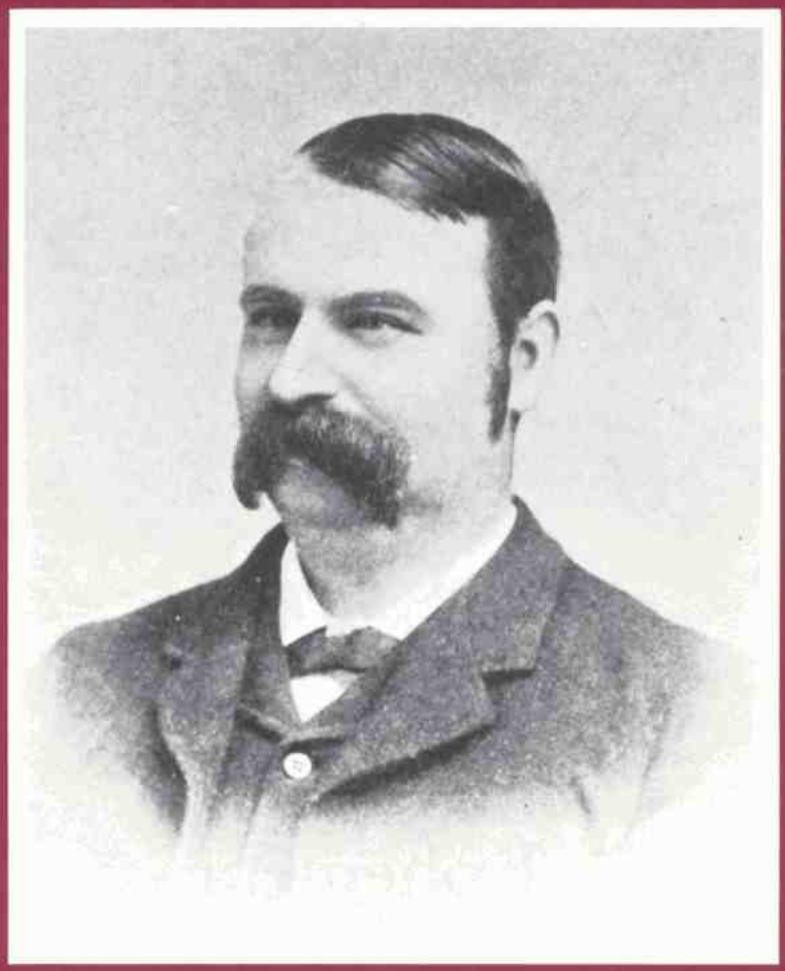

The American Fly Fisher

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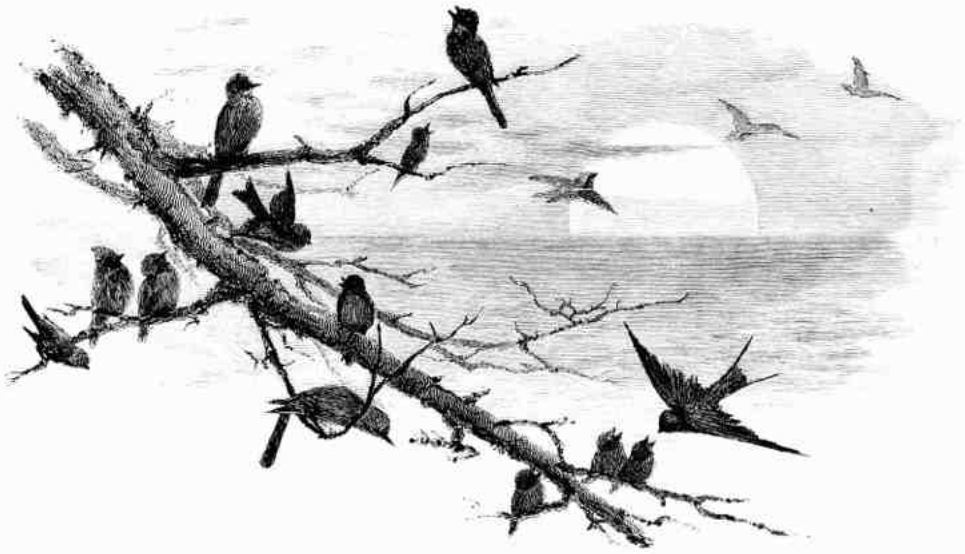

Ephemera

Ephemera: anything short-lived or transitory—such as mayflies of the order Ephemeroptera. In a museum collection the term refers to paper materials, usually printed items other than books. In our case, tackle catalogs, scrapbooks, fishing licenses, fishing regulations, angling-related advertisements, business cards, and the like, would qualify. These are items that generally get thrown out when the desk drawer or the attic trunk is purged of ostensible junk.

We often forget the importance of the ephemera and focus on the more glamorous items: rods, reels, and flies. We cannot overemphasize the importance of the ephemera to a museum. As an example, consider the scrapbook of C. F. Orvis that we mentioned in a previous edition of the *American Fly Fisher,* which is in our collection. It is a veritable gold mine of information concerning the early days of the Orvis Company. Bills, receipts, business cards, and advertising material contained therein allow one to construct a vivid picture of the workings of one of America's most important early tacklemakers. Without the scrapbook, this information would have been lost to us. So when you spring-clean next, if you find something related to angling (related even in the remotest way), don't throw it out—send it to us, please. Let us decide if it is *really* junk.

The American Fly Fisher

WINTER 1986 Volume 13 Number 1

On the cover:
Photograph of John Harrington Keene from the frontispiece of the 1921 edition of his book, The Mystery of Handwriting. *We believe that the photograph was taken circa 1888, when Keene was thirty-three years old.*

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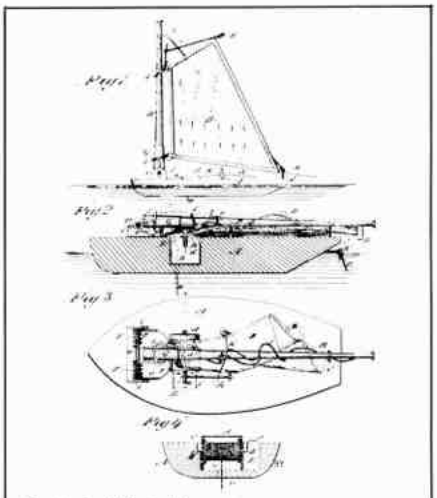
Automatic Fly Reels

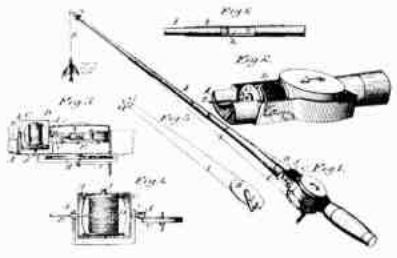
by John Orrelle



Ralph Aldrich's outrageous fishing float, patented in 1885

We are pleased to welcome back to the pages of the American Fly Fisher, *reel-expert John Orrelle. John's last contribution appeared more than ten years ago in the first volume of the* American Fly Fisher *(1974). His article on automatic fly reels is a chapter from his forthcoming book on American fly reels. We hope to publish additional chapters in future issues of our journal.*

The period in America from after the Civil War to the close of the nineteenth century was one of rapid industrialism, one in which machines sprouted and proliferated like some strange crop from an alien planet. There were machines for everything—the more complicated the better; whether or not they worked was sometimes an entirely peripheral matter. Few people were immune to the fascination and allure of all this gadgetry, which promised to do jobs faster and cheaper (if not better), and whose siren call often trapped otherwise sensible people into a dinosauric bog of financial ruin. Among others, one recalls the quixotic pursuit of Mark Twain for a type-setting machine, an automated marvel that never worked and in whose quest he unsuccessfully squandered several fortunes.



Archer Wakeman patented his line-twirling device in 1881. It allowed the angler to rotate his fly or bait and thus make it seem more lifelike to the fish.

It was during this same period that some of the wildest fishing tackle imaginable made its way into the patent records, from spring-loaded fish hooks and traps, to hinged fishing rods (with built-in scales), tandem reels, and oyster-opening machines. One of the more imaginative of these was the brainchild of L. A. Peck of Newton, Massachusetts, who in November 1876, patented a machine for fishing that was described in the *Official Gazette* simply as "...an apparatus for throwing a weighted hook and line a distance seaward." Judging by the patent drawings, the inventor must have had in mind the outer limits of the Grand Banks, for the machine looks fully capable of throwing a line across Lake Superior! Constructed in the form of a catapult, the patent records fail to mention if a model was submitted—in which case a team of horses would have been required to transport it.

But there were other equally ambitious inventions. Two of my favorites were the contraptions of Ralph Aldrich and Archer Wakeman, whose genius is certainly evident, if not somewhat misguided.

The Aldrich patent (see illustration) deserves top honors. When I first came across it, I thought I'd made a mistake, for right in the middle of the section of fishing floats and reels (from a Commissioner's Report, 1885) was what appeared to be a New England fishing dory. A quick reading of the patent text revealed this to be indeed a fishing float, although it was really a self-contained, fully automated fishing machine. Constructed of a piece of wood about a foot to a foot and a half in length, the float was fashioned in the shape of a boat, featuring an anchor, a folding mast *with sail* (whose significance was paramount), and a fishing reel installed amidships. To use the float, the hook was baited, a length of line drawn from the reel, and the mast locked in a horizontal position by a tripping bar attached to the reel:

> In this condition the float is to be anchored out in the water and the hook dropped. The mast and reel will remain in this locked condition until the line is disturbed sufficiently by the biting of a fish to turn the reel, whereupon the crank will be moved off from the rod *h* and set the reel and mast free, thus giving play-line to the fish and signaling the biting or catching of a fish.

But it is the last paragraph of the patent claims that contains the prescriptive zeal of Mr. Aldrich; with a certain entrepreneurial elan, he advises as follows:

> In most cases the fisherman will provide himself *with several* of the floats, and after anchoring them out in the water will await the hoisting of a sail, upon which he will proceed to the float, pull in the fish and rebait the hook and reset the float, and in most cases *the bottom of the floats will be painted green, so that when in the water they will resemble the leaf of some water-plant and not frighten the fish (!).* [italics mine]

Archer Wakeman's invention (see illustration) was just as incredible, especially when one realizes that *its sole purpose was to twist line!* His "fishing tackle," doubtless classified by a shocked patent clerk hesitant to call it anything more specific, is best appreciated by reading the actual patent description, which in

delicate circumlocution minimizes the problems of line twist:

> A divice to be applied to a fishing-line for the purpose of twirling or rotating the line, and with it the fly or bait at its end. A rotary disk or head to which the line or gimp is attached is connected with a crank, or with an automatically operating mechanism by which the line may be rotated.... The line B, or much thereof as extends from the reel to and through the tubular guide, is made of gimp, or of other material having sufficient stiffness to turn without buckling or twisting to any material extent, yet capable of being readily wound upon the reel. The line being provided with the usual fly or bait, and the latter being allowed to hang from the rod and thereby to straighten the line, it will be seen that rotation imparted to the shell or cylinder by the train E will be transmitted to the line B, and through it to the bait or fly, the swivel of the bait being made sufficiently tight to prevent rotation therein until a fish is hooked, and resistance thereby offered to the rotation of the bait.

There were numerous other madcap schemes for catching fish or "improving" tackle, and while the above examples are somewhat removed from fly-fishing (excepting the Wakeman patent, which at least is pictured with a fly on the line), they capture the spirit of the times very well.

It was out of this atmosphere and the preoccupation with machinery that the automatic fly reel was born. Particularly well suited to those whose sole objective was to catch more and bigger fish faster, they typify the pragmatic bent of the period and the inordinate concern with efficiency. Of the criticism sometimes leveled at these reels, it is significant that this usually centered on their mechanical aspects, occasionally its heavy weight, but rarely if ever on the *appearance* of the reel. Thus, however pedestrian in form, automatic reels were symbolic of the American's love of gadgets, and were destined to become immensely popular.

YAWMAN & ERBE REELS

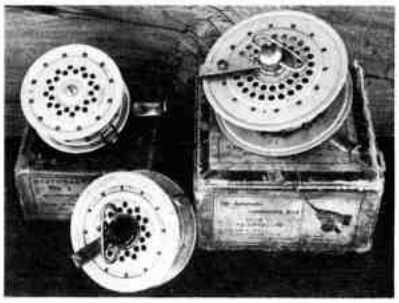
The earliest automatic fly reels successfully marketed in this country were the Y & E reels, manufactured by the Yawman & Erbe Company of Rochester, New York. Although inscribed with a patent date of December 9, 1880, the actual patent record for this reel gives a date of December 7, 1880, which was issued in the name of Francis A. Loomis, the inventor of the reel. On July 5, 1881, a second patent was issued, with no discernible change in the form of the reel, but with one-half of the patent rights assigned to James S. Plumb of Syracuse, New York (what the relationship was between Loomis and Plumb is anybody's guess). Still later patents were issued on February 28, 1888, and January 16, 1891, with other patents pending at that time (Note: many of the Y & E reels are erroneously stamped February 28, 1898 instead of 1888). Most of these later patents related to modifications of the braking arm, although at least one of them involved a new model of the reel.

There are two basic forms of the Y & E automatic. Contrary to what the appearance of these forms suggests, the earliest reel *was not* the one with the famous winding key, but instead was similar to the reel pictured at the left in the accompanying illustration. This is often confusing, since the model with the winding key has such an antiquated look about it.

Early ads of the Y & E indicate that the original form—the one that subsequently was advertised as the Old Reliable—came in one size only, but was made from a choice of brass, nickeled brass, bronze, or hard rubber. Shortly after its introduction (sometime in the mid-1880s), the reel was fitted with an improved braking-and-release lever shaped in such a way as to facilitate positioning of the finger in the upturned end of the arm; earlier braking arms had been little more than a simple wire extension with a loop in the end. The actual braking pad on the arm was simply a wrapping of thread or other line, which has a peculiar makeshift appearance and is misleading to those who have never seen a Y & E reel (the immediate impression is that the line was wrapped around the arm as an emergency measure, when in fact it was original equipment, see illustration). It was the modified braking arm (with the slight crook in the end) that gave rise to the Y & E slogan "The Little Finger Does It," which later appeared on the Horrocks-Ibbotson Utica Automatic.

Around 1890, two additional sizes were added to the Old Reliable model series: the no. 1, no. 2, and no. 3, that could carry 90, 150, and 300 feet of line respectively. By this time, reels made from bronze and brass had been discontinued, but the no. 1 and no. 2 reels were still available in nickeled brass, hard rubber, and—for the first time—aluminum; the no. 3 reel was made from *aluminum only*. Thus, for dating purposes, those reels made of *unplated* brass or bronze are of a very early vintage and naturally these are the scarcest....

By 1900 a new model had been introduced—the New Style Automatic Combination Reel, available in styles A, B, or C, with plate diameters of 2 7/16, 3⅜, and 4⅛ inches. Stated line capacities were 125, 300, and 600 feet of no. 5 silk line (or 50, 90, and 150 feet *without rewinding*). This New Style Reel featured a sliding plate on the front of the reel that made it suitable for either automatic or free-spool casting. Tension could also be adjusted by means of a conspicuous winding key located in the center of the front plate.



Three examples of Yawman and Erbe reels: top left, circa 1890; top right and bottom, circa 1900. Note that these two later models are equipped with a sliding plate that allows for either automatic or free-spool usage, and each has a winding key.

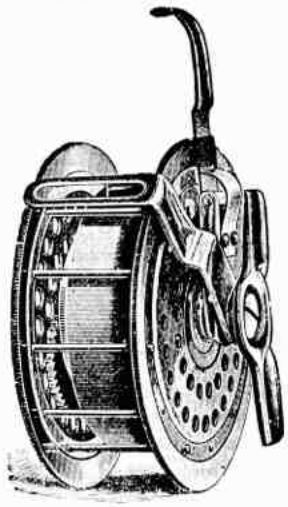
Regarding the proper use of these early automatics, they were designed to be used originally as either bait-casting or fly reels (In 1897 Thomas Chubb [catalog] recommended his reversible butt rod, i.e. a rod that could be used for either fly- or bait-casting, for use with the automatic reels). Still, this was a source of some confusion for many early anglers, and sporting periodicals of the late nineteenth century contain many letters from inquiring readers wanting to know if they could use automatics for minnow casting.

The Y & E automatic reels were made for many years. In 1920 they were marketed by the Horrocks-Ibbotson Company, direct successors to Yawman & Erbe. A Horrocks-Ibbotson catalog of that year lists the smallest style A reel for $10.00 and the large style C for $14.00; the no. 1 and no. 2 Old Reliables sold for $7.50 and $9.00. Prices were about the same some fourteen years later.

For the reel collector, the earlier Y & E models are particularly desirable because they were made for only a few years. These were made of unplated brass, bronze, nickeled brass, and hard rubber. The aluminum reels were manufactured for more than fifty years and are by no means rare items.

THE FRANKLIN SMITH AUTOMATIC

Between 1880 and 1890, there were close to fifty patents issued relating to fishing reels, some of them bizarre and unwieldy creations and doomed to fail-



An early Yawman and Erbe reel, circa 1885, illustrating the line-wrap brake pad on the line-release lever

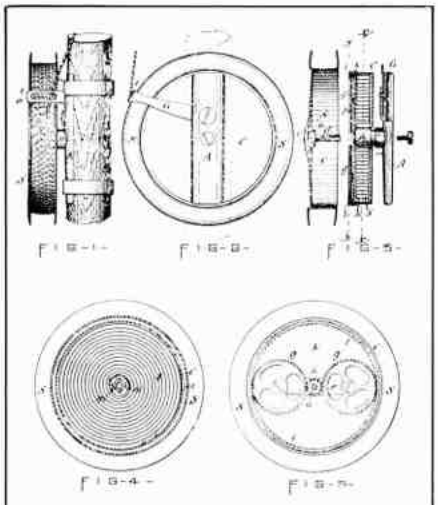
ure, but others were quite efficient and later became very successful (both bait-casting and fly reels, including those designed by the Vom Hofe brothers, John Kopf, and Thomas Chubb); yet only a few automatic reels were patented during this same period.

