manufacturers of the day.

Smooth as Silk

LOOKING AT THE AMERICAN angling experience, one of the first references to silk fly lines is a 1777 advertisement of Edward Pole, a self-described "Fishing Tackle Maker" who offered "Silk, Hair, and other Lines of every kind, length and Degree of Goodness." Of course, horse hair was a material used in the earliest lines, but as this advertisement demonstrates, silk was being used by the colonial angler. It is also interesting to note that silk lines get top billing in this eighteenth-century advertisement.

The early silk lines were not braided. Instead, the individual strands of silk were merely twisted together in order to create the thicker line and increase its total strength. Two types of silk were generally available, one being *raw* and the other *boiled*. Raw silk, as the term implies, was used exactly as it came from the worm: the finished line being rough and gummy to the touch. Boiled silk, on the other hand, described the distillation process used to remove the natural "gum" from the silk. This boiling, however, left a fiber thinner in diameter than the raw silk. As a result, more individual boiled fibers were required to make a line of equal diameter to a similar line of raw silk. Although the boiling procedure, and the added materials required to make boiled silk line, certainly drove up the cost of the finished product, it was discovered that the additional fibers produced a stronger line. It was further discovered that boiling the silk fibers yielded far more supple lines than their raw silk counterparts, but this led to a curious problem described by Henry Wells in *Fly Rods and Fly Tackle*. It seems that even though boiled silk line had greater strength than that made of raw silk, its suppleness resulted in a good deal of tan-

DAME, STODDARD & KENDALL, BOSTON.



CASTING LINES OR LEADERS.

	1 yd.	2 yds.	3 yds.
Eight Quality Trout Leaders, Whole Lin.	.30	.45	.55-cwt.
Extra	.15	.25	.30 "
Light Salmon	.25	.35	.40 "
Extra Heavy	.35	.45	1.00 "
Imperial	—	—	—
Best Leaders, Double Lin.	.25	.35	.40 "
Extra Heavy Best Leaders, Double Lin.	.35	.45	1.00 "
Salmon	.25	.35	.40 "
Patented	—	—	—
Salmon	—	1.00	1.25 "

All our Leaders are tied from Selected Mist Color Gut, with or without extra loops, as desired.

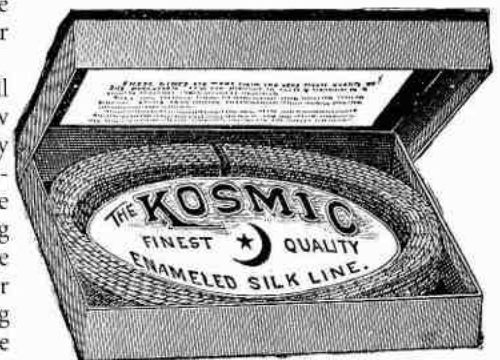
gling around the tip of the rod. This, he related, was quite a problem for the wading angler who, while in midstream, would have the formidable challenge of untangling his outfit. Remember, the average nineteenth-century rod was 12 or 13 feet in length.

An early Dame, Stoddard and Kendall catalog (pre-1890) lists lines of both raw and "oiled" silk. The latter line was surely the boiled variety, "oiled" being a reference to the oils or varnishes applied to the silk at the end of the manufacturing process. This covering helped increase the longevity and buoyancy of the line. A later Dame, Stoddard, and Company catalog no longer listed the raw silk line, and the term "enameled" replaced "oiled."

Charles Orvis, in a catalog from the late 1880s, offered only braided enameled lines. These came either tapered or level, and were available in a variety of lengths. The Salmon Tapered Fly Lines could be purchased in lengths of 100 and 120 yards. In none of the early catalogs can I find a

product we would refer to as fly line backing (of course, this isn't to say that something to serve this purpose didn't exist). In the early 1900s, an Abercrombie & Fitch catalog did mention "backing" in conjunction with salmon lines, but this product wasn't described. For the most part, an early fly fisher wanting to pursue big fish would purchase a large spool of level fly line and splice this into the back end of his casting line. This long level line would act as the backing, and, as Kelson described in *The Salmon Fly*, would serve to fill up the "winch." Of such importance to the salmon angler, Kelson gave careful instructions on how to securely braid a backing to the general casting line.

Though the name Kosmic is more closely associated with the manufacture of fine reels and exquisite rods, this company also offered equally fine double tapered and level lines in various lengths. Kosmic, like so many other companies who offered lines, sold these complementary products under its own name; there



is rarely any mention as to the actual manufacturer. Even William Mills and Son, Abercrombie & Fitch, and Dame, Stoddard, and Kendall give little indication as to whose product you were really buying.

In an early twentieth-century Hardy

The demise of the silk line began during World War II when nylon was introduced. The product of chemical and scientific breakthroughs, introduced by the E. I. DuPont De Nemours & Company, Inc., nylon was less expensive and easier to produce. Nylon's major shortcoming was that it did not hold the impregnating oils as well as silk. This problem was solved by coating a level line with synthetic repellent materials that were then molded to the desired tapers. The

technology behind the development of nylon lines was the direct result of ideas that grew out of the manufacture and use of horse hair and silk lines — lines which play a proud and innovative role in angling history.

E N D N O T E S

1. "Edward Pole: Fishing Tackle Maker," advertisement appearing in *The American Fly Fisher*, vol. 6, no. 1 (Winter 1979), p. 6.

2. Izaak Walton and Charles Cotton, *The Compleat Angler or The Contemplative Man's Recreation*, fourth London edition (New York: Thomas Y. Crowell & Co.), pp. 245, 246, 348; Samuel Mellner and Herman Kessler, eds., *Great Fishing Tackle Catalogs of the Golden Age* (New York: Crown Publishers, 1972), illustration, p. 65.

3. "Charlie's Scrapbook," *The American Fly Fisher*, vol. 8, no. 3 (Summer 1981), pp. 24, 26.

4. *Great Fishing Tackle Catalogs*, p. 58.

5. *Ibid.*, p. 3.

6. *Ibid.*, p. 218.

7. Leon Chandler, "Fly Lines That Really Float," *Trout* (Autumn 1989), p. 78



Brothers catalog, one can find a very wide range of silk lines sold under the name Corona. The "Corona Superba" were double tapered lines 30 yards long, and the "Level 'Corona' Salmon Lines" were available in 50-yard lengths. Far more interesting, however, was the "Filip," described in the Hardy catalog as "Special Tapered Salmon and Trout Fly Lines." Quoting from the catalog, "Roughly the idea is, that a longer foreline can be thrown when 'shooting,' owing to the special form of back taper, and the fact that the principal weight of the line is nearer the fly." Undoubtedly, the "Filip" was one of the first commercially available weight-forward lines.

Many of us have come to believe that the silk line was a cantankerous piece of tackle requiring an inordinate amount of care, and that once nylon line became available, everyone happily stripped those old silks off their reels and replaced them with the new "wonder" lines. After all, who would want to spend their time dressing a line with a floatant if such a tedious procedure could be eliminated? And with the new synthetic lines, one no longer had to worry about forgetting to take the line off of the reel in order to assure proper drying.

Noel Buxton, of West Midlands, England, is to my knowledge the only maker of silk fly lines in the world today.

In his literature I learned that to entirely braid a line takes roughly forty-five minutes using machines especially designed for the task. Over the course of the

next eight weeks, the braided line is dyed either olive green or a straw yellow, and all of the necessary varnishes are applied to it. During this time Mr. Buxton also proofs each line to assure that it conforms to American Fishing Tackle Manufacturers Association specifications for line weight. His lines come in double tapers, which are 30 yards in length, line weights one through nine. He also makes a 40-yard salmon line in sizes nine through twelve.

The Phoenix line, a four-weight in a



lovely straw color, is a joy to use. On my first trip with the line, I pulled the car onto the side of the road along the Little River in the Great Smoky Mountains where the rhododendron leans out over the water by about 4 feet. The stream had a medium flow that day, which left about a 2-foot space between the surface of the water and the bottom of the foliage. The fish usually lie along the undercut bank, and, well, you know the rest. It's a very challenging problem, but one that the Phoenix line handled beautifully. I've used the line many times since, and I always remove a dozen or so coils from

the reel when I return and hang them on a peg in order to assure proper drying. The next day, I quickly dress the loose coils with the proper floatant that came with the line. By that afternoon, about twenty-four hours later, the line is ready to go.

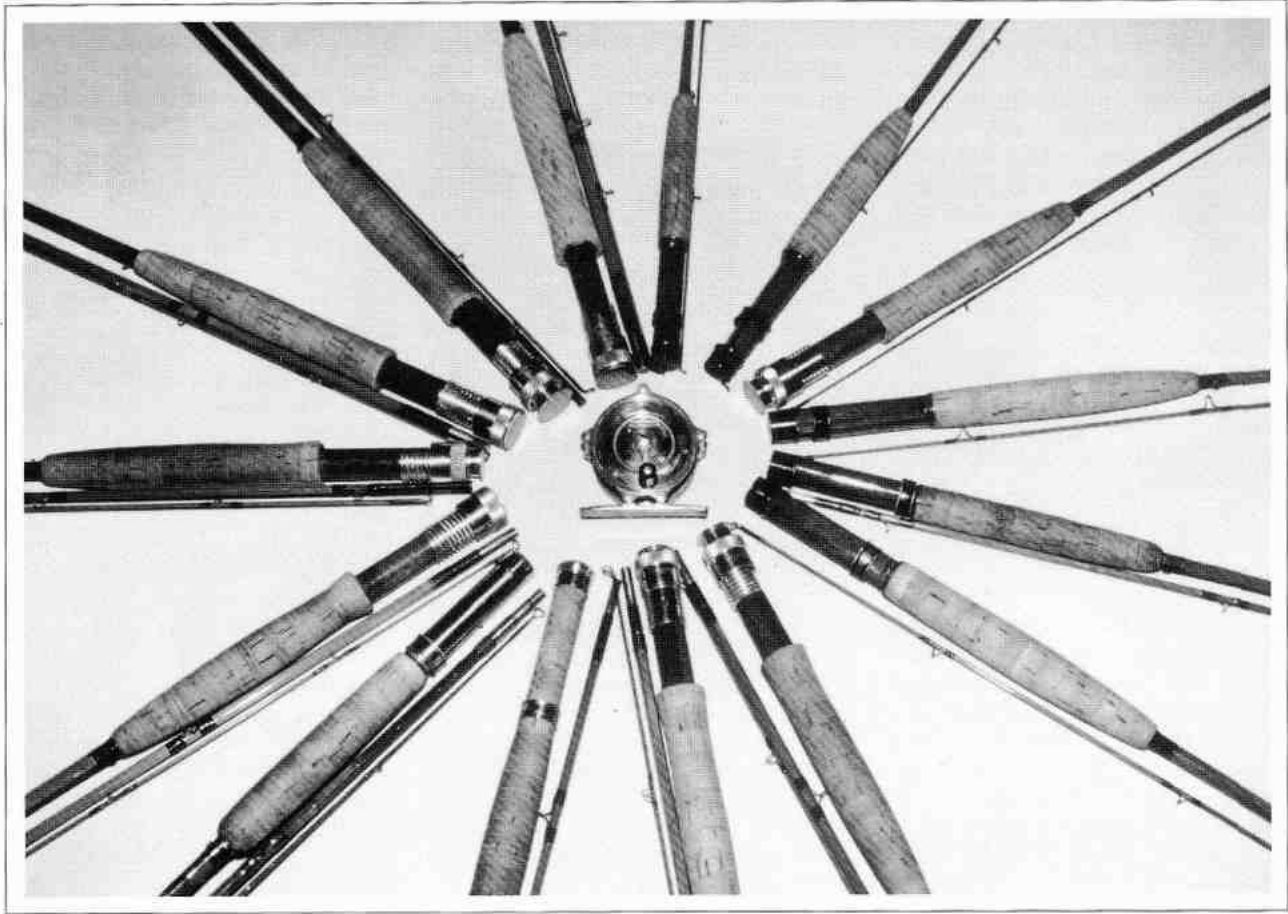
Linen, hair, and silk are the materials that made up the lines which connected early anglers to their quarry. Over the years, countless hours have been spent by untold numbers of inventive anglers to produce superior casting lines. Fortunately, today's anglers can still cast a traditional silk line on their favorite waters. And it is hoped that we who take responsibility for our sport begin to pay a little more attention to those who seek the small improvements in our tackle, and in our angling enjoyment.

