“It was a fearful stroke, but they made their old boat hum.”

A Social and Technical History
of Rowing in England and the United States

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Introduction

All over the world today, rowing is a sport that offers to its athletes, even those who reach the Olympic level, amateur status and athletic obscurity. The majority of rowing's participants pick it up later in life, compared to many other sports, and it is rarely an athlete's first sport, but is one that often offers them second chances. Institutionally, rowing is also rarely the focus of much attention in the athletic department. Despite such apparent drawbacks however, rowers are as passionate and devoted to their pursuit as any highly paid, well-publicized professional athlete.

All team sports lay claim to the "ultimate team sport" mantle when describing what it takes to be successful, and rowers are no different. However, the combined unity of the oarsmen, who must be in perfect synchronization with one another while rowing; the relationship between the oarsmen and their boat and oars, which serve as extensions of their arms, back, legs and lungs; and the relationship with the water and the wind, blend together to form a unique sporting environment of physical and mental challenges and rewards.

Today in the United States, rowing is a sport performed largely on the collegiate level; the majority of its participants learn to row in college without any prior introduction to the sport. There are, however, a number of notable areas of growth for rowing in the United States: at the junior level for high school-aged youngsters; for women at the collegiate level, due largely to recently achieved NCAA recognition for women's rowing; and for Masters rowers, aged 27 and above. There are more rowing opportunities now than ever before.

Rowing is a sport whose complexity goes beyond simply trying to master the various movements. There are various classes of boats, and rowing can be divided into two categories: sweep rowing and sculling. The difference is in the number of oars the oarsman handles. While each discipline is difficult to master and has its own subtleties, it

is not uncommon, either in the past or present, for oarsmen to be adept competitors as both sweep rowers and scullers. Sweep rowing consists of each oarsman using one oar and thus rowing either port or starboard in boats holding two people (pairs), four people (fours), six people (sixes, although this class of boat has not been used since the 19th century), or eight people (eights). Sweep boats sometimes employ coxswains in both pairs and fours, and always use coxswains in eights.

In sculling, an oarsman uses two oars, one in each hand, in boats holding one person (singles), two people (doubles), or four people (quads), almost always without coxswains (with the exception of some quads rowed at the junior level). Though the history of rowing consists of both sweep rowing and sculling, collegiate competition in the United States and school and University rowing in England has been sweep rowing almost exclusively. For this project the terms "rower" and "oarsman" are used interchangeably, referring to both scullers and sweep rowers.

On the international level, rowing has made an attempt to become more accessible outside of Western Europe, North America and Commonwealth nations. FISA, (Federation Internationale des Societes d'Aviron) the international governing body of rowing, founded on June 25, 1892, recently instituted changes to the events schedule beginning with the 1996 Olympic Games in an effort to increase the number of countries and athletes competing at the highest level. They have substituted "lightweight" events, in which male competitors weigh less than 160 pounds and female competitors weigh less than 130 pounds, for traditional "open weight" events in which there is no weight limit for competitors. Additionally, the organization has added these events in the smaller boat classes, for two or four oarsmen. The intention is that by making space at the Olympic level for smaller boats, rowed by smaller people, rowing will spread to more nations in order to help fulfill F.I.S.A.'s stated goal "to establish rowing in its many disciplines as a

universally practiced sport,"[1] as well as maintain good standing with the International Olympic Committee. Early indications are that this goal is being achieved; participation in these Olympic events at the World Rowing Championships from smaller, non-traditional rowing nations has increased every year since the changes were made.

However, with a few notable exceptions, rowing is a sport practiced largely out of the public eye, on rivers and lakes where the only observers may be the coach following along in a launch or a small number of spectators, often family, who are drawn to the water on race day. The quadrennial Olympic Games, the annual festival that is the Head of the Charles Regatta in Boston, Opening Day in Seattle, the annual Harvard-Yale four mile race on the Thames River in New London, Connecticut, and its ancestor, the Boat Race between Oxford and Cambridge Universities on the Tideway in London, as well as the Henley Royal Regatta in Henley-on-Thames, are where rowing makes its way into mainstream consciousness.

Rowing was not always this way. In 19th-century America, rowing was not an obscure blue-blood pastime as it has often been categorized; instead, it rode a wave of popularity on club, professional, and eventually collegiate levels across the country. Such popularity kept its heroes in the pages of newspapers and magazines and drew thousands of spectators to the water's edge for all levels of racing. The club and amateur oarsmen often went on to become professionals, while the geographical areas where rowing flourished - such as Boston, Philadelphia, New York City and Upstate New York - supported fledgling collegiate rowing programs alongside the amateur and professional oarsmen plying the same water. As America's passion for sporting traditions grew, rowing was there to provide the drama before what are now the big three sports - baseball, football and basketball - evolved sufficiently to capture the public's attention. It was the professional oarsman, however, who truly captured the public's imagination and

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1 Http://www.fisa.org/fisa2/fisastrategicplan.html. January 12, 2000.

whose successes and failures provided decades of sporting news to post-Civil War America. These same oarsmen also breathed life into what is now the main arena for competitive rowing in the United States, the college rowing program, by paving the way as the first professional coaches.

Directly and indirectly, however, England was the birthplace of competitive rowing for sport in the world. The use of oared boats for warfare in the ancient world, often manned by slaves rowing literally for their lives, was certainly "competitive" rowing at its most intense, but is significantly different from the origins of rowing for sport in the 19th and 20th centuries. In England, as in America, rowing was one of the major sporting activities during the 19th century. The English approach to the sport proved to be the major influence on the world for most of the 19th century. But the English approach would also be a source of friction both in England and America as the sport evolved in both countries.

The birth of America's own rowing tradition during the middle and later years of the 19th century had undeniable ties to England, whose competitive rowing tradition had preceded that of the United States' by a few decades. However, by the early part of the 20th century the sport was firmly entrenched in the United States. Although it was not as widespread as at the peak of professional racing and the gambling it attracted a few years earlier, it was taking full advantage of the technological evolution happening to boats and equipment. This evolution coincided with the end of the "Golden Age" of English rowing on the world stage. The steady decline of English hegemony over rowing was brought on by many of the same factors that allowed for the ascension of the United States as the premier rowing country in the world.

The factors which led to the long and steady decline of English rowing are as varied as the components of the sport itself. Some were technological and some were philosophical, and taken individually they are not significantly different from the natural evolutionary changes one would expect of sport in society. But the combination, the

timing, the growth of rowing in the United States, and a unique set of societal norms in England together brought on a fractious, inbred degradation of the standards of English rowing relative to the rest of the rowing world.

As rowing developed from a mode of travel and cartage for goods and people to a sport practiced at the elite schools and universities of England, a strong anti-professional, anti-waterman sentiment manifested itself in the style of rowing thought to be the most efficient. What came to be called the English Orthodox Style of rowing was the social elite's answer for how to row the lighter, sleeker craft designed for racing compared to the waterman's style of moving the heavier, passenger and freight-laden working boats. Technological changes to rowing equipment, which occurred in both England and the United States over the second half of the 19th century, also impacted rowing style. With this evolution of equipment came a firmly rooted structure in English society regarding the professional and the amateur. The gentlemen-amateur pursued sport purely for pleasure; the coach donated his time out of his own goodwill, and could do so because his financial circumstances didn't require more time and energy than would make such involvement in sport reasonable and feasible. The professional, on the other hand, came to be classified not through a sport-related definition or one of rowing skill, but through a restrictive, class-based definition rooted in social structure.

There was most certainly a scientific approach to rowing and the study of it by the gentleman-amateur, but the goals were more esoteric, more pure, in their minds, than simply winning or losing. An inertia settled into English rowing regarding the technological changes that were happening to rowing equipment. In some cases these changes had taken place decades earlier, and their implication for rowing style was not fully embraced. Instead of a re-examination of style or innovation in trying to maximize the speed to be gained from them, a cadre of coaches, unpaid gentlemen-amateurs whose livelihoods did not depend on the results of their crews, became blind to the need for innovation or examination of rowing style. They misunderstood just what exactly the

English Orthodox Style of rowing was and what they were trying to teach, and their crews became slower relative to other international crews.

Hastening the decline was the decades-long controversy caused by Australian-born Steve Fairbairn, a rowing coach at Jesus College, Cambridge in the late 19th and early 20th centuries. He quite simply split the world of English rowing wide open with a new method of moving a boat, which proved highly successful for the crews he coached. His teaching was a breath of fresh air to many, because he focused less on style and more on allowing the oarsman freedom to simply row. His method was accompanied by severe criticism of the English Orthodox Style and the state of English rowing under its influence. Rather than moving forward and using the controversy as a way to improve English rowing, England became stagnated and divided for decades, and its stature as a rowing nation suffered irreparable harm, setting the stage for the United States to supplant England as the premier rowing nation.

Not surprisingly, rowing has a common heritage in the United States and England. The tradition of rowing for sport grew out of the use of rowing boats for work - hauling goods and passengers around harbors and rivers, employing thousands of watermen. Competition rooted in employment, such as who could get out to the incoming ships first or who could carry passengers around the island of Manhattan in the least amount of time, led to competition rooted in pleasure: who was the fastest in a boat racing one another simply for the sake of racing. These competitors were the first professional oarsmen.

Rowing in the United States experienced phenomenal growth and popularity in the middle half of the 19th century as rowing clubs became home to professional and amateur oarsmen, both of whom often raced for purses in a growing number of races throughout the country. Soon rowing spread to the colleges - Yale and Harvard, respectively, to start - and then across the country. The coaches of these fledgling rowing programs, often the first athletic programs at many colleges, were a who's who of the

ranks of professional oarsmen. As those coaches moved on and passed on, another class of coach was developing - the professional coach, paid to produce race-winning crews.

The significant societal differences between England and the United States regarding the professional/amateur debate had an impact on the development of the sport in America. The professionals in America made a living from their rowing, or tried to, as did the first professional rowing coaches. They were often from the working classes and were the best oarsmen around. In England, rowing was ruled by the gentleman-amateur, who specifically did not need rowing to make a living. An entire style of rowing, intended to put distance between the professional and the amateur, was developed and adhered to for over a century; it was the professional who was largely frowned upon and excluded through rules and regulations. Gentlemen-amateurs were the ideal, the ones entrusted to teach and pass along to the next generation the art of rowing. This fundamental difference had a major impact on the decline of rowing in England and on the ascension of American rowing. While there was a natural desire among many in the United States to look to England for answers, there was an undeniable need to develop on its own due to the many differences between the two countries. The innovation, the experimentation and the development that occurred from the recognition and exploitation of these differences were critical to American success.

Chapter 1

The Rowing Tradition in England

The oldest continually-held rowing race on record dates back almost three centuries to August 1, 1716 when a sign was posted at London Bridge which read:

> This being the day of His Majesty's happy accession to the throne there will be given by Mr. Doggett an Orange Colour Livery with a badge representing Liberty to be rowed for by Six Watermen that are out of their time within the year past. They are to row from London Bridge to Chelsea. It will be continued annually on the same day for ever.[2]

At the time the only bridges that crossed the lower portion of the Thames River in London were the London Bridge and Chelsea Bridge. The race for Doggett's Coat and Badge still takes place between these two bridges, despite the existence of many more bridges today. Thomas Doggett was an Irish-born actor moved to begin a race for watermen who were in their first year out of their six-year apprenticeship. He, and all Londoners at the time, were dependent on the watermen as both taxis and ferries. Watermen played a crucial role in the life of the London theater, and thus to Thomas Doggett, by bringing patrons back and forth across, as well as up and down, the Thames.

The English Waterman's Company was formed by an Act of Parliament in 1555 and specified that the only people who could legally work as watermen on the Thames were those who were registered to the Waterman's Company and had been properly apprenticed.[3] Doggett's inspiration for establishing the race and for leaving his money in trust with the Fishmonger's Company, who make the arrangements for the race to this day, came on a night of bad weather and a strong tide on the Thames. The only

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2 Robert Kelly, American Rowing. G.P. Putnam's Sons: New York, 1932. 3.

3 Hylton Cleaver, A History of Rowing. Herbert Jenkins, Ltd.: London, 1957. 23. It is estimated that there were more than 10,000 watermen at the height of their employment, so the need for regulation is apparent.

waterman willing to take Doggett five miles up the river was in just his first year out of apprenticeship.[4] The list of winners of Doggett's Coat and Badge is also a list of virtually all the great professional champions of England, some of whom went on to be major influences in America. Although the race does not today have the prestige it did in the past, it is the common ancestor of organized, competitive rowing in England and the United States.

While England has a long history of professional and club rowing, the most influential segment of the rowing population over the years has come from its elite preparatory schools and from Oxford and Cambridge Universities. Early in the 19th century Eton, Shrewsbury, Westminster, and Radley were all sending their students out on the water and then on to the colleges which make up Oxford and Cambridge. Boating at Eton dates back to the 1790s when those who rowed were known as the 'wet bobs' while those who played cricket were the 'dry bobs.' In the late 19th century, Eton employed a boat builder who had five other boatsmiths and four raftsmen working under him, in order to maintain a fleet of 650 boats and the docks for a school of roughly 1100 boys, ages 13-19 years old.[5] Racing between schools dates back to 1829 when Eton and Westminster raced from Putney Bridge to Hammersmith on the Tideway in London, on the same stretch of water now used by Oxford and Cambridge Universities in their annual Boat Race. Races among the schools became common in the next several decades, as did races against the colleges of Oxford and Cambridge.[6]

While the preparatory schools' results are impressive, including Eton's multiple victories in the Grand Challenge Cup, the premier race for eight-oared shells at the

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4 Cleaver, 25. How it came to be that Doggett left his money to the Fishmonger's Company to run the race and not the Waterman's Company is unclear.

5 Thomas Mendenhall, "The Pococks." The Oarsman. April/May 1981, 8.

6 W.B. Woodgate, Boating. Little Brown and Company: London, 1888. 208-9.

Henley Royal Regatta, the most important legacies of the schools are both that of a constant source of oarsmen, well-trained for many years and sent on to University, and the extended tenure of the headmasters and masters who taught rowing. In fact, at the London Olympics in 1908, England entered two crews in the eights race, in an effort to re-establish the prominence they were losing. One of these crews, known as the "Ancient Mariners," averaging almost thirty-years old and containing six former Eton oarsmen, won the Olympic gold medal. The steady presence of coaches, often for many decades at schools such as Eton, provided the foundation for the development and the spread of the English Orthodox Style which would have a firm grip on English rowing, both good and bad, for over a century.

Dr. Edmond Warre (1837-1920), himself a graduate of Eton, returned as an assistant master in 1860 and was immediately asked to take over coaching the crew for their race against Westminster.[7] He was fresh from two victories over Cambridge in the Boat Race and of impressive stature at over six-feet tall, weighing 185 pounds. Warre did not stop coaching at Eton until he became headmaster twenty-four years later in 1884, a position he held until 1905.

Warre's keen interest in rowing first spurred Eton to compete at the Henley Royal Regatta in 1860, and he established a high standard of rowing along with a firm set of principles which had a strong influence for many years. Warre was one of the first, and most influential, proponents of the English Orthodox Style of rowing. The scientific methods and models for teaching someone how to row "properly" were laid out by him and learned by countless young oarsmen, who went on to become the coaches and spokesmen for the Orthodox Style in the late 19th and early 20th centuries.

It was Warre's goal, through scientific oarsmanship, to develop a fixed formula for boats themselves, as well as for the "rig" of the boat, the combination of the various

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7 Woodgate, 209.

dimensions which affect the oarsman's stroke, which were best and would not ever have to be varied from.[8] Measurements such as the length of the oar, the height of the oarlock above the oarsman's seat, and the placement of the rigger and oarlock, all affect the oarsman and his rowing, and Warre believed that there must be some ideal combination of them. In this vein he wrote On the Grammar of Rowing, which included an often-cited section, "Notes on the Stroke," which laid out his philosophy of the mechanics of the rowing stroke. His teaching and coaching were extremely successful, and by the 100th anniversary of the Oxford-Cambridge Boat Race in 1929 Eton had provided 186 oarsmen to Oxford and 121 to Cambridge who went on to earn their Blues, while Shrewsbury provided 28 and 29 to each University respectively.[9] Warre's successor at Eton said of him, "He had the supreme merits: complete knowledge of the subject, a most compelling personality, the gift of ideas and the art of expressing them."[10]

Among the countless oarsmen who were influenced by Warre's teachings was R.S. deHaviland. He took over the head coaching duties at Eton from 1893 to 1919 and continued the long tradition of well trained oarsmen, taught in a thorough, scientific manner. His pamphlet *Elements of Rowing* was written, in his words, "with a view to

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8 Mendenhall, Thomas. The Mendenhall Collection. George W. Blunt Library; Mystic, CT. Collection No. 263, MC 1999.19. Series 3, Box 13, Folder 9. 2. At this time boats and riggers were difficult to adjust once built. This is one reason why boatbuilders were so important, because the dimensions they built into riggers and hulls could not be readily changed. Adjustable riggers were still many decades away.

