The American Fly Fisher

Summer 1990 Volume 16 Number 2

Courtesy The Orvis Company, Inc.

"The lovely bamboo, Arundinaria amabilis*", a rodmaker's classic material*

Exploring . . .

We offer our readers some serious research in this issue of *The American Fly Fisher*, including the second (and last) installment of "Lyle Dickerson and the Rodmaker's Rod," by James W. Schaaf with Gerald S. Stein, M.D.

It's somewhat ironic that Dickerson, a quiet, unassuming man who did little to promote his rods during his own lifetime, should attract so much attention today. But then all great artists ultimately find a biographer, and Dickerson was an artist in the best sense of the word.

Many of our readers will remember that another two-part article on Dickerson, by the late Tim Bedford, appeared in *The American Fly Fisher* (Spring and Summer, 1985). Taken together, the articles by Bedford, Schaaf and Stein published in this journal constitute an exceptional body of work on a most unusual and accomplished individual.

I wonder, too, if our readers are aware that Tim Bedford worked extensively with Dickerson's rod tapers before his death, and that those same tapers were then passed on to James Schaaf, who continues to make rods in the Dickerson tradition. Continuity and tradition—integral parts of our fly fishing heritage.

Also returning in this issue with some exciting new research on two disparate subjects are Rik Hafer and David Klausmeyer. David Ricardo, the 19th century English philosopher/economist, called economics "The Dismal Science." One suspects that Rik Hafer would disagree with this declaration. We're fortunate that he has decided to combine his love of vocation with avocation—fly fishing—to create another article on the economics of fly fishing.

For David Klausmeyer, fly fishing is a metaphor for life. Dave's love of the sport/art/craft is certainly fully developed for not only does he build magnificent cane rods and play an active role in streamside conservation activities, he also writes (and writes well) about fly fishing. For this we are thankful. Here, David explores the long-forgotten angling traditions of southern Appalachia. We'll be hearing more from Dave later this year when we publish his article on silk fly lines.

D.S.J.

The American Museum of Fly Fishing

Preserving a Rich Heritage for Future Generations

The American Fly Fisher

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ON THE COVER:

Rodmaker Lyle L. Dickerson (right) and companion "Holly" Blossom in 1939. From the Lyle L. Dickerson Collection of the American Museum of Fly Fishing. Photographer unknown.

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Under the Rhododendron Canopy: Angling in the Great Smokies

by David Klausmeyer

One can find snippets of information on fly fishing in southern Appalachia in some of our early sporting and angling periodicals, and oftentimes in period and contemporary regional angling guides. But for the most part, this component of our American fly fishing tradition has gone unnoticed and unexplored.

David Klausmeyer is supremely knowledgeable in all matters piscatorial. It came as no surprise to those of us who know David to learn that he had discovered that a rich angling heritage exists in southern Appalachia, a tradition that is responsible for, among other things, the introduction of several species of trout and the development of flies unique in origin, design, and materials. We think this is a major discovery which, happily, adds yet another chapter to the history of American fly fishing. *D.S.J.*

WHEN I TRAVEL AND FISH new waters around the country, local anglers always ask me about the quality of fishing in the southern Appalachians. These new acquaintances offer that they have scant knowledge of southern trout streams, and that what they do know has been acquired only through one of the very occasional pieces which appear in fishing publications, rarely from first-hand angling experience.

This is understandable.

When I was a small boy, sitting in my grandfather's easy chair, turning through the pages of the popular out-of-doors periodicals he kept in a brass-handled kindling rack which served as his magazine stand, I always got the feeling that I was peering into some cool, remote place. The photographs and art work generally depicted bright salmon flies, weathered canoes, and the best waters New England and eastern Canada had to offer. I grew up believing that fly fishing meant the North Woods, with evenings spent in a cabin tying flies of bold and exotic materials. Indeed, upon examining the overall body of American fly fishing literature, one will note a shift of emphasis from the Northeast only in recent years. Oh yes, anglers wrote about and discussed other destinations, but the concentration was definitely on the Northeast portion of the continent.

In recent years, the focus has shifted to the streams and rivers of western North America. Today many consider the well traveled angler not to be one who can discuss a wide variety of waters, but instead one who makes an annual trek to Montana. This attitude is reflected (or perhaps is led) by today's fly

Opposite: A hand-colored lithograph entitled "The Smoky Mountains," by R. Hinshelwood, 1873. Courtesy Great Smoky Mountains National Park.

fishing literature. Sure, the storied waters such as the quiet, gliding limestone streams of Pennsylvania and the freestone rivers of the Catskills are still being written about, but large pieces of the country and their angling potential are still being sparsely reported. Consequently, much parochial angling history is being lost as senior anglers put away their rods for the last time, and younger anglers become convinced that the fish are always bigger in the next stream.

I was also a victim of this thinking. In preparation to moving to Knoxville, I looked for any information I could find about the local cold-water angling. I knew that trout were available, but I wanted specifics, and I became apprehensive about my angling prospects as I learned that very little had been published about southern trout streams. The angling must be very poor, I thought, if it's not even worth the price of ink and paper.

Since moving to eastern Tennessee, however, I have discovered that southern Appalachia has a rich fly fishing heritage. This tradition, as unnoticed as many of the streams that flow under the mountain rhododendron canopy, has passed through time in a quiet, almost secretive fashion. Occasionally the high quality of the fishery will be recorded in the popular angling press, but the lore and charm are always absent. The establishment of three species of trout, flies unique in origin and materials, and a lodge which catered to some of fly fishing's greatest personalities all contribute to a local tradition which forces us to broaden our thinking about the overall history of American fly fishing.

The development of fly fishing in the Southeast, as with other parts of the country, can be traced in time along with the economic development of the region. In very broad terms, the turn of the century was a time of extensive logging operations in the mountains of eastern Tennessee and western North Carolina. Timber rights were divided among eighteen logging concerns, the largest being Tennessee's Little River Lumber Company, which owned over 77,000 acres. These companies, eager to supply growing cities with lumber and tanneries with the bark necessary to tan hides, sent loggers to clear the forests and haul out the felled trees on the backs of narrow-gauge trains. The large scale of this logging (the Little River Logging Company alone cut over two thousand acres of land per year between 1902 and 1924) had two effects on local angling. First, many miles of stream containing native brook trout were destroyed due to silt run-off and a general warming of the water's temperature. Not being able to survive in this disturbed environment, the brook trout became restricted to a decreasing number of undisturbed headwater streams. Secondly, the lumber companies paved the way in opening the southern mountains for future generations of visitors (and anglers). Many of the roads found in the area were actually constructed on old railway beds.

The next major event which had an impact on local trout fishing was the establishment of a national park. The Great Smoky Mountain Conservation Association, formed in Knoxville in 1923 by businessmen who were concerned as much about the profit potential of a national park as in preserving the dwindling virgin forest, began to promote the park concept to state and federal officials.

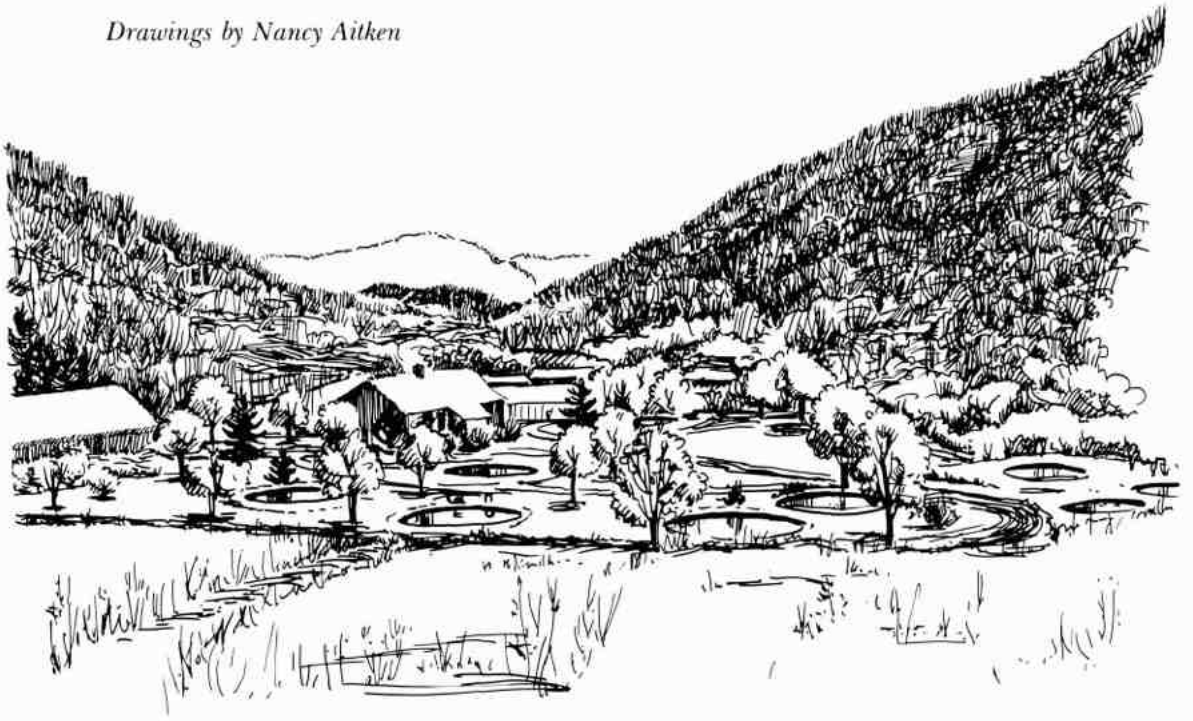
In 1925, the Tennessee legislature and Knoxville city council authorized the purchase of the Little River Logging Company's holdings as a sign of good faith to the federal Park Service that the state would actively support a national park (while the Smoky Mountains are an hour's drive from Knoxville—even on today's roads—the state required that the city pay one-third of the purchase price). This land was then donated to the federal government for initial inclusion in the new park. In 1925, the Congress passed, and President Coolidge signed, a bill authorizing the establishment of the Great Smoky Mountain National Park. This legislation was passed, however, with the condition that actual park development would begin only after the states of Tennessee and North Carolina donated a combined total of 300,000 acres to the project. With the commitment of federal, state and local parties, a campaign of extensive fundraising began in order to secure the more than 1600 individual pieces of property which comprise today's park. By the early 1930s, it became obvious that the states would fall short of acquiring the necessary acreage. Rising land costs and expensive litigation resulting from contested purchases ate into the available land acquisition funds. So, in August of 1933, President Roosevelt stepped forward and pledged the necessary funds to complete the purchases, and in 1934 the new national park became a reality. Later, the northern and southern districts of the Cherokee National Forest were established at each end of the park to further protect these southern mountains. This then provides the land and water in which the fly fishermen of southern Appalachia pursue trout.

The brook trout, referred to as "speckled" trout by many locals, is without a doubt the most beloved game fish among the mountain anglers. While never reaching the size of the "exotic" rainbow and brown trout (a large specimen may reach ten or eleven inches), it is the only member of the *Salmo* family indigenous to the Smoky Mountains. Its beautiful colors, scrappy fight, and the lush green mountain environment it inhabits make even a poor day of angling a fulfilling experience.

While logging and heavy fishing pressure (including the use of dynamite and nets) took its toll on the brook trout population, the introduction of rainbow and brown trout also had a severe impact on the native species. With the streams damaged due to years of abuse, coupled with the desire to increase the angling potential of the Great Smokies, the decision was made to introduce the hardier rainbow and brown trout. Stories abound of local anglers and officials transporting the new arrivals in horse-drawn barrels to the higher elevations even before the establishment of the park. Once released, the new, more aggressive fish began to compete with the brook trout, claiming territory and further restricting the range of the "specks." The Kephart Prong Hatchery (named for Horace Kephart, local outdoorsman and writer) was built at the juncture of the tumbling Oconoluftee River and Kephart Prong tributary in North Carolina. This hatchery played a major role in park stocking activities, allowing officials to more easily introduce many thousands of trout to the park's waters. Today, second-growth forest has taken over the long abandoned hatchery—all that remains are foundation remnants, old pipe, and the outlines of one or two rearing pools. The most outstanding feature is a large, wordless stone sign which once greeted visitors to the birthplace of the fish that still inhabit the surrounding streams.

One of the most noteworthy yet least known features of southern trout angling is the Hazel Creek Fishing Club. While several hunting lodges catered to the needs of bear, boar, and deer hunters prior to the formation of the national park, the Hazel Creek club stood alone as the gathering place for local fly anglers. Started by North Carolina businessmen who enjoyed the finer piscatorial pursuits, a tract of land along Hazel Creek was purchased and a lodge erected in the early 1920s. With the start of this exclusive club, Hazel Creek gained in prominence and eventually came to be considered the finest dry fly stream in the Southeast. As word spread of the quality of the fishery, noted an-

Drawings by Nancy Aitken



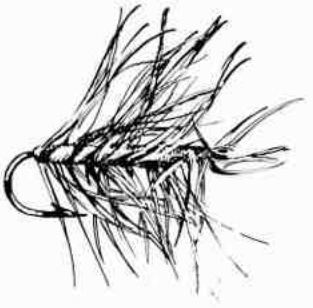
The Kephart Prong Hatchery as it appeared during the heyday of stocking activity. After a National Park Service Photo published in The Smokies Guide *by G.M. Stephens (1947).*

glers such as John Tainter Foote, George LaBranche, and Ferris Greenslet came to fish the club's waters. In 1944 the club faded into angling history when title to the property passed to the Park Service for inclusion into the still growing national park. When the Tennessee Valley Authority completed Fontana Dam, the resulting lake flooded the main approach to Hazel Creek (ironically called Dry Weather Road). Today, one must ferry across Lake Fontana to the mouth of Hazel Creek in order to enjoy its now lonely pools.

Other visitors to the area, those who had no introduction to an establishment such as the Hazel Creek Fishing Club and its knowledgeable members, weren't entirely out of luck. Before the founding of the national park and the construction of better roads, a good guide and a couple of evenings camping out under the stars were almost mandatory if one wanted to sample the best fishing. A guide could be found just by inquiring at the desk of an area hotel. I have seen one period list of guides which numbered over twenty men, all considered highly knowledgeable in woodcraft and angling. I know of no one offering guiding services in today's Smoky Mountains. But then, in an open national park, a guide really isn't necessary.

For flies, fishermen used the popular patterns of the day. Robert L. Mason, for his early book *The Lure of the Great Smokies* (1927), polled the local guides as to what flies they were recommending to their sports. The Brown Hackle, Coachman, Cahill, Cowdung, Black Gnat, Queen of the Waters, Brown March, and White Miller were all offered as tried and true favorites. The Woolly Worm was also a popular pattern, tied on a straight-eyed hook so that it could be used in combination with a small spinner. But the curious omission in this list of favorites are the local creations: those wonderful sketches in feather and fur which reflect the history and surroundings of their makers.

Most of the anglers felt that exact duplication of the naturally occurring insect was less important than simply getting a fly on the water—the fish would do the rest. This philosophy was reflected in local fly development; today most would consider the flies developed by the anglers of the Smoky Mountains as "attractor" patterns. The only fly of local origin to gain a national reputation is the Tellico Nymph. This yellow-bodied fly, referred to locally as simply a Tellico (it's a lot like saying Hare's Ear—everyone understands), was generally considered to be an impressionistic stone fly imitation. Today, of course, most anglers carry frauds that are far more representative of the *Plecoptera*, but the Tellico is still found in most fly catalogs.



The Yellowhammer

Going much further back than the Tellico Nymph, J.H. Stewart of Jackson, Mississippi, wrote Mary Orvis Marbury to describe "North Carolina Indian Flies." This letter, contained in *Favorite Flies and Their Histories*, certainly sheds light on one of the most unusual fly patterns to have evolved in southern Appalachia, the Yellowhammer. Mr. Stewart wrote in his letter that the Indians of North Carolina (undoubtedly referring to the eastern band of the Cherokees, who still have a reservation at the southern end of the park) would cut a thin strip of fur from a deer's leg. This strip was then wrapped on the hook in a palmered fashion, with the hairs pointing toward the eye of the hook. Mr. Stewart went on to say, "They use feathers occasionally in the same way." Certainly he was describing the Yellowhammer.