One of the more notable examples, which evidently never got off the ground, was invented and patented by Franklin R. Smith of Syracuse, New York, on July 26, 1881 (one-half assigned to Willis S. Barnum). Its appearance was similar to the Y & E (see illustrations), but had a lower profile and a spool covering the gears (the spool of the Y & E is of a skeleton type, completely enclosing but leaving the gears of the reel exposed). Although the patent drawings show the usual features generally associated with automatic reels, including a braking lever and line guard, this model apparently suffered severe defects, for within a year Franklin Smith was issued another patent on the same reel, but with several modifications. According to the patent claims, this new model (patented June 20, 1882, see illustration) featured five major improvements: 1. the reel was made to be used with interchangeable spools (one of the few automatics ever made claiming such a feature), 2. the line guard was an integral part of the braking lever (which may have been a serious flaw), 3. the shape of the line guard (which was fitted with a "lateral inlet for the introduction and removal of the line"), 4. a spool that fitted over the tension spring and gears and thus protected them from water and dust, and 5. a square post within the spring housing designed to allow easy attachment and removal of the spring (one of the chief faults of automatic reels—including contemporary models—are springs that either break or become detached from their anchoring posts; the Y & E is a prime example).

It is this second model of the Franklin Smith automatic that is significant, for regardless of its eventual fate, *it was the first automatic with a truly modern form.* Still, like the first version, this model, for some reason, is noticeably absent from any angling literature of the day, and I have found no evidence that it was ever manufactured for sale. Like many reels, it may have had a small but fatal flaw. Whatever the reason, the Franklin automatic's commercial failure is an interesting mystery of the period.

THREE OF A KIND

Shortly after 1900, the Kelso Automatic made its appearance, a reel that subsequently gave rise to at least two other automatics that were practically identical, the Rochester Automatic and then the Pflueger Superex (see illustration). This reel, patented November 19, 1907 (see illustration), was made from aluminum; its chief feature was the looped braking lever similar to the one found on the Utica reel by Horrocks-Ibbotson. Later models of the Kelso had levers of solid construction such as those found on virtually all automatics after 1925. Around 1910 the Kelso was advertised under the Diamond Brand and distributed by the Norvell-Shapleigh Company.



Patent drawings (1882) for Franklin Smith's automatic fly reel. According to John Orrelle, it is the first automatic fly reel with the "modern" form.

The Rochester Automatic was virtually identical to the Kelso, except for a slightly different base-plate and a checkered design stamped on the edge of the winding cap. This reel, along with the later models of the Kelso, was also equipped with a rectangular line guard, a common feature on many later automatics.

The third reel to evolve from the Kelso was the famous Pflueger Superex, which made its appearance sometime around 1920 (see illustration). Nearly identical in form and size to both the Rochester and Kelso, it became an enormously popular automatic and was claimed by Pflueger to be the best automatic of its day. Unlike the Kelso and Rochester, the Superex was fitted with a tension-relief device located inside the reel, a longer braking lever, a main-spring tension release, an oiling port on the back plate, and a sliding plate on the lever arm that made it adjustable for free-spool casting or trolling. Later models of the Superex (circa 1930) came with a modified brake release consisting of a curved arm fitted into the top of the braking lever.

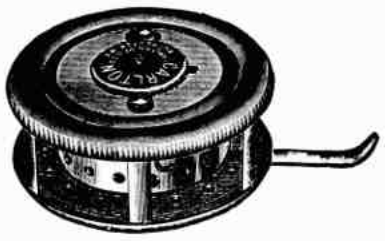
Regarding sizes, literature of the period indicates the Kelso and Rochester were made in a single size (3½-inch plate diameter), while the Superex came in two styles, both with the same diameter but with different pillar widths (¾ inch for the no. 775, and 1¼ inches for the no. 778). All of these reels bear the November 19, 1907, patent date stamped on the winding cap.

THE CARLTON AUTOMATIC

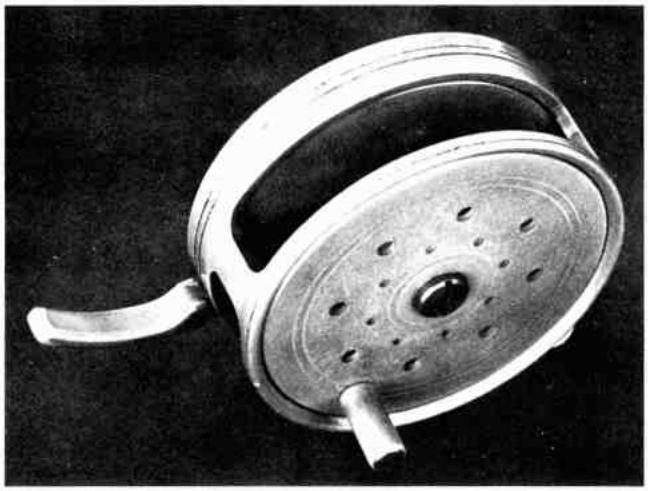
A less familiar automatic reel dating from the same period as the early Kelso and Rochester reels was the Carlton Automatic, made and distributed by the Carlton Manufacturing Company of Rochester, New York (see illustration). Somewhat similar in appearance to the older Y & E (an extremely wide reel with the shape of a coffee mill), the Carlton was made from a combination of aluminum and German silver and came in one size only. It was one of the few automatic reels carried by William Mills & Son; it sold for approximately $5 in 1910.

MEISSELBACH AND MARTIN AUTOMATICS

August F. Meisselbach was one of the most inventive and prolific reelmakers in



The Carlton automatic, one of the few automatic reels sold by William Mills and Son



Two examples of semiautomatic fly reels: P & K Re-Treev-It (left) and Fly Champ (right), both circa 1940

America. His famous Expert and Rainbow single-action reels were the favorites for tens of thousands of American anglers for more than half a century. The first Meisselbach automatic, however, did not appear until 1914 (patented June 30, 1914). This reel, measuring 3½ inches in diameter, was made of German silver and suitable only for the heaviest rods; at well over a pound in weight, this was one you didn't want to drop on your foot!

Two later Meisselbach automatics were the 655 Automatic and the no. 660 Autofly Reel (circa 1920, see illustration). Both of these reels were made of aluminum and were considerably lighter than the older 1914 model. Typical of the Meisselbach genius for locking devices (such as those found on the famous Triparts, Tak-a-Parts, and various ocean reels), both of these automatics featured a knob on the underside of the reel for releasing the bottom plate, as well as an adjustment for free-spool casting or trolling.

The Martin Fishing Reel Company of Ilion, New York (later of Mohawk), was one of the first manufacturers of automatic reels in this country, and they produced what are possibly the most popular automatic reels ever made (see illustration). First patented on July 26, 1892, with later patents issued in 1895, 1897, and 1903 (others pending at the time), the early Martin reels are significant because they set the form for practically all later automatics; indeed, because of their thoroughly modern appearance they are easily mistaken for more recent reels—so much so that Martins in earlier catalogs look incongruous and strangely out of place.

Identifiable by the flower pattern stamped on the edge of the winding cap, earlier reels were made of German silver and came to be known generally as the Martin standard reels. Later these were made from aluminum with frames of German silver, and by 1905, entirely of aluminum. These early reels—those made circa 1910 to 1915—were fitted with a tension-release device (cylindrical in shape and pulled out to release the tension of the mainspring), a brake-release lever that could be adjusted by a finger-plate to put the reel into free-spool position (there were at least two variations of this adjusting plate prior to 1920), and on later models a rectangular line guard.

Some of the earlier Martins (those bearing the Ilion patent) show one of the gear wheels partially exposed on the underside of the reel, had riveted frames, and were stamped with the inscription *Line Out Here* on the inner surface of the bottom plate. Later models had bottom plates modified to enclose the gear wheel, but with a still-discernable bulge where the wheel protruded beyond the normal limits of the circular gear housing; these same reels were assembled with screws and did not have the stamped inscription.

For many years the Martin automatic was available only in the standard model, which came in four sizes: the no. 1, 2, 3, and 4 reels—the latter a large-capacity model advertised as the salmon reel. In the 1920s, Martin introduced the Fly-Wate reel (1924) and the large Trolling Automatic, both of which became very popular. Like many other reels, prices for the Martin were high when the reel was first introduced, but came down once a market had been firmly established. In 1905 the salmon model sold for approximately $9, while in 1924 the price was down to $5.

SEMIAUTOMATIC REELS

In addition to the various automatic reels appearing between 1880 and 1900, a few others were patented that combined both manual and automatic retrieve. Most of these were imaginative contraptions, but impractical and short-lived. At least two of them employed spiral-ratchet gearing and a pull-string like that found on toy tops. One of these, invented by Granville E. Medley of Hopkinsville, Kentucky, appears to have been mainly built from sewing-thread spools! Another similar reel, patented by Charles F. Gillet of Springfield, Illinois (pat. no. 389,070, September 4, 1888), worked on the same principle, and while more elaborately constructed, seems equally improbable. Both of these rigs were outrageous, and only an extra arm or hand could have made them usable (in neither case were models submitted). A third semiautomatic was invented by Charles Bradford (patented June 19, 1888), and although it at least maintained the lines of more conventional reels, it was, like the other two, soon destined for oblivion.

Two modern reels of the 1940s that employed ratchet gearing were the P & K Re-Treev-It (Pachner & Koller, Inc.) and the Fly Champ (Champion Sports Equipment Company, see illustration). On both these reels, line was retrieved on the upstroke of an extension lever (on the Fly Champ this lever could be folded away for strictly manual retrieve), and while both functioned basically as designed, there were several drawbacks to each. For one thing, operating the lever with the finger as intended involved an awkward shifting around of the grip on the rod, a fatiguing maneuver involving an unnatural flexing of the little finger. Added to this was the irregular start-stop motion of the spool, which retrieved line with uneven tension and likely increased problems of line tangle. Finally, neither of these reels had satisfactory clicks, a point apparently neglected because of concentration on the novel retrieving

Representative automatic fly reels, circa 1907 to 1920
Center: Kelso automatic, circa 1907-1910
Clockwise from top: Early Martin automatic, circa 1910-1920; Meisselbach Autofly, circa 1920; Utica, circa 1915-1920; Early Martin #3; Pfleuger Suprex, circa 1920; and first Meisselbach automatic, circa 1914

mechanism. While the click on the Fly Champ was satisfactory at best, the one on the Re-Treeve-It was made in such a way as to make playing a fish directly from the reel virtually impossible because of rough vibrations threatening to shake the reel apart when line was pulled from it.

A more recent form of this type of reel is the DeWitt Re-Treeve-It, which appears to be built on the same patent as the older P & K model. With a somewhat more streamlined shape, the lever of this reel has been extended considerably. This makes the operation of the lever a less tiring maneuver.

MODERN AUTOMATICS

The basic form and operation of the automatic fly reel was well established with the introduction of the Y & E, Martin, and Meisselbach reels. Between 1900 and 1940, a number of other firms produced them (Perrine, Shakespeare, Heddon, Horrock-Ibbotson, etc.), but the overall appearance of the automatic remained the same. Ocean City made an automatic fitted with handles that could be used either manually or automatically (the model 90), Shakespeare advertised one with a level wind (the no. 1838 Wonder-Full)), and many new free-stripping reels appeared. Most companies made both horizontal and vertical models, and a very few offered reels with interchangeable spools (in the 1970s Garcia made this a strong advertising point). Aside from these minor innovations and certain changes in construction materials, automatics have remained essentially the same.

Regarding the use of automatic fly reels, opinion is generally divided into two groups, with strong feelings evinced by both; those who use and like automatics are wedded to them irrevocably, while others find them better suited for doorstops. For a third group—mostly angling editors who are hesitant to state explicit opinion—they are a sometime thing. Particularly in the early part of this century, automatic reels were held in high esteem, and a great deal of space was devoted to their praise. Among others, O. W. Smith, angling editor for *Outdoor Life* in the twenties, wrote a number of articles on automatics, including them in a piece on the "Dry Fly Reel." For many anglers though, putting an automatic on a fine fly rod was like tying a brick to it. The horizontal reels were especially disliked, since they were comparatively heavy and often put a peculiar torquing motion into a rod—destroying its feel and balance.

AUTOMATIC FLY REELS: PRO AND CON

The following two narratives, taken from early sporting periodicals, describe both the drawbacks and virtues of the automatic fly reel.

The story told by "C.D.C." appeared in an 1887 issue of *Forest & Stream*, and while written before the automatic had been fully developed, points out the troublesome gremlins that somtimes hid in the spring mechanisms of the automatic —contemporary models included. It is very likely that the author was describing the old Y & E reel, a model known for a spring that sometimes came "unhitched."

Writing for *Outdoor Life* in 1919, Jack Maxwell relates a disastrous encounter with a black bass, in which he becomes in immediate and solid convert to the automatic. Done in by the limitations of the single-action reel and demonic cockleburrs, he advises anglers to stay well clear of both. The two accounts follow:

"EXPERIENCE WITH TACKLE"

To the Editor, Forest & Stream:

Perhaps it would be in order just now to say that the article which appeared over my signature in your issue of July 7 was written some four years ago and has only now made its way into the printer's hands.

Since writing it my opinion in regard to reels has changed a number of times.

Since about the year 1865, at which time my parents moved here from Massachusetts, I have devoted more or less of my time to fishing for trout. I early learned the use of the fly-rod, and from the time I first began to handle the reel until the present time I have never found a reel that was just as it ought to be. I have bought a number of reels and used a number of different kinds, and still have never found one that was all right. Perhaps it is my fault, but if there is anything that will cause an angler trouble and expense it is a poor reel.

I thought when I wrote the article referred to that I had found the thing I had long been looking for, and that henceforth I should have no trouble with slack line, broken tips, and accidents of that nature. When the next September came, and I had made preparations for a trip to the Connecticut Lakes, Parmachene Lake and the Rangeleys, I did not think it necessary to provide myself with another reel, more especially as a good part of my way was to be through the

woods, where all the luggage must be carried on my back, and I well knew that every pound would grow to be a hundred before I had carried the pack ten miles....

The morning after our arrival at John Danforth's I put my tackle together and started out to try my luck at catching a five-pounder, but just then five-pound trout were a little scarce, so I had to content myself with some of about a pound weight. The reel worked all right for a time, but about noon I succeeded in hooking a fish much larger than any before, and then I noticed a little hitch in the internal arrangements of the mechanism. At first it would go all right, then it would seem inclined to dispute the rights of the line with the fish, but it would soon repent of being so hasty and make amends by giving him nearly all the line it had. But evidently that was not just right, for then it would sulk and refuse most decidedly whether to take back the portion of the line that the fish had got through with or to give up any more. The state of my mind at that time could be easily imagined, but would be hard to describe. At last the reel got over its obstinancy and went along as well as ever, and I had begun to have hopes of being able to secure the fish, when as it made a desperate plunge and run for liberty, I felt something snap inside the reel, and then there was such a whirring noise that one would think an old-fashioned clock was getting ready to strike, and the reel was dead. To say that I was vexed would be to state it very mildly indeed. There was 50 yards of line out and a good fish on the end of it, and no prospects of being able to get it in in any kind of shape. My anxiety in regard to the fish was soon released by his going away somewhere and taking a good leader and three flies with him. I succeeded, after a time, in getting the line on the reel and started for camp, where I immediately began to take the reel apart and ascertain the extent of the damage. I found that the spring had become unhitched at one end, and after working on it all the afternoon succeeded in getting it back together again.

After that it went along quite well for two or three days, but I did not take any comfort with it, for I did not know how soon it would "baulk up" again. At last, one afternoon as we were beginning to fish, snap went the spring. It was broken and as a reel was of no use, but as an infernal invention for keeping a man from enjoying himself it was a decided success. I immediately returned to camp, and was expressing my opinion of the reel in quite decided terms, when an old gentleman who was present implied his readiness to deprive himself of a nice reel he had for a sufficient remuneration, an offer which I at once accepted.

The careful reader will perhaps surmise before this that my opinion in regard to the "automatic reel" had changed, but for the benefit of those who have not already come to that conclusion, I will now state that, while the automatic is a good reel as long as it works well, it is so liable to get out of order and is so expensive to keep in repair (and if broken in the woods it cannot be mended), that I think I am justified in saying that it is a good reel not to have.

I have just got a new reel from another well-known dealer, and expect soon to find out what the timber is with that.

C.D.C., Northumberland, N.H.,
July 9, 1887

WHY I USE AN AUTOMATIC
(*Outdoor Life*, 1919)

So far as I am personally concerned, in the angling game I much prefer the automatic reel for fly fishing; let the other fellow use anything he likes; me for the automatic, and as Mr. Post says, "there is a reason", as the following brief experience will show:

Some years ago I was fishing one of my favorite lakes for bass, using a flyrod and a certain well-known single click fly reel. My luck on this particular day was not phenomenal to say the most, however, I was hanging a No. 4 fly in the face of a bass now and then, and was, to all intent and purpose, having a bully good time. According to the custom I was carrying a few feet of line looped gracefully in my left hand as a sort of reserve fund and was getting by very well in this manner, until something happened that caused me to sit up and take notice of the extra line I had in my left hand.

Extending out from the shore line on one side of the lake was a moss-bed reaching out possibly fifty feet and just at the farthest edge of the moss a very athletic bass was going through his morning calisthenics while rustling up his breakfast. The idea occurred to me at once to slip him something just as good, so I proceeded to work out my line until I could reach his city address and dropped my Black Gnat right in his plate. No sooner had the fly landed than the bass smacked his face together and by a simple twist of the wrist and with a little assistance from the fish we had turned the trick and Mr. Bass was on the other end of the string and it was up to me to do the rest.

Growing wild, without any help from mankind in the way of cultivation, fertilization, "Burbanking" or transplanting, growing abundantly and multiplying in most any old kind of soil, is a weed, plant, or something, in this precinct commonly called by the inhabitants of the rural districts a "cockle-bur".

This varmint of a weed is so loving that it will almost stick to the polished surface of a marble slab, and if a fisherman's line becomes entangled in this aforesaid "Farmer's Curse", he had just as well stop and unhitch right where he stands. The fish may spit the fly out of its face, but this cussed imitation of a weed will not release an angler's line....

Soon as I hooked the fish I started to work his noodle up over the moss so I could possibly land him at the shore where I was standing. I succeeded in my first performance very well and had him coming toward the frying-pan, when something seemed to go wrong in my immediate vicinity; stepping swiftly backwards, I gave a tug at the line I was carrying in my left hand, but there was nothing doing; looking quickly around I had lamped the cockle-bur. To get my line untangled instantly was impossible and I at once turned my attention to the fish, but he had made the most of the opportunity and was under the moss.... When I got loose my nice enameled line, all I had to show for my vexation of spirit was a little bunch of beautiful green lake moss fastened to my hook.

After cooling down, or off, as the case may have been, I figured in this manner: If I had been carrying my line on an automatic at this particular time, the aforementioned accident might not have occurred, as I would have had no excess baggage in the shape of a line in my left hand; therefore I beat it back to town and at once purchased an automatic reel. I simply followed up my hunch and have lived happily ever since.

I prefer the automatic, because I can handle my line with just a little bit less exasperation at a critical moment, and like twin babies, these moments do happen now and then.