9 Cleaver, 69. "Blue" is a distinction given to those who are chosen from their colleges to represent their University in the Boat Race or other inter-University competition, so called because Oxford, signified by the colors dark blue and white are the "Dark Blues," and Cambridge, signified by the colors light blue and white are the "Light Blues."

10 Mendenhall, Series 3, Box 13, Folder 9. 4.

helping those boys who are engaged in coaching junior fours at Eton, and further, in order to try and standardize to some extent for the time being the coaching here."[11] Together the tenures of these two men span close to six decades, so it is not difficult to imagine the influence they had over English rowing.

The history of rowing at the two major English universities and of the Oxford-Cambridge University Boat Race, or "The Boat Race," as it has been known for over a century and a half, is a story which winds itself throughout the history of rowing in England; its influence often reaches to the United States as well. As technological and style-based changes appeared and sparked controversy, the two Universities were continually under the scrutiny of the press and rest of the rowing world, and their decisions often had a wide-ranging impact. The large number of small colleges which make up Oxford and Cambridge, along with the proximity of each to rowable rivers, allowed rowing to flourish in a nearly year-round cycle of races which culminated with the Boat Race in the spring and competition at the Henley Royal Regatta in the summer. This tradition and pattern still exists today.

Rowing is recognized to have begun at Oxford as early as the 1790s, while the exact date on which rowing appeared at Cambridge is unclear. St. John's College, Oxford, purchased the first eight oared shell at either University in 1826. Records were kept beginning in 1826, with the formation of the Cambridge University Boat Club occurring sometime between then and 1829.[12] It was the eight-oared shell with which the two Universities would make one of their major contributions to collegiate rowing both in England and America.

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11 Peter Haig-Thomas and M.A. Nicholson, The English Style of Rowing: New Light on an Old Method. Faber and Faber Limited: London, 1958. 153.

12 W.F. MacMichael, The Oxford and Cambridge Boat Races. Deighton, Bell and Company: London, 1870. 33.

In the early years, rowing was quite informal compared to the system which would spring up once formalized racing appeared. Students generally focused more on atmosphere and appearance as they used the wide, stable six-oared pleasure boats for excursions or for transportation to parties where the focus was as much on colorful dress as it was on rowing. A frequent feature of rowing at this time was the use of local professional watermen as a natural source of instruction and information about rowing and as coxswains to steer the boats. But it was not to be a feature for long, and when organized racing began to appear, so did a debate about a structure of rules that helped lay the groundwork for English rowing for years to come.

The structure of rowing at both universities followed a rhythm based on the time of year and the skill level of the oarsmen. At Oxford, early in the October Term, notices went up for freshmen interested in learning to row; the older members of the colleges did the teaching and coaching in what are known as tub-pairs and tub-fours, so named because of their size. The coach sat in the coxswain's seat to give the initial lessons. During the next term, the Lent Term, "the energies of the college boat clubs are entirely devoted to the selection and preparation of the crews for the Torpids,"[13] a series of races which occurs over the course of six days, with crews racing in a single-file format and attempting to bump the crew in front of them, literally, so as to move up in ranking and starting order each day. At the end of the six days, the crew at the front is considered the "Head of the River," and is a term which continues to this day in the United States, with what are known as Head races.

Once Summer Term began, the focus turned to a series of races called "the Eights," another series of bumping races, but over a longer course and with boats starting closer together than in the Torpids races. Those oarsmen who distinguished themselves and their colleges during the training and racing earned spots in the Trial Eights, two

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13 R.C. Lehmann, Rowing. A.D. Innes & Company: London, 1898. 198.

eight-man crews made up of the best of each college from whom the University Eight was, and still is, selected for the University Boat Race, the origins of which will be discussed shortly.

At Cambridge the rowing began in a similar method, with freshmen signing up and being introduced in tub-pairs and tub-fours during the October Term, with the more experienced rowers racing in "the Fours" at the end of October. The Lent races were traditionally held near the end of February in sturdier, heavier boats than the delicate racing craft used by the University crews, and were restricted to the less experienced oarsmen. At this time the top oarsmen of each college were preparing for the "Trial Eights" and possible selection to the University crew. During the next school term, the May races, also called "the Eights," were held.[14] These were bumping races taking place over four consecutive days, in which each college put together its top eight oarsmen and could enter as many crews as it desired.

It was in the winter of 1829 that the Cambridge University Boat Club decided to send a formal request to a member of Christ Church College, Oxford, for a race to take place in London during the upcoming Easter Vacation. After initial wrangling over where exactly to hold the race, a 2 1/4 mile race was held on June 10, 1829. Oxford won by about 60 yards.[15] It took a period of years before the race became the fixture that it is now; the second race was not held until 1836, after another overture by Cambridge in 1834 went unfulfilled over what are now long-forgotten discrepancies about the arrangement. In 1837 there was continued disagreement over where to hold the race so that it never occurred, but Cambridge used the opportunity to race the Leander Club instead. Leander, a Metropolitan club located in London, was a small but distinguished

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14 Lehmann, 230.

15 MacMichael, 34. This first race took place in the town of Henley, which will figure prominently in the future of English rowing.

group of oarsmen mostly in their thirties who had never raced in eights, but who were very game for the challenge. The race was held in London. As was the norm at this time, two professional watermen, who were great rivals of each other, were used as coxswains of each crew.[16] This was a common practice, because fouling the other crew was also a common practice and was accepted strategy for a race, so having an experienced man in charge was of utmost importance. However, Cambridge put a rule in place that fouling would not be allowed because it was their goal to see which crew was faster in a clean race. They were rewarded with an upset victory over the favored Leander crew. Naturally, a rematch was set up for 1838 and Leander won a close race marked by numerous fouls from both sides down the entire course. Finally, in 1839 the Universities of Oxford and Cambridge met again, and with the exception of 1850 and 1851 and during the two World Wars, the race has been held every year since.

After the 1839 race the two universities decided to end the practice of using professionals in the coxswain's seat, and a speech made after that race signalled the start of an important distinction. C.J. Selwyn, a brother of an original Cambridge Blue of 1829, said:

> The true way to make my office unnecessary is to allow no waterman to have anything to do with the matches, but to leave it all to gentlemen. I do not wish to say a word against watermen, but watermen's ways are not our ways, or watermen's notions our notions.[17]

After a successful race in 1840, won by Cambridge in a fast time for both crews, he addressed the crews again and congratulated them for:

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16 MacMichael, 54. The currents and tidal fluctuations on the Lower Thames made having a coxswain who could find the best stream under the varying conditions extremely important.

17 G.C. Drinkwater, The Boat Race. Blackie and Son Limited: Glasgow, 1939. 34. One of the many traditions surrounding the race is that the crews would get together for a meal the evening of the race as a show of sportsmanship towards one another.

> The gentlemanly and generous spirit in which this match has been conducted. The principles which we always maintained were: first, that gentlemen should steer: second (which follows the first), that fouling should be abolished; and last, but not least, that victory should be its own reward. These principles are now established, a triumph in which all present may share.[18]

At the time of this debate, two names which would go on to have a significant impact on both the race itself and rowing in England appear in the records of the Boat Race. Thomas Egan was the coxswain of the Cambridge crew in 1836, 1839 and 1840, and Arthur Shadwell was the Oxford coxswain from 1842-44. They were fierce rivals, but friends, who raced against one another frequently when the crews met at races other than the Boat Race; and these two men first laid down what would eventually become the principles of the English Orthodox Style.

Thomas Egan was associated with Cambridge University from the mid-1830s until the 1860s, serving in every capacity from coxswain to coach to mentor for the crews. He was also in an influential position as the editor of *Bell's Sporting Life*, a journal which featured a significant amount of rowing coverage in its pages. A combination of his longevity, his job, and his firmly-held conviction that amateurs and professionals should put as much distance between themselves as possible helped to make the style of rowing he believed in become so firmly entrenched.

Egan didn't simply talk about his convictions; he was willing to demonstrate them as well. His alma mater, Cambridge, had a difficult time staying away from using professionals, more so than Oxford. In part, this was because Cambridge felt it was necessary; in addition to the Boat Race, they frequently raced other clubs, and would be at a competitive disadvantage if they did not use professionals. This controversy resulted in no Boat Races in 1850 or 1851, and when they picked back up again in 1852 Cambridge decided to use Robert Coombes, one of the first well-known Thames watermen, as a trainer and coach. Egan was so upset by this that he volunteered to train

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18 Drinkwater, 34.

and coach the Oxford crew that year simply to prove he was right. Oxford won by over six boat-lengths. His explanation states his case quite clearly:

> I am a Cambridge man and have trained a victorious Oxford crew....Our feeling, then, has always been, that our favourite science, rowing, ought to be the first object of our love; that the great object to be pursued, the chief end of these great contests is to exhibit to the world rowing in perfection; whatever therefore tended to lower the style of rowing....was to be resisted and condemned. Hence it follows, that if, at any time, one's own University departed from its old, tried, and acknowledged principles of gentlemen's rowing, and took up another system....one's higher and nearer allegiance to rowing itself should overrule the secondary duty and subordinate the tie by which one was bound to his University....I make public statement of my belief...that the Universities did neither wisely nor well in ever allowing watermen to touch the yoke-lines of the match boats. My conviction is that rowing has suffered from their interference....the old hereditary way of training crews was the good, the right, the true, and certainly successful way....Let them remember that I have not been contending for Oxford, but for Rowing.[19]

Arthur Shadwell served as coxswain and coach at Oxford for many years. He is also remembered for being the coxswain of the legendary "Seven Oar Crew" from Oxford at the Henley Royal Regatta in 1843. As Oxford was preparing to meet the Cambridge Subscription Room's crew in the final of the Grand Challenge Cup, Fletcher Menzies, the seven-seat oarsman of the Oxford crew, fainted and was unable to row. Oxford was denied the option of substituting anyone in his place, as the regatta rules stated that a crew was only allowed to use men who had already raced with the crew in previous heats, effectively eliminating the possibility of substitutions. With no other choice than to row without Menzies, Oxford shuffled their seven remaining rowers and went on to win the Grand Challenge Cup by two boat-lengths.[20] Shadwell's influence in the coming years helped galvanize the two universities and some of the metropolitan rowing clubs in London into an elitist group whose ideas became very prominent when England formed the Amateur Rowing Association in 1882.

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19 Drinkwater, 34-36.

20 MacMichael, 111-2.

The style of rowing that Egan and Shadwell developed was centered around a response to the rowing style of the professional watermen. They collaborated on a pamphlet in 1845, entitled *The Principles of Rowing and Steering,* in which they laid out the basic ideas of how to accomplish their style of rowing. As discussed earlier, rowing for sport grew out of rowing for work, the fundamental difference being that work boats were necessarily sturdy, heavy, and filled with extra weight (goods and/or passengers). Racing boats, although a very long way away developmentally from where they would be in thirty or forty years, were lighter, sleeker crafts for which speed was the main goal.

It had been common in the past, and - despite sentiments such as those of Egan and Shadwell and others - it would not be extraordinary in the future, that people interested in rowing for sport would look to the professionals for guidance. But the desire to distance the gentlemen from the professional was a strong one, hence the rise of the "amateur style" or "racing style" developed by Egan and Shadwell. Professional watermen had found an efficient method to carry heavy loads: a short, choppy stroke, likely designed to save energy and speed while dealing with the inescapable fact of carrying heavy loads, which slowed the boat drastically any time the blades were out of the water. Drinkwater points out in The Boat Race that the watermen would use a short stroke in which they pulled their upper bodies up to "meet the oar" at the end of a stroke, and when racing an unloaded boat they would simply row more strokes to the minute in order to go faster.[21] Egan and Shadwell advocated a longer swing of the rower's upper body, both as he reached forward to place his oars in the water at the beginning of the stroke, as well as backwards at the end of the stroke, as he prepared to take his oars out of the water.[22] It is too early to call this the English Orthodox Style, but it was certainly the

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21 Drinkwater, 30.

22 Richard Burnell, Swing Together: Thoughts on Rowing. Oxford University Press: London, 1952. 23. Because boats were not adjustable, the rower was left with few options to change boat speed;

foundation for it; it aimed to put the distance that the gentlemen-amateurs desired to have between them and the professionals, not only in attitude, but in practice as well.

It would be too simplistic to describe the relationship between the professionals and the amateurs in England as a contentious one, filled with animosity that only ended with the decline of the professional. It was certainly complex, and there were numerous reasons why the existence of the professional declined in the second half of the 19th century. Eric Halladay, in his exhaustively-researched book Rowing In England: A Social History, points out that A.A. Casamajor, a successful amateur oarsman, wrote the following about Matthew Taylor, a professional oarsman and boatbuilder from the Tyne River in northeastern England: "[Taylor was] combining the practical skill of the waterman with the mental intelligence of the amateur."[23] While a somewhat backhanded compliment, it is evidence of the respect given to professional oarsmen. Likewise, it was the professionals who would make some of the major technological contributions in boat design that would have a far-reaching impact on competitive rowing. But professional rowing as a spectator sport in England was not to have the same impact as that of the gentlemen-amateur and his pursuit of rowing, nor would professional rowing capture the imagination of the public as it would in the United States.

The fact that professional rowing for sport grew up alongside amateur rowing meant that it never had the opportunity to be the sole source of rowing news in England as it would be in the United States. Amateur rowing also had the benefit of far greater institutional support through schools, universities and metropolitan rowing clubs, than the professionals would ever have. Once the schools and clubs were able to attain a certain

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either to alter the style of rowing as Egan and Shadwell wanted; or alter the frequency of strokes per minute, as the professionals were doing.

23 Eric Halladay, Rowing In England: A Social History. Manchester University Press: Manchester, UK. 1990. 9.

level of proficiency, the need to patronize the professional on either a spectator or service basis diminished. Combined with the inevitable march of industrial progress and the introduction of steam power to the waterways, there was less of a need for watermen to transport goods and passengers. The resulting decline in the number of watermen brought a decline in standards of competitive rowing, accompanied by waning interest from potential sponsors who were finding other sporting outlets to support.[24]

So far the Henley Royal Regatta has only been briefly mentioned. However, Henley's importance over the years as a stage for English rowing, English attitudes towards rowing, and as a voice of English rowing is critical. The Thames River served for centuries as the main route to get to the western parts of England from London. The town of Henley, located between London and Oxford, was an important stop along the way. Blessed with a stretch of over 1 1/4 miles of dead straight river, the development of the race made it one of the most important dates on an oarsman's calendar. The race course is one mile 550 yards long, the longest straight stretch of the Henley Reach. That distance was the precursor of the current Olympic distance of 2000 meters, which also is just over 1 1/4 miles in length.

The first proposal for a regatta at Henley came at a meeting at the town hall on March 26, 1839, and was geared towards boosting the local economy.[25] This idea is attributed to the fact that the first University Boat Race between Oxford and Cambridge was held there in 1829.[26] Immediately there appeared an internal structure which still exists today. It was comprised of the Stewards, who were made up of local, landed gentry - there to provide some immediate respectability to the whole affair - and the Committee, who were the local townspeople and who were most immediately concerned with the

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24 Halladay, 25.

25 Richard Burnell, Henley Regatta: A History. Oxford University Press: London, 1957. 29.

26 Cleaver, 113.

regatta's success. It is notable that no rowers or people with an interest in rowing from the competitors' standpoint were included in either group.[27] The regatta went along in this fashion for almost thirty years, before the growing popularity of rowing and the Henley Regatta itself, and a number of rowing-related difficulties, forced the addition to the Stewards of two people with rowing background who could help advise the two groups. In 1868, the regatta elected Edmond Warre, from Eton, and H.H. Playford, as Stewards.

Just as the Henley Royal Regatta (it became "Royal" in 1851 when H.R.H. Prince Albert became a patron of the regatta)[28] was able to move along quite well without any representatives of the sport on its Committee, so did English rowing survive the professional/amateur debate quite well, with local regattas forming their own requirements, until the end of the 1870s. In 1879, however, as a result of a growing number of regattas with incompatible rules, and one year after a group of representatives from Oxford, Cambridge and four Metropolitan rowing clubs met in a failed attempt to try and hammer out a definition of an amateur, Henley adopted its own rules, which came to be the foundation for English rowing for many years:

No person shall be considered an amateur oarsman or sculler,
1. Who has ever competed in any open competition for a stake, money, or entrance fee.
2. Who has ever competed with or against a professional for any prize.
3. Who has ever taught, pursued, or assisted in the practice of athletic exercises of any kind as a means of gaining a livelihood.

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27 Burnell, Henley Regatta, 30. To this day Henley is famously anachronistic. It was not until the 1980's that women have been allowed to compete, and initially it was just for elite-level single scullers only. There is now a Women's Henley Regatta (not Royal) which takes place two weeks before Royal Henley, but the women are not allowed to use the grounds of the Royal Regatta and were initially made to race in the opposite direction on the river; towards the starting line and are not allowed on the final 1/4 mile of the regular course.