While many local anglers have heard

The clubhouse at the Hazel Creek Fishing Club. After a photograph which appeared in Jim Gasque's Hunting & Fishing in the Great Smokies *(Alfred A. Knopf, New York, 1948).*

of the Yellowhammer, very few have ever seen one or are familiar with its construction. The mystery behind the fly is probably due to the materials required in the fly's recipe. The key ingredient in tying the Yellowhammer is the tail and wing feathers of the now federally protected yellow flicker woodpecker. These unusual feathers, black on one side and school-bus yellow on the other, were soaked in warm water (as described by Mr. Stewart), split down the middle of the quill, and wound on the hook as a hackle. I have seen two versions of the Yellowhammer (both tied on a straight-eyed hook to accommodate a spinner). One simply had the feather palmered over the entire shaft of the hook with the barbs pointing forward. The other had a peacock herl body and golden pheasant tippet tail, the yellow flicker feather being used more as a regular hackle. I have been told that both patterns are true Yellowhammers, but in light of Mr. Stewart's very early letter (dated 1887), I believe the palmered version to be the original pattern. With time, "Yellowhammer" probably came to mean any fly that was dressed with the feathers of the yellow flicker.

The Clay Hart, another local creation named for its originator, is a streamer also tied on a straight-eyed hook to accommodate a spinner (while I have never seen anyone use this method, senior anglers report that the use of small spinners was once very popular). The wing of the Clay Hart is a mix of feathers and fur which makes the fly as singular as the Yellowhammer. A small bunch of red fox squirrel tail was tied in first, with a white and a grizzly feather tied in on one side of the fur (with the white feather on the outside) and a ginger and brown combination on the other (ginger feather out). The Clay Hart has a dingy, dirty, greenish-brown spun fur body which one angler described as the color of "manure in August." Today, the Clay Hart, like the Yellowhammer, is remembered mostly by those fishermen who can still recall the founding of the national park.

Along with this set of attractor fly patterns, there was one angler of local reputation who developed what we could call an "attractor" method of fishing. In fact, I've noticed that it's the same group of fishermen who can tell you about things as obscure as the Yellowhammer and the Hazel Creek Fishing Club who can also tell you about Mr. Mark Cathy's "dance of the fly."

The Clay Hart

Mark Cathy, of Bryson City, North Carolina, believed that any fly could catch fish; it was simply a matter of proper presentation. He didn't believe that stealth, a fine leader or a drag-free float was at all important in catching trout. Instead, he would attach to his line a leader more suitable to angling for bass than trout, stand on a rock in full view of every fish in his chosen pool, and begin skimming his fly back and forth across the surface of the water. Occasionally he would dance the fly on the top with a few quick pops of his rod tip. The fish, their attention now shifted from Mark to his forgery, would strike at his lively offerings. And, as was recorded by Jim Gasque in *Hunting and Fishing in the Great Smokies* (1948), Cathy was known to always creel his limit.

Mark Cathy died in October, 1944, while hunting. According to his obituary, his body was found in the woods, leaning against a tree with his squirrel rifle lying across his lap. Today, over forty-five years later, he and his unique style of angling are still remembered.

The parameters of fly fishing are quite broad. From fresh water to brine, and from teasing pan-sized brook trout to turning a homeward-bound salmon, to-

An untitled watercolor of the Smoky Mountains by Charles Christopher Krutch (1849-1934). Courtesy Great Smoky Mountains National Park.

The Mountain Painter

Charles Christopher Krutch (1849-1934) is considered to be the first artist of note to capture the mountains of Tennessee and North Carolina. Entirely self taught, he earned the esteemed reputation among his fellow artists as "the Corot of the South."

Born in 1849 in South Carolina, he lived most of his life in Knoxville, Tennessee, where he was employed as a photographic retoucher by McCrarry and Branson in 1893 and then in 1904 until his death by Brakebill & McCoy Studio. A quiet and gentle man, he loved music and was for many years an organist at St. John's Episcopal Church in Knoxville.

Krutch early established his reputation as a "mountain painter." Never married, he often said his true love was painting the Great Smokies, and he spent weeks at a time living with friends and sketching in the mountains. He best loved LeConte and Sugarland Valley, with Chimney Tops also a favorite subject. Originally a watercolor painter, he later changed to oil for many years, but returned again to watercolor and used both media with equal facility as he perfected his techniques. As his reputation grew, many of Knoxville's finest homes boasted of having several of his landscapes.

In 1933, one year before his death, Krutch received national recognition when he became the first artist commissioned under the Public Works of Art Project, for which he painted at least two large canvases, now in the collection of the Great Smoky Mountains National Park. When he died in 1934, his valuable legacy was a record of the Great Smoky Mountains—the beauty of their form and color—in earlier days.

MARGOT PAGE

day's piscators have a wealth of angling opportunities that would astound many of our forebears. Exploring new environments and making the acquaintance of new species of *Salmo* are certainly a part of the enjoyment of fly fishing. Yet much of the angling history and lore of the Great Smokies, and certainly other parts of the country, is being lost with time. It is my sincere hope that while we fly fishers enjoy the opportunities afforded us through modern travel and the wide dissemination of information, we also recognize our parochial responsibilities in preserving regional traditions. To borrow a phrase from our conservation-minded friends, fly fishing is more than just catching fish. □

Rod and Reel

from

Adventures in the Wilderness;

or

Camp-life in the Adirondacks

by William H.H. Murray

Throughout the early years of the 19th century, the lakes and mountains of the Adirondacks attracted the attention of wilderness adventurers, sportsmen, and the curious. At no time, however, during these early years could the Adirondacks be considered a popular destination. That changed in 1869 when a New England minister named William H.H. Murray published his first book, Adventures in the Wilderness; or Camp-life in the Adirondacks *(Fields, Osgood & Co., Boston, 1869).* Adventures *attracted a flood of tourists into the Adirondack region from Boston, New York, Albany, and from as far away as Pittsburgh and Cleveland. What made Murray's book so successful was his presentation of useful information for anyone planning an excursion into the Adirondack region.*

The second section of the book contains the accounts of Murray's actual adventures during his travels in the region. His stories about hunting, fishing and frivolity in the Adirondacks, amid the balsam-scented air and mirrored lakes, lured thousands into the wilderness that summer of 1869, and for many years thereafter.

"Rod and Reel," published herein in condensed form, is one of the more entertaining chapters of Murray's Adventures. *It captures the flavor of the book that did so much to popularize the Adirondacks as an angler's paradise.* *D.McC.*

"MR. MURRAY, WAKE UP! the pancakes are ready!" shouted John.

Aroused by the familiar cry, I arose, and, walking down to the shore of the lake, waded out into its tide, and, plunging my head under water, held it there for a moment, while the delicious sense of coolness ran through my system; then I raised it, turning my dripping face straight toward the bright, warm sun. O the sweet experience of that moment! How cool the water; how fresh the air; how clear the sky; how fragrant the breath of balsam and of pine! O luxury of luxuries, to have a lake of crystal water for your wash-bowl, the morning zephyr for a towel, the whitest sand for soap, and the odors of aromatic trees for perfumes! What belle or millionnaire can boast of such surroundings?

Fresh as an athlete in training, I returned to camp and to breakfast. Breakfast in the wilderness means something. No muttering about "those miserable rolls"; no yawning over a small strip of steak, cut in the form of a parallelogram, an inch and a half by three; no lying about tawny-colored water by calling it "coffee." No; but up in the woods you take a pancake, twelve inches across (just the diameter of the pan), and one inch thick, and go conscientiously to work to surround it. You seize a trout ten or fourteen inches long, and send it speedily to that bourne from whence no trout returns. You lay hold of a quart pan full of liquid which has the smack of real Java to it, made pungent with a sprinkling of Mocha; and the first you know you see your face in the bottom of the dish. And the joke is, you keep doing so, right along, for some thirty minutes or more, rising from each meal a bigger, if not a better man.

The meal was finished. It did not take long to wash the dishes; and over the remnants of what had once been a feast we sat in council.

"John, what shall we do to-day?"

"Well, I think," said John, "we'll take some trout. I told you, when we started, you should see a three-pounder before we got back; and here we are within twenty miles of the Racquette, and my promise unfulfilled. I know a little lake, hidden away back of that hard-wood ridge yonder, which is one huge spring-hole; and when scouting through here on my own account, some six years ago, I took some fish from it such as you seldom see. I doubt if there has been a fly on it since; and if the breeze will freshen a little, you'll have rare sport."

Soon after, John shouldered the boat, and we started. Some forty minutes' tramp, and we reached the shore and made our camp. From it the scene was delightful. The lake was nearly circular,

some half a mile across, its waters deep and clear. Into it, so far as we could see, no water came; out of it no water went. It was, as John had called it, one huge spring-hole; the mountains on all sides sloped gradually up, an unbroken sweep of pine and balsam, save where, at intervals, a silver-beech or round-leaved maple relieved the sombre color with lighter hues. Thus secluded, seldom visited by man, the little lake reposed, mirroring the surrounding hills in its cool depths, and guarded safely by them. We stepped into our boat and glided out toward the centre of the pool. Not a motion in the air; not a ripple on the water. At last the beeches along the western slope began to rustle. The mournful pines felt the pressure of airy fingers amid their strings, and woke to solemn sound. The zephyr at length reached the lake, and the cool water thrilled into ripples at its touch; while the pool, which an instant before shone under the sun like seamless glass, shook with a thousand tiny undulations.

"Now," said John, "if the fish haven't all drowned since I was here, you'll see 'em soon. When one rises I'll put you within casting distance of the wake, and if he likes it he'll take the fly. If one takes, strike hard; for their jaws are stout and bony, and you must hook them well or you'll lose them in the struggle."

We sat and watched. "There!" suddenly shouted John; "one isn't dead yet." And whirling the boat about, he sent it flying toward a swirl in the water, some twenty rods away, made by a rising fish whose splash I had heard but did not see. We had traversed half the distance, perhaps, and all alert I sat, holding the coil and flies between my fingers, ready for a cast, when, as we shot along, a bright vermilion flash gleamed for an instant far below us, and a broad, yellow-sided beauty broke the surface barely the length of my rod from the boat. The swoop of a swallow is scarcely swifter than was the motion of the boat as John shied it one side, and, with a stroke which would have snapped a less elastic paddle, sent it circling around the ripples where the fish went down. Twice did I trail the flies across the circle and meet with no response; but hardly had the feathers touched the water at the third cast, when the trout came up with a rush. He took the fly as a hunter might take a fence, boldly. I struck, even as he hung in mid-air, and down he went. After a sharp fight of some ten minutes' length the trout yielded, the fatal net enclosed him, and he lay flapping within the boat. Thus five were captured in little more than an hour's time, good two-and-a-half-pound fish each of them—a string which a man might contemplate with pride. We paused a moment to give John time to inspect the tackle to see if it was all right. The trout had made sad work with the flies. The largest and strongest came out of their mouths bare to the shank. Five ruined flies lay with the five captured trout on the bottom of the boat.

"Mr. Murray," said John at length, as he sat looking at the mangled flies; "haven't you something larger? These trout are regular sharks."

"Nothing," replied I, running over the leaves of my fly-book, "except these huge salmon-flies"; and I held half a dozen gaudy fellows out toward him, the hooks of which were nearly two inches in length, covered with immense hackle of variegated floss, out of whose depths protruded a pair of enormous wings, and brilliant with hues of the ibis and the English jay.

"Let's try one, anyway," said John, laughing. "Nothing is too big for a fish like that!" and he nodded his head toward a deep swirl made in the water as a monstrous fellow rose to the surface, closed his jaws on a huge dragon-fly that had stopped to rest a moment on the water, and, throwing his tail, broad as your hand, into the air, darted downward into the silent depths. "There," continued he, as he tossed the tuft of gay feathers into the air, "that's the first pullet's-tail I ever noosed on to a leader. A trout that takes that will be worth baking. Lengthen your line to the last foot you can cast, and when a big one rises I'll put you within reach of his wake."

We sat for several minutes in silence, watching. At last, some fifteen rods away, a magnificent fish shot up out of the water after a butterfly which chanced to be winging its way across the lake, and missing it by only a few inches, fell back with a splash into the very ripple he made in rising.

I pitched the coil into the air, and by the time it had fairly straightened itself out the boat was in reach of the wake; and, obedient to the quick turn of the wrist, the huge fly leaped ahead. It had not reached the surface by a yard, when the water parted and out came the trout, his mouth wide open, quivering from head to tail with the energy of the leap; missed, as he had before, and fell back flat upon his side.

"Quick, quick! cast away!" shouted John, as with a stroke of the paddle he sent the boat sheering off to give me room for the cast.

Feeling that there was not an instant to lose, by a sudden jerk I caused the fly to mount straight up into the air, trusting to the motion of the boat to straighten the slack as it fell. John understood the motion; the boat flew round as on a pivot, and glided backward under the reversed stroke. It was well done, as only John could do it; nor was it a second too soon; for as the tuft of gay plumes alighted amid the ripples, the huge head of the trout came out of the water, his mouth opened, and, as the feathers disappeared between his teeth, I struck with all my might. Not one rod in twenty would have stood that blow.

Illustration from Murray's *Adventures in the Wilderness; Or Camp-life in the Adirondacks* (Fields, Osgood & Co., Boston, 1869).

The fish was too heavy even to be turned an inch. The line sung, and water flew out of the compressed braids, as though I had sunk the hook into an oak beam.

Reader, did you ever land a trout? I do not ask if you ever jerked some poor little fellow out of a brook three feet across, with a pole six inches around at the butt, and so heavy as to require both hands and feet well braced to hold it out. No, that's not landing a trout. But did you ever sit in a boat, with nine ounces of lance-wood for a rod, and two hundred feet of braided silk in your double-acting reel, and hook a trout whose strain brought tip and butt together as you checked him in some wild flight, and tested your quivering line from gut to reel-knot?

"When,

high in mid-air,

he shook himself,

the crystal drops

were flung into

my very face."

Well, as I said, I struck; and, as we afterwards discovered, the huge salmon-hook was buried to the shank amid the nerves which lie at the root of a trout's tongue. Then came a fight for the mastery such as never before had I waged with anything that swims. Words should have *life* in them to depict the scene. Quick as a flash, before I had fairly recovered my balance, partially lost by the energy with which I struck, the trout started, and before I could get a pressure upon the line, not twenty yards were left on the reel. A quick stroke from John, and the boat shot one side; and bearing stoutly on him, tasking the rod to the last ounce of resistance, I slowly swayed him about and recovered a little slack. After a few short sweeps he doubled on the line and shot straight for the boat as an arrow from a bow.

"Double, and be hanged to you!" shouted John, as he shied the light shell to one side and swung it round so as to keep me facing the fish. "If you get under this boat it will be because this paddle breaks."

Failing in his attempt to run under us, he dove to the bottom. "Let him rest a moment," said John; "recover your line; you'll need it all when he rises. He's big and ugly, and his next rush will be like lightning."