DAVID R. KLAUSMEYER



Illustrations from Samuel Mellner and Herman Kessler, eds., *Great Fishing Tackle Catalogs of the Golden Age* (New York: Crown Publishers, 1972), pp. 9, 11, 95, 131, 251.

Personal Treasures:



The Bamboo Fly Rods and Reels Fishermen Love

by Gerald S. Stein, M.D.

FOR VALENTINE'S DAY some years ago, my wife bought me a pair of tattered Leonard rods in an Abercrombie & Fitch canvas-and-leather rod carrier for \$85 at our favorite antique shop. I fell in love with the 8-foot, three-piece rod that my friend John Bradford identified as a Model 4099 and restored as he did the 9-foot, three-piece Model 51DF which now casts to the most distant rises in trout ponds. I had taken good trout on my grandfather's Montague rods while guiding, but was never really taken with them. The Leonards given to me were so

much better that I got hooked on fine old bamboo.

The Rocky Mountain region where I live has a lot of good trout, but few fine, old rods and reels. I came to realize that the limited knowledge and appreciation of vintage tackle here was not so different from the rest of the country. There are few shops or dealers in most regions, and little opportunity for casting — let alone fishing — enough classic bamboo rods to compare similarly designed tapers and match them to our personal styles. With no bamboo rod fishermen's organiza-

tions and few in-depth articles to pass along new information, even good reference sources such as Martin Keane's *Classic Rods and Rodmakers* (New York: Winchester Press, 1976) and the chapters on tackle in Ernest Schwiebert's *Trout* (New York: E. P. Dutton, 1978) are of only limited use. It is not easy for neophytes to find their way around the uncharted world of classic rods and reels.

I came to rely on numerous tackle experts and am grateful for their availability and knowledge, and for the warm friendships which have developed with

R O D S

Opposite: **Photograph A.** Jim Payne rods, clockwise from top: Model 95, 6-foot, two-piece; Model 96, 6 ½-foot, two-piece; Model 97, 7-foot, two-piece up-locking reel seat; Model 98, 7-foot, two-piece; Model 100, 7 ½-foot, two-piece; Model 101, 7 ½-foot, two-piece; Model 197, 7 ½-foot, three-piece; Model 102, 8-foot, two-piece, all-cork grip with rare acorn butt cap; Model 201, 8-foot, three-piece; Model 204, 8 ½-foot, three-piece early rod with slide-band, nickel-silver reel seat; Model 205, 8 ½-foot, three-piece; Model 206, 8 ½-foot, three-piece; Canadian Canoe Model, 8 ½-foot, three-piece; Model 400 Dry Fly salmon rod, 9-foot, three-piece; Model 410 Dry Fly salmon rod, 9 ½-foot, three piece. Reel at center: Philbrook/Payne Bimetal, first series, built by H. L. Leonard.

mavens such as Jim Schaaf and Joe Garman. It has been a steep, gratifying learning curve: from trying to fish the Montagues and having Walt Carpenter show me his favorite Jim Payne rods, to casting "Gary" Garrison's own rod at Hoagy Carmichael's home and observing Jim Schaaf's labor of love — making Dickerson Commemorative Series rods.

Yet there is still a lot to know in order to determine what classic tackle is worth having — and paying for. With the cost of most rods and reels at least doubling in the 1980s and many short, light, "collectible" rods and some American reels quadrupling in price in the past five years — largely independent of their value for fishing — not knowing classic from ordinary can be costly.

To obtain a broader base of knowledge from experts I trust who have used the finest tackle over many years, and to have the pleasure of sharing their conclusions, I sent out eighty-five surveys to learn which rods and reels these experts love to fish. In it I posed the hypothetical situation that an old friend had invited them on a six-week trip to fish a number of trout and salmon rivers. With limited gear space, they can only take three trout rods, one bamboo salmon or steelhead rod; one trout reel, and one salmon/steelhead reel. They were asked not to leave anything out because of fear it would be lost or broken, and not to include anything largely because of its rarity, value, or its having belonged to someone famous. Assuming they had them to bring on my hypothetical trip, respondents were asked to list the specific models they believed to be "the most enjoyable, finest fishing rods and reels they have ever had the good fortune to use."

FIFTY-TWO REPLIES were received, about half from fishermen who are also rod-makers and some from fishermen who make reels. Those who fish only for trout did not list favorite salmon or steelhead gear. One hundred and seventy-six trout and salmon/steelhead rods made by forty-one different makers are cited, as are seventy-four trout and salmon/steelhead reels from twenty-one different reel-makers. This number of responses seems sufficient to point out the clear favorites, but may not be enough to distinguish between models of nearly equal popularity, so such models will be considered together in groups.

Jim Payne and H. L. Leonard are the top rods overall, as well as being the favorite trout rods. Payne, Leonard, and H. S. Gillum share the honors for being the favorite salmon/steelhead rods.

The second most popular group for both trout and salmon/steelhead rods is comprised of L. L. Dickerson, F. E. Thomas, and E. C. Powell (see Photograph B). F. E. Thomas appears to hold the edge as the favorite trout rod (see Photograph C), and L. L. Dickerson the favorite salmon/steelhead rod (see Photograph D).

The third most popular group consists of G. H. Howells, Garrison, Orvis, Paul H. Young, Thomas & Thomas, and H. S. Gillum rods. In the fourth most popular group are the rods of R. W. Summers, Goodwin Granger, Winston, Heddon, J. W. Schaaf, and Omar Needham; Bob Summers's rods seem to have the edge here.

If the choices of only the rodmakers surveyed were considered, Payne and Leonard would still be tops, with Dickerson heading the second group. If the choices of only the *non*rodmakers surveyed were counted, the top choices would remain the same, but the contemporary rods of G. H. Howells, Winston, and R. W. Summers would place higher than they do in the total survey.

The survey gives us an indication of how many great rods were produced by each maker, but it does not take into account the vast differences in the number of rods each shop manufactured (estimates of each rodmaker's production will be offered). Thus the survey says little about how consistently each shop made great rods.

In an interview, Martin Keane, author of *Classic Rods and Rodmakers* (Winchester Press, 1976), calls the consistency in producing high-quality rods "the essential genius of the great rodmakers."

Trying to judge consistency of quality in order to differentiate among rodmakers is difficult, but necessary if we are to reach conclusions that go beyond those of Thomas Maxwell, who headed H. L. Leonard and cofounded Thomas & Thomas, and said in a recent interview, "I've had rods in my hands from every rodmaker that were exceptional, but others which weren't as good as buggy whips."

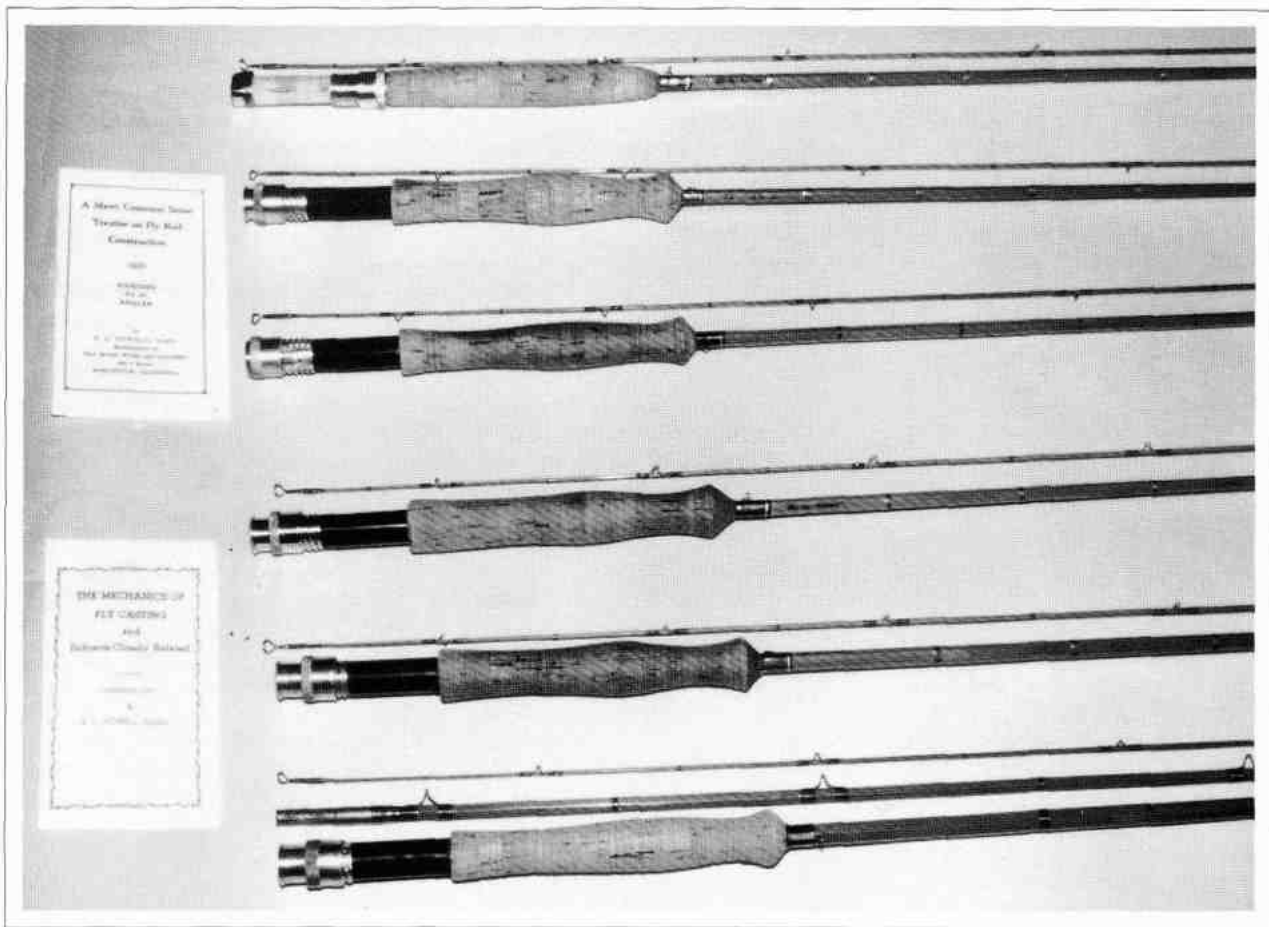
PAYNE RODS

The late Jim Payne was hardly able to support himself a generation ago when he was a contemporary rodmaker. Now a consensus has evolved as to the unique quality of his work. Jim Schaaf, who adores Dickerson rods, readily acknowledges when interviewed, "Payne would be at the top of my list — first class in every aspect of rodmaking." (Lyle Dickerson himself is said to have once preferred Payne rods over all others.) Although he emphasizes Garrison's innovations, noted rodmaker Hoagy Carmichael volunteers in his interview, "I think Jim Payne was the greatest rodmaker who ever lived."