28 Cleaver, 113.

4. Who has been employed in or about boats for money or wages.
5. Who is or has been, by trade or employment for wages, a mechanic, artisan, or labourer.[29]

These rules would eventually come to be the source of an enormously fractious episode in English rowing. In 1882 England formed the Amateur Rowing Association (A.R.A.), by essentially replacing the Metropolitan Rowing Association, and wielding greater authority than that of the group of London based rowing clubs. Not surprisingly, when it came time to draw up rules of amateurism, those in place at Henley were the guiding force, with three significantly stricter characterizations. The A.R.A.'s rules adopted in 1884 are as follows (*italics* have been used to show differences):

No person shall be considered an amateur oarsman, sculler *or coxswain* who:
1. Had ever competed in any open competition for a stake, money, or entrance fee.
2. Had ever *knowingly* competed with or against a professional for any prize.
3. Had ever taught, pursued, or assisted in the practice of athletic exercises of any kind *for profit*.
4. Had ever been employed in or about boats, *or in manual labour* for money or wages.
5. Had been, by trade or employment for wages, a mechanic, artisan, or labourer, *or engaged in any menial duty*.
6. Was a member of a boat or rowing club containing anyone liable to disqualification under the above clauses.[30]

A result of such strict rules, and the A.R.A.'s unwillingness to alter them, was that the entirely separate National Amateur Rowing Association (N.A.R.A.) was formed. The A.R.A. had effectively forced any laborer to row only against other laborers or turn professional. Both sides had considerable support and both organizations ran their own separate regattas, with the only difference being the N.A.R.A.'s willingness to eliminate the manual labor portion from the definition of an amateur. Generations of oarsmen were denied the opportunity to race at any A.R.A. regatta, including Henley. The most famous instance of the strict adherence to the original A.R.A. definition of an amateur

29 Burnell, Henley Regatta, 44.
30 Cleaver, 127.

came in 1920 when Jack Kelly, father of Grace Kelly (who would later become Princess Grace) and winner of the 1920 Olympic single-sculling gold medal over England's fastest oarsman, Jack Beresford, was denied entry to the Henley Royal Regatta's Diamond Sculls for elite single scullers because he had once worked as a brick layer in Philadelphia. In a fitting moment of redemption, after the A.R.A. and Henley had revised their rules in 1937, Jack Kelly's son, Jack Jr., went to Henley and won the Diamond Sculls in 1947 and 1949. On June 12, 1937, the *Times of London* editorialized about the repercussions of having two entirely separate amateur rowing associations:

> There can be no doubt that the sport has suffered from the exclusion of a great source of promising material from all possibility of ever taking part in classic events. The rigid division into sheep and goats, who must never be allowed to mix, has inevitably interfered with the development of rowing and with the promotion of good fellowship, one of the chief objects of every sport....Now that an outworn distinction has been swept away, there is every prospect of increasing co-operation between the two associations, to the benefit of both, and of English rowing as a whole.[31]

High-mindedness and heavy-handedness characterized the upper echelons of English rowing. The pattern and structure of the exclusiveness of its regattas and associations were fed by the social structure in place. Rowing, a sport repeatedly trumpeted as one requiring ultimate teamwork and sacrifice to succeed, was suffering in England because those entrusted as caretakers could neither work together for the benefit of English rowing nor make a sacrifice by changing its imperious and absurdly prohibitive rules. Furthermore, in exploring the technological innovations which occurred, one will see the same pattern of rigidity play itself out repeatedly, all to the eventual detriment of English rowing.

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31 Cleaver, 123-4.

Chapter 2

The Technological Evolution of Equipment

On both sides of the Atlantic Ocean in the 19th century there occurred dramatic changes to the equipment used by rowers and scullers alike. These changes often brought varying degrees of confusion over how they might best be implemented in order to maximize their effectiveness, or even if they could improve effectiveness at all. No area of rowing was left unaltered by this evolution of rowing equipment. The development of outriggers, which improved an oarsman's leverage, led to significant changes in the boats themselves. The development of the sliding seat had many implications to both rowing style and boat building. The introduction of the swivel oarlock, from a fixed oarlock, also required a reexamination of the rowing stroke. Even oars themselves went through many alterations and design changes in an effort to maximize an oarsman's effectiveness. It is also worth noting that it was this area, rowing technology, which provided much of the interaction, and created much of the mutual respect, between amateur and professional oarsmen in both England and the United States.

The long and influential history of the Thames River to the sport of rowing is well earned, but there is another great rowing river in England, which itself has accounted for many of the developments in rowing technology, and which was home to a fiercely proud tradition of oarsmen: the Tyne River in northeastern England. The natural tendency towards competition made the rivalry between the oarsmen of these two rivers a lively one, and both rivers became home to great champions. Although the Tyne River professionals are less well known today, without their contributions and developments and the rivalry among the Tyne oarsmen, the Thames oarsmen, and the rest of the world's oarsmen, the course and pace of rowing's growth would be significantly different. As summarized by Halladay:

The changes in design and shape of boats inevitably meant adjustments and alterations to the style of rowing. Because the stakes were often high, the matches of the professionals gave them sufficient encouragement to experiment with different methods....The final achievements [of the professionals], often rough-hewn men, were things of beauty, the lines of which have withstood the test of time. Not the least noteworthy part of their craftsmanship was their rejection of conjecture and theory in favour of experience and practical experiment. They tested their boats against each other relentlessly, in particular during the often fierce struggles between the Tyne and the Thames. In terms of inventiveness the Tyne always had the edge and the tradition of good boatbuilding continued on that river until the eve of the Great War.[32]

Still preserved for study today is the eight-oared shell used by Oxford for the 1829 race against Cambridge. It serves as a wonderful example of where the sport of competitive rowing was, and how remarkable the progress over the next fifty years, during which all of the major technological changes to rowing equipment occurred. The 1829 eight was a clinker-built (or lapstreak) hull; the planks which form the hull overlap one another, much like the clapboards on a house, rather than being placed flush against one another. It was in-rigged, meaning that the oars were leveraged against thole pins attached to the gunwales of the boat, a distinction which only began to be necessary when out-riggers were developed almost two decades later. Weighing 600 pounds, it was 45 feet, 4 inches long. Each oarsman sat on a seven-inch wide thwart having only 28 inches of stateroom between himself and the next oarsman[33] (a little more than half what is required in a modern eight with sliding seats). Due to the varying beam between the oarsmen's seats, the oars they used ranged in length from 13 feet, 6 inches, for the oarsmen in the center of the boat, to 14 feet, 6 inches, for those sitting closer to the bow and stern. This is enormously long compared to the more standardized oars of about 12 feet, 6 inches, which also evolved over the next thirty to forty years.

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32 Halladay, 209.

33 Thomas Mendenhall, "Training, Technology, Technique." The Oarsman: March/April, 1976. 34.

The absence of any unassailable account of the exact evolution of rowing equipment, especially during the middle-third of the 19th century, makes dating such advances an inexact science, as the word evolution implies a gradual change over time. Attributing credit to the proper source, in the instances of some major changes, is less difficult but not impossible. Almost by necessity, many of the technological changes appeared on smaller boats (singles or fours) until they were more widely accepted and began to appear on larger boats (eights).

By the 1830s, racing between watermen was so common, and wagering was so intense, that an adapted form of their work boats evolved, called the wager-boat, or wager-wherry. The wager-boats had a narrow beam for speed, but high, flared gunwales for the oarlocks, indicating an awareness of the need for leverage. In 1843, a professional rower and boatbuilder from the Tyne River, Harry Clasper, brought an out-rigged four, *The Five Brothers*, to the Tyne Regatta and a year later to the Thames Regatta in 1844.[34] These were the first public appearances of an out-rigged boat. The basic advantage of a rigger for the competitive rower is that it provides greater leverage by moving the fulcrum further away from the oarsman without requiring a wider hull.

Before riggers had become standard, oarsmen had attempted to increase their leverage by sitting as far away as possible from the side of the boat which their oars were on, called sideseating. In other words, an oarsman rowing on the port side of the boat would sit as far over towards the starboard gunwale as possible, and vice-versa for an oarsman rowing the starboard side. Side-seating remained common in boats made and rowed by Englishmen for many years after center-seated boats had gained popularity in American-built and rowed boats. Richard Glendon attributed the continued popularity of side-seating to the manner in which boats were built in England. The fact that English shells were lighter and more delicate meant that it was more difficult to use longer riggers

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34 Halladay, 198.

because the strain on the shell would be too great; thus, side-seating remained a way to maximize leverage while keeping the riggers shorter and the boats lighter. American-built boats tended to be heavier and more sturdily built, thus allowing the boat to withstand the forces placed on them from longer riggers, and allowing the oarsmen to be center-seated.[35]

As riggers became more commonplace, major changes in hull design were possible as well. While an exact understanding of hydrodynamics and how boat speed was related to hull shape was not yet completely understood, there was much practical evidence of which builders of boats had long been aware: that narrower boats were faster was among them. But maintaining sufficient hull-strength to support the weight of the oarsmen was a problem. In England over the course of roughly a decade and a half, from the mid-1840s to the late 1850s, hulls with overlapping planks (clinker-built) gave way to hulls with planks placed edge-to-edge (carvel style), which gave way to smooth-skinned (shell-style) hulls, while keels, the backbone of the boat, went from being external to internal.

Harry Clasper's boat, *The Five Brothers*, was also revolutionary for its hull design. It was the first appearance of a keel-less shell (meaning it was internal, not absent) and it had the smooth, shell-style exterior. A quote from *The British Rowing Almanack* of 1863 refers to Clasper's new shell and the stir it caused:

> ...she created much speculation and excitement among the Thames watermen. Her construction was quite revolutionary to their settled notions of racing vessels, and it was believed it would be impossible to row her steadily, as she was as round in the bottom as the section of half a gun barrel.[36]

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35 Richard A. and Richard J. Glendon, Rowing. J.B. Lippincott Company: Philadelphia, 1923. 101.

36 Halladay, 199.

Although Robert Kelley attributes the appearance of the first keel-less four to Clasper in 1847, it would seem he is referring to the same shell mentioned above.

The development of the keel-less four is not without controversy, however. The Pococks, a family of boatbuilders, some of whom went on to great fame in America as boatbuilders on the West Coast in the first half of the 20th century, lay some claim to building the first keel-less boat. George Pocock, who would go on to a legendary career as the premier boatbuilder in the United States in the 20th century, and whose father had been one of the head boatbuilders at Eton in the later years of the 19th century, claimed through family lore that it was his great-uncle Bill who first produced a keel-less boat. When questioned, he said:

> This Bill Pocock was rowing coach at Westminster School in London in the days when the coach had to stroke the crew. He did not make any great fuss over his boat until Clasper of Newcastle on the Tyne came out with a similar keelless boat and claimed authorship of it. This Clasper had been in London when Bill Pocock was building this boat.[37]

Regardless of the confusion over credit, Clasper introduced the keelless boat to the rowing world at large. It took two years before the Oxford and Cambridge crews used them in the 1846 Boat Race and in ten years Harvard had them on their shell for the 1856 race between Harvard and Yale Universities, which was just becoming an important rivalry between the two schools.

Much of England's influence on the rowing world has taken place not in the smaller boats, but in the eights, such as at the Henley Royal Regatta and prestigious eight-oared shell races such as the Grand Challenge Cup, and the University Boat Race, which has always been contested in eights and is the reason why American colleges still focus on the eight as the boat of choice. But the evolution of major technological changes

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37 Kelley, 235-6.

never began with the eight; rather, they first appeared in singles and fours, as with *The Five Brothers*, and gradually moved on to other boat classes.

The reasons are understandable: eights were expensive to build, and schools, colleges or the universities were naturally reluctant to be the first to experiment with something new and not completely understood. The following quote from Walter Camp, best known as the pioneer in making American college football into the hugely popular pastime it is today, speaks for those on both sides of the Atlantic when in to comes to experimentation: "when a boat in this country costs five or six hundred dollars, building for experimental purposes must necessarily be limited, or the exchequers of the boat-club associations must find some enthusiastic and rich patrons to supply the funds for such experiments."[38] Furthermore, as Halladay has pointed out, the professionals were willing to experiment and try new things because there were significant benefits to be gained through improvements that could help defeat the fierce competition.

So it was in this vein that it took ten more years, until 1856, until the rowing world saw the first keelless eight. It was built by another well-known Tyne River professional, named Matthew Taylor. This particular eight was not only keelless, but was significantly shorter, fifty-five feet long as opposed to sixty-five feet, than conventional racing eights of the early 1850s, as well as having its widest point between the bow and the center of the boat. This feature was as notable as the fact that it was keelless, because "at this time problems relating to the form and speed of vessels excited much interest."[39] Taylor built

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38 Walter Camp, "The Mystery of Rowing: A Sketch of Boat Racing in America." The Century Magazine: Volume LXXX, Number 3. July, 1910, 324. Colleges and universities had not taken over athletics yet, a fact that accounts for Camp's ability to become such a powerful force at Yale and for intercollegiate athletics as a whole.

39 Gilbert Bourne, A Textbook of Oarsmanship. H. Milford: London, 1925. 203.

the boat for the Royal Chester Rowing Club, which went on to win the Grand Challenge Cup in it that year.

The paternalistic and class-based attitude of the gentleman-amateur towards the professional can be seen in this milestone of boat building through Gilbert Bourne, a former Eton wet-bob, Oxford rower, secretary of the Oxford University Boat Club in 1885, and Oxford coach. He claimed that the design of Taylor's new shell must have come from the research of Scott Russell, who had performed tests to determine the most economical speeds for towing vessels in canals for shipbuilders, information which would have found its way to J.B. Littledale, the stroke of the Royal Chester Crew, who had relatives in the business. Bourne believed that it was "highly improbable that Matt. Taylor, a skilled craftsman, but ignorant of theoretical principles, should have designed a boat which ... embodied the highly technical, if also somewhat mystical principles of Scott Russell. But to Mr. Littledale, who was related to the great Liverpool shipowners, such ideas were familiar."[40]

Taylor's boat was so extraordinary that in 1857 he served as coxswain in practice sessions with the Oxford crew in preparation for the Boat Race in order to show them how to best row the boat he had built for them. But they were clear to make the distinction that Taylor was there "not to instruct Oxford in the art of rowing, but to show us the proper way to send his boat along as quickly as possible."[41] It is unclear if anyone asked what the difference between the two was, especially after Oxford went on to a thirty-two second victory.

Throughout these changes to rowing shells the rowers still sat on fixed thwarts, which limited the rowing stroke to a long swing forward of the upper body and a long swing backward during the stroke in order to row the longest stroke possible. However,

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40 Bourne, 203-4.

41 MacMichael, 228.

they were not unaware of the usefulness of their legs as a muscle group to help propel the boat. The sliding seat was America's first major contribution to the rowing world, and was one which would lead to a major rift in English rowing not long afterwards.

Examples of oarsmen sliding forward and back on their fixed thwarts are common, mostly during spurts of energy at the end of a race; and oarsmen frequently used greased, leather-bottomed pants which helped, but were very tiring due to the mechanical inefficiency.[42] As early as 1857, a sculler from the Nassau Boat Club of New York named J.C. Babcock had fitted a leather covered wooden board in tracks on his single-scull, but abandoned the idea soon after. Another American single-sculler, the professional Walter Brown, did the same in 1861 and also abandoned it as cumbersome. Not only was it seen as cumbersome, but it was not yet entirely understood just how effective it could actually be. Initially the sliding seat was a "mechanical contrivance intended for a better accomplishment of the sliding movement in rowing," and only later was it better understood that "it gave the legs an opportunity of being brought into more active use than before, it added an additional propelling power to the stroke."[43]

By 1870 the Harvard-Yale Boat Race had become a point of pride between the two schools. In that year, looking to reverse a string of four defeats, Yale employed the same Walter Brown as their coach. He brought back his idea of the sliding seat and built them himself for the Yale crew. There were no wheels on Brown's sliding seat; instead,

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42 Thomas Mendenhall, The Harvard-Yale Boat Race 1852-1924 and the Coming of Sport to the American College. Mystic Seaport Museum: Mystic, CT. 1993. 75. Various methods were called "buckskin and butter" among others, to help the oarsmen slide back and forth.

43 E.D. Brickwood, Boat Racing, or the Art of Rowing and Training. Horace Cox: London, 1876. 30. One immediate benefit of the sliding seat which nobody overlooked was the reduction in discomfort to an oarsman's backside. Boils and irritations were simply accepted as part and parcel for an oarsman and were the result of the friction created by fixed seats. Sliding seats greatly eased this problem.

the seat slid along grooves cut in the board on which the oarsmen sat, facilitated by liberal amounts of grease.[44] While Yale did not win the race in 1870 because they fouled Harvard at the stake-boat turn and were disqualified, the sliding seat was ready to make a case for its usefulness to the rowing world. Walter Brown took out patents on his version the same year.[45]

The debate over the sliding seat would remain a hot topic for many years, and there were many who were steadfastly against it. Fixed-seat rowing remained a part of English rowing until well into the 20th century, long after the advantages of the sliding seat had been proved. The perpetuation of proper English Orthodox Style was one reason for the continued use of fixed-seat boats. Edmond Warre's reaction to sliding seats was indicative of the hesitation when he stated that until he "saw the Henley course done in seven minutes by a sliding crew, I will not be rash enough to augur that the pace of that fine London crew of 1868 and of the Oxford Etonians of 1870 can be much improved upon by sliding."[46] However, he did, somewhat grudgingly, accept the use of slides; but he only allowed them to be eight to ten inches long,[47] thus keeping the stroke he was teaching, of a long reach forward and powerful swing with the body, as unchanged as possible.