After I had stowed away some forty yards of line upon the reel, winding it on hard and evenly, so that it would render well, I began to feel of the fish. The first pressure elicited only a shake. At the next he described a circle, still keeping to the bottom, then came again to a stand-still. He acted ugly. I felt that, when the rush came, it would try nerve and tackle alike. Enjoining John to watch the fish and favor me all he could, and by no means to let him pass under the boat, I gave a quick, sharp jerk. My arm was still in the air and the rod unstraightened, when I caught a gleam far down below me, and before I had time to wink the huge fellow parted the water almost within reach of my arm, and when high up in mid-air he shook himself, the crystal drops were flung into my very face. Perhaps I shall live long enough to forget the picture, as that trout for an instant hung in the air, his blue back and azure sides spotted with gold and agate, his fins edged with snowy white, his eyes protruding, gills distended, the leader hanging from his jaws, while a shower of pearly drops were shaken from his quivering sides. He fell; but while still in air the boat glided backward, and when he touched the water I was thirty feet away and ready for his rush. It came. And as he passed us, some forty feet off, he clove the water as a bolt from a cross-bow might cleave the air. Possibly for five minutes the frenzy lasted. Not a word was uttered. The whiz of the line through the water, the whir of the flying reel, and an occasional grunt from John as the fish doubled on the boat, were the only sounds to be heard. When, suddenly, in one of his wildest flights, the terribly taxed rod straightened itself out with a spring, the pressure ceased, the line slackened, and the fish again lay on the bottom. Wiping the sweat from my brow, I turned to John and said, "What do you think of that?"

"Mr. Murray," replied John, laying the paddle down and drawing the sleeve of his woollen shirt across his forehead, beaded with perspiration—"Mr. Murray, that fish is ugly; if he should get the line over his back, he'd smash the rod like a pipe-stem!"

"He won't get it over his back," replied I. "Ready with your paddle; he's getting too much breath."

"But I say," said John, looking affectionately at the rod as he took up the paddle; "if I was in your place, and he *did* get the line over his shoulder, I would part my tackle before I smashed that rod."

"I won't do either, John"; and as I answered I gave a jerk, and the trout started again. But why repeat? Why tell of flights and rushes which followed? Twice did he break the surface a hundred feet away, flinging himself out like a black bass. Once did he partially get the leader over his back and dashed away like lightning; while John, anxious to save so true a rod from ruin, shouted to me, "Part the gut!" But who ever knew a fisherman, when his blood is up, refuse a risk to save the game? I screamed to John to shoot the boat one side; and when the last foot of silk was given I advanced the butt. The heavy fish and pliant rod were pitted one against the other. Three days later, in another struggle, the old rod parted; but this time it triumphed. For a moment the quivering tip rattled upon the bars of the reel. The fish struggled and shook himself, but the tenacious fibres would not part. He ceased to battle, came panting to the surface, and rolled over upon his side. The boat shot toward him, and as it glided by John passed the landing-net beneath him, and the brave fighter lay upon the bottom board. His tail, across its base, measured five inches; and his length from tip to tip was *seventeen inches and three quarters!*

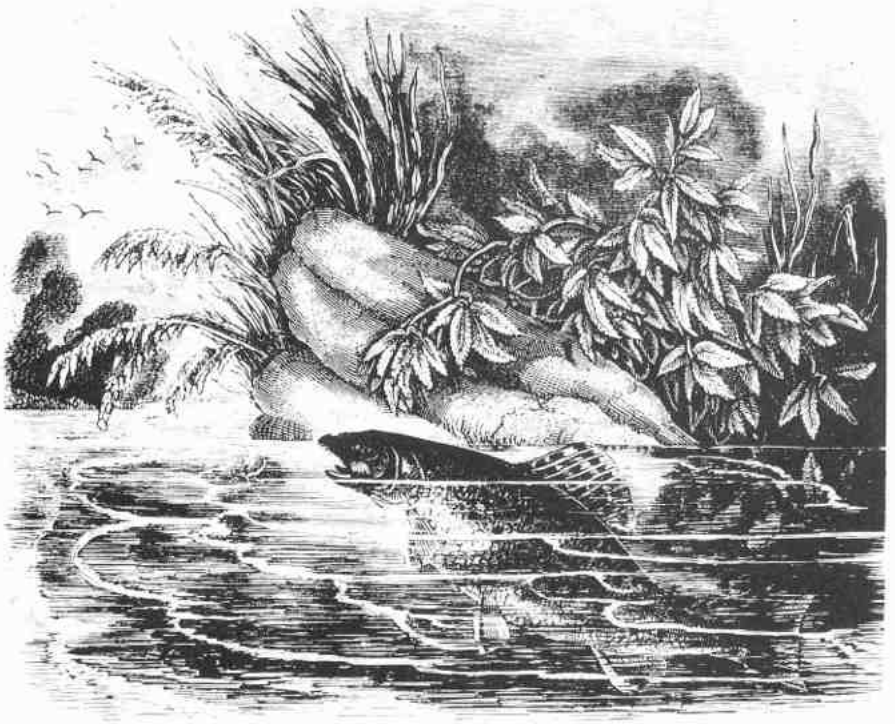
"John," I said, twisting round in my seat and facing him—"John, I should have lost that fish or smashed the rod, if it had not been for your paddle."

"Of course, of course," replied John; "that's my business. Those fly-rods are delicate things. Like women, they shouldn't be put to heavy work if you can help it, but they are able to bear a heavy strain if necessary. But with all I could do I thought it was gone once. I don't think I ever came so near breaking this paddle as on that last sweep. It made my flesh creep to hear the old rod creak. I really believe my own back would have snapped if it had parted."

That afternoon we lay on the beach and watched the leaping trout sporting before us; or gazed; dreaming of absent friends, into the deep blue sky, across whose cerulean dome the snow-white clouds drifted, urged silently onward by the pressure of invisible currents. The sun at last withdrew his beams. Throwing some huge logs on the fire, and wrapping our blankets around us, we stretched ourselves beside the blaze, and, with malice in our hearts toward none, sank peacefully to our night's repose. □

An Early Illustration

by Paul Schullery



"The Brook Trout. Salmo Fontinalis," one of the earliest images of a rising trout published in the United States, appeared in William Henry Herbert's (Frank Forester) American Game in Its Seasons *which was published in 1853.*

A SUBJECT THAT HAS CONCERNED several authors in *The American Fly Fisher* over the years is the awareness of previous generations of anglers in the matter of rising trout. The traditional view among fishing writers was that until the late 1800s, few anglers ever bothered to fish anything but a wet fly. That view, now under attack from many quarters, seemed to suggest that either these early fishermen did not notice that fish rose and fed on the surface, or noticed it but thought it unimportant, or noticed it and did not know how to do anything about it.

One way in which such awareness has been considered is in illustrations of trout behavior. For example, in his very important article "The Dry Fly and Fast Trains" in *The American Fly Fisher* (Volume 10, Number 1) Ken Cameron produced two illustrations from British periodicals of 1832 and 1857, both unmistakably showing either artificial or natural flies on the surface.

I offer here a similar case, this one perhaps a little more interesting because it also shows a trout rising to a natural fly on the surface.

The drawing is a bit fanciful; most trout do not stick their heads so far from the water's surface in order to take a mayfly (I assume the insect was intended to be a mayfly).

The artist was possibly the author of the book in which the illustration appeared. Henry William Herbert, writing under the pen name of Frank Forester, produced a series of successful sporting books in the years before the Civil War. The book in question here, *American Game in Its Seasons*, first appeared in 1853, with later editions in at least 1854 and 1873.

Herbert had an awful reputation for using other people's work, and so it could be that this little engraving was in fact copied and modified from some earlier work, perhaps a British book. Maybe one of our readers will recognize the picture, and be able to tell us if it did actually originate with Herbert or was older.

In either case, it is the earliest depiction of a rising trout I know of published in the New World. Not that *that* is any great distinction, either for the picture or for me, but it does suggest that at least some New World fishermen were exposed to the notion of surface-feeding trout some three decades before Americans began to hear about the formal British approach to fishing dry flies. □

# of a Rising Trout

Above: A portrait of Frank Forester (Henry William Herbert) by Gordon Ross which appeared as the frontispiece in Forester's Trouting Along the Catasauqua.

AMERICAN GAME
601

IN ITS SEASONS.

BY

HENRY WILLIAM HERBERT,

AUTHOR OF "FRANK FORESTER'S FIELD SPORTS," "FISH AND FISHING," "CARUATS WOODLANDS," "MY SHOOTING BOX," "THE DEER-STALKERS," ETC. ETC.

ILLUSTRATED FROM NATURE,

AND ON WOOD, BY THE AUTHOR.

799
H53

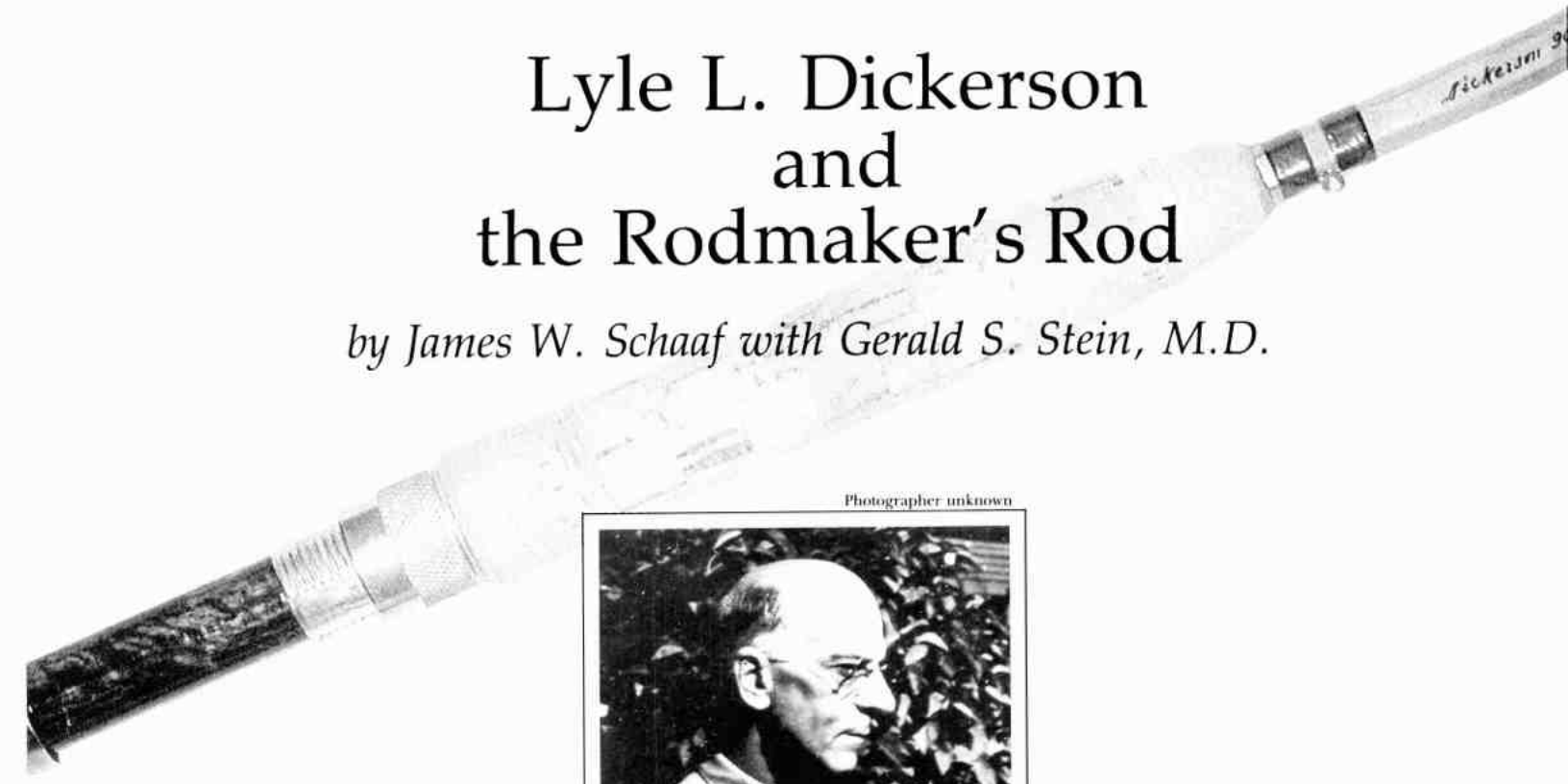
NEW YORK:
CHARLES SCRIBNER, 145 NASSAU STREET.
1853.

The title page of Henry William Herbert's American Game in Its Seasons *(Charles Scribner, New York, 1853).*

PART II

Lyle L. Dickerson and the Rodmaker's Rod

by James W. Schaaf with Gerald S. Stein, M.D.



Photographer unknown

In the second of our two installments on "Lyle L. Dickerson and the Rodmaker's Rod," James Schaaf, one of the world's finest rodmakers, with co-author Gerald Stein, M.D., explores the intricacies of Dickerson's rodmaking technique and superb style. The authors hope that any comment and additional information on Lyle Dickerson, his life, rodmaking, and rods will be directed to the editor. *D.S.J.*

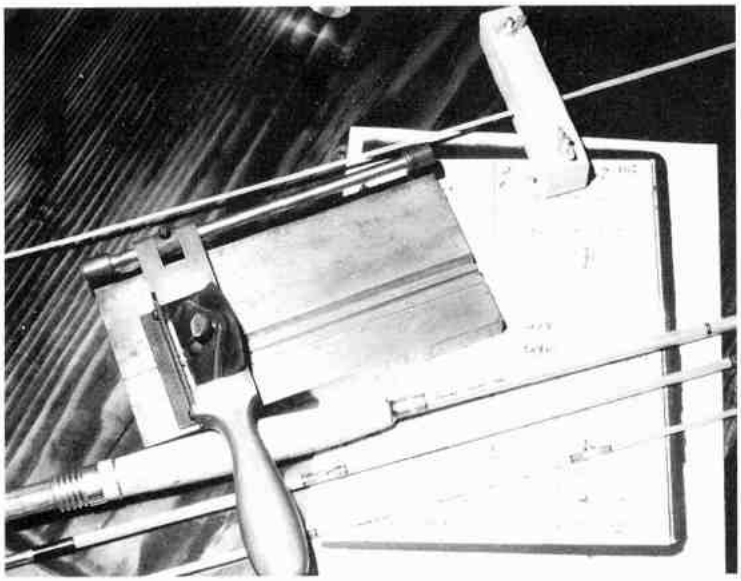
ONE OF MY LIFE'S REGRETS is that I met Lyle "Dick" Dickerson only once, when Tim Bedford, who purchased the Dickerson shop in 1972, brought him to the casting ponds at the Golden Gate Angling and Casting Club in San Francisco's Golden Gate Park. If I had only known at the time that I would later own Dickerson's shop following his death in 1981 and the untimely death of my good friend Tim in the fall of 1985, I would have asked this gentle man a million questions.

My first Dickerson fly rod, an 801611 D made in 1936 and one of the finest tapers in my collection, was purchased from the granddaughter of its original owner, Dr. Irving Condit of Glennie, Michigan. The bamboo strips were hand planed on a small steel and brass form designed and fabricated by Dick in the early 1930s. Each strip was indexed (marked at five-inch intervals on the enamel side of the strip and planed to a different thickness between each five-inch mark) and pulled through the adjustable blade, or iron, of the form, which has three 60-degree tapered grooves milled in the plate. The strip is held by means of a wood vise. Repeated placement down the full length of the indexed strip forms the taper (page 13). This was tedious and most exacting work since only less than one thousandth of an inch of bamboo was removed from the strip each time it was drawn through the blade for five inches. To repeatedly pull the strips through the cutting surface required great strength and endurance.

The beveled strips were heat-treated to remove the moisture contained inside the long cellulose fibers and to temper them. The heat treatment was done after the strips were tapered by hand planing because heat-treating them before tapering made planing difficult and dulled the cutter quickly. Later, when using his milling machine, Dick took into consideration the shrinkage from heat treatment, the thickness added by the glue, and the thickness of the power fibers on the outside of the cane in calculating the precise measurements required to make a perfectly fitted blank of six strips, tapered at 60-degree angles, glued and wrapped into the tapered blank (page 14).