But playing a fish with a single-action reel, stripping in the line and letting it fall at your feet is mighty fine sport and if the other fellow prefers this method I say let him "hop to it"; but if there should be any cockle-burs along the shore line, he had better best shy of them while playing his fish, as they are liable to "gum the game" at the critical moment just as they did for me. Now just try to remember that a difference in opinions is what makes horseracing and fishing worthwhile, so always try to pick the winner, place your money on your favorite, sit steady in the boat and "may good luck follow you".

Jack Maxwell, 1919

§

John Orrelle holds a master's degree in psychology and teaches at Clackamas Community College, near Portland, Oregon. He is an avid trout fisherman who enjoys fishing in nearby high-altitude lakes. His articles have appeared in Fly Fisher, Fly Fisherman, *and* Outdoor Life.

John Harrington Keene. A steel engraving from the October 1888 issue of Wildwoods's Magazine *(vol. 1, no. 6, frontispiece)*

Dry Flies on the Ondawa: The Tragic Tale of John Harrington Keene

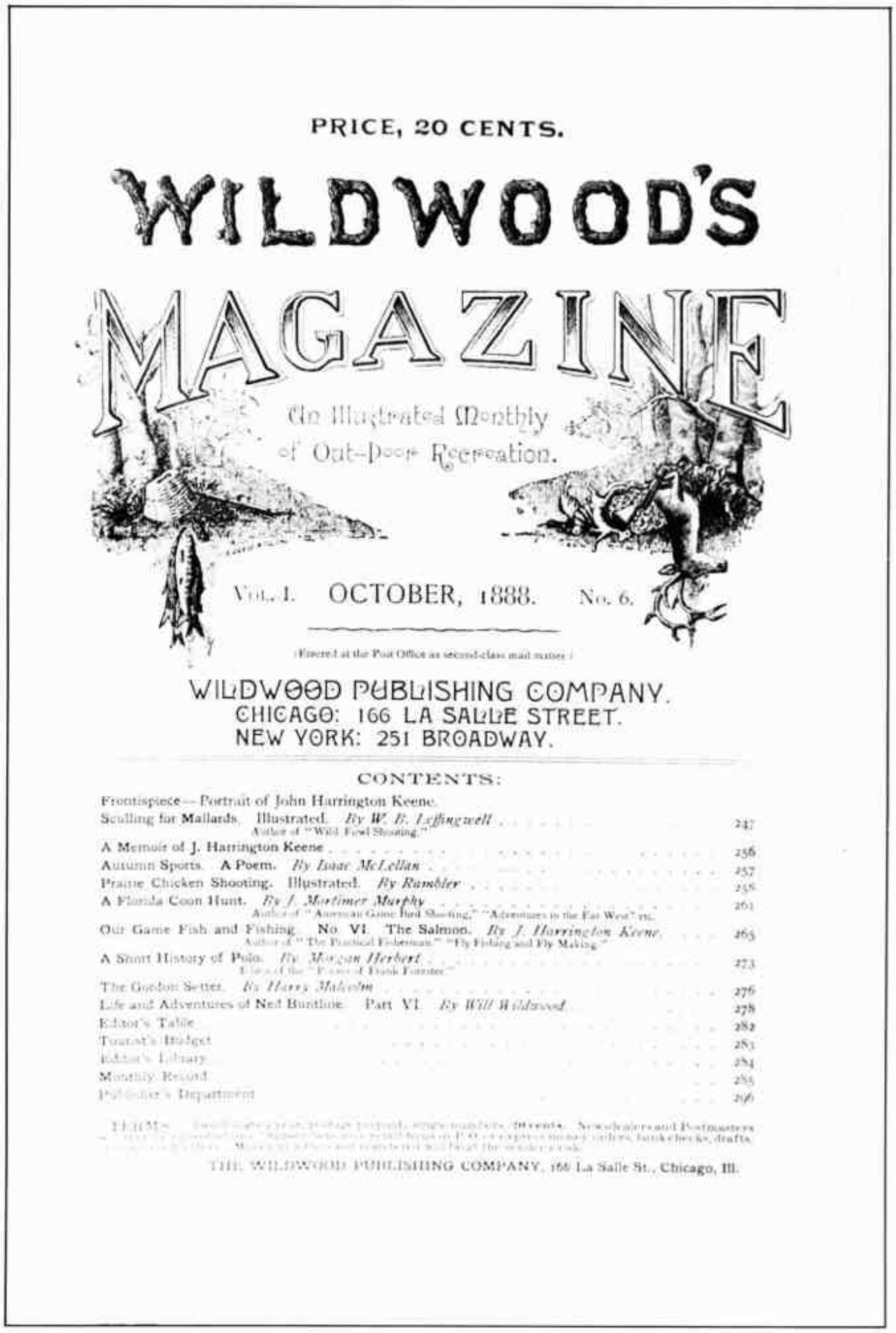
by David B. Ledlie

It must be fifteen years since I first read Vincent Marinaro's Modern Dry Fly Code*—not the scarce first edition that Putnam published in 1950, but the more affordable Crown reissue that became available in 1970. I think I read it in one sitting, and I* know *I reread it at least three times within the next few weeks. A true innovator of his time, Marinaro introduced me, and a good many American anglers, to the world of terrestrials and to a new approach to tying dry-fly imitations of various mayflies. His Jassids, Pontoon Hoppers, Thorax Hackled Duns, and Quill-Bodied Spinners (all extremely effective patterns) are now well known to most serious fly fishermen of today. Marinaro's influence on fly-fishing was profound. His insightful book was a sharp contrast to and a break from Ray Bergman's* Trout *(a very popular book originally published in 1939 and still considered a bible on trout fishing well into the sixties) that touted Bivisibles, showy wet-fly patterns, and of course the ultimate of nonimitation, the Royal Coachman.*

More important, however, and transcending the particulars of Marinaro's Code*, its reissue marks the beginning of an era, a renaissance in American fly-fishing in which innovation, modern science, and modern technology have combined to give us highly efficient tackle, highly effective imitations, and remarkably successful techniques for the capture of fish with a fly, especially the dry fly. The serious fly fisherman of today has by now read Swisher and Richards, Caucci and Nastasi, Whitlock, and Schwiebert, to name a few. He is a student of the natural history of both aquatic insects (entomology) and fish (ichthyology) and probably knows a little about fish culture and the physics of rod tapers. In short, he is, more sophisticated about his sport (in an absolute sense) than at any other time in the history of its development.*

But how does this relate to John Harrington Keene? Keene, at his worst, was as innovative as Marinaro. He practiced dry-fly fishing on the Battenkill as early as 1886, the same year Halford published in England his Floating Flies and How to Dress Them *and well before Theodore Gordon's experiments on the Beaverkill. Keene fished with terrestrial imitations that employed jungle cock nail feathers (a la Marinaro's Jassid); he tied cork-bodied dry flies; he introduced Americans to extended-body dry flies;* he had a good working knowledge of aquatic natural history; he fished small midges; and he wrote about all this in the* American Angler *(1885), the* American Field *(1889), and in several books on fly-tying and fly-fishing. In other words, this man began telling the American angler about entomology and innovative fly-tying and fishing techniques often associated with the late 1960s and 1970s, and he did it a century ago!*

Keene's contributions to American fly-fishing have never been fully recognized by angling historians, nor did these contributions have much of an influence on his contemporary American fly fishers. While Marinaro's Code *was very influential and is today considered a benchmark of the beginning of a modern renaissance for the gentle art, Keene's proclamations evidently fell on deaf ears and failed to induce any revolutions or evolutions in American fly-fishing. It is the intent of this essay to present to the readers of the*



PRICE, 20 CENTS.

WILDWOOD'S

MAGAZINE

An Illustrated Monthly of Out-Door Recreation.

VOL. I. OCTOBER, 1888. No. 6.

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CONTENTS:

THE WILDWOOD PUBLISHING COMPANY, 166 La Salle St., Chicago, Ill.

Wildwood's Magazine, *a rare, short-lived sporting periodical that was published by Fred Pond (pseud., Will Wildwood). Note that in addition to Keene's "Memoir" by Pond, the issue contained an article by Keene ("The Salmon," p. 265).*

American Fly Fisher *a biography of John Harrington Keene and an examination of the writings of this knowledgeable, innovative fisherman.*

Part I: The Biography

John Harrington Keene and his wife, Anna, emigrated from England to the United States in 1885. Within a year after their arrival they settled in Manchester, Vermont. An informative biographical sketch on Keene, written by Fred Pond and published in the October 1888 issue of *Wildwoods Magazine,*[1] gives many details concerning Keene's life prior to his coming to this country. Rather than excerpt highlights from this memoir, I have chosen to include it in its entirety, with annotations. I caution readers that, due to logistics, I have not been able to check the reliability of all of the information contained in Pond's memoir. I note, for example, that Keene was born on December 19, 1855 (to John and Rebecca Sarah Keene), not in 1856 as stated by Pond.[2]

John Harrington Keene was born at Weybridge, a pretty village on the Lower Thames, England, in 1856, and is consequently but 32 years of age, though the amount of work and sport connected with matters piscatorial he has accomplished, is out of all proportion to his years. His fishing career may almost be said to have been commenced in the cradle. He was the only son and close companion of his father, a famous Thames professional fisherman, from his earliest years. Mr. Keene, Senior, who quite recently died at Windsor, was, when the son was quite young, chosen fisherman to Queen Victoria, and presided over the magnificent preserves of Windsor Great Park for fifteen years, where young Harrington Keene became acquainted with Buckland, Francis, Manley, and a host of other patrician anglers, accompanying several of them to most of the best fishing waters of Europe and the British Isles, sometimes as an attendant, and at others as a personal friend.[3 4]

It is natural that an ardent love of fishing and great natural powers of observation should produce a writer on fishing subjects. When but sixteen, Mr. J. H. Keene began his career with the pen, in the "Globe

Church Street, Weybridge, England. Keene was born in Weybridge in 1855. The photo is from a postcard (circa 1904).

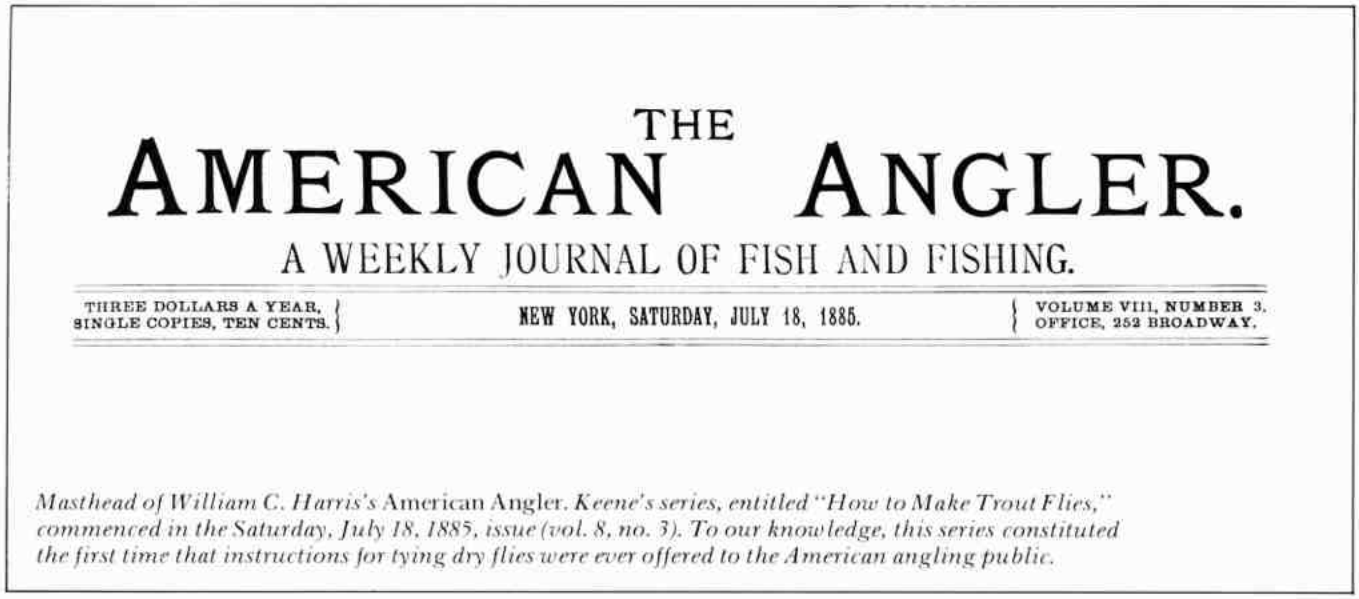
and Traveler," a well known London evening paper, then edited by a now famous physician, Dr. J. Martin Granville, and also contributed sketches to "Once a Week," then edited by G. Manville Fenn, the well known novelist. Very soon followed copious contributions to "Land and Water," "The Field," and the "Morning Advertiser," a large daily sheet under the direction of the accomplished Col. Alfred Bates Richards. About this time also—though previously intended for commercial life—Mr. Keene became assistant to his father and determinately pursued journalism and angling, natural history and authorship. By the time Harrington Keene had reached the mature age of twenty he had gathered material for his, as yet, magnum opus, "The Practical Fisherman." He had fished for repeatedly and caught every fish swimming in British waters, and had compared notes with the best fishermen of the day. His chief angling friend at that time was the late Rev. J. J. Manley, an amiable and profoundly learned clergyman and author of a charming work, "Notes on Fish and Fishing," which originally appeared in the "Morning Advertiser," alternately with articles on similar subjects from the pen of Mr. Keene.

About this time Mr. Keene, pursuing his bent, left home a few miles, and began business as a professional fisherman on the Thames. He was successful beyond the average, as the son of such a "practical fisherman" as his father, could only be. About this time he had contributed some especially interesting notes on the parasitic diseases of fish, (for Mr. Keene is a microscopist, being then a member of the chief microscopical societies) to the now defunct English "Country," and became intimately known to its manager, who also was part owner and manager of the "Bazaar Exchange and Mart." Recognizing Mr. Keene's general journalistic efficiency, he was invited to edit the "Country," and sub-edit the "Bazaar," on most liberal terms. This position he undertook and filled satisfactorily for two years, after which he retired in favor of more original and congenial journalistic work. During this term the "Practical Fisherman" was published in the "Country," and subsequently in volume form, receiving very cordial and distinct recognition from the critics.[5]

Mr. Keene was at once thereafter understood to be an authority on fishing matters, and a real catalogue of his contributions to the periodical press would fill more space than we can here afford. He, with a printer named Oates, founded the present London "Fishing Gazette."[6] He compiled and edited "Little's Angler's Annual," and wrote multitudinously for all the prominent papers and magazines. Finally in 1884, for rest and genuine recreation, he accepted the position of head fish-keeper on Lord Northbrook's portion of the river Itchen —the premier British trout stream. Whilst here he wrote a long series of articles for boys in the "Boys' Own Paper," and his recently published "Fishing Tackle; its Materials and Manufacture."[7] Finally Mr. Keene decided to visit this country, of which he had formed enthusiastic visions, (not yet broken, he tells us, by unfulfilling reality), which he did in 1885. Whilst here his father died suddenly, and he not being available, the appointment passed to other hands than his son's. Then Harrington Keene decided to make his home among us, and being an expert in all kinds of tackle manufacture as well as an expert with the pen, he wrote "Fly Fishing and Fly Making for Trout," (O. Judd & Co.,) and finally engaged in fly making for the benefit of the numerous admirers of his books and talents.[8] Until quite recently he has been associated with C. F. Orvis, but has now removed to the banks of the lovely bass lake—Cossayuna, Washington county, N.Y., where he proposes to complete many a chef d'ouvre of the piscatorial writer's and fly maker's art, amidst congenial surroundings.

Mr. Keene is president of the flourishing Greenwich and Cossayuna Game and Fish Protection Club, of Greenwich, N.Y., and is at present deeply engaged on a new work, especially designed to aid the purely amateur angler, which will be published early next spring by the enterprising publishing firm, Nims & Knight, of Troy, N.Y.[9]

Based on Pond's remarks and the material subsequently published by Keene, I think it is fair to say that he was well schooled in all matters piscatorial and was probably well acquainted not only with Francis, Buckland, and Manley, but also with Halford, Ogden, and others intimately associated with the develop-



THE
AMERICAN ANGLER.
A WEEKLY JOURNAL OF FISH AND FISHING.

THREE DOLLARS A YEAR, SINGLE COPIES, TEN CENTS. | NEW YORK, SATURDAY, JULY 18, 1885. | VOLUME VIII, NUMBER 3. OFFICE, 252 BROADWAY.

Masthead of William C. Harris's American Angler. *Keene's series, entitled "How to Make Trout Flies," commenced in the Saturday, July 18, 1885, issue (vol. 8, no. 3). To our knowledge, this series constituted the first time that instructions for tying dry flies were ever offered to the American angling public.*

ment of dry-fly techniques on British trout waters. But more about this later.

Pond states that Keene arrived in this country in 1885 and shortly thereafter associated himself with Charles F. Orvis in Manchester, Vermont. I think this information is probably correct. Keene published twenty articles in William C. Harris's *American Angler* in 1885.[10] Although Keene could have sent these articles to Harris from England, more likely, he was in the United States at the time. Unfortunately, no datelines were printed with these articles that would establish for us Keene's place of residence. In 1886 Keene published a series of three articles on English bait-casting in the *American Angler*.[11] Again, no dateline is given, nor does the text indicate Keene's whereabouts. But in the March 20, 1886, issue of the *American Angler*, two short paragraphs appear (Notes & Queries Section) that relate to his casting articles. Here, Keene mentions that he has had a "Change of residence...." Keene also says, in the June 26 issue of the *American Angler*, that he ate his lunch "on the banks of the Ondawa which runs through the vale of content in which I live." The Ondawa is the Indian name given to the Battenkill, which runs through Manchester, Vermont. In 1887 at least ten articles by Keene were published in the *American Field*, all with a dateline giving Manchester, Vermont, as Keene's place of residence.[12] I would guess that Keene and his wife lived in the environs of New York City in 1885 where he probably first met Harris (the *American Angler* was published there), and that he moved to Manchester in January or February of 1886 (the change of residence referred to earlier).[13]

It is not hard to imagine why Keene chose Manchester, Vermont, as his place of residence. Manchester, in 1885, was a resort town of some note. Franklin Orvis's prosperous Equinox Hotel was filled by well-to-do tourists from New York and Boston who had come to revel in the rural charm of this quaint New England village. Also, by this time, Charles F. Orvis's tackle business, established in 1856, was flourishing. By 1885 he had acquired a national reputation as a manufacturer of good quality rods, reels, and flies. His tackle included the now-famous narrow-spool fly-reel with perforated side plates, and cane flyrods equipped with Eggleston's patented, spring-locking reel seat. In 1876, C. F. Orvis tackle received a gold medal at the Philadelphia International Exhibition. Orvis's reputation as an important tackle manufacturer was further enhanced with the publication of *Fishing with the Fly* (1883), which he co-edited with A. Nelson Cheney.[14] What better spot could Keene have chosen to reside in? Here, he could hob-nob with the affluent tourist crowd; as an associate of Orvis, he could continue his career as professional writer, fly fisher, and fly tier; and he could spend his leisure hours pursuing the trout on the Battenkill.