Advocates such as Warre felt that the only way to correctly learn how to use the upper body during the rowing stroke was to slowly and gradually strengthen the muscles

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44 Mendenhall, Harvard-Yale, 75. It is interesting to note that despite the fact that all "sliding seats" today actually roll on wheels rather than slide along grooves, the term sliding seat has never been changed from when it was first introduced.

45 Samuel Crowther and Arthur Ruhl, Rowing and Track Athletics. The MacMillan Company: New York, 1905. 237.

46 Camp, 326.

47 Mendenhall, Box 13, Folder 9.

of the lower back on a fixed-seat, and then to move on to a sliding-seat boat only after proper oarsmanship had been learned. They were long concerned about great harm being done to the style of rowing by those who had never been initially and properly taught on a fixed-seat. Another reason for the opposition is that the magnitude of the increase in speed for a shell from the use of the oarsman's legs was not fully realized through the early versions of the seat, due to their initial shortcomings in design. Theodore Cook recounts a race at Henley in 1883, when, while racing Eton, his Radley crew ran into problems with their seats:

> We led at once, at a slower stroke than theirs, though even that meant well over 40 a minute on our 12-in. slides. Before Fawley was reached we were rowing long and quite comfortably, still at a slower stroke, and about two-thirds of a length ahead. Quite suddenly our number four (just in front of me) stopped in his swing. His clumsily built slide had come off its brass runners. The boat nearly upset with the shock, and never ran really true again. I was only just sixteen with hardly any experience, so my despair may be imagined as I swung forward and cut both shins deeply against the wreckage in front of me, and continued doing so until the finish. Number four was bleeding almost as badly where a plumper portion of his anatomy was wedged between two narrow bars...as we struggled on.[48]

Likewise, there was great difficulty encountered by oarsmen in learning to slide forward (toward the stern) together and to put their oars in the water together. The sliding seat caused the oarsmen's body weight to move back and forth much more dramatically than in fixed-seat boats, and if it was not done properly it was very difficult to realize all the potential speed that could be gained. Babcock, who had first experimented with a moveable seat, was well aware of the problems the moving seat posed to coaches and oarsmen alike, and, as can be seen in the following quote from him, it is not hard to understand why the sliding seat took time to be embraced by the rowing world:

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48 Theodore Cook, The Sunlit Hours: A Record of Sport and Life. George H. Doran Company: New York, 1925. 33-4.

The slide properly used is a decided advantage and gain of speed, and the only objection to its use is its complication and almost impracticable requirement of skill and unison in a crew....It requires more skill to use the seat properly than it does the oar, thus making it doubly difficult to perfect a crew.[49]

In an early effort to determine the relative merits of the sliding seat, the *Field*, an English newspaper that regularly featured sporting news, decided to conduct a series of experiments at a local boat club to test this new development. Two members of the London Rowing Club, F.S. Gulston and L.P. Brickwood, were used to test the sliding seat. The first experiment simply consisted of putting Brickwood, an older gentlemen who was thoroughly schooled in the art of fixed-seat rowing and had never before used a sliding seat, into Gulston's single-scull, which was fitted with a sliding seat, to see how he could perform. They found, somewhat surprisingly, that "after a few minutes pulling he became perfectly at ease on the sliding seat, and a convert to its undoubted superiority over the old fashioned fixed seat."[50]

For the second experiment they placed a four-oared shell, out of the water and up on a platform, in order to take measurements more easily. Gulston sat in the boat, which was held still by helpers, and took air strokes from the positions of both a fixed-seat rowing stroke and sliding seat rowing stroke. The measurements taken showed the sliding seat stroke to be just over one foot, two inches longer than the fixed-seat stroke when measured out of the water. Some of the conclusions drawn by the *Field* for their article were the following:

1. That with a seat sliding 9 in. the stroke can be lengthened 18 in. in the water.
2. That with a sufficiently long stroke the body is not bent either forwards or backwards nearly as far as without the sliding seat.
3. That the force exerted by the muscles of the back cannot be applied to advantage when the body is extended either backwards or forwards to the extreme limits of the human frame....

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49 Christopher Dodd, The Story of World Rowing. Stanley Paul and Company, Ltd.: London, 1992. 77.

50 Brickwood, 31.

4. By the substitution of the....powerful extensors of the thighs, in lieu of...the extensors of the back, a new store of muscular action is brought into play....
5. That....flexion and extension of the knees....afford great relief to the rower.
6. That....a new power is brought into play....a better pace can be kept up for a longer time, and consequently for all ordinary rowing distances the sliding seat must beat the fixed one, other things being equal.[51]

It has been mentioned how technological advances to rowing equipment impacted rowing style, and how the impact was not always completely understood or embraced. With sliding-seats it was not only a question of whether or not they were an improvement - despite the fact that in 1873 when Oxford and Cambridge used them for the first time, both crews lowered the existing course record by over thirty seconds[52] - but how much sliding was optimal. Slides began with limited ranges of motion, of about nine inches; but over the next decade they gradually lengthened to sixteen inches, and eventually some coaches, Steve Fairbairn among them, were using "endless slides."[53] As slides lengthened and became more accepted and understood, a problem arose which became the next technological battleground for rowing on both sides of the Atlantic. The issue was the oarlock, and it was America's second great contribution to rowing.

As boats evolved from in-rigged to out-rigged, the concept of the traditional oarlock, consisting of a tholepin against which the back of the oar rested during the stroke

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51 Brickwood, 32-8.

52 Drinkwater, 61.

53 Drinkwater, 45. The length of an oarsman's slide affects what is called the "work through" for the oarsman. With a longer slide he can bend his knees at a more acute angle as he slides towards the stern of the boat and so can increase his work through. Work through is measured relative to an imaginary line from the pin on which the oarlock is secured, through the perpendicular of the longitudinal axis of the boat. The further towards, or through, this perpendicular line the oarsman slides, the greater his work through. The dilemma over length of slide included the problem of finding the best work through for the oarsmen depending on the rig of the boat and the style of rowing the coach was teaching.

to help the oarsman apply pressure, was essentially the same but was now attached to the rigger. The collar of the oar, which rested inside the oarlock, had a button around it which rested against the oarlock itself and which had an eccentric curve. As the oarsman moved toward the stern on the recovery between strokes, the oar handle moved in a semi-circular motion around the fulcrum created by the oarlock. The eccentrically curved button on the collar allowed the oar, as it moved forward, to be returned to the "squared" position (perpendicular to the water surface) from the "feathered" position (parallel to the water surface) naturally.[54] This feature of an oarsman's "bladework" has long been considered a hallmark of good oarsmanship: the ability to handle the oar, and thus the blade, in a clever and effective manner which does not upset the boat. The traditional style of oarlock, the fixed tholepin, made a crews' bladework easier to control and master. As long as they moved forward together, and the grip was relaxed and loose, the motion of the button of the oar in the oarlock did the job of returning the blades to the squared position in unison as well.

The sliding seat changed all of this. With the ability to slide further towards the stern of the boat came the ability to row a longer stroke. However, the fixed tholepin meant that there was a limited range, or length, of the stroke which could be rowed before the oar would become pinched in the fixed oarlock. Soon, through addressing this issue, another professional oarsman from America would change the rowing world forever.

Michael Davis was born in Ireland in 1851; during his childhood his family moved to Portland, Maine to escape the famine.[55] By the early 1870s, Davis had abandoned the apothecary business to make his living on the water. While not a large man, and although destined to make a larger and more sustained impact on rowing as a

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54 Mendenhall, Harvard-Yale, 146.

55 Mendenhall, Harvard-Yale, 144.

coach and inventor than as an athlete, he defeated some of America's top scullers of the time in races which took on modern-day proportions. In a heated sporting rivalry between Portland and Boston in the late 1870s, Davis was one of the principal "Down Mainers" who took on, and defeated, the best oarsmen Boston and New England had to offer.[56]

By 1874, Davis had built his own version of a sliding seat for himself, consisting of steel clamps which slid along two steel rails.[57] He encountered difficulty with his oars jamming in the oarlocks, so he invented and patented the world's first swivelling oarlock, which he further perfected over the next five years. It allowed the oar to move freely around in its arc as the oarsman came forward on the recovery, without concern of getting caught, although it forced a change in the oar design as well. A round button on the collar would have to replace the curved button, and the oarsman would have to use his hands to return the blade to the squared position during the recovery between strokes as a result. No longer would the blades square themselves with their motion around the fulcrum, an issue which bothered many, and necessarily impacted the conventional wisdom of the rowing stroke.

By the end of the 19th century, influential advocates of the English Orthodox Style were grudgingly conceding that swivel oarlocks were acceptable for sculling boats, but not so for fours and eights. R.C. Lehmann, English coach and author of two well-known books on rowing, commented on fixed oarlocks versus swivel oarlocks:

> The advocates of swivels contend that by their use the hands are eased on the recovery, and the jar that takes place when the oar turns on a fixed rowlock is absolutely abolished. These advantages seem to me be exaggerated....I am convinced that for an ordinary eight-oared crew the fixed rowlock is best, and for the following reasons: The combined

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56 Sylvester Gookin, "Silver Lake in '78." The Log of Mystic Seaport: Volume 29, Number 4. January 1978. 100.

57 Mendenhall Collection, Box 12, Folder 4. Spirit of the Times: December, 1879.

rattle of the oars as they turn constitutes a most valuable rallying point....This advantage is lost with swivels. In modern sculling-boats a man must use swivels, for the reach of the sculler extends to a point which he could not reach with fixed rowlocks, as his sculls would lock before he got there....But in rowing....you cannot fairly reach beyond a certain point, which is just as easily and comfortably attained with fixed rowlocks as with swivels....For average oars, and even for most good oars, the difficulties of rowing properly will be largely increased, without any compensating advantage, so far as I am able to judge.[58]

However, as the last major technological innovation - for at this point all the major technological pieces were in place for boats well into the 20th century - the oarlock became a symbol the struggle between styles and changing times. The fixed-pin became the symbol of the English Orthodox Style and was "as powerful a badge as ever the true cross had been to the medieval crusaders."[59] Indeed, as late as 1935, when the Cambridge Boat Club President decided to use swivel oarlocks for the Boat Race, their two long-time coaches, loyal to the fixed-pin and all that it meant, did what Thomas Egan had done some eighty years before and offered to coach the Oxford crew instead.[60]

The English Orthodox Style has been mentioned frequently up to this point, often as the center of debate about the merits of particular changes, both technical and philosophical. But a more thorough investigation of the style itself is necessary in order fully understand the decline of English rowing and the subsequent ascension of the American rowing tradition.

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58 Lehmann, 153-5. The "jar" at the release to which Lehmann refers is created by the fact that a fixed-pin oarlock was much longer than a swivel oarlock and so the oar would slide from the bow side of the oarlock towards the stern, causing a thumping sound, when pressure on the oar was removed. Fixed-pin oarlocks needed to have that space because as the oar moved through the arc of the stroke, if it was too short, the oar would be pinched very easily, a problem made considerably worse by sliding seats.

59 Halladay, 130.

60 Halladay, 130.

Chapter 3

The English Orthodox Style

Before attempting to focus on the details of the English Orthodox Style, it is necessary to put the discussion into some context. Coaching is the human involvement in attempting to achieve some desired athletic ideal, and is therefore a most personal and private thing. Discussing or critiquing one style or another is in no way an automatic judgement of its merits. Any style, method or form of teaching is a product of the times and the technology available, and it is limited by the ability of the athletes asked to perform it and the coaches who are trying to pass it on. Success or failure does not necessarily imply that one way is better or worse than another.

The very human nature of coaching means that certain things will be emphasized more than others as a coach tries to alter, through his teaching, the physical performance of his athletes. So while different coaches may be striving for the same ideal, in the name of English Orthodox or some other "style," the end results will very often be different from one another. This individuality, it will be seen, was part of the confusion and the quarrelling that went on in England and led to opposing camps of advocates of one style over another. Instead of being a healthy by-product of the pursuit of athletic excellence, it ended up having a negative influence on English rowing as a whole. It is also well known that the human nature of coaching is what makes one coach stand out from another. With the same background, same information and technology available to them, and similar athletes, what makes one coach's crews outperform another's are often the intangible qualities of leadership, charisma, teaching ability, and originality - not necessarily that one coach believed in or didn't believe in the English Orthodox Style or any other style of rowing.

In the 1840s and 1850s, as the Oxford and Cambridge Boat Race grew and evolved into an annual affair of such magnitude to the Universities, the difficulty in firmly

establishing ground rules regarding professionals was a recurring theme. At that time it was generally acknowledged that moving away from the professional influence was the best route, as can be recalled by C.J. Selwyn's speeches and Thomas Egan's disgust at Cambridge in employing a professional. However, there continued to be many times when the two would intersect. As Egan and Shadwell began their effort to develop an "amateur style" as distinguished from that of the professional waterman, it was a break in theory, to be sure, but one that was not as easy to put into practice. The instance of Matthew Taylor steering Oxford in practice before the 1857 Boat Race is a good example.

Recalling the situation of the late 1840s and the 1850s, oarsmen were just beginning to see clinker-built boats replaced by shell-style boats with interior keels, and the introduction of outriggers allowed boats to become narrower, often two-feet or less, and longer, up to sixty-five feet long. These boats were covering the four and one-quarter mile Putney to Mortlake course, which was first used in 1845, almost three and a half minutes faster in 1869 than just fourteen years earlier,[61] a drop of almost 15%. Perhaps surprisingly, it would take another 80 years before they lowered the time even another ten percent. So to alter the style of rowing in order to deal with the faster boats was a natural and necessary result.

Egan and Shadwell began by changing the waterman's short, choppy stroke to one with a long reach forward; a hard, sharp entry into the water, in order to grab hold of the water with the oar as the boat moved faster; and a long swing into the bow with a powerful pull into the body, so as to send the boat onto a smooth run between strokes. It is interesting to note that sitting in the number six seat of the Oxford Crew during the

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61 Cleaver, 220-1. Comparing times in rowing is always hazardous at best because conditions, such as weather and tide, can vary greatly. However, the sudden drastic drop over just two and a half decades as the major technological advances appeared, is undeniable.

1857 Boat Race, the crew for whom Matthew Taylor had built one of the first keelless eights and which he had "instructed," was Edmond Warre. Halladay points out that it may be erroneous to assume that Warre's teachings and "the full flowering of the orthodox style" came directly and solely from Egan and Shadwell. Some of the credit, he argues, may indeed belong to the professionals, such as Matthew Taylor, who were also experimenting with the new style of boats.[62]

In order to gain a better picture of the mechanics of the Orthodox style it will be useful to look at descriptions of the ideal stroke in the words of some of those who were its staunchest advocates and most eloquent spokesmen. The definitive piece describing the Orthodox style comes from a man who is probably the most well-known and influential advocate to this day, Gilbert Bourne. A graduate of Eton who rowed on the 1882 and 1883 Oxford University crews, Bourne went on to a long career as a coach and in 1925 published A Textbook of Oarsmanship. It is a comprehensive and thorough examination of the technique, anatomy, physics, and mechanics of rowing. In it he pays homage to Edmond Warre "from whom I, no less than many other generations of oarsmen, learned nearly everything that I know about rowing."[63] He, like Warre, felt that there was one set of indisputable rules to which proper rowing must adhere, that "there is a certain shape and sequence of bodily movement that is to be preferred above all others." His chapter on rowing technique, therefore, was "dogmatic"; the main "purpose is to insist, and to go on insisting, on the necessity of obeying rules."[64]

Bourne takes Warre's *Notes On the Stroke* a step further. Where Warre went over twenty-seven different points of a single stroke, Bourne goes over forty-five different

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62 Halladay, 204.