There are no records available from the E. F. Payne Rod Company, but discussions with former Payne rodmakers, dealers, and collectors suggest that Ed and his son Jim made between 8,000 and 20,000 rods. Those rods cited in the survey as being favorites number between .13 and .31% of all the rods Payne made, about the fifth highest number among all rod makes.

Paynes are unique among the makes in this survey because they are cited as favorites in every length from 6 ½-foot stream wands to 9 ½-foot salmon rods (see Photograph A) — a much wider range than for other rod makes. Fishermen's favorite Leonards, for example, are cited almost exclusively in the 7-foot to 8-foot range. Gathering the full range of Payne rods cited in the survey gives the fisherman an opportunity to test these rods and understand why they are so highly regarded.

Payne rod action and style are precise and lovely. Each element — from the rich, flamed bamboo with Jim Payne's legendary varnish work, to the svelte rod tubs and ferrule plugs, and his 1951 catalog filled with literary fishing essays — is honed to perfection. Yet the overall design is integrated and "restrained" as the Granger rod scholar, Phil Snyder, points out. The feel of Payne rods is so characteristic that they might be identifiable by even a blindfolded caster. Paynes are, in my opinion, the most satisfying rods to cast, to take memorable fish on, and to



Photograph B. E. C. Powell rods, from top: 7-foot, two-piece, hollow built with rare all-cork reel seat with slide band; 7 1/2-foot, two-piece, hollow built for #3DT; 8-foot, two-piece, hollow built, part of Companion Rod Set; 8 1/4-foot, two-piece, hollow built, part of Companion Rod Set; 8 1/2-foot, two-piece, hollow built, part of Companion Rod Set; 9-foot, two-piece trout rod, hollow built; 9 1/4-foot, three-piece, solid built with slide-band, nickel-silver reel seat; 9 1/2-foot, three-piece, record-holding steelhead rod, solid built.

admire in the rod rack at the end of the day.

Yet Payne rods' perfection and the degree of their superiority over other makes can be overstated. Maintaining objectivity in evaluating these seductive rods, which seem to envelop owners in their aura of perfection, is difficult. One of the many reasons Paynes are so satisfying is the knowledge that they are so universally admired.

About half the Paynes I have fished have been great, and most of the others were good rods. I do not know of another rodmaker who has made a markedly higher percentage of great rods, though a number of rodmakers, including L. L. Dickerson, F. E. Thomas, and E. C. Powell may have done about as well. Jim Payne told Joe Garman that he felt his rods were best in the 8-foot to 9-foot range. A number of the participants in the survey felt that the chances of finding a great Payne rod outside that range are somewhat diminished.

LEONARD RODS

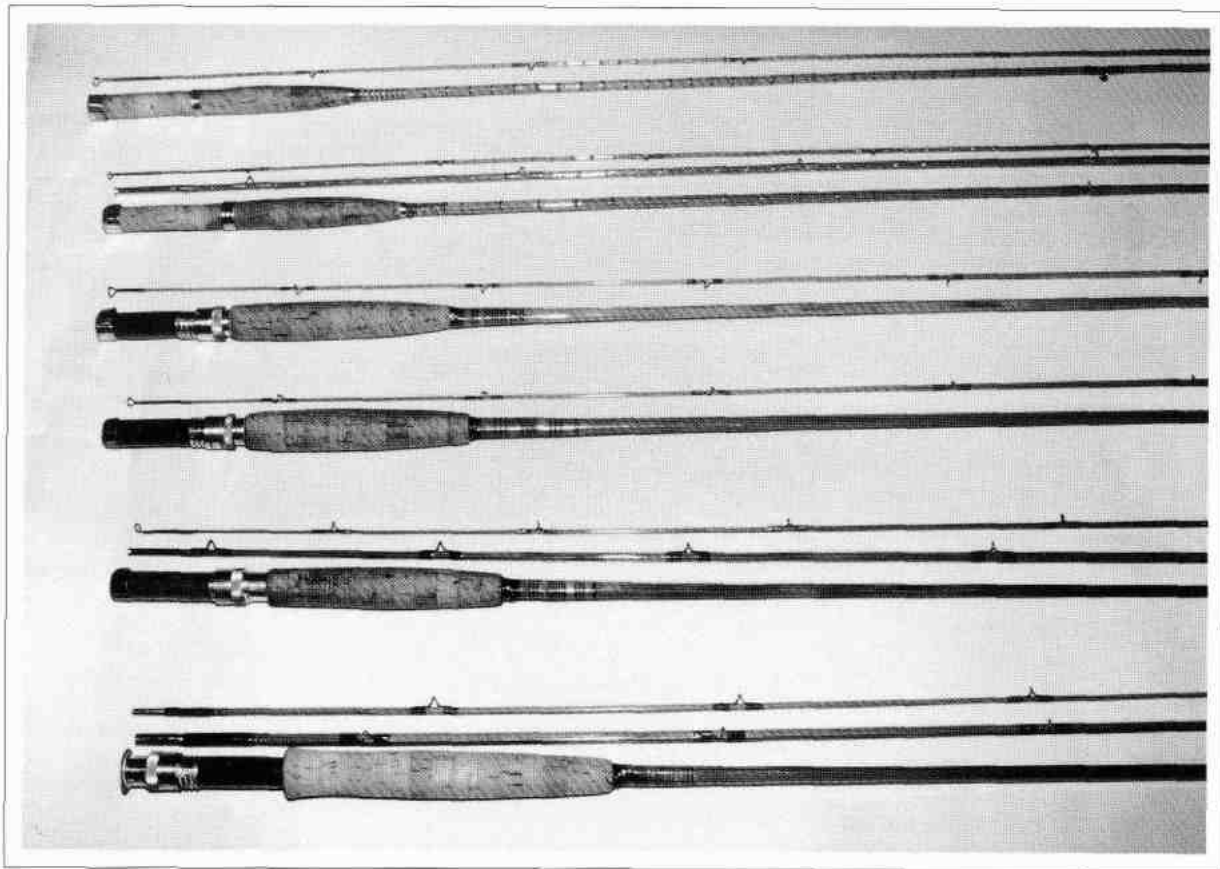
H. L. Leonard joins Payne at the top of the overall survey. Hiram Leonard, many of whose early rodmakers went on to found their own great rod shops, is the grandfather of most of the rods cited in this survey. Yet over its century of operation, Leonard's marked changes in quality point to the shop's inability to maintain the same focus and consistency achieved by Payne during its decades of moderately high production.

Inexplicably, the H. L. Leonard Rod Company destroyed its records after the 1964 factory fire. Thomas Maxwell has estimated production since the turn of the century by counting the number of rodmakers actively working at various times and multiplying by the quota of rods contributed by each rodmaker. His calculation of the number of Leonards, William Mills & Sons rods, and the later Duracanes (impregnated rods designed by Leonard and built to its specifications

in England) from 1900 on, totals about 50,000 (.048% of which are cited in the survey). This estimate is not inconsistent with others arrived at independently.

To try to compare Leonard rods, the period of their construction has to be clarified: the pre-dry fly period until the 1920s, the golden era interrupted by World War II and ending with the disastrous 1964 fire, the chaotic red wrap era (1967-1970), the Ted Simroe era (1970-1976), the Thomas Maxwell era (1976-1982), and, finally, Leonard's corporate demise and auction in 1985. (There are rumblings that H. L. Leonard may rise again.) Thomas Maxwell reported that when he took over at Leonard, he found the rodmaking beveller had been cutting bamboo strips so variably that rods designated as the same model took different size lines. So it is possible that even the same Leonard models made in the same era are not really comparable.

Our survey fishermen do cite some great Leonard rods, especially those deli-



Photograph C. F. E. Thomas rods, from top: Special "Fairy" 7-foot, two-piece; Special "Fairy" 8-foot, three piece; Special 8-foot, two-piece; Browntone Special 8-foot, two-piece; Browntone Special 8 1/2-foot, three-piece trout rod; Browntone Special 9-foot, three-piece salmon rod.

cate Leonards for light-line fishing. Yet when asked personally, most acknowledge that they tried a number of Leonards before finding one they really liked. They recognized that Leonard has not been as consistent in making outstanding rods as many other makers. Dealer Fred Grafeld believes that "Leonard's name recognition and good press . . . have made substantial contributions to its reputation."

Yet this same "halo" effect also deepens our enjoyment of the great Leonard rods. For me, fishing an 8-foot, three-piece Model 50DF built in the 1930s, with honey-colored cane and wraps, using a silk-line on a Philbrook/Payne Bimetal reel made by Leonard, is a transcendent experience that turns back time and vividly evokes a sense of our great fishing heritage. I also enjoy a Leonard 7-foot, two-piece Model 38H, one of the two most cited rods in our survey, which casts with crispness and vitality.

Most fishermen feel good about Leonard rods and take pride in the Leonard heritage. Hoagy Carmichael said, "Leonards have been the standard of excellence for over 100 years. Everyone

has had the chance to cast and cuddle a couple of Leonards. That's not so true of other rod makes."

DICKERSON RODS

Like Jim Payne, Lyle Dickerson maintained a consistent vision, making few changes in the rods he built throughout his career. Dickerson was not an urbane New Yorker/Catskill man, but a hardy Midwesterner who chose function over form. Dickerson rods were not made to be perfect or radical; these straightforward rods look and cast as Lyle Dickerson insisted: "clear as light." Noting the parallel between the character of this rodmaker and that of his product, Phil Snyder concluded, "The man was as good as his rods."