Evidence of Keene's enchantment with his new surroundings can be found in the August 7, 1886, issue of the *American Angler*[15] in a letter (reprinted by Harris) that he had sent to the British publication, *Land and Water*.

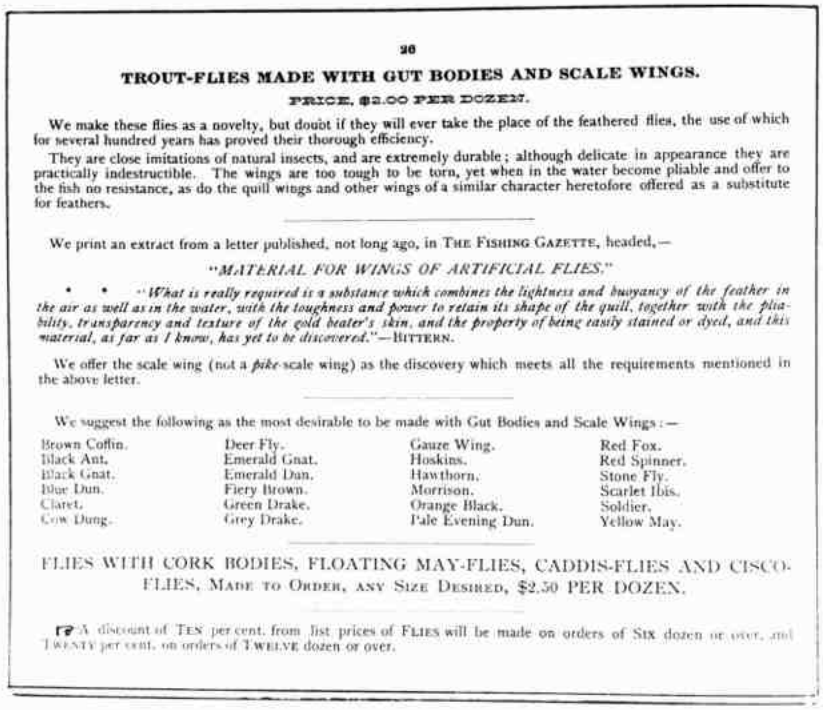
> As I said above, I am writing from the old Yankee State of Vermont, and in a village which reminds me of nothing so much as the beautiful town of Malvern (Worcestershire), except that Malvern has no stream running through it, and this has. Here is a genuine mountain stream, born of the mighty Equinox, and the trout are in thousands, with none to catch them, save villagers and a few summer visitors. And these same trout are of very respectable size, unlike the generality of mountain fish—that is, going up to one and one-half pounds, pretty frequently. There is no need to conceal its name, it is the 'lovely' Ondawa in the language of the Indians, and Battenkill in the uncouth vernacular of the settlers. Ondawa let it be.
>
> It is rapid and clear, shallow and deep, in alternation; now garrulous with mimic fury, now making 'sweet music with the' enameled stones.' But stay; Shakespeare's words remind me that a poetically-inclined friend has already apostrophised 'Ondawa' in strains which all will agree rival anything 'le immortel Williams' could have writ. Pardon me, all-patient Editor, if I reproduce them as a valedictory tailpiece to this, my very discursive letter.
>
> ONDAWA
>
> The high and massy mountains roll along,
> Wave-like, beside thee, dressed in living green,
> Whilst giant Equinox—a parent strong
> Of myriad rivulets, with royal mien,
> Head-gray is cloud—o'er shades the daedal scene.
>
> Through dells and grots, through festooned dreaming woods.
> Thou boundest, glad of heart, in child-like glee
> Mid plains of emerald, or solitudes,

Masthead of the American Field *as it appeared in 1887, where and when Keene published his articles on fly-tying.*

Dark with crag, or from the canopy
Of leafy mystery thou hastest, wild and free.

And from thy limpid deeps, or riffles whirl,
Or the translucent eddy's oily curl,
Leaps the bejeweled trout. Then richer far
Than Ophir's mine of gold art thou, oh Ondawa!

There is no use whipping the water with flies when the fish are not feeding on the natural insect. If there are not some flies to be seen about, depend upon it the fish are after some kind of food they do see, something in the water. Then try 'wums.'



26

TROUT-FLIES MADE WITH GUT BODIES AND SCALE WINGS.

PRICE, $2.00 PER DOZEN.

We make these flies as a novelty, but doubt if they will ever take the place of the feathered flies, the use of which for several hundred years has proved their thorough efficiency.

They are close imitations of natural insects, and are extremely durable; although delicate in appearance they are practically indestructible. The wings are too tough to be torn, yet when in the water become pliable and offer to the fish no resistance, as do the quill wings and other wings of a similar character heretofore offered as a substitute for feathers.

We print an extract from a letter published, not long ago, in THE FISHING GAZETTE, headed,—

"MATERIAL FOR WINGS OF ARTIFICIAL FLIES."

* * * *"What is really required is a substance which combines the lightness and buoyancy of the feather in the air as well as in the water, with the toughness and power to retain its shape of the quill, together with the pliability, transparency and texture of the gold beater's skin, and the property of being easily stained or dyed, and this material, as far as I know, has yet to be discovered."*—BITTERN.

We offer the scale wing (not a *pike* scale wing) as the discovery which meets all the requirements mentioned in the above letter.

We suggest the following as the most desirable to be made with Gut Bodies and Scale Wings:—

Brown Coffin.	Deer Fly.	Gauze Wing.	Red Fox.
Black Ant.	Emerald Gnat.	Hoskins.	Red Spinner.
Black Gnat.	Emerald Dun.	Hawthorn.	Stone Fly.
Blue Dun.	Fiery Brown.	Morrison.	Scarlet Ibis.
Claret.	Green Drake.	Orange Black.	Soldier.
Cow Dung.	Grey Drake.	Pale Evening Dun.	Yellow May.

FLIES WITH CORK BODIES, FLOATING MAY-FLIES, CADDIS-FLIES AND CISCO-FLIES, MADE TO ORDER, ANY SIZE DESIRED, $2.50 PER DOZEN.

☞ A discount of TEN per cent. from list prices of FLIES will be made on orders of SIX dozen or over, and TWENTY per cent. on orders of TWELVE dozen or over.

Copy from page twenty-six of C. F. Orvis's sixteenth catalog (circa 1889). These so-called "novelty" flies are unquestionably the creations of John Harrington Keene.

The nature of Keene's association with Charles F. Orvis is not completely clear. On page twenty-six of Orvis's sixteenth catalog (circa 1889) trout flies made with gut bodies and scale wings, as well as flies with cork bodies, floating mayflies, caddis flies and cisco flies are offered for sale (see illustration).[16] These are the flies of John Harrington Keene, the same flies that were described in great detail in the series of articles he published in the *American Angler* in 1885 and in the *American Field* in 1887 *(vide ante)*. On page thirty-one of the same catalog, fifty patterns of salmon flies were advertised, all of them English patterns. Evidently, Keene supported himself during his stay in Manchester by supplying Orvis with his highly innovative trout-fly imitations, probably with the salmon flies too. Keene also obtained additional funds by functioning as a correspondent to the more popular American sporting periodicals and to some British publications.[17]

Pond, in his memoir of October 1888, states that Keene had recently relocated his residence to the shore of Cossayuna Lake in southern Washington County, New York.[18] My supposition is that he moved because he had a falling-out with Orvis. Although Orvis was a strong believer in the imitation theory,[19] I don't think he had much faith in Keene's "Exact-imitation flies" or the dry-fly methods that Keene espoused. For example, see the accompanying illustration

JOHN HARRINGTON KEENE,

Author of Fly Fishing and Fly Making, Etc., Etc., Etc.,

Artist in All Kinds of the

Finest Artificial Flies and Fly-Fishing Lures.

SPECIALTIES—All Standard Patterns. Exact Imitations of American Insects, in Feather, Fur, Silk, Quill, Horse Hair, Rubber, Scale, Etc., Etc. The New Interchangeable Bass, Salmon and Trout Fly. The Water Proof-Winged Fly. Salmon Flies Made to Order. Every Hook and Snell Tested and Guaranteed.

GREENWICH, N. Y.

Keene's advertisement that appeared in the 1894 edition of the Directory of Greenwich. *Note that he touts "Exact Imitations of American Insects...."*

from the Orvis catalog (circa 1889) in which the following statement is made:

> We make these flies as a novelty, but doubt if they will ever take the place of feathered flies, the use of which for several hundred years has proved their thorough efficiency.

I surmise that Keene not only took umbrage at this statement but also at not being given any credit whatsoever for his innovative flies, either in this catalog or in other Orvis advertisements.

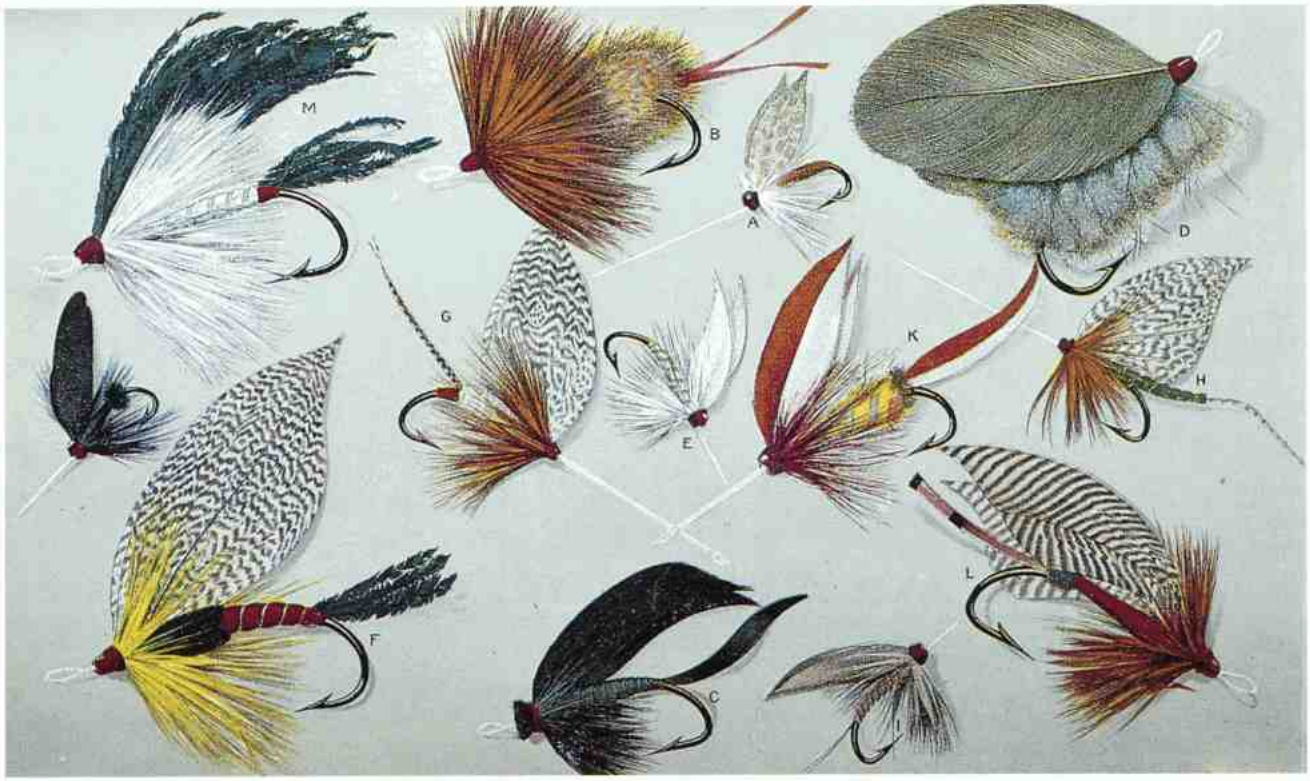
I would also surmise that Keene's flies didn't sell very well. The unsophisticated, native brook trout would take just about any fly, and the gaudy, tinseled attractor flies not only were less expensive than Keene's creations, but very likely were more attractive to and more popular with the Victorian angler. Indeed, Keene as much as admits this in the previously mentioned copy that he sent to *Land and Water* reprinted in the *American Angler* in 1886.

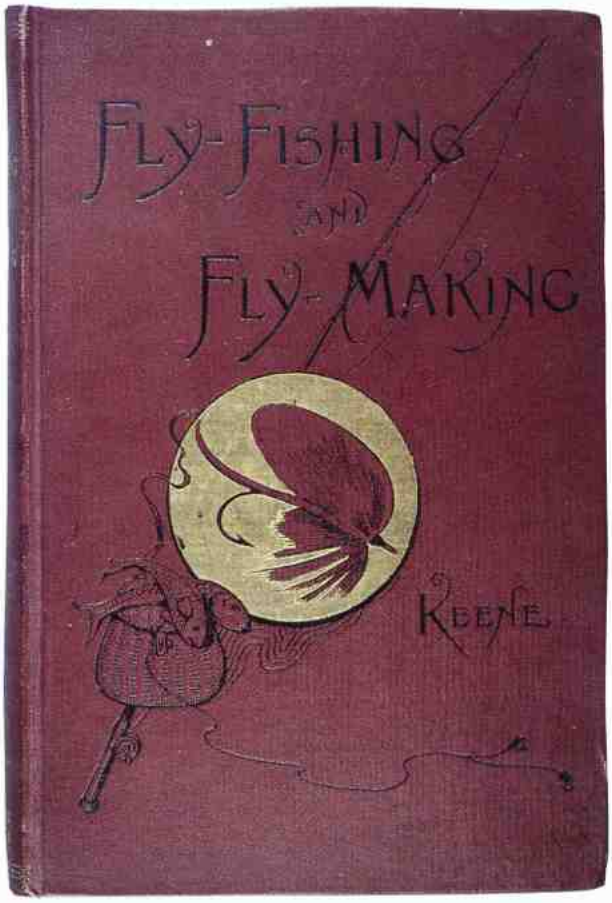
> What chiefly impressed me regarding trout fishing [in the United States] were the two facts that large flies up to No. 9 Sproat, and fishing down stream, were de rigeur. The floating fly is practically unknown, and up stream fishing therefore an occult art, the mere mention of which is sufficient to bring forth a smile of kindly contempt. Yet the brook trout here are easily taken by the means employed. Here it is a charr [sic]—as the latest dictum of the ichthyologists sets forth—and not a trout at all, being but Salmo fontinalis, and its voracity is great. Probably when it has been fished over through hundreds of years by a crowded population the necessity for very light tackle will arise. At present the generality of tackle here is light only as regards the rod.

If, as I suspect, Keene badgered Orvis to tout his flies more effectively and to give him credit for his innovative contributions, Orvis would have most likely refused, and a parting of ways would have followed. Speculative, obviously—but I note in Mary Orvis Marbury's *Favorite Flies* (1892) the following passages on page 382. These remarks accompany a plate of F. M. Halford's dry flies.

> Some time ago, in the English "Fishing Gazette," a correspondent signing himself "Bittern" wrote as follows:
>
> *What is really required for the wings of artificial flies is a substance which combines the lightness and buoyancy of the feather in the air as well as in the water with the toughness and power to retain the shape of the quill, together with the pliability, transparency, and texture of the gold-beater's skin, and the property of being easily stained or dyed, and this material, so far as I know, has yet to be discovered.*
>
> Later, it was found that the inner membrane of the scales of the shad, red-snapper, and other fish was a beautiful substance nearly answering this description. Flies made with wings of this membrane are extremely durable and lifelike in appearance; the wings are too tough to be torn, but in the water become pliable and offer to the fish no resistance; yet, attractive as they appear, they have not proved very popular with fishermen, owing chiefly, we think, to a slight rustling noise they make when cast through the air. It is doubtful if this sound is really any serious objection to these flies, but it seems to have been a fault that has prevented their extended use.

Keene himself had discovered the inner membrane of the scales of fish could be used as wings for dry flies, yet Marbury (Charles F. Orvis's daughter) failed to give him due credit. Further, mention of Keene's name is conspicuously absent from her book. She must have known about Keene's articles in the *American Angler* and the *American Field* and about his book, *Fly Fishing and Fly Making*,[20]





Top: Frontispiece from American Game Fishes *(1892) edited by G. O. Shields. The dressings for the flies are given in a chapter of the book titled "Fishing Tackle and How to Make It" by John Harrington Keene.*

Above right: More of Keene's flies from the same work

Left: Cover of the third edition of Keene's Fly-Fishing and Fly-Making *(1898). The book contains two pages of tipped-in fly-tying materials—hackles, wing materials, floss, etc.*

A contemporary photograph of John Harrington Keene's residence at 9 John Street, Greenwich, New York. Keene resided there for at least two years (1892 to 1894).

Keene lived at 2723 Parkwood Avenue, Baltimore, Maryland, in 1896 and 1897. A Baltimore city directory lists Keene's occupation as reporter.

LEFTY KREH

all of which exhaustively discuss his innovative fly-tying techniques, his dry flies, and his exact-imitation theory. Yet, in all of her discussions of the floating fly (albeit brief), only the names of Pritt and Halford appear. Surely Orvis and Keene must have had a bitter disagreement.[21] [22]

How long Keene lived on the shore of Cossayuna Lake, I'm not sure; by 1892 he was listed in the *Directory of Greenwich* as a fishing-tackle maker living at 9 John Street in Greenwich, New York.[23] Elsewhere in the same directory, it is noted that Keene published a newspaper called the *Graphologist* on the fifteenth of every month (graphology is the study of handwriting). In the 1894 directory the same address is given, and he has an advertisement for his flies and lures (see illustration). Additional information on Keene during this period can be found on page fourteen of Islay V. H. Gill's *History and Directory of Cossayuna and Vicinity* (1957).

> ...J. Harrington Keene, an English man, graphologist and expert tyer [sic] of artificial flies. He lived in the village for a time and employed a few women in the making of flies. He was a boon companion of that early small group of dedicated fishermen who always had a jug in the boat for live bait.