63 Bourne, xii.

64 Bourne, 89.

distinctions. He attributes the increase to the use of the slide. As Bourne, with remarkable detail, presents the conception of one single rowing stroke:

> The moment the thumbs touch the body drop the hands smartly straight down, but not more than is sufficient to bring the blade clear out of the water; then turn the oar on the feather by sharply flattening the wrists, and at once straighten the elbows so as to carry forward the hands in a straight line to the front; simultaneously, by an elastic movement of the hips, incline the body forwards from the thigh-joints, allowing the knees to relax a little, but not so much as to bring forward the slide. As soon as the oar and the body have been recovered in this way, without any break in the continuity of the movement, carry on the forward swing of the body from the thigh-joints and allow the knees to bend steadily upwards so as to bring forward the slide, taking care that the body is always travelling in advance of the slide. Let the stomach and chest come well forward, the lower part of the body pressed towards the thighs, the back bending down in one piece from the seat and kept as nearly straight as it can be without constraint; the head held up, the eyes fixed on the outside shoulder of the man in front. The elbows should be straight, the arms allowed to swing freely upwards from the shoulder-joints to compensate the downward movement of the body during the swing; the oar held lightly between the fingers and thumbs and not pressed upon, the weight of the arms alone being sufficient to maintain the blade in its proper straight line as it goes back; the button of the oar lightly pressed against the sill of the rowlock; the wrists depressed a little below the level of the knuckles. The shoulders, though slightly braced back, should not be stiffened and should partake of the free swing forward of the loins. As the slide comes forward the knees should open out evenly from the middle line, just sufficiently to make room for the stomach but not so far as to shift the position of the feet on the stretcher, the forward movement of the body and slide being regulated by the uniform bending movements of the knees and ankles and by the pressure of the feet on the stretcher. As the hands pass forward over the feet the oar should be turned neatly off the feather by raising the inside wrist and forearm, allowing the handle to come into the grasp of the inner side of the palm of the hand but without shifting the position of the fingers; keep the outside wrist flat and the fingers of the outside hand securely hooked round the handle of the oar. As the body and slide come forward to their full extent the soles and heels of both feet should be pressed against the stretcher, the shins nearly vertical, the knees close below the armpits, the thigh-joints bent to their fullest extent, the flanks and ribs pressed close against the thighs. Both body and slide should slow up till they come to the momentary full stop necessary for the reversal of the forward movement. At this instant the weight of the hands and arms on the handle of the oar is released; there is a prompt, decisive uplift of the hands, during which, without the loss of a thousandth part of a second, the action of the body and slide must be reversed by springing back from the stretcher. The initial impulse should come from the feet, the heels being driven well home, and the weight of the body must be lifted back from the thighs by a swift and strong action of the loins so that the trunk springs back to the perpendicular during the first four or five inches of the backward travel of the slide. During this action the fingers of both hands should be firmly hooked round the handle of the oar, but all tightening of the grasp must be avoided; the

arms are straight, being pulled taut by the resistance of the water to the blade of the oar, and the shoulders must be kept firm but not stiff. The blade having gripped hold of the water and the beginning of the stroke having been effected as described, the stroke must be continued by forcibly pressing down the knees, so as to drive back the slide and maintain the backward swing of the body in conjunction with it, the loins and the back being held firm, so that the oar is driven through the water with a force unwavering and uniform. As the wrists pass over the knees, the shoulders should be drawn back; the upper arms carried well past the sides; the elbows allowed to bend and drop the rear; the wrists allowed to arch to compensate for the bending of the elbows. While the arms are bending home, maintain the pressure on the blade of the oar to the last moment by flattening down the knees and swinging the body back a little, but not far, past the perpendicular. At the finish of the stroke, the shoulders should be drawn well back; the chest should be displayed to the front but not stiffened or puffed out; the lower part of the body held firm and upright but not artificially strained; the roots of the thumbs, not the knuckles, touching the body a little below the breast-bone. From this position the movements of the recovery are promptly recommenced.[65]

Another student of Warre's and a teammate of Bourne's at Eton and Oxford was R.S. deHaviland. He also went on to a distinguished coaching career, taking over the head coaching duties at Eton in 1893. He contributed to the school of the Orthodox style with his pamphlet *Elements of Rowing,* which provides for a thorough description of the Orthodox style on a fixed seat:

Body: To begin then, the oarsman must sit 'at attention' firmly down on his bones, not the end of the backbone; the small of the back in, but with no stiffness anywhere, easy and comfortable but *not* sloppy.
Feet: See that the feet are firm and flat on the stretcher at an angle of 45 degrees; the stretcher is as important for rowing against as the ground is for standing on. There is no hope for the oarsman who neglects stretcher....
Hands: The hands must have an easy hold of the oar....the shoulders and arms straight, but not stiff.
Swing Forward: Now let the oarsman swing the body forward from the hips, in one piece....*Now comes the really hard part of rowing.* The lower part of the trunk must be forced down, the small of the back in, till the lowest ribs touch the thighs. The upper part of the body all the time must be loose and easy and the feet must be flat on the stretcher....the only pain which need be suffered is in forcing the lower part of the body forward, and even this pain will abate as practice makes perfect....Let the central axis of the body always move forward and back, never sideways.
Like a Spring Bent Down: The whole body becomes a spring bedded in the stretcher; the firmer the spring is pressed down the greater will be the force of the recoil. PRESS the

65 Bourne, 94-6.

feet against the stretcher and the rest follows....The body should force the feet against the stretcher that the least pressure against the stretcher sends the body flying back.
Finish: As the stroke ends the arms bend naturally, the shoulders must be in their place, neither up nor down, forward nor back; keep the wrists flat as long as you can.
Recovery: Let the recovery be easy and SILENT, no banging against the rowlocks as the hands come away....Once up to the perpendicular the body swings forward as before described, the feet fall against the stretcher and there abide.[66]

Last, a description of the stroke by R.C. Lehmann, who was previously quoted as a firm believer in the fixed-pin oarlock, is more detailed, and includes the proper use of the sliding seat as well. As Lehmann states, in his book Rowing:

2. Beginning: Get hold of this just as you would on a fixed seat, with a sharp spring of the whole body, which thus begins its swing-back without the loss of a fraction of time.
(a) The natural tendency of a tiro will be to drive his slide away before his shoulders have begun to move. This must at all costs be avoided. In order to secure the effectual combination of body-swing and leg-work, it is essential that the swing should start first.
(b) It is equally reprehensible to swing the body full back before starting the slide....
(2) When the body-swing backward has started, but only the smallest fractional part of a second afterwards - so quickly, indeed, as to appear to the eye of a spectator almost a simultaneous movement - let the slide begin to travel back, the swing meanwhile continuing.
(4) The body must swing a little further back than on a fixed seat.
(5) Body-swing and slide-back should end at the same moment.
(6) Simultaneously with this depression of the legs, the hands must bring the oar-handle firmly home to the chest, sweeping it in and thus obtaining what is called a firm hard finish. As the knees come finally down, the elbows pass the sides, and the shoulders move back and downwards.
(7) The drop of the hands, the turn of the wrists, the shoot-out of the hands, and the straightening of the arms must be performed precisely as on a fixed seat, but the legs, meanwhile, are to remain braced, so that knees may not hamper hands. As soon as the hands have been shot out, and *immediately* after the start of the forward swing, the slide comes into play, and the knees consequently begin to bend outwards and upwards.
(8) The recovery movements ought to release the body smartly, but care must be taken not to hustle the body forward with a rush before the arms are straightened. The body *begins* to swing *from the hips* as soon as the hands release it....
Only by carefully observing fixed rules and by prolonged practice will you be able to attain to the harmonious ease and elegance by which a comparatively weak man can so economize his strength as to outrow and outlast some brawny giant who wastes his power in useless contortions.[67]

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66 Haig-Thomas, 153-6.

67 Lehmann, 48-53.

A few key elements of the English Orthodox Style are worth pointing out because they will demonstrate where some of the technological changes in rowing equipment fit into this style of rowing. As described earlier, there was a long swing forward from the hips as the oarsman moved towards the catch position, which got its start with Egan and Shadwell, and which stayed with the Orthodox style. Richard Burnell, an English rowing historian, describes it thus, "the body was packed right down on to, or even between the knees, at the forward position. The beginning was a lightening drop, into the water, effected by a sudden upward movement of the hands....Simultaneously there was an upward and backward spring of the body off the knees. It has been described as a 'Shoulder Catch'."[68]

Lehmann provides a clear picture of how the sliding seat was incorporated into this stroke as he discusses the novice's tendency to "drive his slide away before his shoulders have begun to move," when the actual idea was to have the swing of the body still initiate the stroke. But the distinction that it is just "the smallest fractional part of a second" before the leg drive is made demonstrates that the sliding seat's incorporation into the rowing stroke created confusion and consternation and was, even over twenty-five years after its introduction, essentially super-imposed into the Orthodox view of a stroke defined by the swing of the oarsman's body. The driving of the legs during the rowing stroke was never supposed to be the major focus of an oarsman's energy; indeed, the legs were "not permitted to master the backward swing of the body."[69]

In terms of the history of English rowing, perhaps the most interesting and significant sections, of each of the preceding descriptions of the Orthodox style are the admonitions which accompany them. Bourne describes rowing technique as "dogmatic"

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68 Burnell, Swing Together, 33.

69 Burnell, Swing Together, 33.

and insists on obeying rules, deHaviland warns the rower about "the really hard part of rowing," and Lehmann tells the rower that he will succeed "only by carefully observing fixed rules." A combination of many factors accounts for such an approach: the declining hold on sporting superiority for the English throughout the world; the Muscular Christian movement associating sporting activities with religious conviction; and an increasingly industrialized world where the scientific study of even mundane actions meant that more and more tasks were being mechanized by modern machinery, and efficiency was improving. Many of the criticisms of the Orthodox style were related to just this approach.

For many years in England in the 19th century there simply were not different ways to row. There was the Orthodox way to row. Of course, not everyone accomplished this, but success was viewed largely in relation to how well a crew executed the Orthodox style. Failure to row in this way, to many oarsmen and coaches, meant failure on the water. This view, however, left out the self-taught and experimental ways of the professional and the amateur oarsman who was not fortunate enough to go through the preparatory school, University and Metropolitan rowing club systems, but who was not without success on the water. Similar to the questions surrounding the development of the keelless boat, record keeping about rowing styles was not widely practiced, so there is no evidence, beyond a passing mention of how others viewed the stroke.

The criticisms levelled at the Orthodox style and those who pursued it, both successfully and unsuccessfully, took place on a philosophical level which targeted the sometimes ostrich-like approach towards the evolution in rowing equipment, as well as the elitist and xenophobic nature of English rowing. It also took place on a more basic level regarding the actual mechanics of the rowing stroke itself. On both levels it is impossible to discuss the issue without mentioning the person who crystallized the debate

by clearly, eloquently and methodically developing his own approach to rowing that was as different as any could have been.

Chapter 4

Steve Fairbairn

Steve Fairbairn was simultaneously an insider and an outsider in the world of 19th and early 20th century English rowing. Born in Melbourne, Australia in 1862, with a Scottish father who was involved in sheep farming and silver mining ventures,[70] Steve was one of a dozen children. He learned early about rowing from his two older brothers, both of whom rowed at Jesus College, Cambridge in the 1870s, the future home Steve's greatest success. Ian Fairbairn, Steve's son, writes, in the introduction of a book about his father, that the seeds of his father's future stance were planted early:

> There was for all that a considerable difference between the English of the homeland and the colonials; and Steve was all his life a colonial in thought and expression. In spite of their veneration for "home" and their strongly sentimental imperial patriotism Australians, and no doubt other colonials as well, had their own local pride and did not fail to criticise what they might consider undue deference to convention on the part of the English and the Europeans. Theirs was inevitably the progressive independent outlook of a very young country, fundamentally rational and sincere....[71]

So too was an awareness of the debate about rowing styles. Twice in his early years Fairbairn watched as two of his older brothers returned from rowing at Cambridge with strong ideas about the sport and what they called the "Varsity style." His oldest brother, George, returned home in 1877 having been in the Jesus College crew which won the Ladies' Challenge Plate (named for the women of Henley; however, women were still over 100 years away from competing there) at the Henley Royal Regatta in that year. Two years later his brother Charles returned home, having earned his Blue for Cambridge and winning the Grand Challenge Cup at Henley with Jesus College. Both

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70 Christopher Dodd, Henley Royal Regatta. Stanley Paul: London, 1989. 105.

71 Steve Fairbairn, The Complete Steve Fairbairn On Rowing. The Kingswood Press: London, 1990. 17.

brothers, upon returning to row with the Melbourne club crews, got wrapped up in minor controversies with local oarsmen who were either unaware or unimpressed by the goings on at Cambridge about style. Each brother was "converted" back to what the locals considered a more rational, natural style of rowing. Fairbairn frequently mentioned these episodes as having left a significant impression on him and as having helped shape his own rowing philosophy.[72]

Fairbairn was an above average athlete in his own right, both in talent and determination. He played cricket, football (soccer), and was a runner and a rower at his grammar school. While he was at Jesus College studying, he took a one pound bet in the days leading up to the Henley Regatta that he could paddle a canoe from Putney, outside London, to Henley, in twenty-four hours.[73] He confidently sent his clothes ahead on the train to Henley and made it in twenty-three hours. Shortly after the regatta, he and a cousin walked to Inverness, Scotland. By the time he graduated he had won three events at Henley, and he had represented Cambridge four times in the Boat Race, winning once. He began coaching as an undergraduate at Jesus College in the 1880s, a common practice for oarsmen in the Universities for many years; he returned to the family sheep farm in Australia until 1904, and began coaching again in earnest upon his return to England that year.[74]

The quote from Steve Fairbairn that most appropriately sums up his philosophy and his approach to rowing, and thus to coaching, is one which he repeated often: "One

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72 Fairbairn, 20-1.

73 Dodd, Henley Royal Regatta, 106.

74 Tony Mason, ed. Sport in Britain: A Social History. Cambridge University Press: Cambridge, England, 1989. 293.

can never really row: one can only illustrate in a boat what one thinks rowing is."[75] This humble view is clearly different from that of the Orthodox coaches with whom he had a running debate for many years. The Orthodox coaches, as the previous excerpts illustrate, had a clear image in their minds of what the proper stroke should look like and exactly how the oarsman should move, and there was no wiggle room on the subject. While Orthodox advocates repeatedly bashed his style, Fairbairn insisted until the end of his life that he did not invent any style; instead, he felt he developed a method. Geoffrey Page states that "orthodox coaches believed in imposing a conscious pattern of movements conforming to their image of the ideal stroke," while Fairbairn's aim "was to eliminate the errors of orthodoxy and replace them with more effective methods of boat propulsion."[76]

Perhaps most significant, however, is why Fairbairn felt the need to confront Orthodoxy, and thus the English rowing establishment. What he had suspected from his own days at Jesus College was clear to him when he returned to England in 1904. Orthodoxy was no longer working because those who taught it were not achieving the results they wanted and "the over-slavish following of a set of rules was doing great harm to rowing, and sometimes making it a caricature of what it was meant to be."[77] In another manual on the finer points of rowing and coaching, F.C. Kempson makes an

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75 Fairbairn, 85. This quote is demonstrative of both Fairbairn's humility towards rowing and his uncanny knack for language. This sentence could serve as either an admonishment for an oarsman, a challenge to an oarsman, a sign of deference from someone always looking for perfection, or a teaching tool prod the oarsman into thinking out the motions of the stroke for himself rather than being a puppet at someone else's control.

76 Fairbairn, 8-9.

77 Burnell, Swing Together, 41.

attempt to point out this trend, without abdicating the Orthodox style altogether. He says in Oarsmanship and Training:

> Further, from what I have observed and overheard on the towpath, it appears to me that though a sound style of oarsmanship may be aimed at, yet the average college coach, he at least who is entrusted with junior crews and who therefore has the greater responsibility, is a very poor teacher. He shouts exhortations, but does not attempt to explain the reason for any detail of form. Yet nowhere is the "art of putting things" more valuable than on the towpath...[78]

According to Fairbairn there were twelve technical differences between his method and the Orthodox style. However, there are three main areas which they concern, and which provide a sufficient contrast to the details of the Orthodox style outlined earlier. The first one begins with the finish of the stroke, when the oarsman takes his oar out of the water and begins the recovery motion, towards the stern, to prepare for the next stroke. Orthodoxy looked for a series of motions which produced a rectangular movement of the oarsman's hands and oarhandle as he pulled towards his body, lowered his hands, and moved them away again. Fairbairn looked for a more blended, rounded motion which brought the hands and handle around the body smoothly "just like turning a mangle."[79]

Second, the Orthodox style looked for a "lively recovery," which evolved into very rapid, jerky motions just as the finish of the stroke was occurring. It involved shooting the arms out to a straight position and swinging the body forward immediately afterwards. Fairbairn felt very strongly that the "lively recovery" actually killed the forward progress, or run, of the boat between strokes. Instead, he wanted his oarsmen to get a

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78 F.C. Kempson, Oarsmanship and Training. Horace Cox: London, 1911. 5. The towpath, which is the path that followed the courses of rivers and canals throughout England and were used for towing barges up the river, in this case refers to the fact that they were used by coaches on foot, bicycle or horseback to follow their crews in the days before the mechanized coaching launch.

79 Fairbairn, 27. A mangle was a common household device used to smooth and press clothes and linen.

"whaleboney," or elastic and flexible feeling, in their backs as they let the natural motion of the stroke flow into the next recovery.