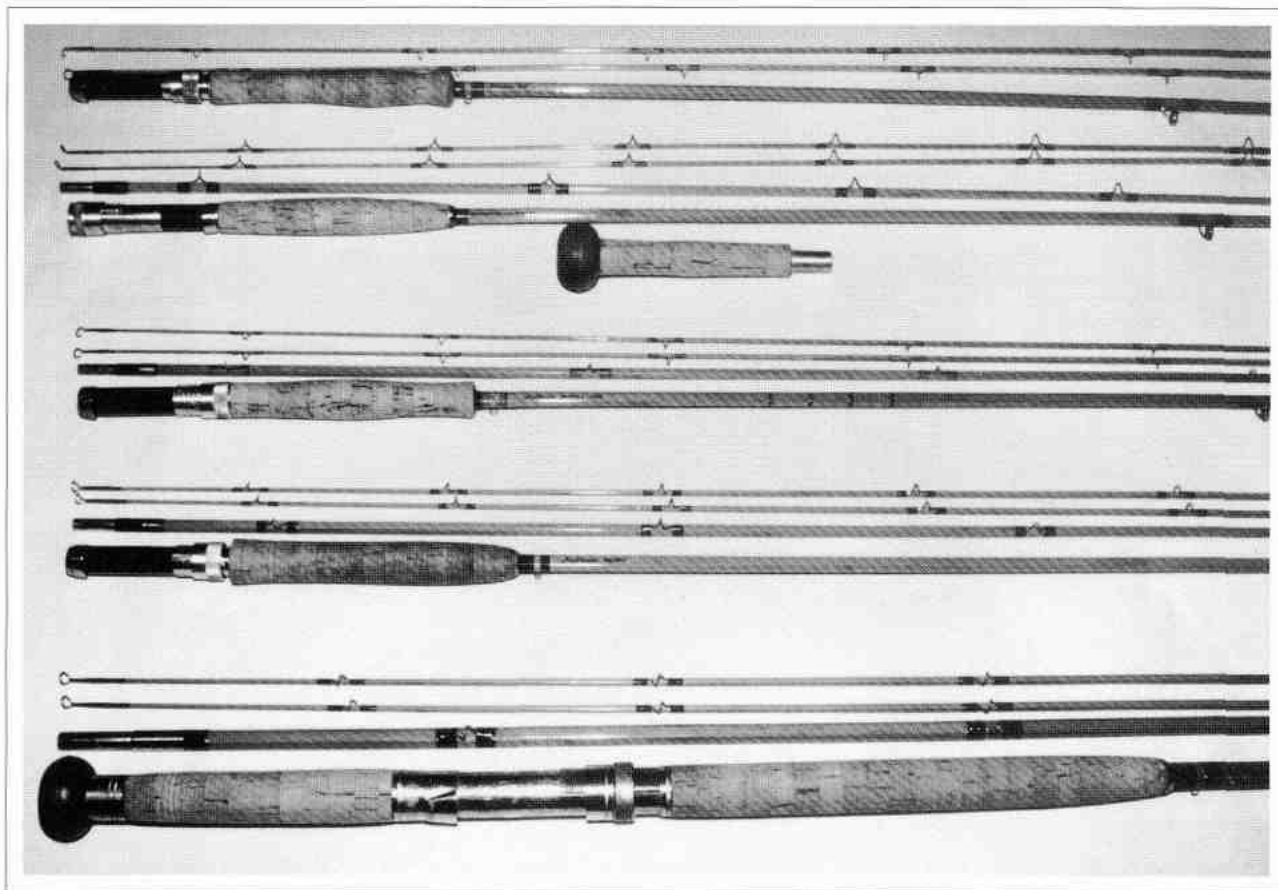
There has been more recognition of Dickerson in the last few years (Dickerson rod prices are rising) and this has made them the third highest priced make behind Gillums and Garrisons — about the same rank Dickersons hold in this favorite rod survey and the closest correspondence between price and our fishermen's esteem for any rod make.

Rods listed in the L. L. Dickerson

ledger, and estimates of the small number of Dickersons not listed, provide a meager total of only 1,350 fly rods for trout and salmon/steelhead (.74% of which were cited in the survey, the second highest number among all rod makes) from this unusual, mostly one-man shop. Payne built at least ten rods, and Leonard thirty-five, for every rod Dickerson made. Experienced participants in the survey place Dickerson just behind Payne for consistently making great rods. John Bradford, a rodmaker who specializes in Dickerson rods, even claimed, "If a bunch of experts harangue it out, they will come to the least disagreement that Dickerson was the greatest rodmaker, as someone will be critical of each of the other makes."

Those Dickersons cited most often in the survey include the lithe 7 1/2-foot, two-piece Model 7612; the silky 8 1/2-foot, three-piece Model 86E (similar to the later Model 861610); and a pair of 8-foot, two-piece rods: Models 8013 and 8014 Guide.

I do not know of another series of two-piece or three-piece rods of any length that compares to the Dickerson 8-foot,



Photograph D. L. L. Dickerson salmon rods, from top: Model 9016 9-foot, two-piece; Model 901913 with extension butt, 9-foot, three-piece; Model 961812, 9 ½-foot, three-piece; Model 961913, 9 ½-foot, three-piece; two-handed 13 ½-foot, three-piece (the only two-handed rod Dickerson made).

two-piece series. (Jim Payne's superb, but much less extensive, 8 ½-foot, three-piece series — Models 204, 205, 206, and Canadian Canoe rods [see Photograph A] — probably place second.)

Having had the good fortune to use eight different 8-foot, two-piece Dickerson models — and these do not exhaust the variety of tapers Dickerson made in the 8-foot, two-piece configuration — each model felt clearly distinct and superb (see Photograph E). Dickerson's ability to conceive, design, and build so many great 8-foot, two-piece variations, each with its own unique character and function, seems remarkable. Though the total numbers of these models produced did extend to double-digit figures, such limited numbers of each model were built that the total number of these specific Dickerson rods known to still exist does not exceed 100. Worth particular recognition are:

* *Model 8012*, 8-foot, two-piece, lays out a #2 silk line beautifully and protects even an 8X tippet. It is the finest midge rod I have ever used.

* *Model 8013*, the best 8-foot, two-piece

taper Dickerson made in even moderate numbers, includes a sweet, delicate 8013 made for Art Flick's son, Bill, and variations of the 8013 such as the Model 8013 Streamer, Parabolic, and a great Model 8013 Special built for Dickerson collector Park Pixley.

* *Model 8014* was designed to pinpoint cast to rising fish from boats on the AuSable River. It has rod tips strong enough to pull hooked fish out of the sweeper branches that line the AuSable banks. Having been designed for such specialized use may limit the desirability of some Model 8014s for use on other streams. Yet a Model 8014 Hollow rod, built for L. A. Pixley with a rare slide band, butternut seat, and intermediate wraps, is wonderfully light.

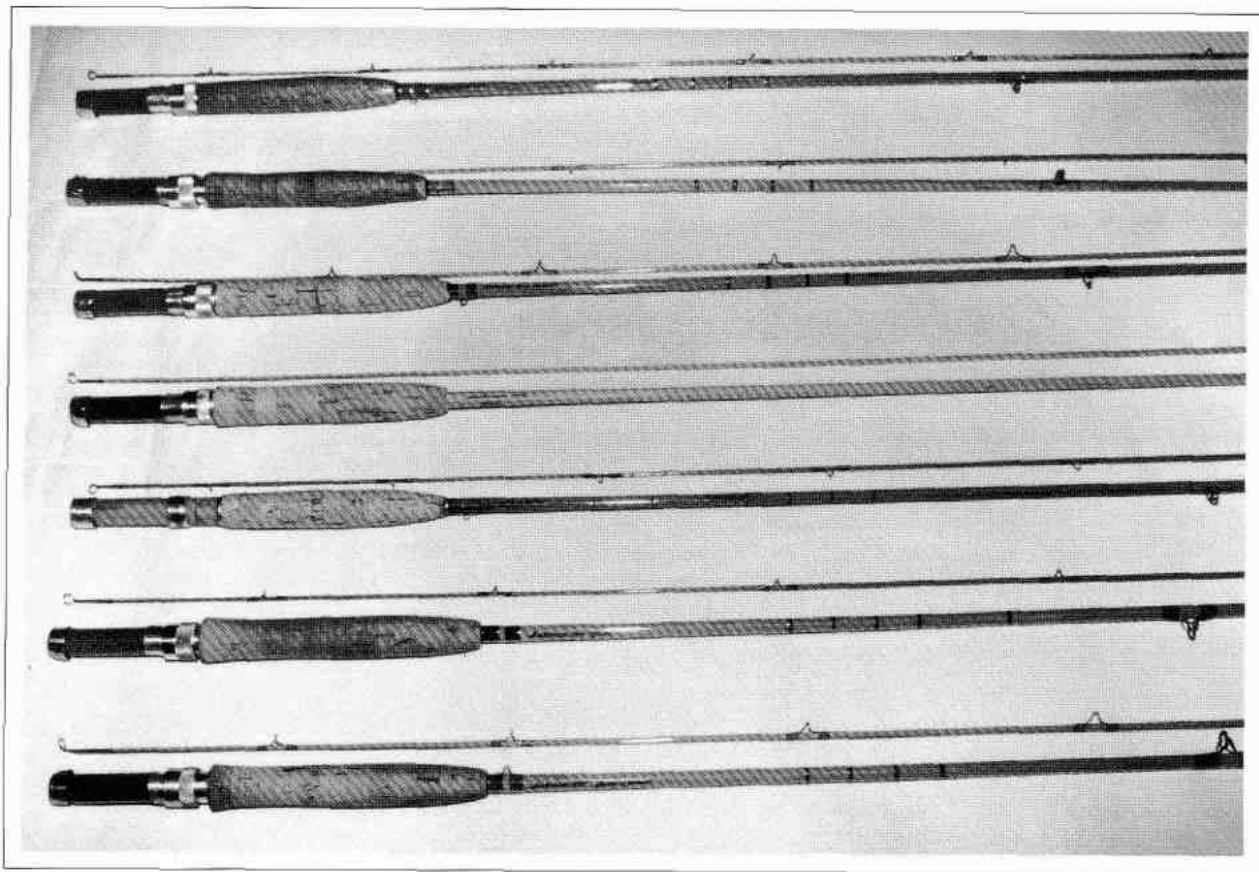
* *Model 8014 Guide* is cited in the survey as a favorite rod of several rodmakers. The rod made for guide Tom Evans feels just right and deserves such recognition.

* *Model 8015 Guide Special* qualifies for dealer Tom Clark's designation as a thunderstick. AuSable guide Norval Stefan's rod, which drills a synthetic WF7 line, is a dynamic, Gillum-like powerhouse.

F. E. THOMAS RODS

Generalizing about F. E. Thomas rods is difficult for a number of reasons. Martin Keane estimates from company records that founder Fred Thomas and son Leon produced about 15,000 rods (.067% of which were cited in the survey). There is a consensus that Thomas's quality of production was inconsistent. Comparing the top rods in our survey, Hoagy Carmichael flatly stated, "F. E. Thomas was the most uneven of them all." There is disagreement as to how much this unevenness detracts from the desirability of F. E. Thomas rods. Dealer Fred Grafeld concludes, "The F. E. Thomas rods differ from each other, even among rods with the same specifications, but I like them all."

The best F. E. Thomas rods are unsurpassed. Several lightweight "Fairy" rods, 7-foot, two-piece and 8-foot, three-piece Special Models cast almost magically using a 2-inch Leonard reel to float midges on a silk line. Yet an 8-foot, two-piece and 8 ½-foot, three-piece trout rod and a 9-foot, three-piece salmon rod (see



Photograph E. L. L. Dickerson 8-foot, two-piece rod series, from top: Model 8012, 8-foot, two-piece; Model 8013, 8-foot, two-piece; Model 8013 Special, 8-foot, two-piece; Model 8014, 8-foot, two-piece unfinished, last rod Dickerson is known to have started; Model 8014 Hollow, 8-foot, two-piece with rare slide band and intermediate wraps; Model 8014 Guide, 8-foot, two-piece; Model 8015 Guide Special, 8-foot, two-piece.

Photograph C) are exceptionally responsive and strong. The beauty of these Browntone Special Models with their chestnut silk wraps is as irresistible as mahogany or fine old leather.

Yet there are concerns about F. E. Thomas rods that lead the most experienced participants in this survey, when polled personally, to rank F. E. Thomas closer to Leonard than to Payne and Dickerson in their consistency of producing great rods. Respondents cited the variability, the coarse hardware used; they questioned the quality of workmanship and how it was affected when the company produced the cheaper Dirigo and Bangor rod lines; and they repeated the rumors that production quality deteriorated further in the early 1950s before the company's demise.

E. C. POWELL RODS

Completing the group of rods that placed second highest in the survey are those of E. C. Powell. Yet if we were to count only the votes of those survey participants who live in the West, E. C. Powell and Leonard would be the very top rods.

Asked to comment on this regional disparity, Martin Keane, who has long lauded E. C. Powell rods, explained:

"There is an enormous void of information across the country about E. C. Powell rods. And a lack of people who have tried them. Many have never seen one, but seeing one is not a moving experience. I would venture that people who don't have a soft spot in their hearts for E. C. Powell rods have never spent a few hours on the river with one."