The Greenwich directories were not published after 1894; according to the Federal Census of 1900, however, Keene had left the Greenwich area by then. We pick up his trail next in Baltimore, Maryland. In 1896 he published a book on graphology, entitled the *Mystery of Handwriting*, and in the preface he gives this address: 712 Equitable Building, Baltimore, Maryland. A Baltimore directory lists Keene as a reporter living at 2723 Parkwood Avenue (see illustration), Baltimore in 1897. No listing was found for 1898. Evidently, Keene worked as a reporter out of an office at the prestigious Equitable Building, but I was unable to ascertain the name of the firm that employed him. Keene's reasons for moving to Baltimore are obscure. Perhaps, without a national outlet for his flies (i.e. the Orvis Company), he was unable to make a success of his tackle business. So he took a job as a reporter in Baltimore—but why Baltimore? James Keene, a lawyer, is listed in the Baltimore directory in 1897—a relative, perhaps?

Material obtained from the Surrogate's Court, County of Queens, New York,[23] indicates that Keene and his wife moved to Richmond Hill, Long Island, New York, sometime in 1897. In 1900 their address is listed as 3410 Fulton Street,[24] a rented house, and in an advertisement for fly-tying material that appeared on page sixty-seven in a March-April 1902 *Field & Stream*, the Keene address is listed as follows:

> WANTED.—Feathers for fly-tying; brown-hackles from game and brown Leghorn roosters, wild male turkey tail and wing feathers, pink curlew, wood duck, plain and barred; blue jay wings, crow wings, etc. Address J. H. Keene, Richmond Hill, Long Island, N.Y.

In that same year he published two articles in *Outing*:[25] "Practical Fishing" (vol. 36, p. 367) and "Making of the Artificial Fly" (vol. 36, p. 634). These were rehashes of his earlier articles and to my knowledge were his last published works.** By 1904, Keene and his wife had relocated to a house on Lincoln Avenue,

near Orchard Avenue, in Richmond Hill,[26] and there is evidence indicating that sometime between 1902 and 1904 they moved to Winstead, Connecticut, for a brief period of time and Keene managed a country club.[23] But after this, I can find no evidence of Keene's whereabouts. His once prolific pen seems to have stopped. The disappearance of Keene's articles from the pages of American sporting periodicals is very puzzling indeed. He was, after all, an expert in the manufacture of and fishing with the dry fly—and a good writer as well. By 1904 the American fly fisher had begun to recognize and accept upstream fishing with floating flies as an extremely effective angling method, especially for the highly selective and rather recently imported brown trout. Conditions could not have been more perfect for the reintroduction of the innovative fly-tying techniques and fishing methods that he had tried to introduce to the American angling public almost twenty years prior. Yet, from Keene there was silence—a mystery indeed, until we read his obituary on page 900 in *Forest and Stream* in 1907 (vol. 68, no. 23), which states that he had been ill for the previous five years.

Death of John Harrington Keene

> John Harrington Keene, of Floral Park, L.I., who was prominent as an authoritative and entertaining writer on angling, died recently in a sanitarium in Bellows Falls [actually, in Brattleboro], Vt., where he went a little over a month ago hoping to gain relief from the illness from which he suffered for the last five years.
>
> Mr. Keene was an Englishman, and to this is attributed the fact that he never received the appreciation that his work deserved. Not that an Englishman may not be honored in America, but because his writings were colored, perhaps, by too frequent reference to angling methods in Great Britain, where conditions are widely different from those met with on this continent. He began to make artificial flies in England in 1865. His best works probably were, "Fly-Fishing and Fly Making" and "Fishing Tackle, Its Materials and Manufacture." The former, a handsome little volume, contains a deal of hand work, done by the author, who was an adept at fly tying. This was one of the first books of its kind to be published in America. It was published by the Forest and Stream Publishing Company [the first edition was published by Judd] and ran through several editions. He also wrote "The Angler's Complete Guide and Companion," "The Practical Fisherman," and hundreds of magazine articles. He was a man of good address, as might be judged from his writings, and had many warm friends among those, anglers and others, with whom he was thrown. On the stream he was a patient and skillful angler, but it is said by the few who knew him well that he never quite became reconciled to American trout and American trout streams. And yet, after the death of Wm. C. Harris, he was perhaps the ablest writer on fly-fishing in America. Certainly his memory will long be cherished by the fraternity, the better, perhaps, when it is remembered that, though lacking the heart interest which he left behind in his native land, his writings were still at the time of his death the best that could be read in America.

This would explain his lack of productivity between 1902 and his death. Keene was admitted to the Brattleboro Retreat,[27] Brattleboro, Vermont (not Bellows Falls, as stated in the obituary), on March 28, 1907. He died there, a pauper, on May 5, 1907. The chief cause of death, as listed on the death certificate, was cerebral hemorrhage. The contributing causes were left unstated (see illustration). However, Keene had been diagnosed as having syphilis,[28] a highly contagious disease for which there was really no cure in 1907. In Keene the disease had reached the tertiary stage, when severe damage to the central nervous system occurs. Hallucinations, bizarre behavior, and blindness are common symptoms of the final stage. To compound matters, Keene evidently had also developed alcoholism. It seems logical to assume that his excessive drinking was in response to a long bout (at least five years) with this painful and debilitating disease—and the disillusionment of failing to be adequately recognized for his contributions to the development of American fly-fishing must have under-

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ENDNOTES:

1. *Wildwoods Magazine*, an illustrated monthly, was owned, edited, and published by Fred E. Pond (Will Wildwood). Vol. 1, no. 1, was issued in May 1888. It sold for twenty cents per issue. The publication was short lived. It ran until April 1889, when according to the *Union List of Serials* its name was changed to *Recreation*. *Recreation* is believed to have ceased publication in June of 1889.

2. Baptismal records for the town of Weybridge, England (1855).

3. Keene's father died in September 1885. An obituary appeared in the September 12, 1885, issue of the *Standard*. "John Keen [sic], the Queen's fisherman, died on Thursday, at his house, the Flying Barn, Virginia Water." He was fisherman to Queen Victoria at Windsor from 1864 until his death.

4. Francis Trevelyan Buckland wrote *Curiosities of Natural History* (1857 and several later editions), *The Log-book of a Fisherman and Zoologist* (1875), and *The Natural History of British Fishes* (1881); Francis Francis was angling editor of *Field* and among his books are the classic *Book on Angling* (1867 and several later editions), *By Lake and River* (1874), *Angling* (1877), *Hot Pot* (1880), *Sporting Sketches with Pen and Pencil* (with A. W. Cooper), and *Fish-Culture* (1863); John Jackson Manley wrote *Notes on Fish and Fishing* (1877).

5. It was published in London in book form in 1881.

6. Pond must be referring to the "new series" of the *Fishing Gazette* that started in 1877. Keene would have been only ten years old when the old series was first published.

7. *Fishing Tackle, Its Materials and Manufacture* was published in both London and New York in 1886.

8. *Fly Fishing and Fly Making* was published in 1887. A second edition appeared in 1891, and a third edition was published in 1898.

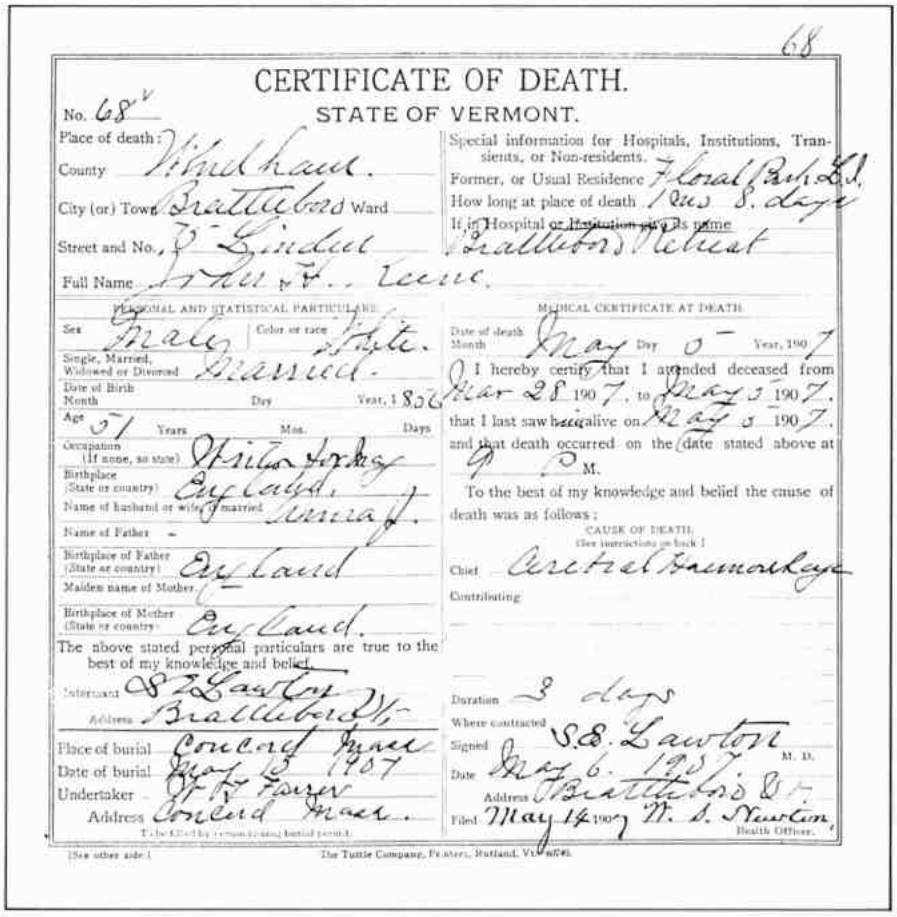
9. Perhaps this is a reference to the *Boys Own Guide to Fishing* that Keene published in 1894. It is interesting to note that the title page of *Fly Fishing and Fly Making* lists the *Angler's Complete Guide and Companion* as one of Keene's works. I found no evidence that indicates Keene published a book with this title (see *National Union Catalog* and Bruns's *Angling Books of the Americas*, p. 253).

10. The first article appeared in the March 28 issue (vol. 7, no. 13, p. 199) and the last in the December 26 issue (vol. 8, no. 26, p. 402). Harris established the *American Angler* in 1881 as a weekly publication (vol. 1, no. 1, was issued on Sunday, October 15 of that year).

11. *American Angler* (1886), vol. 9, no. 4, p. 49; vol. 9, no. 5, p. 69; and vol. 9, no. 6, p. 81.

12. The first article was published in vol. 27, no. 12, p. 270, and the last one I found was in vol. 27, no. 25, p. 598. According to Austin Hogan's *American Sporting Periodicals*, *American Field* has the following history: "1874-75 as *Field and Stream;* 1875-76 as *Field;* 1877-81 [sic, but should read 1878 to 1881] as *Chicago Field;* and from 1881 on as *American Field*. I was unable to peruse the complete year; other articles may have appeared in subsequent issues of the 1887 *American Field*.

13. Unfortunately, street directories or local census material, which would establish the location of Keene's residence in Manchester, are not available.



68

CERTIFICATE OF DEATH.

No. 68

STATE OF VERMONT.

Place of death:
County Windham.
City (or) Town Brattleboro Ward
Street and No., P. Limited
Full Name John F. Keene.

Special information for Hospitals, Institutions, Transients, or Non-residents.
Former, or Usual Residence Floral Park L.I.
How long at place of death Abt 8 days
If in Hospital or Institution give its name Brattleboro Retreat

PERSONAL AND STATISTICAL PARTICULARS

Sex Male Color or race White.
Single, Married, Widowed or Divorced Married.
Date of Birth Month Day Year, 1856
Age 51 Years Mos. Days
Occupation (If none, so state) Writer & Fly
Birthplace (State or country) England.
Name of husband or wife of married Emma J.
Name of Father —
Birthplace of Father (State or country) England
Maiden name of Mother —
Birthplace of Mother (State or country) England.
The above stated personal particulars are true to the best of my knowledge and belief.
Informant S. S. Lawton M. D.
Address Brattleboro Vt.
Place of burial Concord Mass
Date of burial May 15 1907
Undertaker F. P. Fraser
Address Concord Mass.

MEDICAL CERTIFICATE AT DEATH.

Date of death Month May Day 5 Year, 1907
I hereby certify that I attended deceased from Mar 28 1907. to May 5 1907.
that I last saw him alive on May 5 1907.
and that death occurred on the date stated above at 9 P. M.
To the best of my knowledge and belief the cause of death was as follows:
CAUSE OF DEATH.
(See instructions on back.)
Chief Arterial Sclerosis
Contributing
Duration 3 days
Where contracted
Signed S. S. Lawton M. D.
Date May 6. 1907
Address Brattleboro Vt
Filed May 14 1907 W. S. Newton, Health Officer.

(See other side.)

The Tuttle Company, Printers, Rutland, Vt.

J.H.K's death certificate. Place of burial is listed as Concord, Massachusetts (May 15, 1907). We could find no other record of his being buried there, nor were we able to locate his actual burial site.

mined his confidence and weakened his defenses for coping.

Keene was never a man of means,[29] and the debilitating effects of his disease were severe enough to dramatically interfere with his earning a living as a writer, fly-tier, or graphologist, so it is not surprising that he died a poor man. Further, if one interprets Gill's remark *(vide ante)* about Keene being a fisherman "who always had a jug in the boat for live bait" to be a euphemism for a problem with alcohol, then his nomadic existence, his unsuccessful business endeavors, and perhaps even his lack of impact on the American angling scene is at once comprehensible.

It is unclear why Keene chose to be admitted to the Brattleboro Retreat rather than to a local hospital in the Richmond Hill area. Another puzzling matter is that his death certificate indicates that he was buried on May 15, 1907, in Concord, Massachusetts. I could find no record of Keene being buried there, and if he was, the reason is hard to fathom (unless, perhaps, relatives lived there).

So there you have it; the tragic tale of a gentleman, who rightfully should be revered as the father of the floating-fly in these United States. He was probably more knowledgeable than Uncle Thad Norris, and most assuredly more innovative than the renowned Theodore Gordon. A bit later in time, and under more favorable circumstances, he would certainly have revolutionized the sport.[30]

In Part II of this endeavor, it is my intent to closely examine the writings of John Harrington Keene and to present a checklist of his angling publications. §

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14. For an excellent history of the Orvis company, see *The Orvis Story* (1980) by Austin Hogan and Paul Schullery.

15. Vol. 10, no. 6, p. 86.

16. The inclusion of Keene's flies in the Orvis catalog strongly suggests that the catalog was printed after 1885. A loose form letter dated 1889 was found in a copy of the catalog examined by Melner and Kessler (see *Great Fishing Tackle Catalogs* (1972).

17. *American Angler, American Field,* and *Land and Water* (British) have already been mentioned; no doubt there were others.

18. Cossayuna Lake is located in the towns of Argyle and Greenwich. (The latter, near the Vermont-New York border, is downstream on the Battenkill from Manchester.

19. See, for example, Orvis's letter to the editor, *American Angler* (1886), vol. 9, no. 21, p. 324.

20. The book had been through two editions by the time Marbury published *Favorite Flies.*

21. In 1901 Keene wrote "The Fishing Reel and its Development," an article for the *Sporting Goods Dealer* (September, p. 8). Nowhere in the text does the name Orvis appear. Touché!

22. It is curious then to find that in the second (1891) and third (1898) edition of *Fly Fishing and Fly Making* Keene recommends Orvis rods; his favorite was a six-strip cane model, ten feet in length, with the patented Eggleston reel seat. But this can be easily rationalized. It was probably too costly to reset the type for these later editions, so Keene had to live with the pronouncements he made in the first edition (1887)—when he and Orvis were on good terms.

23. According to petitions on file at the Surrogate's Court (Queens County, New York) relating to the will of Keene's wife, John Harrington Keene became a naturalized citizen in 1892. These petitions contain important biographical information.

24. Federal Census, New York, vol. 217, Enumeration District 677, sheet 27, line 63. Keene and his wife are listed as naturalized citizens that immigrated in 1885, could read, write, and speak English, and had no children. They had one boarder, Edwin R. Decker (a school teacher). Keene's occupation is given as handwriting expert.

25. *Outing* ran from 1882 to 1923. It was a sporting miscellany characterized by short articles that lacked depth.

26. *Trows Business Directory.*

27. The Brattleboro Retreat was established in 1834 and recently observed its one hundred fiftieth anniversary.

28. This information was obtained from Mona Beach of the Brattleboro Retreat.

29. I don't think Keene ever owned his own home. To my knowledge his name does not appear on any of the deeds associated with his various residences.

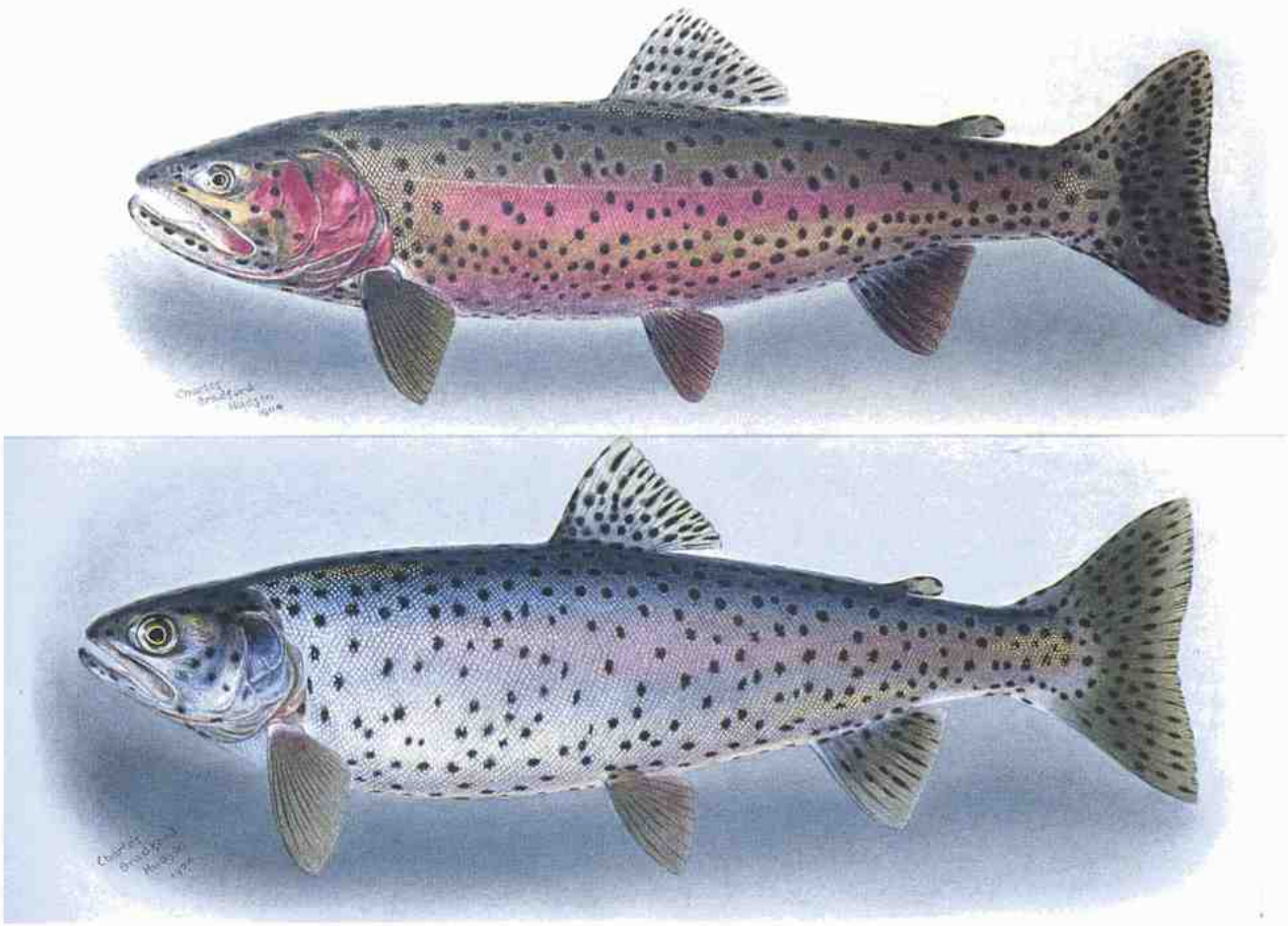
30. Keene's wife died penniless on February 24, 1932. According to an advertisement in the Christmas issue of the 1916 *American Angler* (Reed's *American Angler,* 1916 to 1921), Mrs. Keene tied and sold bass, trout, and salmon flies. Her address was given as Queens, Long Island, New York.