Last, the most damaging thing that Fairbairn felt Orthodox coaches were teaching was what happened just as the blades were entering the water with the oarsmen ready to start the next stroke. This point goes back to the technological evolution of the sliding seat and how it confounded the Orthodox coaches. They essentially super-imposed the slide forward on the recovery and the leg drive, while the oars were in the water, into the fixed-seat version of the rowing stroke. They were looking for the oarsman to open up the angle formed between the thighs and the chest by lifting upward and backward with their upper body just as the blade entered the water. This preserved the entry into the water as it had been without the slide. The oarsman was then to begin the leg drive once the back had started swinging, and the legs and back were to continue moving together until the end of the stroke. Fairbairn was well aware of the importance of the legs; he would teach an oarsman to "drive at your blade and let your body and slide take care of themselves."[80] He wanted a natural action, such as the oarsman probably produced every day in unconscious ways through daily motion, not a mechanical, over-analyzed and stultifying motion that required unnatural movement or excessive thought from the oarsman. Fairbairn felt that if an oarsman "couldn't do it easily, he couldn't do it all."[81] This was often mistaken by his critics to mean that he wanted his rowers to row lazily or without effort, but he meant naturally, unconsciously, and freely. Contrasted with deHaviland's words in Elements of Rowing, "the really hard part of rowing," it is not difficult to see how the approaches differed.

Fairbairn did not just want to teach people the motions of the rowing stroke; he wanted to impart the feel of the stroke through intonation and emphasis with his voice.

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80 Fairbairn, 26.

81 Fairbairn, 44.

He describes how he would tell the oarsman to execute the finish of one stroke and the beginning of the next one:

> Easy and Lazy to the crew.... a sharp firm grip of the "Ee" as the oar bites the water, and a long soothing "syand" as the oarsman draw the oar through, and a pronounced "la" as the oarsman whips the oar round the finishing turn and the blade is struck on the feather; then "aaazy" delivered lazily and smoothly as the oarsman floats forward.[82]

This is a wonderfully simple, yet eloquent, example of his conception of the stroke as one endless movement, where he draws just three words which refer, technically, to the finish of the stroke, out over an entire stroke cycle in an effort to allow the rowers' minds freedom from mechanical motions and "rules" about each step along the way.

In his preface to the first edition of his book, Rowing Notes, Fairbairn points out that he was actually working from a foundation laid by a well known professional sculler, Joe Sadler, when Fairbairn began coaching at Jesus College in his undergraduate days. Sadler had been England's professional sculling champion in the 1870s and, like most professionals of that time, had developed a style of rowing that he felt worked well for him. It was based on two main objectives: good leg-work and good bladework. If the oarsman's legs were applying his power effectively and he handled his oar(s) skillfully, so as to transfer that power to moving the boat effectively, then those were the important things. As if to not take too much credit for the success Jesus College enjoyed under his coaching, Fairbairn notes that Jesus had been Head of the River, for winning the annual bumping races at Cambridge University, from 1875 until 1886, a reign that began before he arrived, while rowing in this style of focusing on leg-work and bladework.[83]

Fairbairn inspired his oarsmen in part because he allowed them the freedom to make mistakes, not intentionally, but because he knew and accepted the fact that people had physical and psychological limitations that would affect their abilities. Oarsmen, in

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82 Fairbairn, 12.

83 Fairbairn, 115-6.

turn, respected him and believed in him. In 1907 George Mallory, who would go on to greater heights, literally, by leading an expedition up Mount Everest in 1924 before perishing in a summit attempt, was the secretary of the Magdalene College Boat Club at Cambridge. The club was looking for someone to help them continue their recent period of improved results on the water, and, as can be seen in the following journal entry, were both leery of and heartened by Fairbairn. Mallory wrote:

> We are to have a Jesus coach. Goldsmith has said: 'God will provide. But alas, how fickle, how selfish the Theocracy!' A fortnight has passed, and still no god to coach us. And so perforce we must go to the Hall, and get some sturdy unintelligent to 'bid him forward, breast and back as either should be,'and teach us to shove it along by sweat and swearings, with all the horror of the ancient Swinck Misspent. And yet when he is secured he makes us row not a whit differently from the elegant, divine way, the way we rowed at Henley. He is none of your cursing, blustering, hell-for-leather, body-swing-overdone-at-all-costs, stupendous-recovery fellows at all. He is shy and rosy-cheeked, modest as any maiden, and makes a considerable effort to be sensible when sober and obscene when drunk. And so we become a very decent crew and go up three places.[84]

Indeed, the devotion Fairbairn inspired in those that he coached was so strong that during the saying of grace at the Henley Royal Regatta, Jesus College crews would bow their heads and say, "To Steve."[85]

The rift that was created between those who were loyal to the Orthodox style and those who felt they were rowing "the Jesus style" or "Fairbairnism," however disagreeable those terms were to Fairbairn himself, was a deep one which caused many long term problems for English rowing. The blame for exacerbating the rift belongs to those on both sides of the debate. In response to heavy criticism of his teaching, Fairbairn occasionally used terms such as "Awfuldoxy" to make jabs at his critics and "Oxforddoxy" to poke fun at those of the rival university who were still more heavily influenced by the traditional style.

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84 Dodd, Henley Royal Regatta, 107.

85 Dodd, Henley Royal Regatta, 137.

One major criticism of Fairbairn's teaching was that it was easier to bring a crew more quickly up to a certain level of proficiency than was the Orthodox style, but that it was not a good style for what were considered "first class" crews. Burnell states that if "you are not concerned with producing a first-class crew, and will be content to win second-class races, you will be better off with Fairbairnism, especially with inexperienced material."[86] This belief was attributed to the sliding seat. Similar to the experiment with the sliding seat on which Brickwood felt comfortable rather quickly, critics of Fairbairn derided his methods as sufficient only to a limited extent. Believers in Orthodoxy felt that extensive fixed-seat rowing was necessary to high quality rowing, so while learning on a sliding seat would give the rower an almost immediate ability to attain some proficiency by using the strength of his legs, it would prevent him from gaining "first class" speed later on because he wouldn't know how to use his upper body properly.

Well into the 20th century it was still believed by Orthodox purists that significant training in a fixed-seat boat was necessary to attain true Orthodox rowing on a sliding seat later on; it simply could not be learned adequately only through sliding seat rowing. Fairbairn felt that fixed-seat rowing was entirely unnecessary. He was well aware, as were Orthodox coaches, that a relatively inexperienced crew rowing less than perfectly on sliding seats could more often than not defeat a more experienced crew rowing on fixed-seats. The jump that Fairbairn's critics could not make was being able to accept that over time a crew that only knew sliding seat rowing would be able to develop into a "first class" crew which could defeat a crew trained in their traditional manner. This is where a fundamental misunderstanding of Fairbairn's teaching can be seen.

Fairbairn coached both fast and slow crews the same way; some were capable of achieving more speed than others. But it was not the method of coaching alone that caused success or failure; it was a host of factors. Fairbairn's critics attributed everything

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86 Burnell, Swing Together, 56.

to the style he was teaching, not giving full recognition to the fact that the end result was not so much a result of style, but of his method of teaching. Too much emphasis, good and bad, was placed on how a crew rowed, and not enough on how they were taught. Fairbairn saw Orthodoxy failing in its goals, so he made rowing fun again, giving his rowers freedom. Orthodoxy saw Fairbairn throwing style out the window and then drew the conclusion that, while Fairbairn's teaching might be easy to learn, it was not fast. This viewpoint evokes the Victorian social framework in place at the time; if it was too fun and enjoyable, it probably wasn't good for you. Like de Haviland's admonishment about "the really hard part of rowing," Orthodoxy stressed the difficulty and discomfort one must expect to succeed, while Fairbairn urged his rowers to think for, and enjoy, themselves.

One of the deeper problems for English rowing, the lack of good coaches, might have been recognized by some, including astute undergraduates such as George Mallory, but it was not adequately addressed for several reasons. It existed in part because English rowing was divided along class lines and had from its earliest days excluded a huge portion of the rowing population who could have helped right the ship before it sank. The tradition of the gentlemen-amateur coach worked in the school and university system because it was a system built by and for the upper classes. But it was a system based on "the tutelage of nurses and games-masters,"[87] which had stifled innovation, change or experimentation. The Orthodox coaches had extremely competent leaders in men like Edmond Warre and Gilbert Bourne, but the quality of the execution of the ideal Orthodox style flagged considerably as one looked down through the system to the junior crew being followed on the towpath by someone giving "parrot cries" of what the Orthodox style should be.

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87 Fairbairn, 19.

Eventually, the clearly written and thoroughly described motions of the Orthodox stroke led to what Fairbairn saw as an over-stylized form of rowing where the only concern was getting the oarsmen to achieve the desired positions, not moving the boat. Many Orthodox believers took for granted that since this was the way to row, boat speed would be the result. Recall how deHaviland, Bourne and Lehmann insisted on obeying and following rules, and that good rowing was doctrine. The English system of rowing, exclusionary and class-based, was not organized to deal with both the inevitable evolution of equipment, which would alter the basic framework of the rowing stroke, and the growth of rowing overseas, which would threaten their dominance of rowing.

Chapter 5

The Golden Age and Decline of English Rowing

The period frequently referred to as the Golden Age of English rowing extends over a period of more than four decades, from the 1870s up through World War I. The end of this period was not a sudden, drastic collapse. It was the result of many years of gradual change in England, Europe and America, signified by displays of English vulnerability on the water, attempts to maintain the status quo through off-the-water actions, and the confusion and controversy surrounding technology and style. Due in part to the organization of English rowing which resulted in the class-based structure of power and decision making, the manifestation is best seen through events such as the Henley Royal Regatta and the newly revived Olympic Games, and through the various ways in which England dealt with change.

It was a natural evolution that with England as the birthplace of competitive rowing and home to the Henley Royal Regatta, it would be only a matter of time before foreign crews would want to compete there. In the last quarter of the 19th century, rowing had spread to America and was becoming increasingly popular at colleges and clubs. While professional rowing on both sides of the Atlantic still played a significant role in the public's consciousness, it was suffering from scandals and accusations, declining in popularity, and the modern Olympic Games were not begun until 1896. So for much of the amateur and collegiate rowing population, Henley was the regatta which carried more prestige than any other.

A foreign oarsman first showed up at Henley in the form of a single sculler named E. South from New York City in 1872. His entry was short-lived as he survived just one

round in Henley's single elimination format.[88] The next foreign entries were again from America in 1878, when there were crews from four different institutions racing in three different events. The real story from that year was the American entry from a small rowing club in Michigan named the Shoe-wae-cae-mette Boat Club. The "Shoes" as they were called, would set off a controversy which plagued Henley and foreign competitors there for many years. They were the first foreign crew to ever contest a final at Henley, and many in English rowing hoped they would be the last. They did not win Henley that year but the Shoes are memorable for a number of reasons. One is because they entered the regatta just as England was on the cusp of splitting rowing up through its definition of an amateur, which included anyone engaged in manual labor. The Shoes were lumberjacks in Michigan and did not make their living on the water, but while they were not considered professionals in America, in England the important defining characteristic is that they were *not* amateurs. Another is that their style of rowing was an assault on English sensibility. They rowed with swivel oarlocks, sliding seats and rowed at a very high stroke rating with a short, choppy stroke. Finally, they brought over a boat made of papier-mache, which was an American innovation popular for some years for their lightness.[89]

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88 Burnell, Henley Regatta, 101. Due to how narrow the upper portions of the Thames River is, racing there is limited to having just two boats side by side. In some instances three boats have been placed abreast, but as the regatta became more popular and pleasure boats lined the river, erecting wooden pilings to delineate the course became necessary and further restricted the available space.

89 Dodd, Henley Royal Regatta, 66. Papier-mache boats were made with multiple layers of heavy paper sandwiched together with numerous coatings of varnish. They were remarkable for their lightness, which rivals what can be built today with modern techniques. Their durability was the problem. They could become fairly easily waterlogged, at which point salvaging them became impossible, and they were very difficult to repair when damaged.

As English rowing moved to define amateurs, Henley moved to make it much more difficult for foreign entries to gain access to the regatta. For the 1879 race any entries from outside England had to arrive on March 1st, complete with notarized declarations as to the profession of everyone in the crew.[90] It is not hard to imagine that this proved almost an impossibility for any American crews to become organized enough to be able to provide such information overseas four full months before the regatta was held.

While such entries as the Shoes' in 1878 certainly caused a stir in both England and America, it was not enough to shake English faith in their position as forerunner of rowing in the world. By 1895 however, foreign entries were still appearing and when Cornell University showed up in that year with their professional coach Charles Courtney, it set off a controversy which became a lightening rod for often volatile issues such as professionalism and foreign entries.

In 1895 English rowing was at its zenith both at home and abroad. People interested in rowing throughout the world looked to England for guidance and her crews were still largely the benchmark of success. England had been able to cordially accept any foreign entries at Henley and had had great success defeating them when they came. During this time Eton was at the start of a remarkable run of making the finals of the Ladies' Challenge Plate event for thirteen straight years, a run which took place under R.S. deHaviland's coaching and which didn't end until 1905. Leander, a metropolitan rowing club which was long a bastion of the Orthodox style and all that it stood for, had won the Grand Challenge Cup four years in a row and was also in the midst of an unprecedented string of making the finals of "the Grand" in 12 out of 15 years, a run that would continue until 1906. However, 1895 was one of the years Leander would not make the final of the event.

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90 Burnell, Henley Regatta, 103.

In the opening round of the racing, Leander met Cornell University, coached by the former professional, Courtney. He kept his crew on a short leash while in England, which didn't earn any favors from the English, to whom foreign entries were still something novel. At the starting line as both crews sat ready to begin the race, the umpire called out his warning that the race was soon to begin, asking, "Are you ready?" at which point some of the Leander oarsmen replied, "No." Owing to a strong wind blowing off one side of the river the umpire did not hear them and he began the race. Cornell took off with a clean start, a couple of the Leander oarsmen took a stroke but the others did not, assuming the umpire would stop the race and call Cornell back. The umpire, thinking Leander had simply had a very poor start, did not stop the race and Cornell rowed the course out with Leander not racing.[91]

Criticism flew everywhere. Some felt that the umpire was to blame for not calling Cornell back, some felt that Cornell was to blame for not stopping of their own accord and coming back, while others felt that Courtney was to blame for teaching poor sportsmanship to his crew. It is a good example of the drastically differing viewpoints held by those at the regatta. Cornell did not travel that far simply for the experience; they came to race and win. They were coached by one of the legendary professional oarsmen who kept them on a very strict regimen, they were far away from home for probably the first time in their lives, and they had not done anything against the rules of the regatta. Courtney's own professional rowing career was marred by many unanswered questions and skullduggery at some of his biggest races, and many saw this latest episode as an example of the danger of having professionals as coaches, instead of a gentleman-amateur. Either way, it was an important event and was only the beginning of many controversies surrounding the regatta and English rowing.

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91 Burnell, Richard and Page, Geoffrey. The Brilliants: A History of the Leander Boat Club. Leander Club: Henley-on-Thames, England, 1997. 72-3.

Just after the turn of the century, more dust would be kicked up regarding foreign entries and professional coaches. Belgium, Holland, Germany, France and America had all sent crews to Henley by this time, but only three times had any events been won by non-English crews (a Columbia University four won the Visitors' Cup in 1878, a Dutch sculler named J.J.K. Ooms won the Diamond Sculls in 1892 and Nereus, a group of Dutch students from Amsterdam, won the Thames Cup in 1895).[92] In 1901 however, the University of Pennsylvania and Belgium both arrived to contest the Grand Challenge Cup. Penn was coached by Ellis Ward, one of the brothers of the legendary American family of Ward Brothers who dominated professional rowing in their prime, and both crews were certainly not rowing in the Orthodox style. Both crews were using long slides and swivel oarlocks and were rowing a style which consisted of very little body swing and rowing at a high stroke rating. Penn's arrival was reported in the *Field*:

> They have brought two paper boats with them, fitted with seats which slide up a slight gradient and are fixed down the centre of the craft. Swivel rowlocks are used, and the oars are rather short and heavy, with small handles and very broad blades... Naturally after their voyage they did not show to advantage, but making all allowances the impression was that they were not more formidable opponents than those who have previously come from America. They are not quite together, and seem to miss the first part of the stroke.[93]

After a few days in England, *The Times* reported on their rowing and training:

> The men, though not specially big or heavy, are very muscular and in splendid condition. Their style of rowing is quite contrary to the approved methods in this country, and is much the same as all the crews which have come from the USA. Their stroke is very short and there is no body swing... Their system of training is also opposed to that in vogue in this country, in being on teetotal principles. They are allowed no liberty, and are kept to their quarters almost as strictly as prisoners.[94]

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92 Burnell and Page, The Brilliants, 81.

93 Dodd, Henley Royal Regatta, 88.

94 Dodd, Henley Royal Regatta, 89.

Belgium was eliminated in the first round by Leander, who along with other metropolitan clubs such as Thames Rowing Club and London Rowing Club, were responsible for defending English rowing at such times. Penn however, defeated both Thames and London and became the first foreign crew to race in the final of the Grand Challenge Cup. They lost to Leander by one boat-length, but helped set off another round of debate regarding foreign entries in the process.