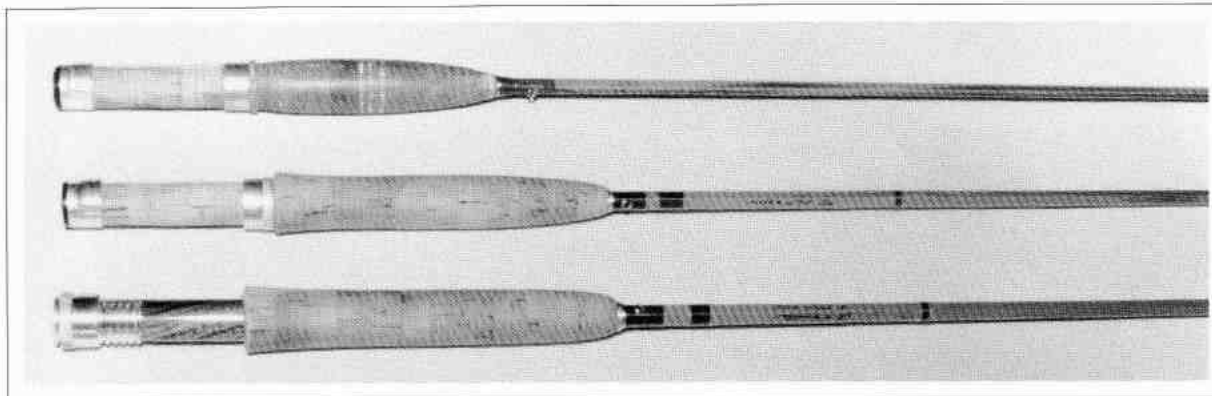
Some of the most experienced participants in this survey are not prepared to compare E. C. Powell with the greatest rodmakers. Most acknowledge that they have had too little experience fishing E. C. Powell rods to draw conclusions. Long-time rodmaker and dealer Bob Summers remembers seeing only one and has never fished an E. C. Powell.

Those survey participants who have fished E. C. Powell rods rank his work behind Jim Payne and Dickerson, but ahead of F. E. Thomas and Leonard. John Bradford concluded, "I have to admire E. C. Powell's workmanship," and not many rods pass muster with this rodmaker who

is also a retired Air Force double wing commander.

Most E. C. Powell rods are 9 feet or longer. Very few are available under 8 feet in length for fishermen to sample. This meager supply of shorter rods, which many fishermen now prefer, may account for why most fishermen have not seriously considered E. C. Powell rods. "My father was an exponent of longer rods," reported E. C. Powell's son, rodmaker Walton, "he believed that a good all-around rod ought to be 9 feet in length."

E. C. Powell did have strong opinions and built rods the way he believed they fished best. Unlike many rodmakers who have only modest skill in casting and fishing, E. C. Powell was a champion caster who described his knowledge in essays on casting and rod design, and he sometimes signed his rods, "E. C. Powell, Angler." His patented hollow-built, and thus light, rods with their remarkable tapers provide buttery smooth, yet precise casting. Many of the available shorter E. C. Powells do hold their own with the best of rods. A 7 1/2-foot, hollow-built gem, built for W. C. Day, lays out a line as lightly as a shadow



Photograph F. G. H. Howells rods, from top: 6 1/2-foot, two-piece, his personal fishing rod and the first rod G. H. Howells built; 7 1/2-foot, one-piece, another personal fishing rod; 8-foot, two-piece for #4DT.

falling on the stream. Exceptional examples of his work include hollow-built two-piece, 8-foot; 8 1/4-foot; 8 1/2-foot — the shorter half of Companion Rod sets; and 9-foot rods. Hollow-built 8-foot and 9-foot, three-piece models are also cited in the survey. A 9 1/2-foot, three-piece solid-built E. C. Powell that won a world casting championship in 1932, and took a world's record steelhead in 1936, fished with a Hardy St. George 3 3/8-inch Multiplier reel, is outstanding on any river from Oregon's steelhead Umpqua to Nova Scotia's salmon Margaree (see Photograph B).

Yet E. C. Powell's plain, Bakelite reel seat spacer that does not bind or need refinishing and the nonreflective oil finish he used on his cane over much of his career detract from the aesthetic appeal of his rods, in my opinion. I do not find his innovative "Companion Rod" set, which combines identical tips with two butt sections of different lengths, to be really successful in creating a pair of exceptional rods. Had E. C. Powell used model designations; provided catalogs; written specific, identifying information on his rods; or fully explained how to differentiate among his A, B, and C tapers, he might have sparked more interest in his superb rods, which remain "sleepers" outside the West.

HOWELLS RODS

The G. H. Howells Rod Company heads our group of third most popular rods. Howells rods are cited by more fishermen in our survey as their "number one" choice than those of any other maker except for Leonard and Payne. Howells rods seem poised to join the ranks of the great rods — perhaps as soon as you can no longer order one. Gary Howells has maintained a conceptual clarity and quality of workmanship over two decades; it is estimated that he has

produced 1,000 rods (.7% of which were cited in the survey, the third highest number among all rod makes).

G. H. Howells rods are hollow-built and designed for delicate fishing. Gary's very first rod, a 6 1/2-foot, two-piece taper; one of his personal fishing rods built as a one-piece 7 1/2-foot rod; and a light, responsive 8 3/4-foot, two-piece salmon rod he no longer makes, offer a broader view of Howells' work (see Photograph F).

Gary Howells' recognition is most welcome: being a contemporary rodmaker seems a thankless task. Though contemporary rodmakers offer the best of the old masters' tapers with improved technology, including adhesives, most split-cane rod fishermen insist on vintage rods. Many of these are not as good as those that contemporary rodmakers can build at prices which seem modest, given the skill, dedication, and labor required. Yet repairing and restoring these vintage rods — for even more reasonable charges — occupy much of the contemporary rodmakers' time. Those contemporary rodmakers cited in the survey include: Mark Aroner, John Bradford, Pers Brandin, Sam Carlson, Hoagy Carmichael, Walt Carpenter, Wayne Cattanach, F. J. Degere, Ray Gambradella, Leon Hanson, Bruce Howells, G. H. Howells, C. W. Jenkins, Tony Maslan, Walton Powell, J. W. Schaaf, Brad Stevens, R. W. Summers, Art Taylor, Tim Watrud, the Winston Rod Company, and others have been instrumental in preserving and extending bamboo rod tradition, skill, and knowledge. How many of them will be revered as great rodmakers once they stop making rods?

GARRISON RODS

Also in the third most popular group of rods are the highly acclaimed, yet controversial, rods of Everett Garrison, whose total production Hoagy Car-

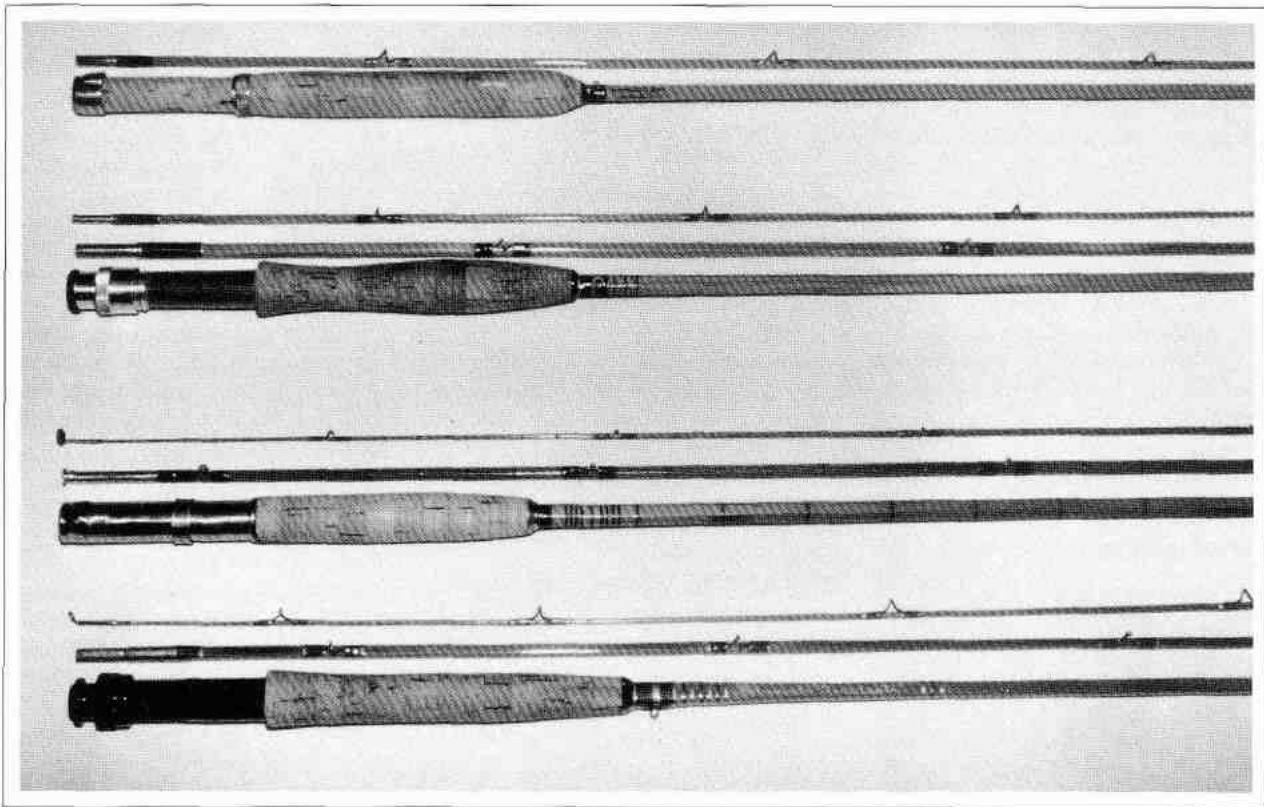
michael estimates to be only 600 to 650 rods (.96% of which were cited in the survey, the highest number among all rod makes). Such a small number of available rods and the comparatively high prices they have long commanded — in part because of the limited supply — probably prevented our survey fishermen from experiencing Garrison rods and thus gaining affection for his work.

Garrison's semiparabolic designs are radical; his engineering approach remarkably technical (Dickerson said that if rodbuilding were as complicated as Garrison described, no one would have been able to build rods); and his tapers vary greatly in their appeal. Garrison rods acquired even greater status after the publication of Everett Garrison and Hoagy Carmichael's excellent book, *A Master's Guide to Building A Bamboo Fly Rod* (New York: Nick Lyons Books, 1985). All these factors may make it difficult for even sophisticated fishermen to objectively evaluate Garrison rods.

No fisherman surveyed cites more than one Garrison as among his favorites. A number spontaneously questioned their value, then as an afterthought, affectionately remembered one Garrison they felt was a great rod. The Garrisons I have cast, including several of the models cited in the survey, have varied from fair to excellent. Yet a 7 1/2-foot, two-piece Model 206 is a superb casting machine which propels the line with a unique feel (see Photograph G).

PAUL H. YOUNG RODS

According to Paul H. Young Company records, Martin Keane estimates that 5,000 rods (.016% of which are cited in the survey) were produced. The Paul H. Young Company rods resemble Garrison's in their use of semiparabolic tapers and in questions as to whether their rising prices are justified. Both



Photograph G. From top: W. E. Edwards Quad, 7 1/2-foot, three-piece; Hawes, 10-foot, three-piece; Gene Edwards Deluxe Model, 8 1/2-foot, three-piece; Garrison, Model 206, 7 1/2-foot, two-piece.