*Note added in proof: The first description of an extended-body fly pattern for American anglers can be found in Bethune's 1847 edition of the *Complete Angler.*

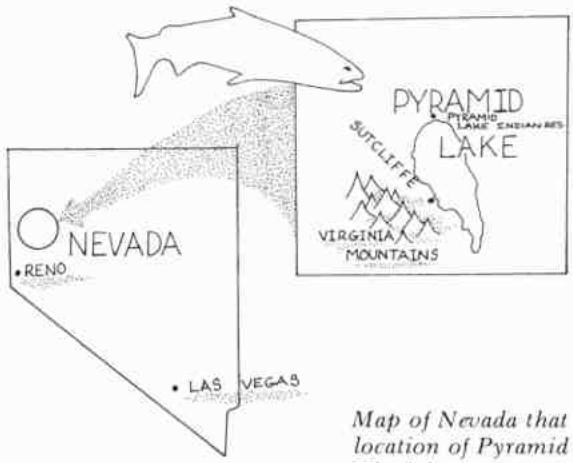
**Note added in proof: I recently discovered that Keene authored a chapter on fishing tackle in *Guns, Ammunition, and Tackle* (1904)—a book that was part of Casper Whitney's American Sportsman's Library series.

JOHN MINGO

CHIP CLARK



Watercolor renderings of a male (top) and female (bottom) Lahontan cutthroat trout, Salmo clarki henshawi, *painted by Charles Bradford Hudson in 1904. Hudson (1865 to 1939) was employed as an illustrator for many years by the Smithsonian Institution and the Bureau of Fisheries. David Starr Jordon once referred to him as the world's greatest painter of fish. Hudson was also well known as a landscape painter, an etcher, an author, and an illustrator for some popular magazines. The trout specimens he used for these paintings were taken from Lake Tahoe. The paintings are currently in the collection of the Smithsonian Institution.*



Map of Nevada that shows the location of Pyramid Lake. The lake is approximately forty miles northeast of Reno.

AL HASSEL

Pyramid Lake and its Cutthroat Trout

by Robert J. Behnke

Pyramid Lake and its giant cutthroat trout have been the subject of numerous magazine articles. Many of these articles are characterized by misinformation and hyperbole. The true story of Pyramid Lake, its enormous cutthroat trout, and their fate is indeed fascinating, but requires no fanciful embellishments. It is the intent of this endeavor to right some obvious wrongs and clear up any misconceptions concerning this extraordinary fishery.

The Great Basin of the western United States encompasses a large region south of the Columbia River drainage in Oregon, west and north of the Colorado River basin of Utah and Nevada, and east of the Sierra Nevada of California. Within this region, streams run from the mountains out onto the desert or into sumps, such as Great Salt Lake, Utah, and Pyramid Lake, Nevada. No running water escapes to the ocean. During the last glacial epoch (from about ten thousand to seventy thousand years ago), there were periods when the climate was cooler and wetter than it is now, and large lakes formed in numerous separate basins. For example, a lake formed in the Lahontan basin that was slightly larger than Lake Erie. The Lahontan basin of Nevada, as well as northeastern California, was invaded by an ancestral cutthroat trout at an unknown time. It is commonly assumed that this cutthroat-trout ancestor gained access to the Lahontan basin from the Columbia basin at the beginning of the last glacial period or about seventy thousand years ago, but it may have been much earlier. Fossil trout bones, several million years old, have been uncovered in the Lahontan basin, and they are similar to the bones of the Lahontan cutthroat trout, *Salmo clarki henshawi*.

In any event, this ancestral trout was the only large predatory fish among numerous species of minnows and suckers that established themselves. It evolved into an efficient predator and may have attained a large size in order to make use of the large stocks of forage fishes. The most common Lahontan minnow, the tui chub, commonly attains a maximum size of fifteen to eighteen inches, certainly more than a mouthful for a pan-sized trout, but a mere appetizer to a subspecies of trout whose weight averages twenty pounds.

Approximately ten thousand years ago, when the climate became warmer and drier, Lake Lahontan rapidly declined in size. About a thousand years later, it desiccated considerably and left two sump lakes, Walker Lake and Pyramid Lake. But, only Pyramid Lake maintained continuity and retained a full complement of Lahontan fishes. This allowed the Lahontan cutthroat trout to continue without interruption its evolutionary specialization as a large, predatory trout. In addition to the populations in Walker and Pyramid lakes, the Lahontan cutthroat trout survived in mountain rivers and lakes, such as Lake Tahoe, but these environments and their associated fish faunas were vastly different from Pyramid Lake, and these populations were subjected to evolutionary pressures distinctly different from those affecting the cutthroat of Pyramid Lake; other Lahontan cutthroat trout introduced into Pyramid Lake never approached the maximum size of the native trout. Although all Lahontan cutthroat trout populations that have been isolated from each other for about nine thousand years (since the desiccation of Lake Lahontan) exhibit little morphological differentiation and are all classified as the same subspecies, *henshawi*, they have all evolved different life-history specializations, and none were so finely adapted to make such efficient use of the Pyramid Lake environment as was the native Pyramid Lake trout—thus their enormous size.

What happened to the original Pyramid Lake cutthroat trout is an interesting case history of a conflict of values between settlers in the area and native Americans, particularly as this conflict relates to values associated with water. While the dating of artifacts indicates that the first native Americans appeared on the shores of Lake Lahontan about twelve thousand years ago, the present Paiute Indian culture at Pyramid Lake began only about six hundred years ago. The Pyramid Lake Paiutes developed great skills as fishermen and established a relatively stable, advanced society. The first nonnative Americans to visit Pyramid Lake were John C. Fremont, his scout Kit Carson, and their exploration party. Fremont had traveled south from Oregon to explore the Great Basin and to search for the mythical Buenaventura River that ancient maps depicted as draining the Great Basin to the Pacific Ocean. On January 10, 1844, Fremont and his party crested a ridge north of Pyramid Lake and were astonished at the sight of a vast sea existing in the midst of a great expanse of desert. Fremont's party camped near the mouth of the Truckee River where it entered Pyramid Lake and soon came in contact with the Paiute Indians. The initial contact was friendly. In fact, the Paiutes brought freshly caught trout to Fremont and his party. Fremont remarked, "Their flavor was excellent—superior, in fact, to that of any fish I have ever known. They were of extraordinary size—about as large as the Columbia River salmon—generally from two to four feet in length." Unfortunately, in less than a hundred years from the time Fremont first saw these giant cutthroat trout, this magnificent fish was actually exterminated from the waters of Pyramid Lake.

The California gold rush of 1849 and the Nevada mining boom of the 1850s brought many settlers to the Pyramid

Lake area. There were conflicts with the Paiute Indians, but during the 1860s a peace treaty was negotiated. The treaty established the Pyramid Lake Indian Reservation and gave ownership of Pyramid Lake and its fishes to the Paiutes. However, the Indians were given no control over the Truckee River, the only stream flowing into the lake that is suitable for the spawning of the cutthroat trout, and the major water supply for the lake.

The rapidly increasing population centers of western Nevada and eastern California created a great demand for lumber. Numerous lumber mills were set up on the Truckee River in California in the 1860s. As the stumpage in the watershed was lumbered, massive amounts of sawdust were dumped into the river, and in 1869 a Reno newspaper reported that "millions" of spawning trout were killed in the Truckee River as a result of sawdust pollution. During spring runoff, the sawdust deposits were transported to the mouth of the Truckee River, sometimes in such quantity that the spawning runs of trout from the lake were completely blocked. By 1875, dams blocked the river near Reno, effectively reducing potential spawning habitat by about seventy-five percent. From 1899 to 1930, a paper mill at Floriston, California, dumped up to a hundred fifty thousand gallons per day of highly toxic wastes into the Truckee River, eliminating all fish life for a considerable distance downstream. In addition, numerous unscreened irrigation ditches must have led to the destruction of millions of young cutthroat trout in the river as they migrated downstream to Pyramid Lake.

In 1868, the railroad was extended to Wadsworth, Nevada, a short distance from Pyramid Lake; this provided the opportunity to ship trout to distant markets and resulted in a tremendous increase in commercial exploitation of the resource. During their spawning runs, the trout were netted, snagged, speared, clubbed, and dynamited. It is incredible that even with all these adversities the Pyramid Lake cutthroat trout lasted as long as they did. They must have been a superbly adapted fish because they not only persisted but managed to remain abundant until the 1920s when successful spawning became rare.

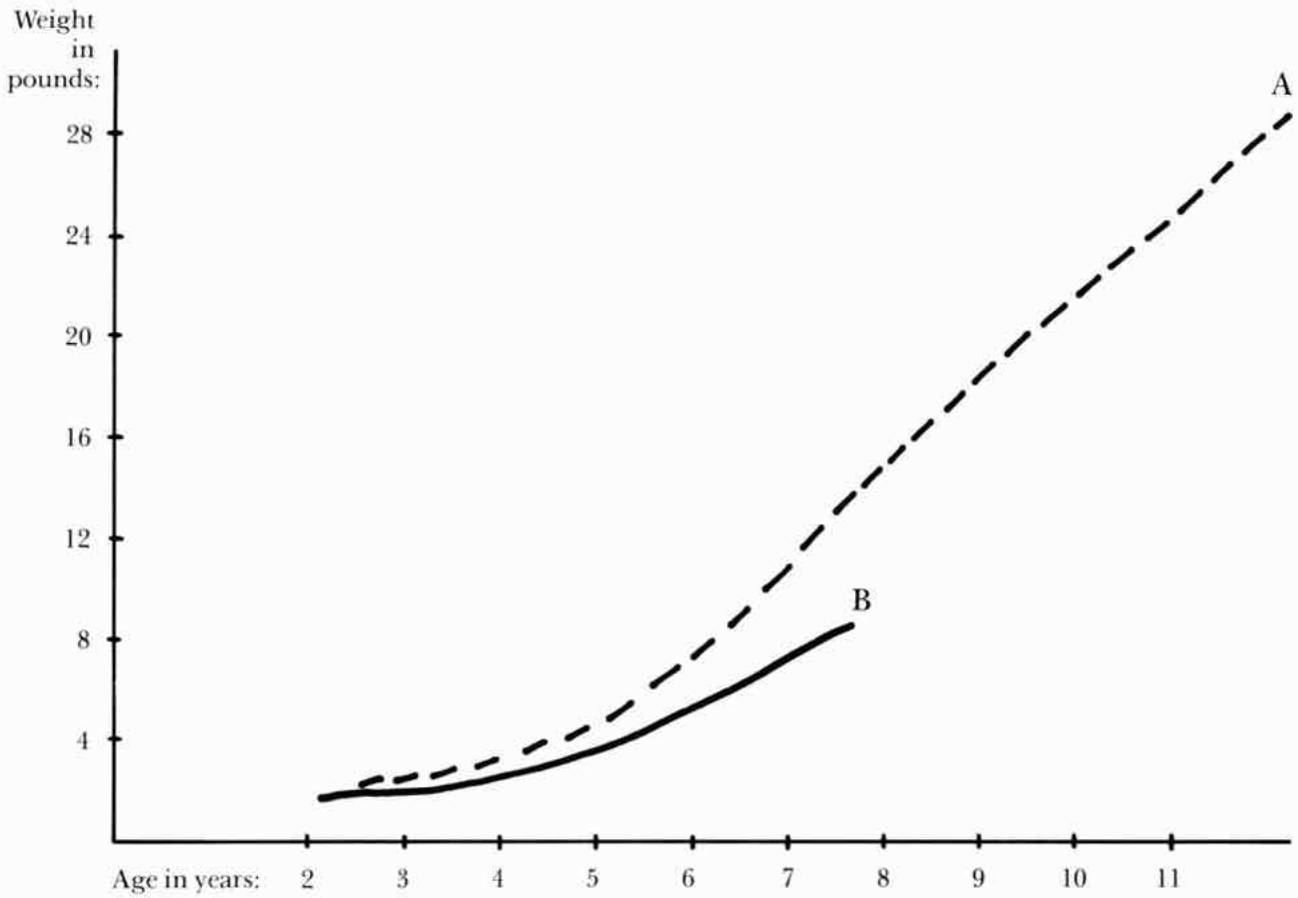
The ultimate demise of the Pyramid Lake cutthroat trout began in 1903 when a new government agency, the Reclamation Service (now the Bureau of Reclamation) annouced plans for its first project: the Newlands Project. It would divert water from the Truckee River to the Carson River in order to irrigate desert lands and make them bloom. The early history of the Newlands Project is one I am sure the present Bureau of Reclamation would prefer to forget, as it was an incredibly unwise use of a natural resource. The first Commissioner of Reclamation, Frederick Newell, drummed up support for the Newlands Project with speeches to Nevada audiences in which he frequently emphasized the philosophy of the department: "Fish have no rights in water law." This is still a popular cliche among western water-users.

The gates on Derby Dam, about thirty miles above Pyramid Lake, were closed June 7, 1905, in a grand ceremony highlighted by the dewatering of the Truckee River below the dam and resulting in the stranding of numerous, large cutthroat trout.[1] Derby Dam was constructed with a fish ladder, but the ladder was poorly designed and cheaply constructed. It was essentially a failure as a fish-passage device. Between 1905 and the early 1920s, there was a sufficient surplus flow in the Truckee River so that trout could spawn below the dam and even get over the fish ladder in some years. The trout population in Pyramid Lake remained relatively high, and their enormous size attracted presidents, supreme-court justices, and movie stars who had an interest in the gentle art. In the 1920s, the Bureau of Reclamation added an electrical generating facility to its Newlands Project, as it seemed utterly foolish to let surplus water flow out into a desert lake (only to evaporate) when it could be diverted through turbines that gererated electricity and additional income. Thus additional water was diverted out of the Truckee River to the Carson basin, and cutthroat trout spawning became more infrequent. The last major, successful spawning run occurred in 1927, with some reproduction reported in 1928 or 1929. Some artificial propagation and stocking occurred in 1930. A high flow in 1928 allowed some trout to get above Derby Dam all the way to Reno. The people of Reno had not seen the Pyramid Lake trout that far up the river for so long they forgot its correct classification and the mayor of Reno mistakenly declared Rainbow Day in honor of the cutthroat trout. In 1938 the offspring from this spawning run made the last attempt to spawn in the Truckee River, but the flow was shut off and the fish and their spawn perished. Thus ended the era of the world's largest cutthroat trout and probably the largest trout native to western North America. Stories relating that the native cutthroat trout did not completely perish from Pyramid Lake but were able to reproduce in springs on the lake bottom have persisted. But all known springs in Pyramid Lake have temperatures or chemistry lethal to trout eggs. I know of no evidence suggesting that the native trout did not become extinct in Pyramid Lake.

The data gathered on the 1938 spawning run is truly amazing. The Indians harvested 1,069 trout in their commercial fishery. When a United States Fish and Wildlife Service biologist weighed a sample of 195 fish from the run, the average weight was twenty pounds! He measured 321 trout taken from the 1938 spawning run; about ninety percent of these ranged from thirty-two to thirty-eight inches, with a few fish of forty inches. No maximum weights were given in this report, but extrapolation from a length-weight curve suggests that a forty-inch trout would weigh between thirty and thirty-five pounds.

How abundant was the original Pyramid Lake cutthroat trout, and what was its maximum size? These questions can never be known with any degree of certainty. In the 1880s, long after most of the upstream spawning and nursery areas were blocked or polluted in the Truckee River, commercial shipments of trout from Wadsworth ranged from two hundred to two hundred fifty thousand pounds per year. Records for another commercial fishery point at Verdi are not available. An unknown quantity of trout were transported by wagon to towns in Nevada and were consumed on the Indian reservation as well. I would estimate that even under the conditions of a declining fishery of the 1880s, the annual catch then was probably about five hundred thousand pounds, and the actual biomass of trout in Pyramid and Winnemucca lakes was in excess of two million pounds. The official world record cutthroat trout of forty-one pounds was caught in 1925 by a Paiute Indian, John Skimmerhorn, but there were reports of larger specimens taken by the Indian commercial fishery. Mr. Fred Crosby, the agent for the tribal fishery, claimed to have seen a cutthroat trout of sixty-two pounds in 1916!

The Nevada Fish and Game Department began to plant trout in Pyramid Lake in 1950 on an experimental basis. Rainbow trout were stocked at first, but it was soon found that the Lahontan cutthroat trout from available stocks in Heenan Lake, California, and Summit Lake, Nevada, grew faster and survived better than the rainbow trout. The advantage of Lahontan cutthroat trout over all other species and subspecies of salmonid fishes stocked into Pyramid Lake was most likely due to their tolerance to high alkalinity, or more specifically, to the concentration of carbonate and bicarbonate ions in the water. As salts and various ions are transported into Pyramid Lake each year via the Truckee River, evaporation and the lack of any outflow concentrates salts. Pyramid Lake water, in recent years, has exhibited an average salinity of about 5,400 parts per million or about fifteen percent of the salinity of ocean water (35,000 ppm.). Of the total (5,400 ppm. total salts) carbonate and bicarbonate ions average more than 1,100 ppm. Most



A. Estimated age and growth of the original native cutthroat trout in Pyramid Lake. Admittedly, there are little data available to construct such a curve, and considerable error may be involved. Spawning probably first occurred at age four at a size of three to four pounds. Thereafter, growth was rapid. The 1938 spawning run consisted of fish thirty to forty inches in length and averaging twenty pounds in weight. It is assumed that this run originated from reproduction from 1927 through 1930 or of fish aged eight to eleven in the 1938 run.