Sometime between 1935 and 1940, Dick designed and fabricated a precision milling machine to cut tapers for two- and three-piece rod strips. He also used this machine to make patterns from hard rock maple on which the butt, mid-, and tip sections would be milled, and to rough-cut the split strips, with their nodes dressed down, into 60-degree straight stock (page 13). Six glued

Photographer unknown



Above: The rod, planing form, and ledger page are components of the Lyle L. Dickerson Collection of the American Museum of Fly Fishing. Right: Lyle L. Dickerson at prototype milling machine.

strips would finally compose a rod section, or blank. I can imagine the difficulty of indexing and repeatedly pulling the longer two-piece strips through the original planing form. Even with the new milling machine it required great strength and concentration to pull the pattern and strip, resting on the custom-designed sliding carriage, through the 60-degree cutter head rotating at 5500 r.p.m. Because of the counter-clockwise rotation of the cutter blades, the strip had to be held tightly during the full travel of the sliding carriage to the end of the pattern. Otherwise the strip would be pulled backward through the cutter head and the razor-sharp edges of the newly cut bamboo could slice the rodmaker's finger tips. In order to hold the strips firmly to the pattern, Tim Bedford added a pin to the face one and a half inches from the butt end, then drilled a hole in each strip to fit the pin. After the six strips were cut they could easily be aligned by placing the index holes side by side before gluing.

Dick's output of rods from 1932 until the start of World War II is astonishing when one considers the quantity and quality he produced in his one-man shop using only a hand-planing form and prototype milling machine to cut and taper his bamboo strips. His first customers were mostly doctors and bankers, who could afford to purchase fly rods during the Depression.

Dickerson made all his components except the bronze and tungsten snake guides, stripping guides, cork specie, nickel-silver stock, and brass stock. He fabricated his own aluminum rod tubes and fitted them with brass collars and screw-locking caps. He also used black-plastic threaded caps for a while; a number of rods from the "black-plastic cap" era have replacement brass or aluminum tops which are different from those Dickerson made. Bob Summers speculates that they disintegrated after a time and the owner found, or had made, knurled-edge cap replacements. Dick made special hooded, cloth-compartment rod bags on a small portable sewing machine now owned by his daughter-in-law, Mrs. Charlotte Gloczynski Dickerson.

Dick figured out how to build cane rods the hard way. No rodmaker in his time, or earlier, shared his methods, techniques, design, or equipment with others. Rodmaking was strictly an in-house process. With the help of his brother Glenn, Dick developed his own methods, calculated his own tapers, then designed and fabricated the necessary machinery and equipment—first the planing form and later the milling machine to cut his tapers. Special tooling was necessary to make his threaded, aluminum reel seats. Dies and mandrils were made and hardened to draw nickel-silver tubing on a special screw-fed drawing machine so that he would have the various diameters of tubing to make ferrules, which he sold to Paul Young for fifty cents a set. Dick made a set of inside cutters to mill the ferrule stations on his blanks in diameters of $^{8}/_{64}$ths to $^{29}/_{64}$ths of an inch. He machined and hardened dies and punches for shearing, drawing, and finishing nickel-silver hoods out of twenty-five gauge, 20% sheet stock to enhance his beautiful black walnut spacers for the reel seats.

Dick designed an ingenious, four-string rod-wrapping machine which wound two strings in opposite directions with a tension control for each string so that the force of the bound string could be adjusted differently for butt or tip sections. The heart of the Dickerson wrapping machine was the differential gear from a Model T Ford. The six straight-cut strips (prior to heat treatment) and glued-up strips could be

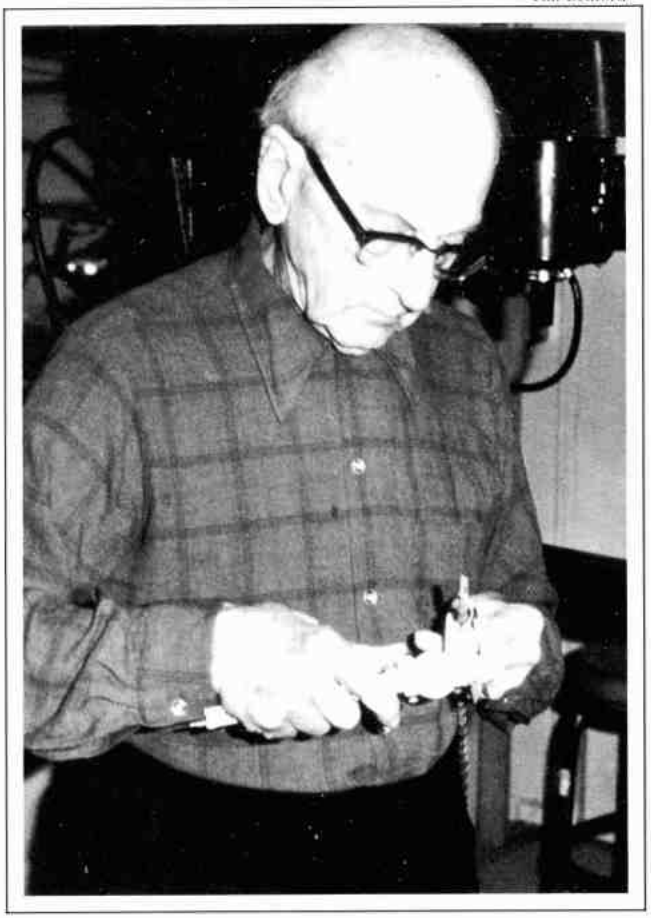
All photographs by James W. Schaaf except as noted.

wrapped very quickly and have the correct torque applied to press the excess glue out of the seams without twisting the bundle prior to drying.

There was no waste in the Dickerson shop. Dick saved the nickel-silver squares from which he sheared the circles to make reel seat hoods. The corners of the squares were punched with his small punch and die press, and the discs were used as bulkheads for his ferrules. Dickerson purchased no ready-made machinery or equipment. If a special tool was needed for the rodmaking process, Dick designed and built it.

Dick used only the very best bamboo. His Tonkin cane (*Arundinia amabilis*) was ordered through a broker directly from China. Later, when an embargo was imposed after the Communist Revolution in the 1940s, all imports from China had to be obtained indirectly. The standard Tonkin culms (the pole, or stem, of the bamboo) imported before the embargo were twenty-four feet in length and cut into twelve-foot sections. They were usually shipped in bundles of twenty-five culms. The post-embargo culms, which were obtainable indirectly from only a few bamboo supply houses, were eight feet in length. The best way to assure good quality culms was to go to a supplier and hand pick only the quality poles suitable for rodmaking, or have a broker do so on your behalf; otherwise only one-third of the culms could be used. Dick liked tight fiber, two- to two-and-a-half-inch culms with good, unblemished rinds (the outside enamel, or power fiber) free of water spots, fungus, or dimpled node stations.

Tim Bedford



Dickerson measuring a glued-up section of bamboo

The main drawback in using Tonkin cane (which is actually a grass) for rod building is that it does not grow uniformly. Each period of growth is indicated by a node which swells out from the wall of the culm. At each node station the fibers are bunched up close together, and protrude as a ring on the outside of the rind, sealing each growth section on the inside of the culm.

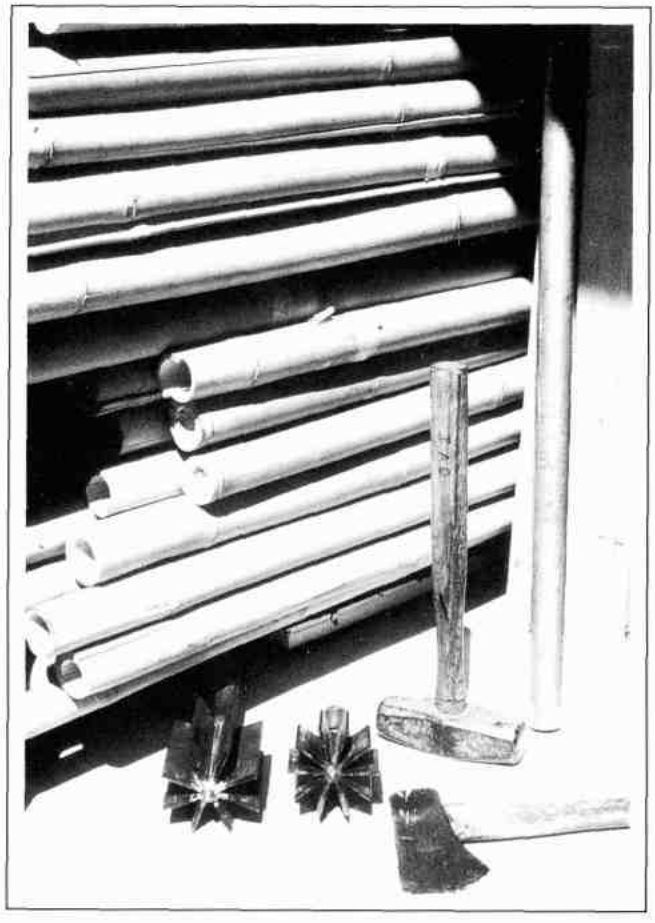
Nodes are a rodmaker's nightmare. First, the culm must be split, a task for which each rodmaker has his own special tools. Each section is split into a smaller strip, which is rough-cut into a 60-degree form, and the node stations are dressed down before the final taper is milled. The specially designed tools for the splitting process include knives, chisels, splitting gauges, and veined splitting tools of various sizes (page 15). The split strips for butt sections are the widest, 9/32nds to 3/8ths of an inch; those for the mid- and smaller butt sections, 7/32nds of an inch; and the tip section width, 5/32nds to 3/8ths of an inch.

Some large-production rod shops made inexpensive fly rods from strips sawed from the split, straight-sectioned culms to avoid any straightening of the strip itself. Then the node stations were sanded down flush with the outside enamel (losing some of the enamel power fiber). This is called "the fast production" method of strip and node preparation. Some of the power fibers are cross-cut in this process and show prominently on the finished blank.

Most of the reputable rodmakers took additional time and effort to produce straight fiber strips by light heat treatment and by pressing the nodes. They paid extra attention to the "light" sanding of the node stations, just taking the node protrusion down flush with the enamel of the rind. The strip was heated for straightening, which required many hours of extra work for the rodmaker but produced an excellent blank when all the strips were treated in similar manner.

When a strip of bamboo is heated to the correct temperature using dry heat or an alcohol burner, the cellulose fibers become very plastic and the strip can then be twisted, bent, or moved laterally. As the temperature subsides after heating, the strip will remain straight if it is held in that position while cooling to room temperature. If the strip is of poor quality cane without closely spaced cellulose fibers, or if it is diseased, or has water or insect damage, it will not remain straight after heat treatment. It is of prime importance to use only the best quality cane and spend the extra manhours required to produce quality rods. Lyle Dickerson did just that.

He also "compromised" the splitting and straightening procedure. First, he used very straight, very dry, rich straw-colored cane of superior quality and size with medium-thick walls and non-dimpled node stations. Dick already knew how to work wood and wood-like material, such as Tonkin cane. His special milling machine design and construction allowed him to accomplish rod fabrication which other rodmakers could not accomplish with their machines. With help from his brother Glenn, he devised his method for making the patterns and milling the prepared strips on the same machine. Dickerson used the same node spacing as H.L. Leonard, termed a "three-and-three" node spacing pattern, which was different from



Culms and splitting tools

that of other rodmakers. Jim Payne and Fred Thomas used a random spacing pattern and Everett Garrison used a spiral pattern. The "three-and-three" spacing pattern takes three strips from one culm and three strips from another, similar culm and places them 120 degrees from each other in opposition. Thus the nodes on adjacent strips alternate, yet the alternate nodes line up in the same plane. Dickerson felt that any inconsistencies in a milled strip would be offset by each adjacent strip and the strip located on the same 120-degree plane.

Dick experimented with different materials before he chose carefully selected Tonkin cane as his rodmaking material. Two eight-foot culms were split into four sections. Each quarter section was sawed into strips of equal width using a table saw with a guide against the split edge. Although the strips were not completely straight because of the "swells" at the node stations, they were straight enough to commit to his rough-cut, 60-degree cutter blades. After six strips were cut, the nodes were matched and bundled by wrapping, then heat-treated in a gas furnace to temper the fibers and remove moisture prior to beveling with the milling machine.

When Lyle Dickerson began handplaning his tapers, most rodmakers were using milling machines with standard 60-degree milling heads. Payne, Thomas, and Edwards used two small radial saws with the cutting edges fixed at 30 degrees to cut a 60-degree strip. Edwards also used two radial saw blades fixed at 45 degrees to cut 90-degree strips for his four-strip "quad" rods. This type of mill used a cam to cut a rectangular strip, enamel side down. The milled taper was peeled out of the strip after cutting.

The Dickerson milling machine was like none other in the late 1930s. He designed a very simple but rugged mill that is still alive and well after fifty years of honorable and active service.

The versatility of his milling machine is that several different tapers can be milled using the same pattern by "slipping" the strip on the pattern, which is four inches longer than the finished taper. By slight adjustments of the micrometer and by slipping the strip toward the butt or tip end, three different rod actions can be made. Complicated compound tapers can be milled by placement of shims at specific sites under the pattern before it is bolted to the sliding carriage. Compound tapers gave other rodmakers headaches because they needed a separate pattern for each length rod taper they milled. Dickerson could make his models 8013, 8014, and 8015 tapers using the same pattern by slipping and/or shimming to compound.

After formulating the mill design layout, Dick and his brother Glenn worked in a foundry long enough to learn the fundamentals and theory of casting metal. They made the typical wood patterns for all the mill-cast parts and the bearing housing of the cutter spindle. Dick bartered with the larger shops for the time to machine and mill the cast parts, sometimes with rods in lieu of cash payment. He had previous experience in the art of machining, tool- and die-making, and wood-working, and with earlier jobs in various shops around Detroit.

The bed of the Dickerson milling machine was fabricated from two eight-foot pieces of cold-rolled, mild steel bar stock. Two sliding surfaces were coarse-milled, lapped, and welded to the top of the bar stock. They were separated by a set of machined, ground-steel blocks, at fixed spacing on seventeen-inch centers. After welding, the entire bed was placed in an oven and annealed. After annealing, the four top surfaces and both inside surfaces were precision milled and lapped to make compact sliding surfaces. A heavy, welded steel frame was made and the bed was fastened on the top at waist height by a heavy hinge mounted on the left side of the frame. The cutter head motor is located at midpoint between the two sliding surfaces, and the spindle is on center line with them. On the right side of the frame, under the bed, is a micrometer which can raise or lower the sliding carriage by rotation of a calibrated knob. The cutter head is located equidistant from the pivot and the micrometer. Thus, the angle between the pivot point and cutter head can be raised or lowered in thousands-of-an-inch increments by adjustment of the micrometer. This is the reason a taper can be milled. Once the correct pattern is used, less bamboo is milled from the left, or butt side (lesser angle) than the right, or tip side (greater angle) of the pattern.

The cutter head is comprised of two carbide side-milling cutters, 3 inches x ¼ inch x 1 inch x 30-degree blades, mounted side by side to cut (or mill) an inverted "V" form of 60 degrees. The cutter head is mounted on a one-inch spindle shaft. A one-horse-power motor, which rotates at 5500 r.p.m., is connected by a V-belt and pulley to the

spindle housing. The spindle housing has a forward and backward adjustment so that the cutter head can be locked at dead center line with the center line of the pattern and carriage. The motor, pulley assembly, and spindle housing are located on a base of the steel frame which carries the bed and sliding carriage (page 16).

Each arm of the sliding carriage is five feet long and fabricated from cast semi-steel, milled and lapped to slide on top of the fixed bed. The carriage is fitted with bolt holes located on ten-inch centers by which the maple wood pattern is bolted to the carriage. The carriage slides under the cutter head at a fixed angle which is set by micrometer adjustment.

The Dickerson tapers were all calculated by use of the engineer's and machinist's five-inch sine wave tables. With the pattern bolted to the carriage, a rough-cut 60-degree strip was placed enamel side down on the face of the pattern. The micrometer was set and locked at the correct setting for the desired taper. With the cutter head rotating at 5500 r.p.m., the carriage and pattern were pulled through the blades by hand and the excess bamboo removed from the strip. Tim Bedford modified the carriage travel by the addition of a rack-and-pinion drive with a variable speed control unit and a forward/backward option. This was more efficient than pulling each strip through the cutter head by hand.