Young's beautiful, flamed cane and his characteristic mediocre varnish work are legendary.

No favorite rod was cited more often in the survey than the Paul H. Young Para 15. Though the Para 15 is an exceptional rod, its apparent popularity in this survey may be misleading. Bob Summers, whose Model 856 is patterned after the Para 15 (and is also a very popular rod in our survey), reports that at least six versions of the Paul H. Young Para 15 were built. If these had been given their own model designations, the Para 15 itself would not be cited as much, though Paul H. Young rods would still be ranked as highly.

In fishing Paul H. Young rods, I find his 6 1/4-foot Midge and his 7 1/2-foot Perfectionist, both two-piece models to be original and exciting: these designs are brilliant, though the execution was sometimes imperfect. Ironically, the most desirable Young rods may be those designed by Paul H. Young late in his career, and built during his lifetime, by his then-protégé, Bob Summers.

ORVIS RODS

Charles F. Orvis, and the Orvis Company he founded in 1856, have made available so many bamboo rods — nearly 100,000 by Orvis's estimate — and dis-

tributed them so widely, that fishermen have long had ready access to good bamboo. Used Orvis rods are still more available at fly fishing shops than any other fine, used cane. Most of the Orvis rods cited in the survey are the impregnated Battenkill models which are sturdy, but throw a heavy line. Yet only nine of the nearly 100,000 Orvis rods produced are cited. Despite the Orvis heritage, Orvis rods have not been idealized like Leonards.

THOMAS & THOMAS RODS

Thomas Dorsey, the other founder of Thomas & Thomas, counts about 4,000 bamboo rods produced over the company's twenty-two years of operation (.013% of which were cited in the survey). Unlike most rodmakers Thomas & Thomas has aggressively marketed its rods with newsletters and beautiful catalogs, keeping contemporary bamboo displayed before the fishing public. Each year another unique rod of the master bamboo rod builders is reproduced in the Heritage Limited Edition, a celebration of classic achievements in bamboo.

Thomas & Thomas has demonstrated an impressive ability to make consistently lovely rods, but the casting and fishing consistency of these rods has been less

certain. That many of the Thomas & Thomas rods cited in the survey were made early in the company's existence suggests there was more consistency of production quality during that period. How that consistency will be affected by the company's 1991 sale remains to be seen.

GILLUM RODS

Included amongst favorite rods are those of H. S. Gillum. Yet Gillum's overall popularity in this survey is only because of its recognition as a top salmon rod. Among the favorite trout rods listed, only one is a Gillum, as compared with twenty-one Payne rods. No Gillums are cited as favorites by the rodmakers surveyed. Reportedly a somewhat irascible fellow, "Pinky" Gillum made trout rods that some collectors cherish, many fishermen disparage, yet no one can ignore. Gillum's limited popularity as a trout rod in this survey is remarkable since a Gillum trout rod sold at the February, 1989, Oliver Auction for an all-time record price for rods of \$19,250.

Such prices do not encourage free and easy fishing and thus may limit Gillum's popularity in this survey. The central issue, however, is over whether the heavier Gillum rods are wonderfully powerful

or merely “clubby.” Most fishermen agree that lightweight Gillums are very desirable, yet Hoagy Carmichael estimates that only one in eight or nine of Gillum’s 1,200 to 2,200 rods (.23 to .42% of which were cited in the survey, the fourth highest number for all rod makes) has that lightweight feel.

Though my own experience with Gillums is quite limited, one 8 ½-foot three-piece, 4-7/8 ounce Gillum trout rod—hardly a lightweight—throws #6DT synthetic line with turbinelike smoothness and power. This rod conveys authority and excitement, evoking an expectation that a big fish might take on any cast, traits which would endear Gillums to any salmon and steelhead fishermen.

OVERLOOKED RODMAKERS

An inherent weakness of this survey is a tendency to underrate or ignore rodmakers whose work has not been readily available to most fishermen. For example, Thomas Maxwell names Vince Marinaro as his favorite rodmaker. Maxwell had access to several Marinaro rods, but does not know of any of his rods being sold and remembers Marinaro turning down offers to design rods commercially. Such unavailability leaves little chance for wider recognition of this facet of Marinaro’s great ability.

Al Talbot died in 1989, after making what Gary Howells estimates was less than sixty rods. Al worked as a machinist and built rodmaking equipment for Howells and the Winston Rod Company. Most of Al’s quads and six-sided rods were one piece.

I find Talbot’s 8-foot, one-piece Model 8041 delightfully smooth, light, and precise. A fine 7 ½-foot, one-piece, six-sided Talbot is also cited in this survey. Though he gave some rods to friends, only a few have been sold, and those only in the last few years. With Al’s passing his opportunity for recognition may also be lost.

A number of well-known rodmakers’ work is conspicuously absent in this survey. There are no Halsteads, no Hawes (see Photograph G), and no E. W. Edwards trout rods, though one E. W. Edwards salmon rod is cited. It is not clear that these rods’ limited production entirely accounts for their absence.

Gene Edwards rods are also absent, though they were produced in quantity. Sam Carlson stresses that rod quality was not the highest priority during the years he worked there. Yet I feel one Gene Edwards 8 ½-foot, three-piece rod, reportedly built by Sam Carlson at the Gene Edwards shop, is superb—reminiscent of Jim Payne or F. E. Thomas. Though

Sam Carlson has made very impressive rods in his own shop, few appear in this survey.

FAVORITE ROD LENGTHS AND LINE SIZES

The most popular length of the trout rods cited in this survey is 8 foot, followed by 7 foot rods, then 7 ½ foot and 8 ½ foot in length. The most common salmon rod length is 9 foot, followed by 8 ½ foot and 9 ½ foot.

The most popular line size for our fisherman’s favorite trout rods is a synthetic #4DT weight. Next most frequent is a #5, followed by a #6, then a #3 weight. The most popular line thrown by the salmon rods cited is a #8 weight..

Illustration from *Fly Rods and Fly Tackle* by H.P. Wells (1885)



REELS

EACH OF THE FISHERMEN surveyed lists his favorite trout reel and most cite a salmon or steelhead reel as well. The most popular trout reel is the Hardy Perfect; next are the smaller size Bogdans; then a group consisting of the Jim Hardman reel, the Edward vom Hofe Perfection, and the Orvis CFO reels. Among the salmon/steelhead reels, the Bogdans are clearly the first choice: notably the oo Model, followed by the o Model, then the Large Steelhead Model.

Jim Hardman took as an avocation the challenge of making a classically styled, yet beautifully functioning reel. He has completed only six reels, most of which have been given to friends. Yet two of the

six are cited in this survey, a testimonial, in part, to the exceptional quality of Jim Hardman’s work.

Comparing favorite reels is complicated because the model, series, and size designations are not as standard as they are on rods. The Hardy Perfects, for example, have been made for nearly a century in very large numbers—unfortunately, the company records were destroyed during World War II—with a myriad of ambiguously designated models, prototypes, and production versions of varying sizes, using different materials, and with features which make them difficult to categorize.

Bogdan reels are a simpler line to trace. Yet there are no Bogdan production records to indicate how many have been made. Stan Bogdan estimates production has been in the thousands. This survey points to a consensus regarding Bogdan reels similar to the consensus regarding Jim Payne rods. As with Payne, nearly every Bogdan model except for the largest sizes is cited as a favorite in our survey. Assembling the series of Bogdan reels cited, from the smallest “baby” Bogdan through the popular o Model salmon reel, allows a complete description and evaluation after the fiftieth year of S. E. Bogdan’s production.

These nine Bogdan models vary in diameter, width, fixed or adjustable drag, single action or multiplier, lightweight or solid sideplate, “gold” rim or all black decorative features. Yet it seems that each Bogdan works perfectly, holds up well, and looks great—making its owner feel good to be using it. Hooking an Atlantic salmon or steelhead on a Bogdan and knowing that the excellent drag will protect the leader saves many a fish . . . and fisherman. An especially attractive choice is the oo Model, made as a lightweight, adjustable drag, single-action reel—just right for trout, steelhead, and salmon.

Asked which Bogdan model he uses for trout fishing, Stan Bogdan insists he takes whichever Bogdan reel his wife has around the house. He doesn’t specify whether he has always done this, or just started after the resale price of used Bogdan’s tripled in the past few years! Trout fishing with a Bogdan is like staying at an expensive hotel—an unnecessary luxury, but a pleasurable extravagance.

A distant second in popularity among salmon/steelhead reels is the Hardy St. George series. Then a group consisting of the Hardy St. John and Hardy Zenith, the Abel #2 reel, the Saracione, Finnor #2 and #3, the Ross S2, and the classic Edward vom Hofe Tobique. Other reels cited are the Pflueger Medalist, the Thomas &

Thomas Classic, and the J. B. Young Pridex reel.

DISCUSSION

THOUGH THIS SURVEY was designed to do everything possible to objectively name the finest tackle models, there are limitations in comparing tackle by model. No two bamboo rods cast identically, even though designated as the same model by the maker. Differences in the structure and aging of the bamboo used, inconsistencies in cutting and gluing together the strips, the length of time and temperature at which the cane is heated or flamed, and other production differences affect how the finished rods feel and cast. Fortunately, reels are less prone to such variations if the exact model can be specified.

Yet asking fishermen to choose which reels or rods please them most is subjective and personal. "All in the eye of the beholder," insists Bob Summers who goes to great lengths to maintain his standards of rodbuilding. Style and appearance are important in these artistic creations. How much does the red color of the "red wrap era" Leonards detract from our appreciation of them? Would Omar Needham's rods be more popular if he had used consistent, attractive hardware? Details such as how well the cork grip fits in our hand affects how a rod's action feels.

Regional patterns, friendships, and loyalties also influence our judgments. The work of Western rodmakers E. C. Powell and G. H. Howells rate much higher with Western fishermen, very few of whom can appreciate the excellence of F. E. Thomas rods. The larger Western rivers and occasional Western spring creeks only partially explain these marked variations in regional tastes. Westerners are partial to New Hampshire Bogdans over English Hardy Perfects as their favorite trout reel. Bogdans are Westerners' runaway favorite salmon/steelhead reels.

Personal friendships with the rodmaker cannot be overlooked. Joe Garman answered the survey question about his favorite salmon/steelhead rod, "I don't know whether I prefer the Payne (9-foot, three-piece Model 400 DFS — see Photograph A) or the Needham, but this was Omar's rod and he gave it to me, so I will pick it." The personal meaning of a rod in one fisherman's life led him to answer the survey, "It was an unmarked rod, but I restored it, and got it like it should have been, and it is my favorite rod." Another confided, "I got this rod when I was twelve years old and loved it. It is why I am a cane rod builder." ~

RECOMMENDED READING

Books of Any-Month Club

What the River Knows: An Angler in Midstream by Wayne Fields (New York: Poseidon Press, 1990)

Upland Stream: Notes on the Fishing Passion by W. D. Wetherell (Boston: Little, Brown & Co., 1991)

Where The Trout Are All As Long As Your Leg by John Gierach (New York: Lyons & Burford, 1991)

The Way of The Trout by M. R. Montgomery (New York: Alfred A. Knopf, 1991)

On The Spine of Time by Harry Middleton (New York: Simon & Schuster, 1991)

Fishing Came First by John N. Cole (New York: Nick Lyons Books, 1989)

Old Soldier by Vance Bourjaily (New York: Donald I. Fine, 1991)

Uncommon Waters: Women Write About Fishing, edited by Holly Morris, preface by Margot Page (Seattle: The Seal Press, 1991)

IN A RECENT EDITION of the *New York Times Book Review*, six fishing books were taken up — that's right, six. To appreciate the enormity of this, you have to understand that the *New York Times Book Review* may well be the most prestigious, influential publication devoted to the book publishing trade. Publishing houses and their authors scheme and dream of getting their books reviewed by such an estimable publication. And it doesn't necessarily matter whether the reviews are favorable; the important thing is to get a book in those pages.