B. Known age and weight of 604 non-native cutthroat trout sampled in Pyramid Lake in 1975 and 1976. Of 604 fish age two or more, only six (1 percent) attained age seven and none were age eight. Typically, in large populations, the maximum weight of an individual in any age class is about twice that of the average weight of its cohorts; thus, the maximum weight expected from the original native cutthroat trout would have been at least forty pounds and perhaps sixty pounds. The maximum weight expected of the present non-native cutthroat throut stocked into Pyramid Lake would be about sixteen pounds. There is a hereditary basis governing maximum growth and maximum age. This fact must be recognized and used before the Pyramid Lake fishery can regain even a semblance of its former greatness.

fish species are physiologically stressed at carbonate-bicarbonate levels greater than 1,000 ppm. The pH of Pyramid Lake averages 9.2.

The stocking of Lahontan cutthroat trout from Heenan Lake or Summit Lake into Pyramid Lake, first by the Nevada Fish and Game Department, then by the United States Fish and Wildlife Service and by the Paiute Indian Tribe, can be considered successful in that a popular fishery for large cutthroat trout has been reestablished. Many more pounds of hatchery trout have been stocked, however, than have been caught in this fishery during the past thirty years. On the average, it takes fifteen to twenty hours of angling to catch a legal-sized trout. But a small group of Pyramid Lake "experts," fishing during winter months, have had considerably better angling success—and the exploits of these anglers have been the subject matter of several magazine articles. The present fishery pales in comparison to the fishery that was established when the trout were able to spawn in the Truckee River. Valid

creel-census data are lacking for the Pyramid Lake fishery. Various estimates during the past ten years indicate an annual catch of legal-size fish of four thousand to twenty thousand, averaging about twenty inches in size, or an annual harvest of about ten thousand to forty-five thousand pounds. Minimum legal lengths have ranged from fifteen to nineteen inches, and the present minimum is set at eighteen inches, with only flies and lures allowed. The annual catch of cutthroat from Pyramid Lake during the past ten years is probably less than five percent of the catch of a hundred years ago. In comparison, the maximum size and maximum life span of the nonnative cutthroat trout falls considerably short of the native Pyramid Lake trout. The graph compares the age and growth of the nonnative cutthroat trout stocked into Pyramid Lake with that of the native trout (the latter data is estimated from historical records). The maximum life span of the original strain was probably eleven years in Pyramid Lake. Adequate reconstruction of an age-growth curve of the original Pyramid Lake trout is hampered by lack of precise data. All that is known is that a run of trout from thirty to forty inches in length occurred in 1938 averaging twenty pounds, with a maximum weight of about thirty to thirty-five pounds. It is assumed that all of these trout resulted from spawning from 1928 through 1930. That is, they were eight to eleven years old. Nonnative cutthroat from Heenan Lake and Summit Lake origins have a maximum life span of seven years when they average eight pounds in weight. A hereditary-based difference between the native Pyramid Lake cutthroat trout and the stocks of Heenan and Summit lakes resulted in different life histories, influencing maximum size and age, which is predicted from evolutionary theory. The nonnative stocks of Lahontan cutthroat trout evolved in isolation from the past ten thousand years or more without large stocks of relatively large forage fishes in their environment. Thus, they did not obtain the size of the cutthroat trout in ancient Lake Lahontan.

It is interesting to note that from 1976 to 1978, several trout weighing more than twenty pounds were caught in Pyramid Lake. Twenty-pound trout were not caught before or since that time. What differentiated these large trout from the other nonnative cutthroat trout in Pyramid Lake? They could be the result of the size of the trout stocked, the time of year they were stocked, a particular stocking site (environmental factors), or a different origin of the planted fish (hereditary factor). I examined records of all of the trout stocked into Pyramid Lake from 1950 to 1977. In 1970, the Nevada Fish and Game Department stocked forty-eight hundred two-year-old Lahontan cutthroat trout of Walker Lake origin. Since 1948 the Walker Lake cutthroat trout have been maintained in a hatchery, but of all Lahontan cutthroat trout, the Walker Lake stock continued to evolve (until 1948 at least) as a predator on tui chub in an environment most comparable to Pyramid Lake. I suspect that the exceptionally large trout caught in the 1976 to 1978 period were eight- to ten-year-old Walker Lake cutthroat trout. I suggest that the hereditary factor be given more recognition if the Pyramid Lake fishery is to regain a semblance of its original glory.

I bring this matter up because in 1979 I published a paper with Terry Hickman that reported the discovery of what we believe to be the original Pyramid Lake cutthroat trout—still existing in a small stream on the Nevada-Utah border.[2] Mr. Hickman was attempting to locate populations of the rare Bonneville basin cutthroat trout at the time, when he found an unusual trout in a tiny stream draining Pilot Peak on the Nevada-Utah border. The characteristics of the newly found cutthroat trout unmistakenly identified it as the Lahontan basin subspecies *henshawi*. The small stream on Pilot Peak is in the Bonneville basin, so the trout had to be introduced by man. Cutthroat trout were known from the stream prior to 1950 (when Lahontan cutthroat trout from Heenan Lake were first available for stocking). We determined that Pyramid Lake cutthroat trout were the only source of Lahontan cutthroat trout propagated in Nevada (beginning in 1883) before the propagation of trout from Heenan and Summit lakes, thus the Lahontan cutthroat trout on Pilot Peak probably had its origin from the original stock native to Pyramid Lake. The existence for many generations of a small population in a tiny stream, in such a completely different environment from Pyramid Lake, has undoubtedly altered the genetics (heredity) of the only known living descendents of the native cutthroat trout of Pyramid Lake. However, I believe that the Pilot Peak population and the Walker Lake stock of Lahontan cutthroat trout might offer genetic diversity for larger maximum size and longer life span than is presently found in the Heenan Lake and Summit Lake stocks. By stocking large numbers of genetically diverse Lahontan cutthroat trout into Pyramid Lake, then continually selecting the oldest and largest spawners that survive in Pyramid Lake to reproduce the next generation (no significant natural reproduction is likely to occur in the Truckee River in the foreseeable future), a trout approximating the maximum size and age of the native trout might be obtained. By experimenting to determine the best rearing techniques, the most opportune size, time, and locations for stocking, and by producing sterile fish with no gonad development (which will increase growth and life span), it is probable that the annual catch of Pyramid Lake trout could be increased by fourfold to fivefold over current levels, and a new world-record cutthroat trout might be in the offing. This is all predicated, however, on a sufficient flow of water (about four hundred thousand acre feet per year) in the Truckee River to maintain the Lake at its current level. In 1983, after a long legal battle, the Supreme Court of the United States ruled that the Pyramid Lake Indian Tribe is legally entitled to only thirty thousand acre feet of water each year from the Truckee River for irrigation and that they have no legal claim to the water for Pyramid Lake or its fishes. I can only hope that there are public officials with an innate sense of justice and decency who will attempt to work out a compromise on water use in the Truckee River basin so that flow adequate to maintain the present lake level can be achieved. I also hope that some of the ideas and theories discussed herein will be applied in an effort to restore the greatness of the Pyramid Lake trout fishery. §

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1. Water diverted from the Truckee River lowered the lake level by eighty-five feet, most of the decline coming after 1920. Evaporation rates are high in this desert region—about four feet per year. If no inflowing water were to enter Pyramid Lake from the Truckee River for one year, the lake level would drop by four feet minus the relatively few inches of precipitation falling directly on the lake and the very minor input of a few springs and ephemeral dry washes. The surface area of Pyramid Lake and connecting Winnemucca Lake was about two hundred thousand acres until around 1910. Since then the lake has shrunk to little more than one thousand surface acres.

2. T. J. Hickman and R. J. Behnke, *The Progressive Fish-Culturist* (1979), *41*, 135.

Robert Behnke is a professor of fisheries biology in the department of Fishery and Wildlife Biology at Colorado State University, Fort Collins, Colorado. In addition to numerous professional articles, he writes a regular column for Trout *magaine. He has also written the section on salmoniformes for the* Encyclopedia Britannica. *We would like to add a note of thanks to Bob Berls, John Mingo, and Chip Clark, who were instrumental in obtaining the color photographs of Hudson's paintings of the cutthroat trout that illustrate this piece.*

William Radcliffe and the Grand Mesa Lakes Feud

William Radcliffe (1856 to 1938) was a wealthy Englishmen who owned several lakes on the Grand Mesa and operated two hatcheries for fish propagation before the turn of the century. He was a graduate of Oxford and quite a sportsman. He usually spent his summers in Colorado and the rest of the year in Paris or London. The illustration is from the Rocky Mountain News *(July 19, 1901, p. 3) and was furnished by the Colorado Historical Society.*

by William Wiltzius

Fishing from the Earliest Times *(first edition, 1921; second edition, 1926) was written by William Radcliffe, a wealthy Englishman, Oxford graduate, and accomplished angler. The book is well known to angling bibliophiles for its exhaustive and extensive treatment of angling in ancient times. The second edition is considered more useful because of its excellent fifteen-page bibliography. A little-known fact recently brought to our attention is that Radcliffe owned and operated a fish hatchery for a short period of time (1896 to 1901) in Colorado's Grand Mesa lakes region. We reprint below a portion of the appendix section of William J. Wiltzius's recently published book,* Fish Culture and Stocking in Colorado, 1872-1978 *that describes the details of Radcliffe's unfortunate difficulties with the American West. For those of you interested in the history of American fish culture, we highly recommend Bill Wiltzius's delightful book. It can be obtained by writing to the State of Colorado Department of Natural Resources, Division of Wildlife, 6060 Broadway, Denver, Colorado 80216. The price for this paperbound edition (102 pages and replete with numerous illustrations) is only five dollars, postpaid.*

BACKGROUND

On May 14, 1896, a wealthy Englishman named William Radcliffe acquired certain leases to property adjacent to Alexander Lake for $7,000, as well as irrigation rights and exclusive rights of fishing and propagating fish in all twenty of the Grand Mesa lakes operated by the Surface Creek Ditch and Reservoir Company. At that time, the property included a hotel, stables, cabins, one fish hatchery, an ice house, and outhouses.

Radcliffe's acquisition, which was for ninety-nine years, was obtained from Richard Forest, who earlier had propagated fish on Grand Mesa with his partner William Alexander. Mr. Alexander, namesake for one lake in the chain of more than a hundred lakes on the mesa, had mysteriously disappeared around 1893. Apparently, after his disappearance the Grand Mesa lakes were heavily poached by local residents. Radcliffe learned that for two or three years before he bought the property, fish had been taken by illegal methods (i.e. seining, snagging, and dynamiting) while running up small streams to spawn. Even before the disappearance of Mr. Alexander, the Grand Mesa lakes had a rather tainted history of illegal propagation of fish and fishing.

In July 1891, Colorado's Fish Commissioner, Gordon Land, found it necessary to personally inquire into alleged violations of the fish laws in western Colorado. Mr. Alexander, of Delta County, had been shipping trout to Leadville and Ouray at profitable figures, claiming the trout were propagated in his lakes at the

The old fish hatchery on Alexander Lake was just part of Radcliffe's Grand Mesa Lakes property that was destroyed by irate mobs retaliating for the killing of Womack. Radcliffe countered with a claim against the United States and eventually was awarded $25,000 for damages.
Photo courtesy Colorado Historical Society

head of Surface Creek. However, Mr. Land's inspection into the matter demonstrated that the lakes designated by Alexander and his partner had been stocked by trapping the fish from adjacent streams and impounding them in Alexander Lake (see illustration). No hatchery was located on the property then, nor had been in the past. The trout stolen from public waters had been confined in this alleged summer-resort lake, later to be removed and sold under the pretense that they were from private ponds. Mr. Alexander was fined fifty dollars and costs, and each party who bought fish from him in Leadville and Ouray was also fined according to the law.[1]

While these "propagators" were conducting their fish business, they were getting stiff poaching competition from the Delta County locals who made it their custom every spawning season to procure about a year's supply of fish. This was accomplished at the chain of irrigation lakes on Grand Mesa. When large numbers of trout had left a lake and ascended a connecting stream to spawn, the poacher would lower the headgate to that stream, leaving the trout high and dry. Although one poacher could accomplish this task, efficiency was improved if at least two were involved—one to drive, scare, or concentrate the trout in an area of stream where a wagon could be easily loaded, and another to lower the headgate and return to assist in loading the wagon. According to *Field and Farm* (May 8, 1897, p. 12), the early fish culturists at the Grand Mesa lakes disposed their fishing rights and propagational privileges to the Englishman Radcliffe, because they could not control the local poachers.

GRAND MESA LAKES FEUD

After acquiring the facilities at Alexander Lake, Mr. Radcliffe began to improve his property and to propagate trout. He built two houses for his employees and a private house for himself, along with a fish house and a second hatchery. Radcliffe usually stayed at his Grand Mesa estate only during the summers and spent the rest of the time in Paris or London.

Similar to the charitable endeavors of Mr. Kirkpatrick, who operated a large fishery preserve in the Durango area, Radcliffe donated many cutthroat trout (eggs and young fish) to the state for stocking in public waters. Unlike Kirkpatrick though, and probably because of the notorious and scandalous poaching that had transpired earlier at the Grand Mesa lakes, Radcliffe employed as many as seven deputized state game wardens to patrol his property. He also required that fishermen obtain a permit to fish his lakes. This, no doubt, irritated many law-abiding fishermen and incensed those persons who had been accustomed to poaching the Grand Mesa lakes. Soon Mr. Radcliffe was accused of giving fish-

1. *Field and Farm*, July 25, 1891, p. 2.

Island Lake on Grand Mesa is where Womack was murdered in July 1901 by a state-deputized game warden The warden had been employed by Radcliffe to prevent poaching at his lakes. The photo is from the State Fish Commissioner Biennial for 1915-16.

ing permits to only a favored few. He denied this, saying:

> No one has ever been refused a permit to fish in a way laid down by the law of the state of Colorado and to take away with them all their catch without payment of a single cent. On the other hand, I have strictly insisted upon the observance of the game laws.

In 1899 Colorado legislators passed a law that required, for the first time in the state's history, a fee for procuring a license to operate any privately owned game and fish preserve within Colorado. Radcliffe was quick to comply. Of thirty-six licenses issued before September, Radcliffe's was the second. Colorado's Fish Commissioner Johnson issued a Class A park or lake license to Mr. Radcliffe on May 4, 1899. It entitled him to propagate, catch, and sell fish from thirteen of the Radcliffe lakes as well as the streams connecting these lakes. Since 1896 Radcliffe had used only twelve of the twenty lakes originally acquired (Alexander, Barren, Eggleston, Upper Eggleston, Hotel, Upper Hotel, Island, Deep Slough, Sheep Slough, Carp, Beaver, and Beaver Dam).

Radcliffe's fish business finally became lucrative by 1899. The expenses associated with hiring spawn-takers and culturists were lessened considerably through a contractual agreement with the U.S. Fish Commission, which took on those tasks in exchange for a share of the eggs collected at the lakes. Either because of jealousy of Mr. Radcliffe's success with his fish business or irritability associated with his requiring permits and employing guards, Delta County residents, in August of 1899, filed a suit questioning the legality of Radcliffe's newly acquired Class A license. Charges of fraud and misrepresentation were made. A general misunderstanding of this new license law prevailed in Colorado then, and many of the press releases were either inaccurate or very confusing. Judge D. C. Beaman, who had been the instigator of the lake license law in the legislature earlier in the year, assisted Radcliffe in the suit defense. The ruling favored the legality of Radcliffe's license, which further irritated many residents.

Adverse feelings toward Radcliffe still festered nearly two years later. William A. Womack, a well-known cattleman and resident of Delta County since the late 1880s, had been warned several times about poaching the Grand Mesa lakes. He had his summer cattle range near the lakes, and on July 14, 1901, accompanied by four of his range riders (Frank Hinchman, Frank Trickle, and Dan and John Gipe), Womack proceeded to the Grand Mesa lakes to fish (?). According to an item in the *Rocky Mountain News* (July 19, 1901, p. 3, col. 1), it was Womack's intention not to show his fishing permit, and if ordered away from the lakes, to take the matter into the courts and make Radcliffe show upon what authority he prevented people from fishing the lakes.

On that date, Womack's fishing party was confronted and warned away on two occasions by Frank A. Mahany,[2] one of Radcliffe's deputized state game wardens. Radcliffe was away from the lakes on business that day. Details of what actually happened varied considerably and later were the subject of a sensational trial, because warden Mahany shot and killed Womack and wounded Hinchman during a confrontation at Island Lake (see illustration).

The killing of Womack so provoked the local residents that on the evening of July 16, 1901, an irate mob set fire to all of Radcliffe's buildings except his two hatcheries, a fish house, an ice house, two small cabins, and two large cisterns. These were spared because it was believed that the U.S. Fish Commission had a share in them.

After 1899, Radcliffe operated his fish business under an agreement with the U.S. Fish Commission, whereby they were to send E. S. Tulian, Leadville hatchery superintendent, and three other men to the lakes to collect eggs. From the close of the spawning season, on about July 4, two men were to be left as long as necessary to attend to hatching the eggs (cutthroat trout) in Radcliffe's hatchery and to plant the fry. The first half-million eggs were to be put in Radcliffe's hatchery, the next half-million brought to the Leadville hatchery, and so on. From the eggs taken to the Leadville station, Mr. Radcliffe was to receive 33.3 percent of the fry.

After it became known that the buildings spared by the first mob belonged to Radcliffe and were not those of the U.S. Fish Commission, on August 25, 1901, a second mob set fire to and destroyed all of Radcliffe's remaining property. Because of repeated mob threats between July 16 and August 29, 1901, and the lack of state or federal government protection, neither Radcliffe, his employees, nor the U.S. Fish Commission men under contract to Radcliffe, were able to give expert care to the approximately two million eggs and young fish. Many died or became diseased, despite reports to the contrary. Shortly after the first mob had struck, Radcliffe notified the U.S. Fish Commission in Washington that they were in breach of their contract with him.