Tim Bedford describes in detail the sliding carriage in his 1985 article in *The American Fly Fisher*. He describes the single bar carriage and the cross-shaped cross section to which the pattern is bolted. The fit of the sliding carriage was fine-lapped to exact tolerances so that gibs (metal plates to afford a bearing surface or to provide means of taking up wear) seemed unnecessary. In 1974 Bedford added gibs to compensate for minimal wear to both sliding surfaces.

The versatility of the Dickerson milling machine facilitated milling the patterns for the strip tapers. The first patterns were made from hard rock maple (which I am still using) and backed by ⅛-inch x 1-inch steel, screwed to the pattern on five-inch centers its entire length. Later Dick used micarta (a phenolic-based material) and finally an aluminum alloy bar, ⅜-inch x ½-inch x the length of the desired taper. Whether using wood, micarta, or aluminum, mounting holes were drilled and the blank pattern was bolted to the carriage. The top edge was milled its entire length to a 60-degree inverted "V" shape using a standard 60-degree milling cutter. Then a flat milling cutter was used to dress the top surface, or face. The total amount of material removed was inversely proportional to the total amount of material (bamboo) which was left on the finished (tapered) bamboo strip. The pattern was then reversed, shimmed if necessary, and rebolted to the carriage. Thus, when the strip was milled, more bamboo would be removed from the tip end of the pattern because it is at a higher point than the butt end, which slides under the cutter head first in the milling run. The micrometer adjusts the angle of the taper for its particular length from the butt end to the tip end in thousandths-of-an-inch increments.

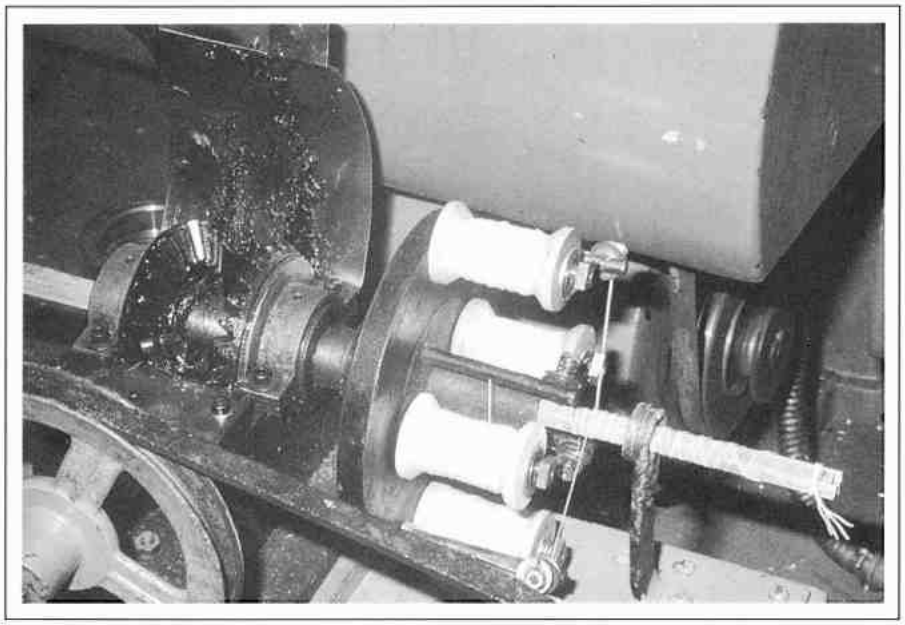
Dickerson's spindle and cutter assembly

Dickerson took great care in each step of tapering the bamboo strip. First, the node stations were removed, inside and outside, then dressed down to the surface by fine sanding. A special cutter head was installed on the spindle housing to rough-cut the rectangular strips to an untapered 60-degree inverted "V" shape. Lyle made a special base and stage for this cutter.

Part of the sliding carriage was removed, and the special base and stage were bolted to the bed under the cutter head. The cutter head was adjusted to move down into the stage to the correct height. When the rectangular strip was pulled though the blades, enamel side down, it was milled into a 60-degree inverted "V" shape, which is called the rough-cut strip and is not tapered. Six strips were cut to the approximate size for final milling. The node spacing was matched and they were bundled together using the wrapping machine (page 17), then heat-treated. Dick allowed for the thickness of outer skin which was to be removed (down to the outer power fibers), for glue thickness, and for shrinkage after heat treatment in producing the final taper of the blank.

After heat treatment the strips were unbundled, the rough-cutter head removed from the spindle, and the base and stage removed from the bed. The precision cutter head was installed on the spindle and locked. Spring tension mounts located on each side of the cutter head held the strip flat on the pattern as the strip was being milled. The mounts had 60-degree "Vs" milled into the rollers to match the newly cut "V" shape in the strip as the carriage moved it through the cutter head. Tension was applied to each roller assembly via spring tension adjustment. The roller mounts varied in size and width of the "V" proportional to the size of the strip being milled: deep "Vs" and heavy spring tension for large butt and mid-strips, shallow "Vs" and light tension for small butt, mid-, and tip strips. If necessary, shims were placed at the calculated positions between the carriage and pattern. The pattern was bolted to the carriage and checked for alignment.

Strip number one was placed enamel side down on the face of the pattern. The micrometer was set to mill a larger strip than necessary so that measurements could be recorded after each successive milling pass and any corrections or adjustments made. Dick made several "light" successive cuts and recorded measurements between each, as the mi-



Rough-cut bamboo strips wrapped for heat treatment

crometer setting (and the angle of the pattern) was increased. He knew the chord on the five-inch sine table for the length of the strip being milled and its equivalent to 1/1000ths of an inch on the calibrated micrometer dial. The control strip (one) was marked every five inches on the enamel side and could be measured at these points after each cut was made. When strip one (the control) measured out to the calculated value for that particular taper length, the micrometer was locked and the remaining five strips were milled at that setting.

Dickerson was a perfectionist with regard to points of high stress on his tapers. He rechecked every milled strip to insure that each was within the calculated tolerances, especially his finished dimensions along the five-inch sine-wave calculations, both before and after the outside skin was removed to expose the enamel of the power fibers. After milling, the six tapered strips were laid out in numbered sequence with the "three-and-three" node spacing and placed enamel side down on fresh newspaper. One-quarter-inch masking tape had been placed adhesive side up on the newspaper so the strips would stick as they were placed on the newspaper. The tape was placed approximately three inches from the butt end, at mid-point, and approximately three inches from the tip end.

A urea formaldehyde glue, pre-mixed before the strips were milled, was applied with a toothbrush to all the freshly cut surfaces from the butt end toward the tip end in even strokes until all the exposed surfaces were coated. The glued strips were gently lifted from the paper, butt first, and the uppermost tape rolled in such a manner around the strips so that they formed a hexagon. The remaining two pieces of masking tape were removed. By gentle rolling with the fingers, each strip mated with the next until a complete hexagon was formed along the entire glued section. This was placed in the center hole of the wrapping machine and the masking tape was removed. The proper diameter strings were half-hitched around the section twice.

Before the section was wrapped, the tension controls on the wrapper were adjusted to the correct tension for that particular taper. Butt sections and some mid-sections required four strings; two strings (at lighter tension) were used on light mid- and tip sections. Glued-up sections being wrapped had to be held firmly and gently pulled through the center hole as the section was wrapped. The same flat had to be kept up at all times during the wrapping procedure so as not to warp or twist the section. Used as designed, the Dickerson wrapper was without peer for wrapping glued-up sections.

After wrapping, the strings on each end of the section were knotted, made into a loop, and taped to the section, which served to hang the section on a hook in the drying box. Sometimes a weight was hooked to the loop at the bottom of the section to keep it straight until it cured. Some slight straightening was needed before placing the section in the drying box, which was accomplished by placing it on fresh newspaper and gently rolling it back and forth with the palms of the hands or fingers. Sighting down the section, any zigs or zags could be determined and that area given the gentle rolling treatment until it was true. The section then was referred to as "being in the string."

After the section had cured, the string was removed (then referred to as a blank). Dick carefully removed all the excess glue with a dull scraper, which actually polished the outer power fibers. The blank was then lightly sanded with 220-grit garnet paper. He was especially careful to maintain the circular integrity of the round form of the dense, outer power fibers as these are subjected to the highest stress when the rod is cast. The blanks were hand polished with oooo steel wool, then bundled together for final polishing.

Being a proficient machinist, Dick designed and fabricated a precision drawing machine for drawing nickel-silver tubing to make the various diameter sizes needed for ferrules. Hard-drawn nickel-silver in the sixteen to eighteen diameters needed could only be purchased in quantity, and such expense during the Depression was out of the question. Precision hard-drawn tubing is a requisite for the ferrules used in rod-making, and most of the tubing available did not have uniform inside dimensions. With Dickerson's precision machine, he needed only three sizes of soft annealed nickel-silver tubing: ¼-inch, ⅜-inch, and ½-inch outside diameter. Using only these three sizes, he fabricated ferrules of the highest quality in 1/64-inch increments, from 19/64ths of an inch to 24/64ths of an inch.

The Dickerson precision drawing machine consists of a heavy metal frame and four-foot worm screw mounted in babbit metal bushings. The screw is gear-fed by a one-horsepower motor to deliver very high torque. Mounted over the worm screw is a lever-type lock-nut assembly which, when engaged, runs on the screw and draws the assembly toward the back of the machine. Mounted over the lock-nut assembly is a heavy scissor-type vice with serrated jaws and in front of the jaws is a block which is bolted to the frame. Center line in the block is a counter-sunk hole, .850 inch in diameter, which holds a hardened die with a hole sized to accommodate the outside diameter of the tubing to be drawn.

A set of hardened dies and precision-ground, hardened mandrils are used to draw the soft annealed tubing to the correct sizes to make any particular ferrule size. Three diameter sizes are needed to

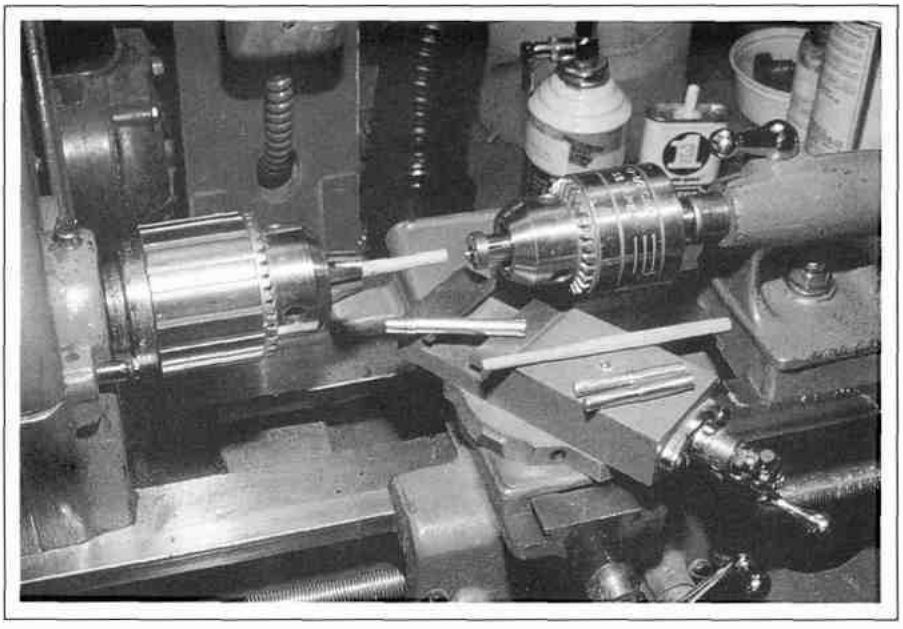
make each ferrule-size set of one female and two males: one size for the female ferrule and one size for the welt, or lip; the same size for the barrel of the male as the barrel of the female; a smaller size for the slide of the male. By using the Dickerson drawing machine and its dies and mandrils, precision tubing could be drawn and elongated and the tubing diameter reduced, while at the same time making it stiffer—thus the term "hard-drawn."

Approximately two feet of the tubing to be drawn was chucked in the headstock of the lathe and the diameter reduced by shaving off several thousandths of an inch so that it would just fit through the hole in the die. Approximately two and a half inches of the diameter were reduced so that it could be grasped by the jaws of the scissor vice as it protruded through the die. The precision mandril was fitted inside the tubing and the jaws of the vice were held with the fingers. The motor was turned on, and the key was turned with the other hand to engage the lock-nut assembly of the worm screw. The tubing and mandril were drawn through the die. Successive draws using smaller dies and mandrils reduce the tubing to the desired size ferrule stock. Each draw increases the strength and modulus of elasticity coefficient (stiffness). The barrels of the male and female were cut and honed to the correct fitting dimensions, then soldered, with the welt being soldered to the female. The slide of the male was honed and lapped to fit the female barrel.

Dick made a small punch press and complete set of hardened dies and punches to shear nickel-silver discs for the bulkheads (water seals) which fit inside the female barrel and the tip of the male slide. Four serrations were next cut in the end of the barrels of the male and female ferrules and then polished.

These finished ferrules were fitted on the polished blanks' butts and tips. Inside cutters, or mills, were commercially available in graduated sizes of 1/64th inch, but Lyle fabricated his own. Ferrule stations on the blanks have to be precision-cut so that the integrity of the rod's taper will be uniform during the loading stress of the casting stroke and line retrieval, especially "with a fish on." The ferrules must be properly fitted and mounted at true center.

The blank was measured to the correct length and cut-off. It was then fitted in the lathe headstock, and the cut-off end dressed, then measured for the correct depth of the ferrule to be mounted and marked. The inside of the ferrule was throughly cleaned with acetone and ethyl alcohol to remove any grime or flux from soldering, and the tip of the blank was slightly dressed again. The inside mill was chucked in the tailstock, the lathe turned on, and the tailstock and mill pushed to the index "fit" mark on the blank. The ferrule station was milled slightly oversize, then dressed down to a "tight fit" diameter with No. 320-grit garnet paper. Two milling passes had to be made on the male ferrule because of the reduction of the two diameters due to its stepdown configuration. There was a difference of 2/64 inch between the inside diameter of the barrel and barrel of the slide. After the ferrules were fitted and glued to the blanks, they were pinned, dressed, polished, and oxidized.



A view of the internal workings of the mill-cutting ferrule station

Next, the cork grip was added and contoured. Lyle used only cork specie rings, superfine grade from Portugal, measuring 1 inch x 1/2-inch x 5/16-inch bore. His son Glenn recently sent me a box of these—the finest I have ever seen—saved from his father's shop. It is impossible to obtain this quality today.

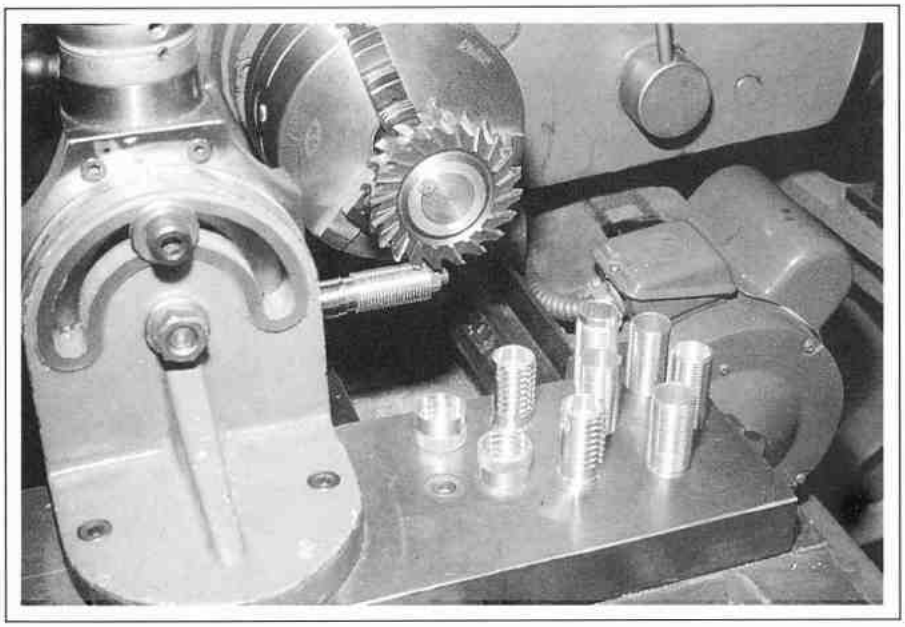
Dick usually used twelve to thirteen corks for the grip, but various customers wanted from ten to thirteen and a half. I have a Dickerson 7011, circa 1951, with twelve and a half corks, which is a long grip on a short rod! All Dickerson rod patterns were calculated to have approximately ten inches on the butt section, which measured 3/8 inch in diameter so that his cork rings would fit all the butt blanks regardless of the taper or length of the rod.