As an example of the power of the *Times Book Review*, there is the case of an associate professor at a large university who for years was denied a full professorship despite having had a half dozen books published; the problem, you see, was that they were fishing books. Then, with tongue in cheek, he wrote and had published a book on, of all things, dieting!

The book was promptly reviewed in the *Times* book pages and he was immediately elevated to the long-sought full professorship.

That will give some idea of where fishing books ranked on the literary scale and the value of being plucked for the pages of the *Times Book Review*. Traditionally, book review editors would as soon review a book on the mating habits of earthworms as sully their pages with even a mention of a fishing book, let alone a review of one. How then to account for what seems to have become a growth industry of sorts? Of course, it can be partially attributed to interest in fly fishing and the many celebrities of one ilk or another who have been drawn to it. But is that the whole answer? Doubtful.

Whether book review editors are aware of it or not, the literature of angling, including fly fishing, has a history that predates most forms of formal writing; certainly long before the novel became a recognized form. Ernest Schwiebert in his two-volume *Trout* speculated that the first known reference to an artificial fly seems to have appeared in a Chinese book from approximately 3000 B.C.! Was anybody writing novels in 3000 B.C.? If that's questionable, there can certainly be no doubt about a third century A.D. book by a Roman zoologist containing a description of both an artificial fly and how it was fished in ancient Macedonia — for trout, no less.

Angling — fly fishing particularly — seems to have been the sport that attracted the best and the brightest, and certainly the most literate. This helps to account for the fact that angling is probably the one sport or recreation that can boast a most extensive body of literature. In the English language, we can definitely date it from 1496, when the *Treatyse of Fishing with an Angle* was first published, though written some seventy years earlier. For nearly five centuries the *Treatyse* has been attributed to Dame

Juliana Berners, not only a woman but a nun. Since then, there have been uncounted numbers of books on the subject; a recent estimate placed the figure in excess of 6,000. This is a sport that has produced books about the books.

Not all of them, it has to be said, qualify as literature. And the reason is fairly simple. There have always been writers who fish and who at times bring fishing into their writings, and then there are fishermen who sometimes write about their sport. Very little of the latter's output is truly literary, and in most cases is designed only to instruct—so-called how-to volumes—such as the Dame did in her *Treatyse*. The volumes of this type are in the vast majority, far, far outnumbering those considered literature.

The appearance of any such volume, whether literary or not, brings with it a measure of pleasure and enjoyment. Michael Pollan, an editor as well as an angler, struck the right note when he wrote, "Fly-fishing would hold little appeal if not for the shelfful of classics that comes with it. . . . After all, it isn't only God and nature that made the trout a more interesting creature than the pickerel; Norman Maclean and Thomas McGuane and William Humphrey deserve at least part of the credit." Indeed. Such a declaration may not need any reinforcing, but gets it anyway from novelist Howard Frank Mosher's stout proclamation that "From Thoreau's *Maine Woods* to Hemingway's 'Big Two-Hearted River,' the pleasures of fishing have inspired some of the most appealing passages in American letters." Is there another sport that can edge its way into that company? Not likely.

The editor of the journal you're reading, who commissioned this piece, asked for a review of some recently published books dealing with angling; instead, this seems to have turned into a ramble about fishing literature. But there's no inconsistency here; fly fishing itself is a sort of rambling sport, which may be why it has such great appeal. Those seeking a pastime guided by set rules of time and place and other strictures may find haven in the more traditional sports of golf, tennis, bridge, or bowling.

Among recent issues, probably the one closest to Maclean's classic *A River Runs Through It* is Wayne Fields's *What the River Knows: An Angler in Midstream*. Though fly fishing figures prominently in both books, neither, strictly speaking, could be called a "fishing book" any more than *Moby Dick* would be called a whaling book. Fields finds himself at age forty-two in a midlife crisis. He sets himself the dual

challenge of fishing the entire 20-mile length of Cook's Run, a trout river in Michigan's Upper Peninsula which flows near the remote cabin he and his family had occupied for fifteen years, and writing about the experience. But for Fields it became more than simply a fishing trip in hopes of recording the capture of a big trout. It becomes, instead, a metaphor for his life and he begins to see it as an "awkward fumbling after grace" . . . the grace to forgive himself for a lifetime of small failures. He also begins the process of letting go, makes an effort to find in middle age a new connection to life and the world. He thinks of his three children growing up and away from the tight hold of the family; that they will leave his house as he had left the house of his father. Ultimately, *What the River Knows* is a meditation on, and celebration of, trout and children, of clear waters and stagnant pools, of personal loss, of what has been and what remains to be. Fishing? Oh, yes, there's a good deal of fishing in this odyssey; it's the thread that holds the narrative together, but it's also a lot more than a fishing story. It is, as one reviewer put it, "a compelling confrontation with nature that is also an excursion down the river of the soul." Few readers will fail to find points where they can empathize with the joys and anguish of the author, or detect in themselves that same "angling for grace."

Of an altogether different character, but easily falling into the category of literature, is *Upland Stream: Notes on the Fishing Passion* by W. D. Wetherell. In these essays, Wetherell explores the age-old question, "Why fish?" In attempting to answer it he discovers that "Why fish?" may be a simple question, but there are no simple answers. While pursuing answers, he casts his flies in trout streams ranging from Vermont's Battenkill to the Yellowstone and to the mysterious lochs of Scotland, with stops at a multitude of other enticing trout waters. From personal experience he combines elements of natural history, his own inner revelations, and a deep love for this solitary sport. An accomplished novelist, Wetherell makes an impressive stab at the question that won't go away, because, he says, fishing is "a balm and supportive to the soul, an antidote to bitterness, a relief and a restorative and a reward." Well, if that isn't an acceptable answer, it will do until a better one comes along. To reinforce that declaration, he lists thirteen separate and specific reasons for "Why fish?" Any reader who can resist the urge to explore those thirteen reasons can't be a serious fly fisher.

An attempt to review in depth all, or even most, of the many fine angling books that have appeared in recent months would be beyond the province of this essay, so the best that can be done at this point is to merely list some of them: *Where The Trout Are All As Long As Your Leg* by John Gierach, in which the author reveals some (but not all) of his secret fishing holes; *The Way of The Trout* by M. R. Montgomery, an essay on anglers, wild fish, and running water; *On The Spine of Time* by Harry Middleton, about an angler's love of the Smokies; *Fishing Came First* by John N. Cole, a book that won't enhance your angling, but will help you understand why you keep on casting; *Old Soldier* by Vance Bourjaily, one of today's finest novelists who has penned a story that takes place in Maine and is built around fishing for landlocked salmon; and *Uncommon Waters: Women Write About Fishing*, edited by Holly Morris.

Since this whole thing started with a *Treatyse* by a dame, it seems fitting that this piece should end with the same gender. In *Uncommon Waters*, a volume of some 280 pages, thirty-five women writers pen their particular views and attitudes about this benign insanity we call fishing. As Margot Page points out in her preface, it is remarkable that in the centuries-old history of angling literature, this is the first collection of women writing on the subject. Although women have fished for centuries — note Dame Juliana Berners in the fifteenth century — only in recent years has it become an acceptable and respectable sport for the so-called gentler sex. The pieces in this volume cover just about every type of fishing known to man — and woman. The male reader will find herein perspectives on the sport he never experienced or even dreamt of. There is humor here aplenty to match the best from the pens of famous male angling-humorists. Some of the titles alone are enough to make you chuckle. Keep a straight face if you can at such titles as "A Buncha Guys, A Coupla Fish, and ME: The Opening of Trout Season, Roscoe, New York," or "Jesus, Pete, It's a Woman Fly Fishing." That should give you some idea. With contributors such as Margaret Atwood, Le Anne Schreiber, and Joan Wulff, the quality of the writing should be no surprise.

It may be that none of the books covered in this essay will help you gain a full professorship or that promotion you so richly deserve, but you will end up with a lot of good reading and, who knows, as a result you might even catch a coupla more trout. JOE A. PISARRO

GALLERY



JOHAN D. VOELKER, also known as Robert Traver, died on March 10, 1991, at the age of eighty-seven. He achieved national prominence with his riveting best seller *Anatomy of a Murder* (1958), which was made into an Oscar-winning movie by Otto Preminger. Traver wrote eleven books including *Laughing Whitefish*, *Danny and the Boys*, *Small-Town D. A.*, and *The Jealous Mistress*. He was an attorney in private practice and a Michigan Supreme Court Justice before retiring to Ishpeming, Michigan, on his beloved Upper Peninsula.

He also gained prominence writing about the wild Upper Peninsula and the characters, human and otherwise, who reside there. He wrote three fishing books that became instant classics: *Trout Madness*, *Anatomy of a Fisherman*, and *Trout Magic*. *Trout Madness* is arguably one of the finest collections of fishing stories ever written. He was also the author of the oft-quoted "Testament of a Fisherman."

In August 1991 Mrs. Grace Voelker donated the personal

fishing effects of her husband to the Museum. The well-used fishing vest was the same one he had worn for the last thirty years; the wonderfully shapeless, hole-ridden sweater was knitted twenty-five years ago by Grace for her husband. The stained Eddie Bauer fishing hat was his favorite.

An elegantly battered enamel fishing cup accompanied John on his fishing outings, nestled in a market basket on the seat of his jeep along with bourbon, bottle opener, jigger, and water, according to his wife. His Orvis Impregnated Limestone Special rod is an 8 ½ foot, 4 ½ ounce for a 6-weight line. Also included in the donation was a box for his Italian cigars, and his small notebooks and famous green pens. Anyone who corresponded with Voelker will instantly recognize the green ink on yellow stationery.

Another significant and related component of the Museum's collection are approximately 225 letters John Voelker wrote to publisher Nick Lyons, donated by trustee Bob Buckmaster in April 1990.

The American Museum of Fly Fishing

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Membership Dues (per annum*)

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Life	\$1500

Membership dues include the cost of a subscription (\$20) to *The American Fly Fisher*. Please send your application to the membership secretary and include your mailing address. The Museum is a member of the American Association of Museums, the American Association of State and Local History, the New England Association of Museums, the Vermont Museum and Gallery Alliance, and the International Association of Sports Museums and Halls of Fame. We are a nonprofit, educational institution chartered under the laws of the state of Vermont.

SUPPORT!

As an independent, nonprofit institution, the American Museum of Fly Fishing must rely on the generosity of public-spirited individuals for substantial support. We ask that you give our institution serious consideration when planning for gifts and bequests.

VISIT!

Summer hours (May 1 through October 31) are 10 to 4. Winter hours (November 1 through April 30) are weekdays 10 to 4. We are closed on major holidays.

BACK ISSUES!