Soon after the regatta, led by Edmond Warre, now the headmaster at Eton, a campaign against allowing foreign entries at Henley was started. It was, in the eyes of the "Little Englanders" as they were derisively called, as much an issue about amateurism as about foreign entries. It was a hotly debated topic in England for the rest of the year, and in the end it was decided that while foreign entries would still be accepted, a proposal was passed which stated that "no professional coaching should be allowed in the preparation for Henley Regatta, except in the case of scullers."[95] While England was still able to hold onto most of the top prizes at Henley, the debate is a good example of the rowing world closing in on England's superiority, and England's awareness of that.

By 1906 a foreign crews' repeated threats to win the Grand Challenge Cup were realized when a Belgian crew from Club Nautique de Gand finally won it, and Leander's streak of 12 Grand Challenge Cup finals in 15 years came to an end. More important however, it marked the beginning of a nine-year effort between the National Association of Amateur Oarsmen in the United States and Henley to reach a consensus regarding Henley's strict rules about amateurs. It was required by Henley that any crews competing sign an agreement abiding by the rules of amateurism according to the Henley definition, but the N.A.A.O. was still a young governing body which did not have

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95 Burnell and Page, The Brilliants, 83.

complete control over American rowing and no common ground could be found.[96] It would be 1914 before another American crew would compete at Henley.

By 1908 the English had watched as the Grand Challenge Cup had gone to crews from Belgium in 1906 and 1907, and with the Olympic Games approaching and being held on the Henley course, they were determined to do something about these recent threats to English success on the water. They went so far as to ban foreigners from the 1908 Henley Regatta because of the approaching Olympic Games.[97] Not surprisingly, this was seen throughout the world and reported in the press as very bad form and poor sportsmanship, to prevent crews who would be racing on the course during the Olympic Games from using it during Henley.

The 1908 Olympic rowing competition also provided a stage for the escalating debate between the Orthodox style and its traditionalist point of view, and the increasingly frequent assaults on it. For the Olympics that year, each country was allowed to enter two crews in each of the four events to be contested: the eight, the four, the double and the single. One of the obvious choices for the eight was the winning Boat Race crew from that spring, which was Cambridge. Cambridge was being led by their stroke, the oarsman sitting furthest in the stern of the boat whom all the others follow and take their rhythm from, D.C.R. Stuart, who rowed what some called a "sculling style."[98] More important, it was not Orthodoxy and it was feared by some to be incapable of defeating the Belgians. For the second crew the selectors got together a Leander crew, who came to be called the Ancient Mariners because of their advanced ages, led by Guy Nickalls who was over forty years old and is one of the most prodigious Henley

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96 Burnell, Henley Regatta, 246.

97 Dodd, Henley Royal Regatta, 111.

98 Dodd, Henley Royal Regatta, 111.

champions with 23 wins in 34 events entered.[99] This crew exemplified Orthodoxy in style and in background. Six of them were former Eton rowers; all had been thoroughly trained in Orthodox style and equipment, and all were members of a boat club which proudly espoused Orthodoxy.

The Cambridge crew did end up falling to the Belgians, and Leander made it past Hungary and Canada on their way to the final, against the Belgians. Leander vindicated themselves and England proudly by defeating the Belgians by over a boat-length in the final. It was estimated by Theodore Cook to be the fastest any crew had ever travelled over the Henley course.[100]

Despite such success, the bloom was off the rose for English rowing dominance and 1914 most closely marked the end of this domination and the end of the "Golden Age." Not surprisingly, political factors weighed heavily with the start of World War I and the heavy toll it took on England, but on the water results also clearly display the changing landscape. It was in the racing for the Grand Challenge Cup, which always pitted the best foreign crews against the best English crews, which the year 1914 signalled as the end. In each of the first four heats of the event there was an English crew racing a foreign crew, and the English crews lost every race. The final saw the Harvard University junior varsity crew take the Grand Challenge Cup to America for the first time ever, and start a rather ominous streak at the same time. The first three times, out of five, which Harvard won the Grand, armed international conflict followed: first in 1914 (World War I), a second time in 1939 (World War II), and again in 1950 (the Korean Conflict).[101]

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99 Burnell, Henley Regatta, 240.

100 Burnell and Page, 89. The race course had been lengthened to 1 mile, 880 yards for the Olympic Regatta, so exact comparisons of times were impossible.

101 Burnell, Henley Regatta, 144. The streak has since ended. Harvard won the Grand in 1959 and 1985 as well, and no major conflict resulted.

The years following World War I saw rowing continue to spread throughout Europe and America, and as it did so its practitioners decided for themselves how to pursue the art of making racing shells go fast. Equipment, while not significantly different now that the major technological innovations had been made, was still being refined, and experimentation was common. Training the oarsman had come a long way from the ascetic methods practiced in the middle of the 19th century and the advent of the professional coach in the United States brought with it the entire dimension of institutions trying to gain national and international prestige through their athletic teams. Perhaps most important, with the end of English dominance came and end to class dominance. While the restrictive rules about amateurs at Henley would still take a few more years to be done away with, it was no longer taken for granted that the gentleman-amateur's way was only one way to succeed. Steve Fairbairn had begun an often divisive dialogue about the style and technology associated with rowing, which had the dual result of fracturing English rowing while providing effective, useful methods which were adopted by many crews both in England and abroad. Both well-to-do and seat-of-the-pants sorts of programs helped spread the joy and pleasure of rowing throughout the world. While a troubling occurrence for the traditionalists, it helped set the stage for the growing and improving rowing movement in the United States, which was using its own unique structure to develop a rowing tradition which would take over from England.

Chapter 6

The Birth of the American Rowing Tradition: The First Generation

As mentioned earlier, the evolution of turning working boats into a competitive sport is a common heritage between rowing in America and rowing in England. However, the United States did not have a codified tradition of watermen such as had existed since the 16th century on the Thames, or a race such as Doggett's Coat and Badge which began almost 100 years before the first recorded race in America. Partly as a result of this, and partly as a result of significant societal differences between the two countries, competitive rowing in the United States grew up and evolved less around institutions, such as colleges and universities, and more around the professional oarsmen. Competitive rowing in America did not have places such as Eton or Oxford or Cambridge to nurture them and help formulate the prevailing national outlook on the sport. And so it was that the professional oarsmen were far more influential in shaping the American rowing tradition than in England, and while it was not always smiled upon by those who hoped to emulate the English model, they helped nurture and shape rowing at the collegiate level in America. The eventual ascension of the United States to the position of the premier rowing nation in the world is centered around the professional and the colleges. The professional perfected, through trial and error, the methods which each felt was best for them: the best stroke, the best type of equipment, and the best way to train and to race. The colleges and universities, with the coaching and guidance of the professional oarsmen and, eventually, professional coaches, saw American rowing through the decline of professional racing and then helped put it in a position to become the premier rowing nation, riding the backs of the colleges and universities.

The origins of rowing in the United States are not as clearly defined as the origins of many modern, contrived sports. There is no exact date or place which we can look to as the first example of rowing in the United States. Competitive rowing evolved from an

entirely working class, utilitarian and labor-oriented background. Surely there were people rowing for some degree of recreation or simple transportation on waterways across the country, but it was the working boats and the ferrymen of New York Harbor in the early 19th century who first brought rowing out of the working realm. The informal, impromptu races that had certainly always existed between men who earned their living on the water became less informal as these men began to approach rowing as more than just labor.

The early, unorganized races were very much tied to the oarsman's livelihood, as they would often be hired by harbor pilots or salesmen to be brought out to meet incoming ships, often in secret so as to get the jump on competitors; on occasion however, races ensued.[102] The first generally accepted race among rowing boats in the United States occurred in 1811 on the Hudson River from Harsimus, New Jersey to the flagstaff at the Battery, at the end of Manhattan Island. It was between two four-oared barges - one from Long Island, named the *Invincible*, and one from New York, named the *Knickerbocker* - and was won by the *Knickerbocker*.[103] The Whitehall steps at the end of the Battery in Manhattan became so well known for the boats that congregated there that the boats themselves came to be referred to as Whitehalls.

Through the first four decades of the 19th century, rowing contests in the United States were loosely organized, with competitors rowing the traditional working boats or ship's gigs common at the time, sometimes with some slight modifications made to them. The Whitehall, a standard lapstreak working boat, would often be modified by having its sides cut to just a few inches above the water.[104] This is a similar adaptation to the

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102 Robert Kelley, American Rowing. G.P. Putnam's Sons: New York, 1932. 14-15.

103 Kelley, 16-7.

104 John Gardner, "The Early Days of Rowing Sport". The Log of Mystic Seaport: Volume 23, Number 4, Winter 1971. 116.

"wager wherries" used by the watermen in England. Another similarity was that at this early stage of racing it was the boats and their builders, as much as the oarsmen, who received attention and are often all that is mentioned in the results of match races between boat clubs. This same trend was common in England as well, and was described earlier through the stories and innovations seen in the boats built by Matthew Taylor and Harry Clasper in England in the 1840s and 1850s.

But by the end of the 1830s, two single scullers had engaged in a series of match races against one another which at once seem to have heightened interest in rowing and presaged some of the darker, more disruptive elements that would follow rowing for the rest of the century. In 1837 Stephen Roberts issued a $200 challenge to any man to a race in 17-foot working boats, and his challenge was accepted by Sidney Dorlan, a fellow New Yorker. They raced four times between 1837 and 1838 with each winning one of the first two races. Dorlan suffered cramps and lost the third, while in the fourth race Roberts' friends ran into Dorlan's boat while Dorlan was leading and the outcome was never settled.[105] Such back-and-forth drama, intrigue and questionable tactics, complete with large sums of money, became an all-too-common theme in professional rowing.

The use of the words "professional" and "amateur" became increasingly more common as more cash prizes were offered for races. However, they lacked any official definition because rowing did not yet have the sort of infrastructure that could even begin to govern the growth of the sport. The earliest definitions of an amateur simply meant that "the oarsman did not make a business of rowing."[106] Any effort to define the professional oarsman from the amateur continued in a haphazard way through the 1850s and 1860s, and it was not uncommon for amateurs and professionals to be mixed

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105 Samuel Crowther and Arthur Ruhl, Rowing and Track Athletics. The MacMillen Company: New York, 1905. 9.

106 Crowther and Ruhl, 9.

together in races and to even have college crews competing alongside the professionals, as Harvard's Class of 1866 did as sophomores in 1864.[107]

The growth and popularity of sports in general, including rowing, experienced a large burst with the end of the Civil War. Thomas Mendenhall, in his history of the Harvard-Yale boat race, points to the expansion of the country and the revolution in transportation that led to America losing its frontier. He argues that to "replace this wilderness elbow room" sports and other outdoor activities filled the gap.[108] And as rowing became one of the sports to fill this gap, the development of the professional class of oarsmen was spurred on by the establishment of the National Association of Amateur Oarsmen (N.A.A.O.) in 1872.

Without an organizational body prior to the formation of the N.A.A.O., any attempt to distinguish between professionals and amateurs had been done so at the local, or club, level where peculiar rules were often worked out so as to benefit their own members. As Crowther describes in Rowing and Track Athletics:

> The amateur oarsman rowed freely against professionals in open races; and in New England, where the sport was in a particularly bad moral condition, the amateurs rowed with the professional for money. Indeed, the average professional oarsman was a much better sort of person than the amateur who maintained his dishonest position only because he was good enough to beat most of the other amateurs, but not fast enough to have a chance with the better professional scullers.[109]

The dissatisfaction felt among those opposed to the idea of professional oarsmen led to the call for a convention, to be held among all 350 boat clubs in the United States.[110]

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107 Mendenhall, Harvard-Yale, 55.

108 Mendenhall, Harvard-Yale, 46.

109 Crowther and Ruhl, 161.

110 The fact that there were 350 boat clubs at the time is indicative of rowing's wideapread popularity in the United States. Clubs existed all over the country, from the Northeast to the deep South to the West.

But the idea was coolly received and was attended by only 27 clubs and their delegates on August 28, 1872 in New York City. Out of this convention the N.A.A.O. was formed, with a board of nine men who would hold elections each year to replace three members. The board would collectively decide on the status of all oarsmen, as well as hold a regatta to decide the amateur champions each year. But more important, and with much more difficulty, they settled on a definition of an amateur oarsman:

> ....one who does not enter into an open competition or for a stake, public or admission money, or against any professional for a prize, or who has never taught, pursued, or assisted in the pursuit of athletic exercises as a means of livelihood, or who has not been employed in or about boats or on the water.[111]

The phrase "or who has never taught, pursued or assisted in the pursuit of athletic exercise" is an important one, as it relates to the relatively new debate over the role of paid coaches at the collegiate level. One aborted attempt at defining the amateur had tried to incorporate the definition used in England at the time, which included banning any artisans or manual laborers as professionals. This more severe, class-based definition did not prevail. The N.A.A.O.'s definition of amateur was unwelcome by clubs and oarsmen around the country even before it was official. The New York Times reported that the committee managing the National Amateur Regatta "are going to extremes in the matter of regulating the entries under the definition of amateur"[112] and hinted that the committee was risking the withdrawal of many crews and scullers due to the strict definition they were using. But the N.A.A.O. persisted, and the line, while not to be always clear or free from controversy, between the amateur and professional was drawn. Soon the professionals "....went on to become as famous and as publicized as any.... heavyweight prize fighters."[113]

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111 Crowther and Ruhl, 164.

112 New York Times. May 31, 1872.

113 Kelley, 25.

Alongside the amateur and professional oarsmen was a small, yet growing number of collegiate oarsmen who were bringing rowing to the college campus. If one mentions collegiate rowing today, one of the first thoughts many people have is of Harvard and Yale. While this is a narrow view, it is rooted in fact because Harvard and Yale pioneered rowing at the collegiate level. In the spring of 1843 a junior at Yale named William Weeks, having agreed with six of his friends that owning a boat to row in would be a good idea, went to the Battery at the end of Manhattan and bought a used, four-oared Whitehall for $26.50. He took it to New Haven where the new owners named it the *Pioneer*.[114] One year later the first boat appeared at Harvard, bought by thirteen members of the class of 1846 for $85.[115] By 1852 rowing at the two colleges had grown to a point where, when the right circumstances appeared, a race became inevitable. Anticipating the promotional and commercial interests of future collegiate and professional athletic contests, the first rowing race between Harvard and Yale was spurred on by profit motives. James M. Whiton, a junior at Yale, while riding the BC&M (Boston, Concord and Montreal) Railroad past Lake Winnepesaukee, New Hampshire began talking to an agent for the railroad about holding a rowing race there. The agent quickly offered to pay all the bills for the crews if Whiton could organize it.[116] On August 3, 1852 the eight-oared Harvard boat *Oneida* won the very first intercollegiate athletic contest.

Informal rowing was soon occurring at a number of colleges and in 1858 Harvard called for a meeting of delegates among rowing colleges. Subsequently, Harvard, Yale, Brown, and Trinity College met to develop a plan for the College Union Regatta. However, the death of an oarsman from Yale in training for the race caused the

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114 Mendenhall, Harvard-Yale, 2-3.

115 Mendenhall, Harvard-Yale, 2-3.

116 Mendenhall, Harvard-Yale, 15-6.

cancellation of the first regatta, and the Civil War prevented more races from being held. Soon it was just Harvard and Yale again keeping the sport alive until the next wave of popularity for rowing arrived at the colleges, at the start of the 1870s.

In 1869 the Harvard crew, as winners of the Harvard-Yale race, had been invited to compete against Oxford, the winner of the annual University Boat Race. Although Harvard lost a close race to Oxford, it had become clear in this country that

> [t]he regatta soon became more than a demonstration of interest in manly pursuits or a contest between rival crews. Students and the public began to regard victory as a measure of an institution's prestige.[117]

A dispute regarding the result of the 1870 Harvard-Yale race (which Yale lost) resulted in Yale withdrawing from the race in 1871. Harvard then turned to inviting delegates from other colleges who had begun rowing to a meeting. Delegates came from Brown, Bowdoin and the Massachusetts Agricultural College. In hopes of continuing competitive rowing, they formed the Rowing Association of American Colleges (R.A.A.C.) on April 15, 1871.

The turn of events between Harvard and Yale and the subsequent formation of the R.A.A.C. now loom very large as major developments in the story of collegiate rowing and in the story of the role of the professional oarsmen as both rowers and coaches. In 1864 the Yale crew had employed the first professional, both rower and coach, for the race. William Wood, a professional sculler from New York, helped bring Yale its first two victories over Harvard, in 1864 and 1865. Even the people at Yale who lamented the race's existence began to give credit to the race for increasing enrollment at Yale for the next two years.[118] Outraged over the use of professionals, people at Harvard blamed Yale for the increasing tension between the two schools and for encouraging

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117 Guy Lewis, "The Beginning of Organized Collegiate Sport". American Quarterly: Volume 22. Issue 2, Part 1. Summer 1970. 228.

118 Mendenhall, Harvard-Yale, 57.

victory at any cost.[119] With the formation of the R.A.A.C. in 1871, the door was open for other colleges to finally have a chance at competitive rowing against the most prestigious colleges in the country, and on July 21, 1871 in Springfield, Massachusetts, the Massachusetts Agricultural College came bursting through the door.