The individual corks were glued on the shaft and pressed tight with a special clamp; when the glue cured, the shaft was chucked in the lathe headstock. Prior to fitting the corks, the blank had been dressed at the butt end and a small centering hole drilled. Thus, when the corked blank was chucked, the lathe tailstock was run in with the live center, which has a point to hold the shaft at dead center in the hole while the contour was being executed with a file and sandpaper of various grits.

The basic Dickerson cork contour was a modified cigar shape with a slight swell five corks from the back at the reel seat. Dickerson rods, however, have a variety of grip contour types, even a few with all-cork grips fitted with aluminum caps and slide bands. A few rods were fitted with wood spaces, aluminum caps and slide bands, some with nickel-silver hoods and aluminum slide bands.

The Dickerson reel seats are both beautiful and simple in concept. The aluminum barrel of his standard seat had 3/4-inch x 16 threads per inch. He alternated between this thread configuration and a modified Whitworth thread (similar to Thomas, Payne and Edwards) several times during his rod-making career. The modified Whitworth is a rounded form at the thread apex and is 3/4-inch x 8 threads per inch, the standard thread used on light-bulb and fuse bases (Plate 32a). All thread barrels had a flared check at the cork grip end and the seats were nearly all down-locking, except for a few up-locking types.

The spacers for the reel seats were almost all made of black walnut and turned to .65-inch x 3.5-inch x 3/8-inch



A set of milling reel seat barrels

bore. A very early 1931 rod has a black Bakelite spacer (Hardy and Thomas type), which may have been original, and the modified Whitworth thread. A few rods were fitted with other woods; for example, the "pink" wood spacer on a 1946 901812 owned by Dick Loebl.

A plain, pocket-type, nickel-silver hood was fitted to the end of the spacer on the Dickerson reel seat (Plate 33), drawn from 25/1000-inch twenty-percent flat stock. A blanking cutter and die were used to shear a circular disc 1.35 inches in diameter using a hydraulic jack press. After shearing, the blanking die was removed from the press and a rounded, tapered, spring-loaded plunger was mounted in the press. The shearing die serves a dual purpose—to shear the disc and to form a cup. In the center of the die is a hole .77 inch in diameter with slightly tapered walls. The disc was placed on the die and drawn into a cup-shaped form measuring .738 inch x .754 inch x .650 inch. Next, the blanking die was removed and replaced by a contour die which was recess-milled on the inside into the shape of the reel-seat foot. The plunger and spring was removed and replaced by the contour punch, which was milled on the outside also in the shape of the reel-seat foot. At the bottom of the die is a recessed hole which fits a knock-out plunger, which releases the drawn, contoured hood. The hood was placed on a spud, or trimming die, and chucked in the lathe headstock. The surplus skirt was trimmed off with the lathe tool, and the hood was finished by cleaning and polishing while in the trimming die. Some of the Dickerson nickel-silver hoods in the 1930s were open on the end with the spacer protruding ¼ inch; my Condit 801611 D is such an example.

Most of Dickerson's heavy rods for salmon, steelhead, and bonefish have a large female ferrule which is soldered to the reel-seat hood and glued to the end of the rod shaft. An extension, or fighting butt, can be fitted to the butt of the rod by means of a male ferrule which mates with the female of the hood. When not needed, the extension butt can be easily removed and stored in a pocket of the rod bag.

Dickerson dressed his rods with Perfection or Mildrum bronzed or tungsten snake guides until World War II. His stripping guides were agate rings with nickel-silver frames. The tip tops were Perfection. Later, most of his rods were dressed with Perfection or Mildrum black or chrome stripping guides and hard chrome snake guides and tip tops. His ferrules and the rounded or hexagon cork-grip checks were always oxidized. His early hook keepers were the typical strap-and-ring type. Later, his standard keeper was formed of bronze wire in loop-the-loop form with flat feet and was left bright. Some Dickerson rods have no hook keeper.

The hook keeper, stripping guide, snake guides, and tip-top stations were wrapped in the basic colored-silk thread. Three or four coats of varnish were applied to the wraps, letting each coat dry before applying the next. Until 1941, Dick varnished his rods with a spar varnish called Detrolac, made by the Detroit Varnish Company. In the fall of 1941 he and his son, Glenn, dug a hole and buried a tarred casing 6 feet x 6 inches long in their Detroit basement floor. Within the casing they placed an aluminum tube, 1 ⅝ inches x 6 feet, with its bottom sealed and top capped. The tube was filled with a new synthetic varnish and was used as a "dipping tube" to varnish the rod sections via a pulley and string arrangement. In the 1950s the family moved to Bellaire, Michigan, and used a similar dipping tube in the cellar there.

After the varnish had cured, the reel seat was aligned with the guides and tip top, then glued to the shaft protruding from the cork grip. The reel-seat hood was aligned, glued on, and pinned. The completed rod was enclosed in a hooded, cloth-compartment type of bag which varied in color over the years, then placed in a brass- or black-plastic-capped aluminum tube.

With little help, Lyle L. Dickerson completed this exhaustive series of technically demanding steps, using machinery and equipment he had designed and built, as many as a hundred times or more in each of his most productive years. Has any one rodmaker done more?

The prices of used Dickerson rods lay dormant until the mid-1970s. By 1980 more and more Dickerson rods appeared for sale in many of the dealer tackle lists. About 1984, auction prices for Dickerson rods started to rise. They gained momentum, then soared to an unprecedented hammer price of $9,000 for a Dickerson 7012, and $4,250 for an 8014 in February of 1989. Lyle Dickerson would probably have been astounded.

I spent the summer and fall of 1986 setting up the Dickerson machinery and equipment, integrating it with mine and the Bedford shop which I had purchased in April. In January of 1987 I approached close angling friends and owners of Schaaf Rods to see how they felt about me introducing a Dickerson Commemorative Series of seven, seven-and-a-half, and eight-foot fly rods. This series would be made on the original maple wood patterns in limited quantity but they would be modified so they would not be mistaken for original Dickerson rods, especially with the appreciation in Dickerson prices. I apprised Lyle's son, Glenn, of my intentions, and the feedback was one-hundred percent positive. Since its inception in 1987, I have delivered fifteen Dickerson Commemorative fly rods.

I count myself most fortunate being at the right time and place to acquire such a piece of rodmaking history and tradition as the Dickerson shop. I hope it will eventually be passed on to another

rodmaker who respects and admires Lyle Dickerson as I do.

In this day of space-age technology and life in the fast lane, there are times, late at night, when I slip quietly into the shop and turn on the light which illuminates the Dickerson milling machine and its wood pattern. The shop is still and silent. Carefully, I run my fingers over the cold, hard metal of the carriage and the soft wood of the pattern. I can almost hear the gentle whine of the motor as it drives the cutter head and smell the sweet, burnt odor of cut bamboo, as the master, wearing his green eyeshade, mills a strip. It occurs to me that even in this last decade of our modern and sophisticated century I can *still* do what the master did for so many years—perhaps not with the intense perfection he achieved but with the same desire, dedication, and purpose—try in my own small way to maintain the standard of excellence set by Lyle L. Dickerson. □

L. L. Dickerson Trout and Salmon Fly Rod Models

The Dickerson ledger records the remarkable total of over 150 different rod designations or models. Other designations may have been used prior to 1931 when the ledger was started, and more were used after 1960 when it was discontinued. Many of these models were made only once or twice. It is not clear whether such models are best considered unique, or oddball.

The ledger recorded the general type of rod which was discussed with the customer, sometimes the specific model to be made. The actual model inscribed on the completed rod shaft was often different—and more varied—than what was recorded in the ledger when it was ordered.

It seems likely that some tapers were designated with different model names during different periods of Dickerson's work. Measurements indicate evolution of some tapers among rods bearing the same model designation over the years.

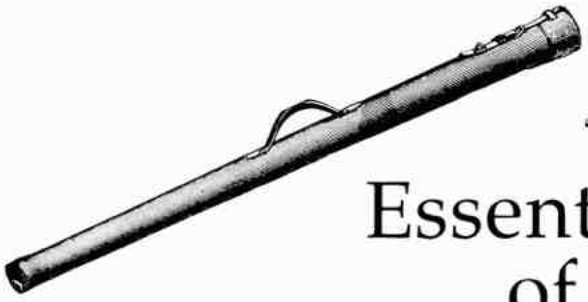
Earl Leitz clarifies that those rods with the inscription "Leitz" or "Dickerson-Leitz," in addition to their model designations, had the same tapers as other rods of that model. Presumably the same is true for those rods designated "Bergman" or "R.B." (Ray Bergman). The large number of rods with these designations indicates that these were not Bergman's or Leitz' personal rods.

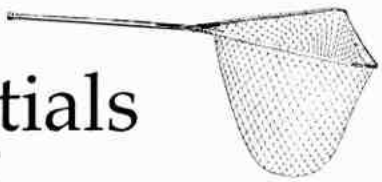
The following table does not take into account that the same rod models were occasionally made using a "plain reel seat (slide band with a walnut spacer)," or an all-cork seat with a slide band, or a rare, uplocking reel seat, or had an extension butt. These variations dramatically increase the number of configurations possible in Dickerson's rods.

J.W.S. & G.S.S., M.D.

FLY ROD MODELS

7 ft. & under	7½ ft.	8 ft.	8½ ft.	9 ft.	over 9 ft.
3 ft. Banty (not made to be used)	7611 Hollow	8 ft. 2 pc.	862	9 ft.	932013 Salmon
6½ ft. 3 pc.	7612	801	8½ ft.	9 ft. 3 pc.	9½ ft.
6½ ft. 2¾ oz. Light Action	7613	802	8½ ft. Dry Fly	9 ft. Standard	9½ ft.
6011	7613 Hollow	803	8½ ft. 3 pc.	9 ft. Dry Fly	9½ ft. Dry Fly
661510	7613 Special	8 ft.	8½ ft. Light Action	9 ft. Easy Action	9½ ft. 6¼ oz.
7010	7613 Stiff	8 ft. 4 oz.	8½ ft. Stiff D	9 ft. 5 oz. Dry Fly	9½ ft. 7 oz. Salmon
7011	7613 Heavy	8 ft. Stiff D	8½ ft. 4 oz.	9 ft. 5¼ oz.	961812
7011 Hollow	7614	8 ft. HDH Stiff	8½ ft. 4¼ oz.	9 ft. 5⅝ oz.	961913
7012	7615	8 ft. 3 pc.	8½ ft. Special 4¼ oz.	9 ft. Tournament	961913 Steelhead
7012 Hollow	7616	801510	8½ ft. 4½ oz. Stiff	9 ft. Tournament Dry Fly	961913 Salmon
7013	7618	801510 E	8½ ft. Special	9 ft. Salmon	962013
7 ft. 2 pc.	7½	801510 (Stiff)	86E	90E	9613
	7½ ft. 2 pc. 3 oz.	801510 Stiff Butt	861510	901611	9618
	7½ ft. 2 pc.	181510 D	861610	901711	101510
	7½ ft. R.B.	801510 D	861611	901711 D	101913 C
	light 7½ ft.	801510 Parabolic	861611 D	91811	101913 Salmon
	7½ ft. 2 pc. 3½ oz.	801511	861711	901811	10 ft. Salmon 8 oz.
	7½ ft. 2 pc. 3⅜ oz.	801610	861711 Light Action	901812	10 ft. Salmon Dry
	761510	801611	861711 D	901812D	102012
	761510 R.B.	801611 D	861812	901812C	102013
	76151310	81711	8613 4X Special	901812 5½ oz.	102014
		801711	8614	901812 5¾ oz. Tournament	10½ ft.
		8012	8615	901913	1062114
		5X 8012	8615 Special	901913 Tournament Distance	13 ft. 18 oz. Salmon
		8012 Hollow	8615 Leitz Special	9 ft. 2 pc.	
		8013	8616	9015	
		8013 Stock	8616 Special	9015 Special Butt	
		8013 Dry Fly	8616 Guide	9016	
		8013 Special	8617	9016 Standard	
		8013 Special Parabolic	8 ft. 9 in. Dry Fly	9016 Special	
		8013 Streamer		9016 Soo Special	
		8014		9017	
		8014 Hollow		9018	
		8014 Special			
		8014 Parabolic			
		8014 Guide			
		8015			
		8015 Special			
		8015 Guide			
		8015 Guide Special			

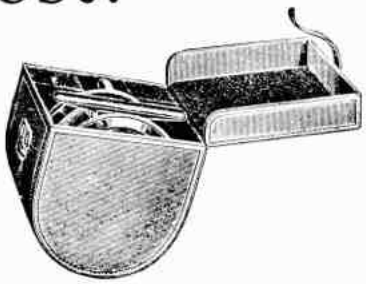




Essentials of Fly Fishing:

What's the Real Cost?

by R.W. Hafer



Rik Hafer, Professor of Economics at Southern Illinois University at Edwardsville, returns this issue with his second article on the economic aspect of fly fishing, "The Essentials of Fly Fishing: What's the Cost?" The article extends Rik's earlier research on the cost of cane rods which we published here in The American Fly Fisher *(Summer, 1989), by incorporating a full range of tackle as well. The results of his real-price calculations are again, in many instances, quite surprising.* *D.S.J*

In an earlier article (Summer, 1989) in *The American Fly Fisher*, I explored the behavior of bamboo rod prices over most of the past century, which showed that the market prices of bamboo rods have increased dramatically since the late 1800s.

But simply comparing the price of an Orvis rod in 1905 with one in 1989 is not economically meaningful. Only by establishing some benchmark price level to which the different year's prices are compared can we accurately gauge the rise or fall in prices over time. As demonstrated in that earlier article, the range of bamboo rod prices from the late 1800s, adjusted for increases in the general level of prices, overlap with the range of prices today. Stated differently, converting what a dollar in 1900 would purchase at today's prices, there are bamboo rods available today that in real terms cost no more than they did one hundred years ago.

Focusing only on the price of rods ignores the changes in the cost of being a complete fly fisher. After all, it takes more than a rod alone to partake in the grand sport. With that in mind, the purpose of this article is to determine the real cost of outfitting an individual with fly fishing essentials over the past eighty years. To keep this comparison manageable, prices are reported for 1910, 1962, and 1990. The choice of these specific years was dictated primarily by availability of price information. Moreover, it is desirable in a study such as this to maintain comparability in quality. Even so, top-grade equipment, except perhaps for the bamboo rod, is undoubtedly better today than its counterpart at the turn of the century.

Since strict quality control is not feasible, the approach chosen for this article is to use the prices of the top-grade equipment offered by one company, Orvis. Two key factors dictate this choice. A primary factor is the availability of historic price information. In gathering the price data, I have made use of two sources, with the 1910 information taken from Melner and Kessler's *Great Fishing Tackle Catalogs of the Golden Age* (1972). Since the Orvis listings are incomplete for a specific year, however, the 1910 prices actually represent prices from around that year, which is especially true for paraphernalia such as landing nets or wading boots. In contrast, the price data for 1962 and 1990 are taken directly from Orvis catalogs for those years.