The following back issues of *The American Fly Fisher* are available at \$4 per copy:

- Volume 5, Number 3
- Volume 6, Numbers 1, 2, 3, 4
- Volume 7, Numbers 2, 3, 4
- Volume 8, Number 3
- Volume 9, Numbers 1, 2, 3
- Volume 10, Number 2
- Volume 11, Numbers 1, 2, 3, 4
- Volume 12, Number 3
- Volume 13, Number 3
- Volume 14, Numbers 1, 2
- Volume 15, Numbers 1, 2
- Volume 16, Numbers 1, 2, 3
- Volume 17, Numbers 1, 2



Hemingway Exhibition

On July 20 Museum director Don Johnson represented the American Museum of Fly Fishing at the gala opening of "Hemingway: The Oak Park Years," a special exhibition at the Oak Park Art Center in Illinois. The Museum contributed several Hemingway angling-related objects to the exhibition which was sponsored and installed by the Ernest Hemingway Foundation of Oak Park, a nonprofit organization whose ultimate goal is to establish a Hemingway Center in one of the two Hemingway boyhood homes in Oak Park.

Interest in Hemingway the angler remains as strong as ever, even among nonanglers. The question Museum staffers hear most from visitors is "Where is Hemingway's rod?" For the record, his rod can now be seen as part of "Anglers All," the American Museum of Fly Fishing's major traveling exhibition, on view at the Manitowoc Maritime Museum, Manitowoc, Wisconsin, through December 1991. "Hemingway: The Oak Park Years" will run indefinitely at the Oak Park Art Center.

"Great Job Folks!"

If the remarks left in the Museum's visitors' book since the June 7 official opening of our newly renovated spaces

Margot Page



Gen. H. Norman Schwarzkopf, on his recent visit, was shown Gen. Dwight Eisenhower's Orvis rod and Gen. George Patton's creel by Executive Director Don Johnson.

are any indication, then we'd have to say that the public — and hundreds of Museum members — really like the finished product.

The comments — which, to our great delight, have also increased in number markedly since June — border on the euphoric. "Wonderful" wrote Martha Hill of New Haven, Connecticut; Jane White of South Pomfret, Vermont, thought the Museum "a jewel!" To other visitors the Museum was "crisp," "a great place," "excellent," and "impressive as always." Our favorite, to date, was left by Matthew MacIver, who lives in Hingham, Massachusetts. Matthew was so impressed with the Museum that he likened his visit to "a near religious experience!"

And one of our most recent illustrious visitors, General H. Norman Schwarzkopf, signed his name in his distinctive straight-line handwriting and commented that the Museum is "a great tribute to a wonderful pastime."

Most of the Museum's renovation work has now been completed, although our staff is still working on the fabrication of a "kid's corner," and is completing plans for the installation of a cold-water aquarium. Stop by for a visit — we think you will like your new Museum.

Library Donations Needed

As we've mentioned in some of our previous issues, the Museum is hoping to expand the number of volumes in its library. This is especially true now that we've moved our publications department out of the library and into the new addition, thereby creating almost twice the library space.

Members who are interested in donating books on any relevant subject should contact Alanna Fisher, the Museum's curator. Donations may take the form of individual volumes or entire collections and all will be warmly welcomed.



Renovated Museum Spaces

Left: A visitor signs the guest book in the new reception area that features a suspended Adirondack guide boat and an enlargement of an old photograph taken on Saranac Lake, New York, from the Mary Orvis Marbury exhibit. Above: The audio-visual room is dedicated to its sponsors, Leigh and Romi Perkins. Here, visitors can watch VHS tapes on a large screen monitor, browse through reading materials at the conference table, or examine panels from Mary Orvis Marbury's Columbian Exposition collection (1893).

Museum Gift Shop



Our popular T-shirts are made of 100% preshrunk cotton. Specify color (navy or cream) and size (S, M, L, XL), \$15 each, plus \$2 postage and handling.



AN ARTIST'S CREEL June 9 - August 7, 1989
Peter Corbin



Our pewter pin features our logo in silver on an olive-green background. Our patch is silver and black on a Dartmouth Green background; \$5 each, plus \$1 postage and handling.



Four-color exhibition posters printed on high-quality glossy stock, ample borders. Right, "Time On the Water" by John Swan (26" x 20"). Above, "An Artist's Creel" by Peter Corbin (26" x 23"); \$15 each, plus \$2.25 postage and handling.

Left, "Lost Pool," special limited edition print by John Swan, printed on acid-free paper (15 7/8" x 26 3/4"), ample borders. Each signed and numbered print, \$95. Postage and handling included.



TIME ON THE WATER June 1 - October 31, 1990
John Swan

Please make checks payable to: AMFF and send to P.O. Box 42, Manchester, VT 05254.
MasterCard, Visa, and American Express accepted. Call 802-362-3300.

CONTRIBUTORS

Barbara Arter



David R. Klausmeyer holds degrees in English (B.A.) and Political Science (M.A.) from Oklahoma State University. Formerly a management development specialist with the University of Tennessee, Dave now makes fine cane rods on a full-time basis, and is actively involved in Trout Unlimited. He regularly speaks to T.U. and F.F.F. chapters, and appears at fly shops throughout the eastern United States to talk about cane rod construction. Dave, wife Barbara, and their two children live in Knoxville, Tennessee.

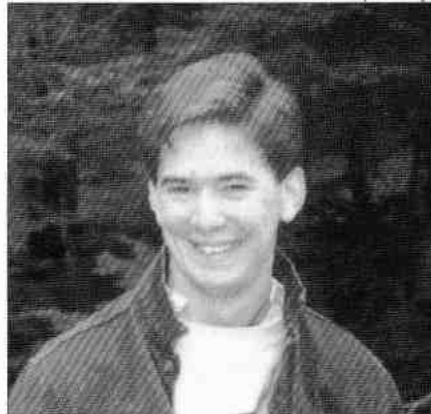
G.S. Stein



Gerald S. Stein, M.D., is a psychoanalyst in private practice in Colorado Springs who also teaches medicine at the University of Colorado Health Sciences Center. His interest in tackle began with his grandfather's Montague bamboo fly rods and Martin automatic fly reels, and his uncle's Shakespeare Wonder Rod and Alcedo Micron reel. His book on rodmaker L. L. Dickerson, coauthored by J. W. Schaaf, is being published by Centennial Press in 1992.

John Mundt is a first-time contributor to *The American Fly Fisher*. Born in Westwood, New Jersey, he now resides in Simsbury, Connecticut, and is a member of the Museum's Hartford Dinner/Auction committee. Currently employed as an account manager with Xerox Corporation in Hartford, John is a member of Trout Unlimited and the Atlantic Salmon Federation. Newly married (July), his other interests include history, lacrosse, theology, and hunting.

Joyce Joseph



Hans-Joachim Bujok



Lothar H. H. Martin is an art conservator who specializes in wall painting. He lives in Berlin for most of the year and summers in eastern France in a small village of 141 residents, near one of the best angling rivers in Europe, the Loue. He writes for German and French fishing publications (*Fliegenfischen*, *Fliegenfischer*, *Fly Only*, *La Première Catégorie*, and *Connaissance de la Pêche*), and in his spare time makes handmade rods.

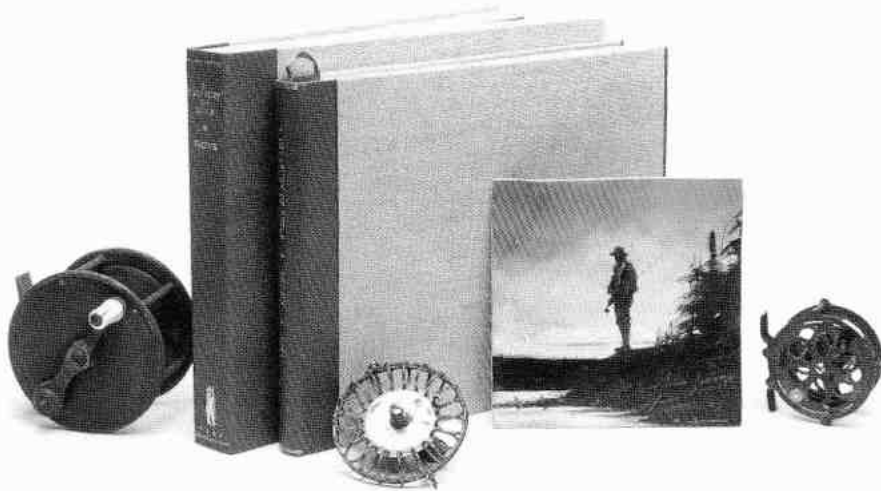
The American Museum of Fly Fishing

is pleased to announce the publication of

A Treasury of Reels:

The Fishing Reel Collection of the American Museum of Fly Fishing

Introduction and catalog by Jim Brown, photographs by Bob O'Shaughnessy



One hundred numbered and signed copies of this deluxe, hand-bound limited edition are being offered for sale at \$450 each

THIS DELUXE LIMITED EDITION has been hand-bound in the traditional manner by Karl Eberth at the Memory Theatre in West Pawlet, Vermont. Each book is sewn with linen hinges and features Italian paper endsheets, leather endbands at the top and bottom of the spine, and a ribbon marker for convenience. Each book is quarter-bound in brown Nigerian goatskin with leather along the fore-edge of each board; the front and back boards are an imported Dutch linen cloth, and the spine is stamped using 22-carat gold. The book is housed in a quarter leather clamshell box made by Judi Conant with the title and Museum's logo stamped on the spine in gold. The text has been printed on a soft white acid-free paper.

The frontispiece featured in this deluxe edition of *A Treasury of Reels* is a luminous four-color print of an oil painting by the renowned artist John Swan of Portland, Maine, entitled "New Moon." The print, commissioned expressly for this deluxe edition and published by the Amscot Group of Bloomfield, Connecticut, has been tipped into the supplemental front matter. The reproduction of "New Moon" has been limited to 100 copies, and each one is signed and numbered by the artist to correspond with the number of the book in which it appears.

Jim Brown is a librarian who lives and works in Stamford, Connecticut. He is an avid fly fisherman and collector of

antique fly tackle who has written extensively on the history of fly reels. His first book, *Fishing Reel Patents of the United States, 1838-1940*, is now accepted as a standard reference work in the field. He is an active member of the American Museum of Fly Fishing as well as numerous other angling and conservation organizations.

Bob O'Shaughnessy is a Boston-based photographer who has worked in the advertising business for the past thirty years. He has been a dedicated salmon fisherman for at least as long, and regularly fishes in Canada and Maine. He is past president of the New England chapter of the American Society of Magazine Photographers, as well as a member of the American Museum of Fly Fishing, the Fly Casters of Boston, and the Atlantic Salmon Federation.

Please note that our deluxe limited edition is being sold on a first-come, first-served basis and that, because of the small edition size, we expect it to sell out quickly. Numbered copies will be reserved as the orders are received by mail and by phone/credit card. Copies will be delivered in February, 1992. They are being sold, retail only, by the Museum at \$450 per copy, which includes shipping and handling.

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THE AMERICAN MUSEUM OF FLY FISHING was established in 1968 to preserve and exhibit the treasures of American angling. As the only national nonprofit educational institution of its kind, the Museum serves as the repository and conservator to the world's foremost collection of angling and angling-related objects, including more than 1,500 rods, 800 reels, 40,000 flies, 2,500 books, as well as manuscripts, photographs, periodicals, and other related items. The Museum's growing collections provide students, authors, teachers, writers, and all members of the public with thorough documentation of fly fishing as a sport, art form, craft, and industry in the United States and abroad from the mid-sixteenth century to the present.