He was informed by his lawyer that the laws in Colorado made it impossible to

2. At least six different spellings of this name have appeared in print (Mahany, Mahaney, Mahoney, Mehaney, Mehany, and MoHaney). My use of Mahany is based on the spelling found in State Supreme Court documents.

take civil action against the State of Colorado, the County of Delta, or against the sheriff. Radcliffe's only recourse was a civil action for damages against the individuals composing the mob. But most of the mob were masked, making legal identification almost impossible. Furthermore, even in the event of obtaining a judgment against some of the mob, the laws of Colorado gave an exemption of $2,000 in cases of judgments against ranchmen, etc., and Radcliffe was informed that not one of the mob was worth even $1,000.

Meanwhile, lawyers for Mahany procured a change of venue for his trial. It was moved from Delta to Gunnison. This change most likely resulted because of an attempted lynching of Mahany and the unlikelyhood of obtaining an unbiased jury in Delta. On September 20, 1901, the trial began. On the twenty-second Mahany was found guilty of manslaughter, but he was not sentenced at that time. Evidently, on September 27, 1901, his lawyers waived the filing of a motion for a new trial and stated to the district court in Gunnison that he consented that judgment for involuntary manslaughter be entered on the verdict. The court declined to pass sentence, however, and over the objection of the lawyers, ordered that the verdict be set aside and that there be a new trial. Before this second trial began, Mahany also had lost an appeal for a Writ of Habeas Corpus in the state supreme court (*Colorado Reports*, January term 1902, vol. 29, pp. 442-446).

Radcliffe, apparently dejected by the adverse feeling toward him in Delta County and the governor's refusal and U.S. government's inability to protect his property or life, on November 15, 1901, leased his Grand Mesa lakes property, including his exclusive rights of fishing and propagation, to the U.S. Fish Commission for the sum of one dollar for three years. Late in December 1901, Radcliffe appealed to the British Embassy in Washington, D.C. He noted the facts of his case, supported by affidavits, and requested that demands be made on the U.S. government for redress and compensation for $65,000. His case consequently became an international affair. Over the next forty months, much correspondence, with additional supporting facts and affidavits, was generated. Both state and federal governments investigated the case (see Claim of William Radcliffe, Senate Document 271, pp. 1-40, Fifty-eighth Congress, Second Session, 1903 and 1904).

Mahany, meanwhile, underwent a retrial at Gunnison on April 23, 1902. A jury found him guilty of voluntary manslaughter, even though five of the jurymen were for acquittal when balloting began. His attorney immediately filed a motion for a new trial before he was sentenced. On April 26, 1902, Judge Stevens sentenced him to not less than six nor more than eight years in the state penitentiary at Canyon City. A writ of supersedas was applied for in the state supreme court and was granted on April 29, 1902. The *Denver Republican* (April 30, 1902, p. 3, col. 6) reported that this kept Mahany from the penitentiary, since orders had been sent to the sheriff of Gunnison County to hold him until the supreme court could pass on his case. Eventually, Mahany brought an action to the state supreme court, alleging that the district court in Gunnison erred in refusing to sentence him upon the first verdict to a term in the county jail; erred in overruling his plea of former jeopardy; and erred in rendering judgment upon the second verdict. In April 1903, the state supreme court ruled to the contrary, however, thereby affirming the verdict and the sentence passed during Mahany's retrial at Gunnison in 1902 (*Colorado Reports*, 1903 [April term], vol. 31, pp. 365-369).

The Mahany case was not yet finished. Over the ensuing eighteen months, a group of Mahany's West Slope friends, led by Mrs. Mahany in Fruita, worked diligently toward obtaining a pardon for him. Eventually a petition, which pointed out that Womack had threatened Mahany on numerous occasions and that he had been repeatedly warned about poaching, was submitted to the state pardon board on November 18, 1904. This petition contained the signatures of seven of the jurors who had convicted Mahany, fifty local businessmen, and many of the residents of Fruita. The board granted an unconditional pardon to Frank Mahany, thus, concluding one of the most sensational murder cases in the early history of Colorado (*Denver Republican*, November 19, 1904, p. 12, col. 1).

Mahany was free at last, after being confined for more than forty months. Most of that time he had spent in the county jail at Gunnison before being sent to the state penitentiary. On November 21, 1904, Mahany went to Fruita for a joyous reunion with his family, which included his young children. They had been residing there with Mrs. Mahany's father. The next day Mrs. Mahany went to Grand Junction to express her thanks to those who had given her assistance (*Grand Junction News*, November 26, 1904, p. 1, col. 4).

By February 1904, Radcliffe's claim had progressed to the point where the U.S. Secretary of State informed the British ambassador that the Justice Department had determined to ask the President that he recommend to Congress a sum of $25,000 be appropriated for the relief of Mr. Radcliffe, if he would accept it in full payment for damages suffered. Radcliffe agreed, and on April 14, 1904, President Theodore Roosevelt recommended this to Congress. But it was not until January 9, 1909, that Congress passed an act to appropriate the $25,000 to Radcliffe (*U.S. Statutes at Large* Sixtieth Congress 35 [pt. 2, chap. 17], p. 1400). By this time, however, I estimate that the U.S. Fish Commission had procured additional cutthroat trout eggs and fish from the Grand Mesa lakes valued at approximately $26,600. The U.S. government may have delayed payment to Radcliffe until the $25,000 was fully recovered. Colorado benefited because the Fish Commission, with those additional eggs and fish, produced approximately five million more cutthroat trout than they would have otherwise, and most of those were stocked in Colorado waters. Furthermore, other eggs of species such as brook and rainbow trout were also taken by the commission from the Grand Mesa lakes before 1910. Clearly, the U.S. Fish Commission was not the loser in this case, except that it soon lost its rights to take eggs from these lakes. In the *U.S. Fish Commission Report* for fiscal year 1910 (pp. 9 and 10) the following is found:

> At present only two stations—one in New England and one in Colorado—obtain their supplies of eggs from wild fish, and the fields heretofore open to them are narrowing each year because of the encroachments of commercial fish culturists. In 1910 Wellington Lake and the Grand Mesa Lakes, heretofore the most productive sources of the Colorado station for eggs of the blackspotted, brook, and rainbow trout, had to be given up to private enterprise.

After the first mob had struck in July 1901, Radcliffe feared for his life and never returned to his once-beautiful estate at Grand Mesa lakes. While negotiating with the U.S. government through the British ambassador, he spent some time in Denver and in New York City before he returned to England. In 1921 he published *Fishing from the Earliest Times*, a tome describing fishing techniques and methods used by ancient civilizations. William Radcliffe died on May 10, 1938, in Kent, England, at the age of 81 (*New York Times*, May 11, 1938, p. 19, col. 5). §

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Notes and Comment

New Quarterly Magazine on Lure Collecting Issued

A new quarterly publication entitled the *Lure Collector* has recently been issued by editor-publisher Keith Brewer. Twenty-four pages long, illustrated, and with a self cover, the *Lure Collector*'s purpose is to disseminate information relating to antique plugs, flies, and tackle. A year's subscription is fifteen dollars; additional information can be obtained by writing to Mr. Brewer. His address is: Route 3, Box 086-B, Maxton, North Carolina 28364.

The Austin Hogan Award

When we announced the winner of the Austin Hogan Award in the last issue of the *American Fly Fisher*, we did not have in hand a photo of the award's first winner, namely Professor Richard Hoffmann. In an effort to rectify this unfortunate situation, we now publish a picture of said winner sans his academic garb.

The fish, a rainbow trout of ample proportions we are told, was released shortly after the picture was taken.

More on Austin Hogan

We include herein a letter received too late for inclusion in the previous issue of the *American Fly Fisher*.

...I first knew Austin in the early days of the Museum, during that hectic time when he was coordinating efforts to put together the first issue of the *American Fly Fisher*. Looking back over the pile of correspondence of those months, the thing that strikes me is the enormous amount of energy and commitment shown by Austin. That he managed the business of the Museum and still found time for personal research was astounding; coping with organizational and financial problems, cataloging donations, conducting research, editing a journal, and at the same time corresponding with dozens of friends and contributors required a Herculean effort.

Of course the first issue of the journal was a smash hit, and things seemed to settle down a bit. Still, there were continuing problems, some of which had a distinctly surreal edge to them. Austin once wrote that he was at his wit's end (Austin often used far stronger language, but when he used this particular phrase, you knew things were serious) about what to do with a rod-beveling machine of Hiram Leonard's that had been donated to the Museum. The Museum had the bevel but no funds to dismantle it, nothing to haul it in, and no place to store it (as I recall, it was at least twelve feet long). The whole affair had a Laurel and Hardy twist about it—Austin and Arnold Gingrich stuck with this two-ton monster and no place to put it. I got the impression that they must have camped out with the damned thing, unless Arnold with his love of gadgets decided to take it home with him.

As an angling historian, Austin had all the characteristics of a Bollandist scholar—patience, tenacity, and an insatiable curiosity about historical processes. His research standards were the highest, and he was unwavering in his insistence that full documentation accompany anything claimed as fact. Above all, he scorned shoddy, hasty work and could be scathing in his criticism—but never unless it was warranted. Austin was impatient with and irritated by gossip being passed off as historical fact, and I have more than one letter from him in which he railed against the caveats, distortions, half-truths, and downright lies that had worked themselves into the mainstream of contemporary angling history. For someone like Austin who valued truth and accuracy, these things were inexcusable; he knew the cumulative and damaging effect that resulted from would-be historians subjectively validating pet theories—fitting data to their own preconceived ideas (a case in point from an earlier time was James Henshall). Austin wanted the full, unromanticized story; for him, the shadow was as important as the light.

Austin understood as well the naivete and superficiality of the "book of nature" approach to history, in which the past was seen as simply so many separate and discrete chapters set aside and just waiting to be discovered and neatly ordered. For Austin, the fascination of angling history lay in its complexity, the bewildering intermeshing of various forces—economic, social, psychological—that gave rise to the particular event or invention. He emphasized repeatedly that in addition to economic factors, the history of tackle development in this country would be found in the history of the machine shop; that one could not understand the evolution of tackle without first understanding the evolution of the technology that made it possible. Austin was interested in the whole fabric of angling history.

As for fishing itself, Austin maintained a purely democratic view. It will dismay some to learn that he would not endorse fly-fishing-only waters. This attitude reflected his appreciation for moral irony and his distaste for anything that hinted of pretension and sanctimony, for he deplored the elitist concept of the fly fisher as somebody special to be pampered. While he could understand and applaud the professed concern for the environment and the resource on the part of modern fly fishermen, he also knew the misguided evangelicalism that could result—in its extreme form masking a monumental narcissism and intolerance.

For as long as I knew him, Austin's primary interest in tackle itself were the flies. When I first knew him, I found this curious but later began to understand his fascination for all the patterns: it was the color, the life, and the freedom that the fly represented. The fly was the real magic. This love of fly patterns was expressed exquisitely in Austin's watercolors of fly patterns —meticulous and flawless in detail and rendered with an unerring sense of color (and all painted during his recurring bouts of arthritis). I believe it was the romance of the fly that captured him.

Austin's personality was a rich and complex one, full of healthy contradictions. In spite of his pragmatic and hard-nosed realism—a persona reflecting the conservatism of Thoreau and Melville and unmistakeably Yankee—he had a streak of the romantic in him and was, by his own admission, a hedonist with a particular passion for oysters and jazz (said he couldn't play, but he sure could listen). He was always young in spirit and had a broad range of interests, which made for stimulating talk. His list of "projects" was unending.

All of us who knew Austin remember him for his generosity and thoughtfulness, for his inquiring mind that brought us together with common interests and goals, and for having shared a part of his life with us.

We shall all miss him.

John Orrelle
Oregon City, Oregon

Join the Museum

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 and the American Association for State and Local History. We are a nonprofit, educational institution chartered under the laws of the state of Vermont.

Support the Museum

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 the Museum

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

Back Issues of the *American Fly Fisher*

The following back issues are available at $4 per copy:

Volume 6,	Numbers 1, 2, 3 and 4
Volume 7,	Numbers 2, 3 and 4
Volume 8,	Number 3
Volume 9,	Numbers 1, 2 and 3
Volume 10,	Numbers 1 and 2
Volume 11,	Numbers 1, 2, 3 and 4
Volume 12,	Numbers 1 and 3

The American Museum of Fly Fishing

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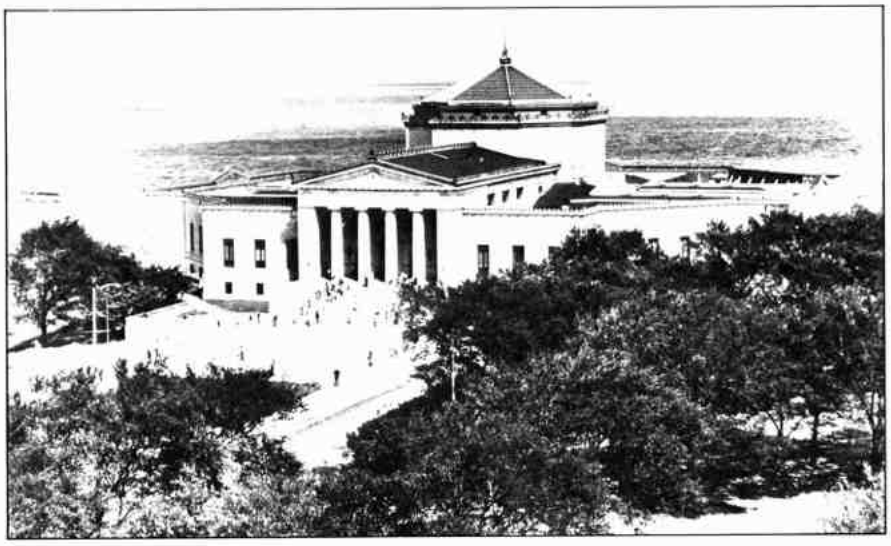
Museum News



Chicago's John G. Shedd Aquarium

"Anglers All" to Chicago

The American Museum of Fly Fishing's highly acclaimed traveling exhibition—"Anglers All: Man and His Environment Through 500 Years of Fly-Fishing"—will be on view at Chicago's John G. Shedd Aquarium from June 1 through September 7, 1986. This exhibit was displayed at the California Academy of Sciences in San Francisco during the summer of 1985, where it was estimated to have been seen by more than one million visitors.

The Shedd Aquarium is on Lakeshore Drive in downtown Chicago, with easy access from O'Hare Airport. This central location should facilitate attendance not only by midwestern enthusiasts but also by the Museum's members and others who may find it easy to stop and see the exhibit in the course of their summer travels. The Shedd is open from 9 A.M. to 5 P.M. seven days a week.

The American Museum of Fly Fishing has the world's largest public collection of fly-fishing artifacts and memorabilia; "Anglers All" features highlights from this collection.

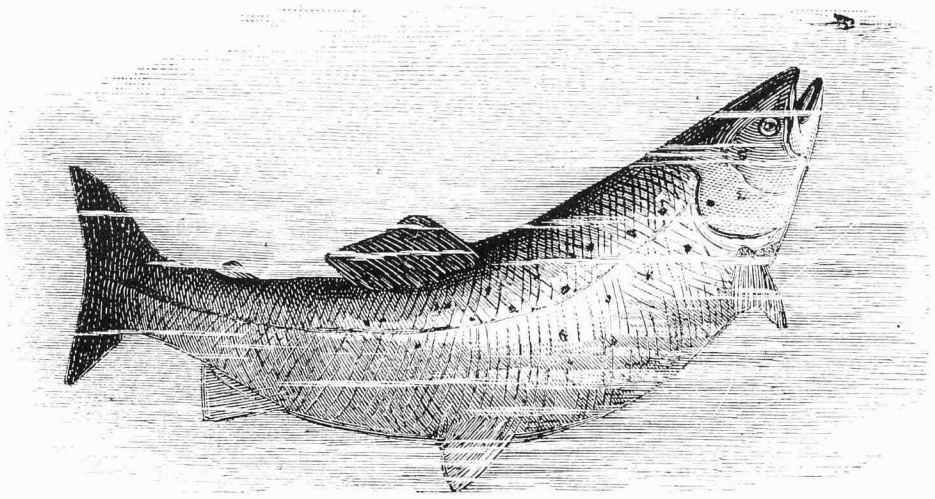
More than 200 years of fly-reel design and development will be represented, with displays depicting the evolution of fly rods during the same period. Not a few past fly fishers were famous in their own right, and in Chicago viewers will see tackle that belonged to and was used by Bing Crosby, Herbert Hoover, Ernest Hemingway, Samuel Morse, Andrew Carnegie, and others. Fly-tying—that subtle art of concocting insect imitations from feathers and fur—will be well represented also, as Victorian tools and materials are displayed alongside their very much changed modern counterparts. Visitors will have a chance to rummage in great-grandfather's attic—he was a fly fisherman, of course, and his collection of artifacts is at once amusing and astounding.

"Fly-fishing," explains John Merwin, executive director of the American Museum of Fly Fishing, "has been a major American pastime for hundreds of years. No other sport has such a rich fabric of lore and tradition. In keeping with our museum's National Exhibit Program, it's a real pleasure to present this exhibit in Chicago in cooperation with the Shedd Aquarium. It is without question the finest exhibit of its kind ever assembled."

AMFF Annual Meeting September 4, 1986

The next annual meeting of both the membership and the Board of Trustees of the American Museum of Fly Fishing will be on September 4, 1986 (Thursday), in Chicago. The date and the following schedule were set at a meeting of the Executive Committee on March 4, 1986. 1:00 P.M., President's Luncheon: for a general discussion, trustees and members invited. 2:30 P.M., Combined Members/Trustees Meeting. The First Annual AMFF Chicago Auction/Dinner will be held in the evening.

The locations for these events will be announced soon. See you in Chicago! §



A Question of Dates

We are often asked to date a particular item of angling memorabilia for one of our members. We are delighted to do this. In the case of rods and reels, the task is easiest—but not necessarily easy. We rely mostly on our patent file and on our collection of tackle catalogs. If no information is forthcoming from these sources, however, we resort to a letter or phone call to an expert in the field, usually another museum member. While the Museum's patent file is almost complete, our collection of American fishing tackle catalogs from both the nineteenth and twentieth century is deplorably incomplete. For example, we have only one nineteenth-century Orvis catalog (circa 1890, and this is a photocopy), an 1882 Abbey and Imbrie catalog, a few Chubb catalogs, and a smattering of various twentieth-century offerings. In order to better serve our membership and also to be able to establish as accurately as possible the date of manufacture of items in the Museum's holdings, it is imperative that our collection of tackle catalogs be improved. We implore those of you with items of this ilk to seriously consider making a donation to the Musuem. We are especially interested in catalogs issued prior to 1950. We hope to hear from you soon.