Another reason for using Orvis is because it offers a relatively complete line of equipment. Thus, even in the early part of the century the fly fisher could purchase rod, reel, line, flies, net, and the other essentials from this one source. While choice of Orvis equipment may not represent the most expensive available in any one year, it arguably is recognized as consistently dependable, high-quality equipment.

NOMINAL PRICE COMPARISONS

The essential equipment for our fly fisher and the prices paid in 1910, 1962, and 1990 are listed in Table 1. While some may argue that there are items missing from the list, remember that it lists only the essentials. Consequently, items that some practitioners may feel are necessary, such as nymph seines, stream thermometers, ph meters, fly threaders, and flexible-necked flashlights are excluded. (Adding these marginal items increases the total cost by almost $300 in 1990!)

Going through the price list will probably corroborate what many already know: fishing equipment today is a lot more expensive than it used to be. For example, relative to the simple aluminum reels available for $3.50 in 1910, the Orvis D-XR reel currently sells for $150, an increase of about 4,000 percent. But, of course, the current-day reel is a much more sophisticated tool. Such may not be the case, however, for other equipment. Consider, for example, the cost of a dozen dry flies. They were hand tied in 1910 and are hand tied today, yet they cost about twelve times more today than in 1910 and about three times as much as in 1962.

Although the magnitude of the price increase varies across items, simply comparing the nominal prices reveals a generally large increase. The overall change is found by comparing the total price for the list of essential fly fishing equipment. While it cost an angler $46.10 in 1910 to be adequately equipped with a top-grade Orvis outfit, the price jumped to $230.50 by 1962 and to $2,194.30 in 1990. But, as mentioned above, is it meaningful to compare nominal prices across time?

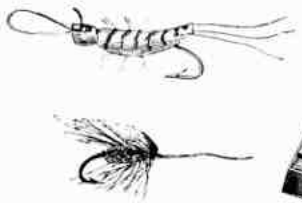


TABLE 1

A Price List for the Complete Fisherman
Nominal Prices: 1910-1990

Item	Date		
	c.1910	1962	1990
Rod	$15.00[1]	$105.00[2]	$1,400.00[3]
Reel	3.50[4]	26.75[5]	150.00[6]
Line	8.00[7]	12.50[8]	45.00[9]
Leader (ea.)	NA	0.50	2.95
Flies (doz.)	1.50	6.00	17.40
Fly box	1.25[10]	7.25[11]	25.00[12]
Floatant	0.55	1.25	7.95
Snips	0.30	0.75	11.00
Landing net	2.00[13]	12.00[14]	65.00[15]
Wading boots	14.00[16]	46.50[17]	235.00[18]
Vest	NA	12.00[19]	235.00[20]
Total	$46.10	$230.50	$2,194.30

NOTES

[1] Orvis $15.00 grade split bamboo
[2] Battenkill, 3 pc., 7½-9 ft.
[3] Battenkill, 3 pc., 8 ft.
[4] Improved Orvis aluminum reel
[5] Hardy LRH Lightweight reel
[6] D-XR reel
[7] AYANEFCO Soft Enamel line, 40 yds.
[8] Orvis Silk, 30 yds.
[9] Orvis SSS floating fly line
[10] Aluminum box, fly hook
[11] Wheatly, swing-leaf construction
[12] Wheatly Maximum Security
[13] Orvis landing net
[14] Orvis landing net
[15] Orvis "New Zealand" landing net
[16] 1897 Abbey and Imbrie Catalog: "Wading Trouser"
[17] Hodgman "Wadewell" bootfoot wader
[18] Orvis bootfoot neoprene
[19] Lee Wulff "Tac-L-Pak"
[20] Orvis "Vest for All Seasons"

REAL PRICE COMPARISONS

Directly comparing the prices listed in Table 1 fails to account for the behavior of prices in general. If the prices of other goods have increased as much as the equipment listed, then the price of being a well-equipped fly fisher, *relative to other goods*, is no more expensive today than it was in the past. To make such a comparison it is necessary to establish a benchmark price level, or base year, from which to compare other prices. In this article, I take the general price level for goods in 1989 to be the base year. Put another way, how much could one have bought in 1910 or 1962 with dollars valued in terms of their 1989 purchasing power?

To calculate the real prices of the equipment, the following procedure is used. The items listed under the 1990 heading in Table 1 are priced in their nominal or current terms. A comment is in order: Although the prices are taken from the 1990 catalog, the general price level is known only for 1989 and before. I assume, therefore, that the 1990 equipment prices also prevail in 1989. This allows me to use the general price index for 1989 as the base year from which to compare the other years. Since the general price level measure used is an index, the value for the price index in 1989 is set equal to 100 percent.

For 1910 and 1962, I make use of a general price index that is available from 1875 to the present. Using 1989 as the base year (=100%), the value of the price index for the other years can be calculated. The value of the index for 1910 is found to be 7.3 percent and for 1962, 27.2 percent. In other words, if a dollar bought one hundred cents worth of goods in 1989, it took only 7.3 cents to buy the same amount of goods in 1910 and 27.2 cents to buy the same amount in 1962. To find the real price—that is, the 1989 price—of any item in Table 1, one need only divide the listed nominal price by the appropriate index value for that year. Thus, the 1989 equivalent price of the 1910 reel is calculated to be ($3.50/.073) or $47.94. Similarly, the comparable 1989 price of the 1962 reel is ($26.75/.272) or $98.35. Since these prices are now calculated using a common base year (1989), they are directly comparable.

Table 2 reports the results of converting all of the nominal prices in Table 1 into their 1989 price equivalents. Notice that once the behavior of the general

level of prices has been accounted for, the disparity between prices across time is diminished. In 1989 dollars, that $15 Orvis rod in 1910 would cost about $200. Glancing through the listing of real prices may reveal some surprises. For example, note that the real price of line actually has fallen over time. While one may argue that my choice for 1910 is a bit out of line, the 1962 and 1990 selections represent Orvis' best-grade line available. Yet the price today is less than what it was in 1962 in real terms. Another decline in real price can be found by comparing the price of flies between 1962 and 1990. The next time you cringe at spending $17.40 for a dozen flies, console yourself with the thought that in 1962 someone was paying $22.06 in comparable dollars. Rather than discuss each item in the list, the real cost of the complete outfit is presented for each year in Table 2.

A useful comparison of the nominal- and real-price changes is made in Table 3. There I compare the percentage increase in nominal and real prices between 1910 and 1962 and from 1962 to 1990. In addition, the change for the complete list of equipment, for all goods except the rod and for the rod only, are calculated. The first thing apparent is that nominal prices have jumped dramatically across the two periods. In terms of real prices, however, the big increase has come primarily during the past three decades when real prices for the complete set of equipment increased 159 percent. In other words, the price increase during this period far outpaced the general rate of price increase for other goods. What accounts for this dramatic increase? The next two lines in Table 3 provide the answer. The real price of non-rod items increased 72 percent between 1962 and 1990. The real price of a bamboo rod, however, rose about 260 percent, or at a rate over three times as fast as the other items. Between 1910 and 1962, the percentage increase in the real price of the bamboo rod is eleven times as great as that for the other items. This increase reflects, to some extent, the impacts on the price of bamboo rods resulting from the import restrictions placed on bamboo following World War II.

SUMMARY

Putting prices into a comparable framework indicates that being a well-equipped fly fisher is not only expensive, but costs significantly more today than it did eighty or thirty years ago. Why is this so? One obvious reason is that quality has improved and one pays more for higher quality equipment. But even with improved quality there are many more substitutes available on the market today than in the past. And since more substitutes should lead to lower, not higher prices, why the increase in real prices?

This suggests a second reason for the higher real price: market segmentation. The idea is that dealers are able to charge a range of prices by which they capture the broadest possible segment of the market. Although there may be alternatives to the bamboo rod, those willing to part with $1,400 may feel that owning such a luxury item outweighs any performance factors vis-a-vis close substitutes such as graphite. Moreover, that segment of the rod market may not react very much to large increases in prices, which implies that increases in bamboo rod prices result in very little change in the quantity demanded. A similar argument can be made for other items listed in Table 1.

In conclusion, the evidence presented here indicates that the real price of a fly fisher's essentials, assuming the desire to own top-of-the-line equipment, is, in nominal or real terms, a much more expensive proposition in 1990 than in 1910 and 1962. □

Illustrations from *Great Fishing Tackle Catalogs of the Golden Age*, edited by Samuel Melner and Hermann Kessler (Crown Publishers, New York, 1972).

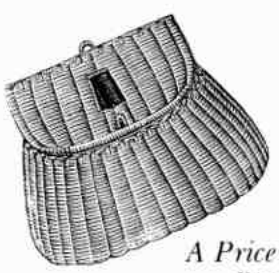


TABLE 2

A Price List for the Complete Fisherman
Real (1989) Prices: 1910-1990

Item[1]	Date		
	c.1910	1962	1990
Rod	$205.48	$386.03	$1,400.00
Reel	47.94	98.35	150.00
Line	109.59	45.96	45.00
Leader (ea.)	NA	1.84	2.95
Flies (doz.)	20.55	22.06	17.40
Fly box	17.12	26.65	25.00
Floatant	7.53	4.60	7.95
Snips	4.11	2.76	11.00
Landing net	27.40	44.12	65.00
Wading boots	191.78	170.96	235.00
Vest	NA	44.12	235.00
Total	$631.50	$847.45	$2,194.30

NOTES

[1] See Table 1 for a listing of the items. The real price is calculated as (nominal price/price index) × 100. See text for a discussion.

TABLE 3

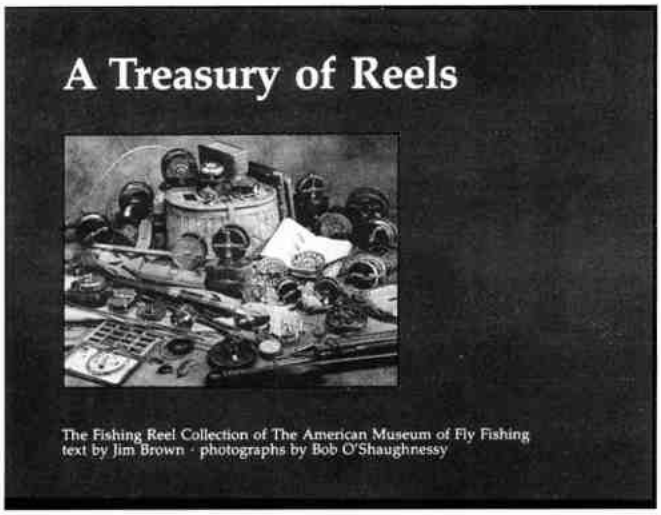
Percentage Price Increases: Nominal and Real

Item	1910-1962 Nominal	1910-1962 Real	1962-1990 Nominal	1962-1990 Real
All goods	400%	34%	852%	159%
All except rod	304	8	533	72
Rod only	600	88	1,233	263

A Treasury of Reels

The Fishing Reel Collection of The American Museum of Fly Fishing
text by Jim Brown · photographs by Bob O'Shaughnessy

Historians!



Collectors!

Publication: Mid-November

- ***Over 200 black and white photos of individual reels***
- ***More than 75 historic illustrations***
- ***Printed on acid-free paper***
- ***Large 8½"x11" format – over 285 pages***
- ***Four-color dust jacket***
- ***All proceeds benefit the museum***
- ***Comprehensive bibliography and index***

The American Museum of Fly Fishing in Manchester, Vermont, has one of the largest and finest public collections of fly reels in the world. Its collection of more than 750 reels includes a significant number of baitcasting, surfcasting, deep-sea, trolling, and spinning reels as well. Here for the first time this giant collection is brought before the public in its entirety.

Antique, classic, and modern reels are all represented. Reels owned by presidents, entertainers, novelists, and angling luminaries as well as reels owned and used by everyday anglers are brought together in this richly diverse collection spanning nearly two centuries of British and American reelmaking.

The book begins with a lengthy introductory essay on the history of the fly reel that traces the origin of the fishing reel and subsequent development and evolution of the fly reel from earliest times. This is followed by a comprehensive catalog of the museum's substantial reel holdings. Each reel is fully identified, dated, and described, and more than 200 of the more important examples are expertly photographed by Bob O'Shaughnessy. The result is a volume that should appeal to all anglers, interested in the history of their sport and most particularly to the growing number of reel collectors.

Jim Brown is a librarian who lives and works in Stamford, Connecticut. His first book, *Fishing Reel Patents of the United States: 1838-1940*, is now widely accepted as a standard reference work in the field.

Bob O'Shaughnessy is a Boston-based photographer who has worked in the advertising business for the past 30 years. He is past president of the New England chapter of the American Society of Magazine Photographers and a member of the Fly Casters of Boston and the Atlantic Salmon Federation.

. . . . . CLIP AND MAIL TODAY . . . . .

Yes! *I do want to order*
A TREASURY OF REELS
directly from the Museum. *(Order one for a friend, too!)*

_____ *signed and numbered limited-edition copies at $50.00 each* *Postage and handling $5.00* *Total* _____

☐ *My check to the* **American Museum of Fly Fishing** *is enclosed.*
Please bill my ☐ *MasterCard* ☐ *Visa* ☐ *American Express card.*

CARD # _____ EXP. DATE _____ SIGNATURE _____

NAME _____ ADDRESS _____

CITY STATE ZIP _____

BOOK REVIEW

American Fishing Books by Charles M. Wetzel. Foreword by Charles K. Fox; Introduction by Colonel Henry A. Siegel (Meadow Run Press: New Jersey, 1990. 235 pages, hardcover, illustrated. $45.)

AS FLY FISHERMEN, we are said to be what we read. The cumulative lore of the sport over the centuries is to be found between the covers of the literally thousands of angling books that have rolled off the presses since the *Boke of St. Albans*, with its "Treatyse of Fyssnge wyth an Angle," was published in 1496. And for nearly the same length of time, anglers have relied on books and other sporting publications for guidance in their sport.

Though the English had been producing angling books since the 15th century, few if any such books appeared in America before 1800, and probably not prior to 1814. It wasn't until 1876 that America's first book exclusively on fly fishing, *Pleasures of Angling with Rod and Reel for Trout and Salmon* by George Dawson, was published. Not that the sport had been neglected or ignored by writers of the day; references and articles appeared frequently in sporting periodicals. But Dawson's was the first between hard covers. Since then the flow from angling presses continues unabated.

Charles M. Wetzel's *American Fishing Books*, first published in 1950, was a serious attempt at tracking down and cataloging this spate of books. Not merely a listing of books, authors and dates, Wetzel's work included a bibliography of American angling books that amounts to a history of the sport reflected in its literature up to 1948. Departing from the traditional "block" style of bibliographies, Wetzel's version is in narrative form, a style that allows him to include details, anecdotes, and other bits of information seldom found in more traditional bibliographies.

We learn, for example, that among the very earliest references to sport fishing were articles in *The American Farmer*(1820-1834) and an 1829 issue of *The American Turf Register and Sporting Magazine*. The latter piece was one of the earliest known records pertaining to fly fishing. It advised that "the rod used is fifteen or sixteen feet long, very delicate (!) and throws from twenty to thirty feet of line, and the fisherman is most successful with the artificial fly."

We learn, too, that there is little mention of tackle and angling methods in *An Authentic Historical Memoir of the Schuylkill Fishing Company* (founded 1732), written in 1829, by William Minor, Jr., then mayor of Philadelphia. It was, rather, a history of the oldest club in the country.

Wetzel relates the origin of the "spoon bait," which in its refined form remains one of fishing's most effective lures. Its invention came in 1834 when Julio T. Buel of Vermont accidentally dropped a teaspoon overboard while eating his lunch one day on Lake Bomoseen. The spoon twisted and turned, flashing as it sank. Before it reached bottom, a large fish struck it.

In addition to this kind of material, *American Fishing Books* contains a number of facsimile headings of early sporting papers and title pages of early and historic fishing books. Among the more interesting are title pages from Thad Norris's *The American Angler's Book*, *The Angler's Almanac for* 1848 and the 1847 American edition of Walton's *Complete* [sic] *Angler* edited by George Washington Bethune.

Equally fascinating are some of the early advertisements for fishing tackle and accessories. It's interesting to note that in 1893, Dame, Stoddard & Kendall of Boston were promoting tarpon fishing as "The Best Recreation in Florida," and offering a "special one-piece Bamboo Tarpon Rod at $6.00 each." And we see that in 1894, the American Rubber Boat Company of New York was advertising its "Layman Pneumatic Sporting Boat," which looks suspiciously similar to what we today call the popular "belly boat" or float tube. The Layman version came complete with fins and a "Storm Cape." No price was given. From J. F. Masters of Brooklyn, New York, you could buy trout flies for 16¢ (that's right—16 cents) per dozen or $1.75 per gross, according to their ad in 1893. And in 1900, tackle dealer Thomas J. Conroy Company of New York incorporated in its trademark the Kilbourne painting of a brook trout that was for years identified with the Orvis Company.

All the aforementioned is found in the book's first part. The second part of *American Fishing Books* features "A List of Publications Pertaining To American Fish And Fishing," the section of greatest interest to the serious collector. Listed in this section are the authors, book titles, publishers, and dates and places of publication with titles arranged alphabetically by author, from Abbott to Zern. Prior to Wetzel's book, the most recent volume on the subject was *Angling In America* by Charles E. Goodspeed, published in 1939.

Most fly fishermen begin by acquiring a book or two, mainly of the "how-to" variety, then another and another. By the time we've acquired twenty or thirty volumes, we begin referring casually to "my angling library." From there, both the numbers of books and range of literary interest grow. In addition to the purely practical works—we still need all the help we can get on the stream—we now find enjoyment in the more literary works. And we become more interested in what books have been published; we begin scanning the catalogs of used sporting books dealers, as well as those of current publishers.

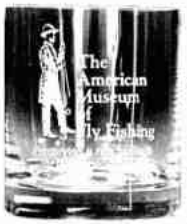
And it is here that the value of *American Fishing Books* reveals itself. And while it's true that hundreds of angling books have been published in the years since Wetzel offered his volume, it remains a treasure for anyone seriously interested in the literature of fishing. Meadow Run Press is to be thanked for once again making this book available.

JOE A. PISARRO

Museum Giftshop

The American Museum of Fly Fishing

Our popular t-shirts are made of 100% pre-shrunk cotton in the USA. Specify color (navy or cream), and size (S, M, L, XL). $10 each, plus $1.50 postage and handling.



These beautiful 10-oz. double old-fashioned glasses are made of hefty 24% lead crystal and deeply etched with the museum's logo and slogan. $47.50 for a set of four, plus $4 postage and handling.

Our pewter pin (left), measures 1"h x ½"w and features our logo in silver on an olive-green background. Our fully embroidered patch (3½"h x 3"w), is silver and black on a Dartmouth Green twill background. Both are $5 each, plus $1 postage and handling.

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

Museum News

GAINING MOMENTUM: the Museum launches a major fund-raising campaign and garners another grant. Our traveling exhibits program grows and prospers while another art exhibition is opened to a packed house. Future in-house exhibitions are planned.

Museum Awarded Major Grant

"The Campaign for the American Museum of Fly Fishing: Preserving a Rich Heritage for Future Generations" got off to a brilliant start in May, when it was learned that AMFF had been awarded a $35,000 private foundation grant. The grant was made anonymously, and will be used for, among other things, the acquisition of computer and audio-visual systems.

The initial segment of this capital fund-raising campaign was launched in June. Museum members will receive a special campaign mailing later in the year.

The ultimate goal of the campaign is $175,000, which will be used to renovate and expand the Museum galleries, acquire computer and audio-visual systems, and create an AMFF Endowment.

"Time On the Water" Art Exhibition Opens at Museum

"Time On the Water," an outstanding exhibition of twenty-five paintings by nationally-known artist John Swan, opened to an overflow audience of 150 people at the Museum on the evening of June 1. All agreed that John's oils and watercolors of fresh- and saltwater fly fishing, and other sporting scenes (most of which were painted especially for the AMFF exhibition) were quite exceptional, and as a group represented an exciting new stage in John's development as an artist of rare distinction and talent.

"Time On the Water" will remain open to the public until October 31, and we'd like to encourage our members and friends to visit the Museum and view some of the finest wildlife/landscape/sporting paintings on exhibit in this country—or in the world—today.

A stunning four-color commemorative "Time On the Water" exhibition poster is now available for $10.00 each plus $2.50 for postage and handling. Write or call the Museum at 802-362-3300 to place your orders.

Alanna Fisher

John Swan and Joyce Cannell preparing for the opening of "Time On the Water"

Museum Launches New Publication

In the late fall of 1989, the Museum published "Lost Pool," a fine limited-edition art print by nationally known artist John Swan. This print was released just as our staff was finalizing plans to publish *A Treasury of Reels*, the long-awaited catalog of the Museum's reel collection by author/reel expert, Jim Brown. Jim's engrossing book will soon be made available to Museum members and the general public.

Along the way the Museum gave birth to yet another publication, entitled *Greenheart Gazette:* "The American Museum of Fly Fishing Newsletter." The four-page *Gazette*, a companion publication to this journal, was designed by Randall Perkins, and is being edited by Margot Page, a writer/photographer whose essays on angling and nature can

be regularly found in magazines and newspapers across the country.

Margot hopes that eventually the *Gazette* will be published more frequently than bi-annually: "The *Gazette* has been exciting to dream up and to finally publish because of its uniqueness. This one-of-a-kind newsletter is both a valuable museum tool to encourage membership vitality, with its friendly behind-the-scenes perspective, as well as a potential forum for some good writing from our many talented fly fishing writer/friends. I am enthusiastic about the *Gazette's* possibilities and look forward to being a part of its growth."

The initial reaction to the *Greenheart Gazette* from our members has been impressive and we're hopeful that Margot's dream of publishing the *Gazette* more frequently will one day be realized. Members wishing to comment on or contribute to the *Gazette* should write Margot here at AMFF, P.O. Box 42, Manchester, VT 05254.

AMFF/ASF Co-sponsor Major Exhibit

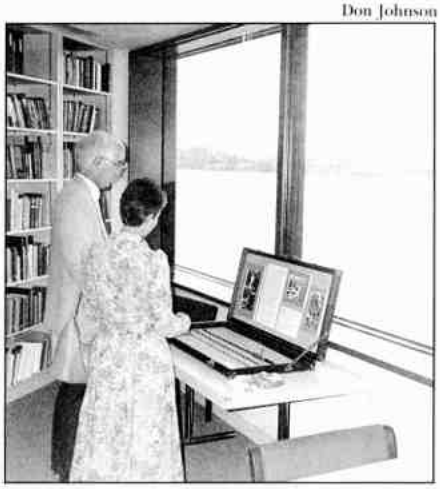
Our Museum staff recently started planning a major exhibition on the history of the Atlantic Salmon in North America and around the world. The exhibition, made possible in part by a generous grant from the Atlantic Salmon Federation, will be opened to the public in the spring of 1991.

The exhibition components now being selected include period and contemporary works of art, lithographs, photographs, and a fascinating assemblage of fly boxes, lines, rods, reels, clothing and ephemera from both private and Museum collections. AMFF staff members are also hoping to present a series of related educational programs to be held in conjunction with the exhibit through the spring and summer of 1991.

Getting the Word Out

When an AMFF staff member or volunteer chats with a visitor in our Museum galleries, they usually mention that the collection components on exhibit are only "the tip of the iceberg." And it's true. We can only exhibit a small percentage of our varied collections at any one time in Manchester, which is why we place such great emphasis on our traveling exhibits program.

Don Johnson



Guests view the Museum's "Hemingway In Michigan" traveling exhibit displayed at the International Hemingway Conference in Boston.

Interest in this program is very high; in just six months, our staff has prepared exhibits, exhibit components, or Museum displays for a number of museums and events in both the United States and Canada. A look at our exhibits log tells the story: the Atlantic Salmon Federation dinner in Montreal, Quebec; the Canadian Museum of Civilization, Hull, Quebec; the Addison Gallery of American Art, Andover, Massachusetts; the Eastern Fishing and Outdoor Exposition, Worcester, Massachusetts; the Northeast Antique Angler's Show, Marlborough, Massachusetts; the International Hemingway Conference, Boston, Massachusetts. It's been a busy year at the Museum, and we expect it to get even busier in the months ahead.

Museum members can look forward to viewing "Anglers All," our major traveling exhibit, at the Manitowoc Maritime Museum, Manitowoc, Wisconsin, in 1991 and at the Rochester Museum and Science Center, Rochester, New York, in 1992. The Museum is also playing a large role in developing "The History, the Science, and the Art of Fly Fishing," a major exhibition at the New York State Museum, Albany, New York, in 1991, and in a smaller, but no less interesting, exhibit at the Jimmy Carter Library and Museum, Atlanta, Georgia, scheduled for Spring 1991.

AMFF's traveling exhibits program, much like our rotating in-house exhibits program, is flourishing these days. Again, we welcome member inquiries regarding traveling exhibits. We'll do everything possible to bring a quality exhibit to your community. □

The American Museum of Fly Fishing

Post Office Box 42, Manchester, VT 05254. 802-362-3300

JOIN!

Membership Dues (per annum*)

Associate*	$25
Sustaining*	$50
Patron*	$250
Sponsor*	$500
Corporate*	$1000
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.

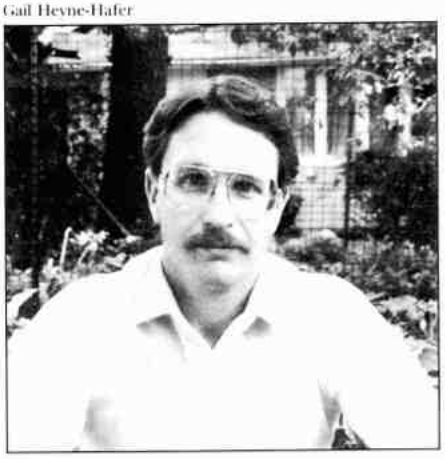
BACK ISSUES!

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 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 1
Volume 13,	Number 3
Volume 14,	Numbers 1, 2
Volume 15,	Numbers 1, 2

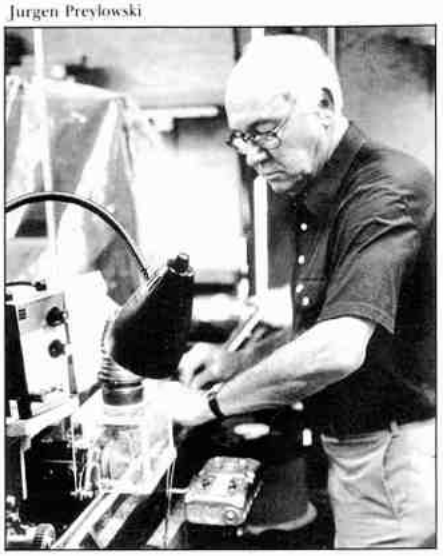
CONTRIBUTORS

Gail Heyne-Hafer



Rik Hafer's enthusiasm for fly fishing began on Nebraska farm ponds and continues today wherever the opportunity arises to step into a trout stream. He began contributing to *The American Fly Fisher* when the birth of his daughter reduced the number of his fishing weekends. In addition to his interest in the economics of fly fishing, Rik is currently at work on the history of trout fishing in Missouri. He is a professor of economics in the Business School at Southern Illinois University at Edwardsville. Rik lives in St. Louis, Missouri, with his wife Gail, daughter Caitlin, and an 8½ pound trophy rainbow trout.

Jurgen Preylowski



Paul Schullery, a professional historian with an M.A. in American history, practices his trade with the National Park Service based at Yellowstone Park in Wyoming. A prolific writer, he is the author of sixteen books, including the landmark *American Fly Fishing: A History.* From 1977 to1983, Schullery was executive director of the American Museum of Fly Fishing, where he was editor and frequent contributor to *The American Fly Fisher.* Subsequently, he was an editor of *Country Journal* before returning to the Park Service at Yellowstone Park. A research technical writer at Yellowstone, and an active conservationist, Schullery has served with various environmental organizations, and serves on the Council of Advisors of the National Parks and Conservation Association.

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 TU and FFF chapters, and appears at fly shops throughout the eastern United States to talk about cane rod construction. Dave, wife Barbara and their two children, Erik and Sandra, live in Knoxville, Tennessee.

Barbara Arter

Margot Page

In addition to his duties as the Museum's volunteer coordinator, **Joe A. Pisarro** also provides valuable service as the Museum's reigning wit and philosopher-in-residence. A World War II veteran, Joe's professional career spanned three decades, during which time he worked as a radio scriptwriter, journalist, and public relations director.

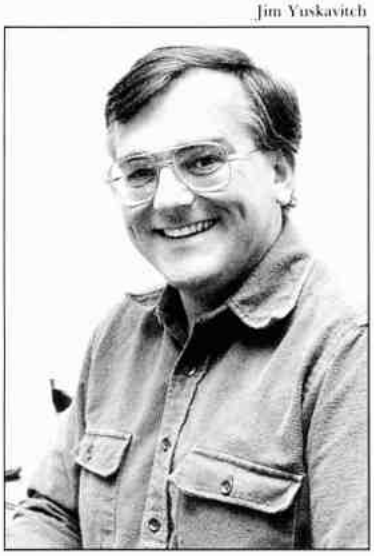
His books include *The Gordon Garland* and *American Trout Fishing.* He is also a past president of The Theodore Gordon Fly Fishers, and a former editor of *Random Casts* and *The Flyfisher.* Joe now lives in East Wallingford, Vermont.

Marvin Stein

James W. Schaaf was born in the mining town of Creede, Colorado, in 1927. After active duty in the Asia and Pacific theatres and undergraduate work at Atlanta's Emory University, he completed graduate work at the U.S. Public Health Center, at the University of Georgia, in 1951.

From 1951 until his retirement in 1985, Jim worked in California as a chemist for a number of nationally known oil and petroleum companies. In 1980, he went public with the Jim Schaaf Rod Company, and by 1986 he had purchased the Dickerson and Bedford Anglers Rod Shop from the Tim Bedford Estate.

Jim Yuskavitch



Gerald S. "Jerry" **Stein, M.D.,** is a 46-year-old psychoanalyst in private practice in Colorado Springs, Colorado. He is a member of the full faculty of the Denver Institute for Psychoanalysis and is an Assistant Clinical Professor of Psychiatry at the University of Colorado Health Sciences Center.

As a boy in Colorado, Gerry was introduced to fly fishing and bamboo rods by his grandfather, and he often fished the Gunnison River near James Schaaf's boyhood home, although they did not meet until 1986. A fishing guide while in medical school, Jerry now has a cabin on the Roaring Fork.

Wood engraving by George Cruikshank which originally appeared in the June 1842 issue of *Ainsworth's Magazine*.

Building a Museum

WE SPOKE of new priorities in our last issue. Lately, we've starting thinking about expanding our library, which today holds some 2,500 volumes. We want to double the size of the library, and we think this is a distinct possibility within two to three years.

The Museum's library is utilized by hundreds of people every year. It receives heavy usage by our staff in preparing this journal, and in answering research inquiries. It is also used by writers, researchers, editors, students, and the just plain curious. It's one of our greatest resources and a delightful, if somewhat crowded, place to visit these days.

Although we can soon look forward to adding another 400-500 volumes through some fairly large private donations, we would like to ask our readers to help in this mission. Herewith, we're appealing to our members to donate angling books to the Museum's library during 1991. With your assistance we will develop the finest angling library in the country. The donation process is fairly simple: just write or call and let us know the title of the book or books you wish to donate. We'll take it from there. We look forward to hearing from you soon.

D.S.J.