In what was the first open rowing competition between American colleges other than just Harvard and Yale, the Massachusetts Agricultural College stunned Harvard and Brown with a crushing forty-three second, twelve-boat length victory over Harvard, finishing more than one minute over Brown down the three-mile course. So underestimated that they were mistaken for Harvard until they drew so close to the finish line that the spectators realized it was the "Aggies" that they were seeing. The victors came:

> ....bounding on and passed the stake-boat with such a powerful pull - a forty-two stroke - that they shot way under the bridge a dozen lengths beyond....The rowing of the Amhersts was not by any means scientific. It was simply a strong pull and a long pull. As one of the Brown men expressed it, "they pulled all over the boat, but like death;" and a Harvard man said, "It was a fearful stroke, but they made their old boat hum."[120]

This was an upstart crew from a bucolic farmer's college, but they had the insight to prepare to win; at the end of the race they were met at the dock by their coach, the

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119 Guy Lewis, "America's First Intercollegiate Sport: The Regattas from 1852-1875". Research Quarterly: Volume 38, Number 4. 1967. 643.

120 New York Times, Saturday July 22, 1871. "Rowing at Ingleside." The Aggie crew would walk the three miles from campus to where their boat was stored at the river; it was not a boathouse in any traditional sense of the word, and they would "double time" it back to campus after their workout. The boat the Aggies used still exists as well. It was moved around the campus after the college dropped rowing a few years after this race and eventually it sat in Central Storage at the University of Massachusetts for decades until it was recently donated to the Mystic Seaport where it will become part of the National Rowing Foundation collection. It is a "light six," meaning it carried no coxswain and there were six oarsman, who instead of being numbered as is the case today, went by the terms; stroke, starboard stroke, port waist, starboard waist, port bow and bow.

professional sculler Joshua Ward, "who was as pleased with the victory as if he had won it himself."[121]

This victory breathed life into rowing at many other colleges. It forced Harvard and Yale to remain a part of the R.A.A.C. rather than continue their own exclusive race, because they could not withdraw after such a humiliating defeat.[122] By 1875 there were thirteen colleges competing for the collegiate championships held at Saratoga, New York. Likewise, professional coaches, who helped prepare them in the days leading up to the racing, raised the stakes for any colleges hoping to gain institutional recognition in the athletic arena. Sports now had become a part of the "....destruction of the isolated academic world and helped make the nation more conscious of its colleges." [123]

So who were these men, some of whom had been rowing as professionals since before the Civil War, who became America's sporting heroes and the first rowing coaches at the colleges? Well, not surprisingly, as with any athletic endeavor, there is a wide range in terms of the popularity, ability and legacy left behind among the professional oarsmen of the 19th century. Similarly, there are varying degrees of impact that the oarsmen who moved into the ranks of collegiate coaches had on the field. Some coached for long periods of time with great success, some are notable for the technological innovations which they encouraged, some were great professionals who had middling careers as coaches, while still others were just the opposite with limited success as oarsmen, yet were very successful coaches. More important than the individual tale taken by itself is the overall picture that is painted by those individual brush strokes. These coaches shaped the rowing careers of thousands of oarsmen who passed through their

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121 New York Times, Saturday July 22, 1871. "Rowing at Ingleside." Part of Josh Ward's pleasure no doubt came from the fact that he had placed a not insignificant wager on his crew before the race.

122 Mendenhall, Harvard-Yale, 77.

123 Lewis, "The Beginnings of...." 222.

care and they shaped the sport of rowing for decades. Their successes and failures collectively formed, for the first time in history, an American rowing tradition. This tradition allowed American rowing to break out from its English heritage both in the administration of the sport at many levels, and in the way it was taught, learned and executed. For American rowing to forge its own identity meant there would be growing pains, as some advocated adherence to English methods, while others recognized the necessity of developing the sport in a way that would be best for American rowing. Part of the magic of their combined efforts is that they were not necessarily aware of any or all of the long-term ramifications of this development. They were simply men of the river, doing what they did best, as athletes and coaches, making mistakes along the way, to be sure, but leaving an important legacy in their wake.

Chapter 7

The Ward Brothers

Already mentioned in the description of the Massachusetts Agricultural College's victory at Ingleside in 1871 was their coach, Joshua Ward. Josh Ward was just one of five Ward brothers, out of nine all together, who were professional oarsmen at one time or another. Four of them raced together frequently and as a four they experienced extraordinary success. Four of them also spent time as professional rowing coaches at different schools. Isaac and Winifred Ward were parents to fourteen children, nine sons and five daughters, all born and raised in Cornwall, New York, on the Hudson River. Isaac Ward was a captain who sailed schooners and Hudson River sloops to Long Island and Nantucket, in addition to running a hotel in Cornwall. All his sons went on to captain schooners at some point in their lives, but for five of the brothers, Joshua, Hank, Gilbert, Charles and Ellis, careers as the most renowned professional oarsmen of the day also awaited. Not surprisingly, as sons of a fisherman raised on the Hudson River, a life on the water, in and about boats of all kinds, prepared them well to be successful oarsmen; having so many brothers to compete with prepared them well for competition.

Nineteen year old Josh and his twenty-nine year old brother Hank made their public racing debut on July 4, 1857, by winning the double scull race at the Newburgh Regatta in Newburgh, New York. Collectively, the Ward brothers' most astonishing success came when they teamed up to row a four together, usually consisting of Joshua, Hank, Gilbert and Charles, but occasionally with youngest brother Ellis or their friend J.L. Raymond of Sing Sing, New York, rowing for one of the brothers.[124] As sweep rowers, when the Ward Brothers got together in almost any combination, they were

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124 Irene Ward-Norsen, Ward Brothers: Champions of the World. Vantage Press: New York, 1958. 22-29.

virtually unbeatable for many years. Their first "world championship" (in quotation marks because at the time it was an unofficial designation; there was no international organizational body to sanction a true world championship) took place in September 1867 on the Connecticut River near Springfield, Massachusetts. It was against a Canadian crew from St. John, New Brunswick, for $1,000. Leading up to the race the New York Times ran a long piece on the entire Ward family, detailing Isaac's and Winifred's, ages seventy and sixty respectively, standing wager of $200 to race any other "old couple" and even spot them a handicap as well.[125] The Times touted the St. John crew as a hand-picked group of the finest oarsmen Canada had to offer, kept in virtual year-round training by their "patrons," while the Wards were "professionals" only in the sense that they rowed for prizes, not because they devoted full-time attention to training. Whether this is true about the Canadian crew is unclear, but either way, the Wards won a relatively easy victory for their first world championship.

A year later, in July, 1868, another Canadian crew, which had travelled to Europe and defeated crews from England and France in races at the Paris Exhibition of 1867, came to Springfield and handed the Wards their only defeat ever in a four-oared shell, defeating them by one minute over the six-mile course and taking home the $3,000 purse.[126] The next major event for professional rowing and the Ward Brothers came in the late summer of 1871. International matches had been gaining popularity over the years with single scullers and crews travelling to and from England and North America. An American named John Morrissey was a frequent backer of professional races, someone who put up the winner's purse and arranged the terms of the event and took home much of the profit. Morrissey arranged for a series of races, with very large purses, to be rowed at Saratoga Lake, and they attracted the best American and English crews

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125 New York Times, August 26, 1867.

126 Crowther and Ruhl, 158.

and scullers. A purse of $4,000 was to be divided among the top three finishers in the race. The Wards, who had had difficulty finding a boat to use in an earlier race held in Canada, sent out notice via Josh that they intended to vie for the prize of the upcoming race. A statement that was an acceptance of the challenge and a call to national pride read:

> ....we give all to understand that we intend to maintain our claim to the title....any disputant to our claims will have an opportunity of contesting it at Saratoga. I again assert that we think we are all called upon to row when the Bold Briton invades our own waters, to meet him, and we shall do so, promising him that we will do our best to maintain our title, and in four weeks' training convince him that at least he will have no walkover.[127]

They were promptly offered a boat from the mayor of Pittsburgh; it was paid for by, and renamed in honor of, Dick Risdon, a frequent backer of the Wards' racing and training and a beneficiary of their success.

So concerned with the safety of their new shell, and so aware of the trickery that could take place, the Wards slept with the *Dick Risdon* in their headquarters the night before the race. On September 11, 1871, the six crews vying for the title of world champion lined up on Saratoga Lake for a four-mile race with a turn (meaning that the crews would race two miles out, turn around a stake-boat in the water, and return two miles to finish at the starting line). There were two English crews: the Tyne and the Taylor-Winship crews; and four American crews: the Wards, the Dutchess crew from Poughkeepsie, New York, the McKee crew from Pittsburgh and the Coulter-Biglin crew from New York.[128] The race was a close, but a fair and clean one, with the Wards victorious in a record-setting time of 24:40. The Tyne crew was three boat-lengths back

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127 Ward-Norsen, 36.

128 These are the same Biglins who were made famous as the subjects of a number of Thomas Eakins' well-known paintings depicting rowing.

and the Coulter-Biglin and Taylor-Winship crew finished in a dead heat for third and fourth. The New York Times praised the regatta for its fairness by making each crew turn its own stake-boat, thus eliminating much of the potential controversy of boats colliding as they converge on a single stake-boat:

> A pleasant feature of this important race is the absence of all doubt about the real victors....If future regatta committees will follow the example set at Saratoga....The suspicion of pre-arranged foulings, which has of late fallen on so many professional rowing matches, will be likely to entirely disappear....England has seldom seen two better crews than those which recently contended at Saratoga, and a victory over them is an honor indeed.[129]

The Ward Brothers never again raced together in a four and moved on to continue in smaller boats or to other professions, having retired as world champions.

By the time of this victory, the careers of the Ward bothers, individually and collectively, were storied ones, but none more than Josh Ward's, "The Old American Eagle."[130] Shortly after his professional debut in 1857, Josh began his remarkable single-sculling career. In 1859 he won a five-mile race against three other scullers for $100 and a silver champion's belt; he was then designated the Champion Single-Sculler of the World.[131] Through 1866 he raced frequently, winning more than he lost, often collecting purses of $1,000 along the way. As he was approaching what would be the end of his single-sculling career, there were two up and coming scullers in James "the Little Engine" Hamill and Walter Brown, who both went on to become champion oarsmen and who had their own great battles together over the years. Josh Ward had already raced and beaten them both, thus satisfied with his unprecedented success and his ability to

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129 New York Times, September 13, 1871.

130 Ward-Norsen, 27.

131 Ward-Norsen, 25.

defeat both Hamill and Brown, Josh turned his focus to racing in fours and sixes with his brothers and others after 1866.

Ellis Ward, the youngest rowing brother, went onto a career as a single sculler that, while not as remarkable as Josh's, was followed by a forty-year career as the rowing coach at the University of Pennsylvania. Ellis was coaching Penn when they became the first foreign crew to ever race for the Grand Challenge Cup at Henley in 1901. While he was still racing, the New York Times reported on a race he rowed against John Biglin, from the 1871 International Regatta, at Springfield, Massachusetts in July of 1873. It was a five-mile race in singles for $500. Ellis started aggressively, but at the two-mile flag, "Ward suddenly fell forward in the boat, dropped his oars, and was unable to proceed. He was taken from the boat and carried to the Amherst quarters, where he was soon revived sufficiently to explain that he was seized with vertigo." The doctor also diagnosed him as suffering from "congestion of the lungs, brought on by over-exertion while suffering from a cold."[132] Ellis' sculling career paralleled those of some of the great professional scullers whose races provided much higher drama, and so overshadowed his, such as those of Edward (Ned) Hanlan of Toronto, Canada who made his professional debut at the Centennial Exposition of 1876 in Philadelphia, while Ellis was already a relatively seasoned pro.

As coaches, the Wards passed on much of what they had learned in their remarkable rowing careers. Josh Ward, it has been mentioned, presided over the Aggie victory in 1871. While he worked with them for only ten days, he was able to turn them into a unit whose victory not only opened the door for collegiate rowing to flourish, but also was taken to symbolize hard work over style, and effort over lineage. In an interview following the race, he was asked a question about the shirtless rowing that all of the

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132 New York Times, July 16, 1873.

Brown and four of the Harvard oarsman demonstrated that day and his reply was as straightforward as the Aggies' rowing was:

....no crew that I train can row without shirts; I think it a shame to chance offending the modesty of ladies. I never rowed a race with a man in my life, but I beat him if he had no shirt on; and I got so used to it that, when a man did draw in line with me, his person exposed, I always considered him beaten before we started. [133]

One can imagine him passing such confidence and belief onto his oarsmen. Gilbert spent time coaching at the New York Military Academy in Cornwall, and Hank, a few years after Josh was helping the Aggies, was going out on the water with Columbia for $15 a day. The idea of a professional coach did not go over well at Columbia that year. On July 19, 1874 the New York Times reported that "the professional trainer of 1873 overdid his work, and had a different system been pursued, it was deemed that the crew of that year would hold a better position at the end of the race."

Rowing historian Christopher Dodd points to Ellis Ward as one of the 19th century innovators of rowing, for his efforts at technological improvements such as trying aluminum oars with his Pennsylvania crews.[134] In addition to his coaching career, which began in 1879 with a Penn victory in their first race against Columbia and Princeton, he founded the Ellis Ward and Sons Company, which manufactured oars, oarlocks, shells and other equipment for rowing and yachting. He also obtained patents for roller-bearing oarlocks in 1885 and 1907.[135]

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133 Douglas K. Fidler, "The First Big Upset: American Culture and the Regatta of 1871." The New England Quarterly: Volume L, Number I, March 1977. 72. An important tradition today in collegiate rowing is that of the "shirt bet," in which there is an unspoken understanding that in the 2000 meter races held in the spring of each collegiate season, the losing crew(s) must hand their racing shirts over to the victorious crew, rendering the losers virtually unidentifiable and the winners taking home a prized possession.

134 Dodd, World Rowing, 85.

135 Ward-Norsen, 51,

Ellis Ward's career as both an oarsman and coach spanned the growth and development of professional racing and collegiate racing in the United States. His was typical of the necessarily different approach to collegiate athletics in the United States than of that in England. He did the experimenting with his own crews, he tried new things and often failed (aluminum oars never caught on, nor did the aluminum boat Penn also tried), but wasn't hamstrung by an imposed system that often frowned on such experimentation. When the Penn crew was in England preparing for Henley they encountered a problem because Ellis could not ride a horse or a bicycle, and this was how all coaching was done in England - from the towpath alongside the river with the coach shouting instructions as he followed along. In Philadelphia Ward had the use of a steam-powered launch so that he could be on the water with the crew. Theodore Cook, of the exploding sliding seat in a Radley eight at Henley many years earlier, and now a time-keeper at Henley, arranged for Ward to use a launch well downstream of the course. Although Ward was suspicious of Cook's presence, he was cognizant enough of the furor caused by previous American entries that he would politely call out, loudly enough for anyone to hear, the times for his crew as they practiced on the course.[136]

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136 Dodd, Henley Royal Regatta, 90.

Chapter 8

The Inventors and the Harvard-Yale Race

One of the other beneficiaries of Josh Ward's coaching skill was not a college oarsman, but a young single sculler from Portland, Maine named Walter Brown (the same one mentioned earlier), whom Josh taught to row. Brown had become a young carpenter's apprentice to Ward after Brown's family had moved to Cornwall, New York. Brown's subsequent battles on the water against James Hamill took over in the public eye as Josh Ward retired from single-scull racing. Brown defeated Ward twice in 1866, once in Worcester, Massachusetts and once in Portland, Maine, and as their rivalry heated up they raced just days later in Springfield, again with Ward victorious.[137] While this was happening in the United States, there was another up and coming sculler from Pittsburgh, James "the Little Engine" Hamill, whose nickname derived from the sight of his 5'8" and 150 lb. frame rowing the short, choppy stroke at the high stroke ratings he was famous for. He was in England racing against, but losing to, the top English scullers.[138] By the summer of 1867 it was clear that Hamill and Brown would need to race to determine the American champion. Brown won their first meeting in June at Pittsburgh, along with the $2,000 winner's purse. Their second race was soon planned, for September at Newburgh, New York, and the purse was doubled to $4,000.[139]

This race between Brown and Hamill turned into one of the epic single sculling races that had yet taken place, with a huge purse, an enormous crowd estimated at 50,000 people, and a host of other professional oarsmen on hand, and it was complete

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137 Crowther and Ruhl, 155-6.

138 John J. Kudlik, "You Couldn't Keep an Iron Man Down: Rowing in 19th Century Pittsburgh." Pittsburgh History: Volume 73, Number 2, 1990. 51-63. 57.

139 Crowther and Ruhl, 156.

with controversy during and after the race. It was a five-mile race around a stake-boat and back, and to insure no foul play by the rival of either oarsman, each man was followed by a six-oared barge filled with supporters who would help steer, and protect, their man. In Hamill's barge was John Biglin wielding a pistol and threatening to shoot the other barge if they got too close to Hamill.[140] Brown jumped out to an early lead but Hamill overtook him and had a four boat-length lead as they converged on the one stake-boat being used for the race, manned by Ellis Ward. Hamill got too close to the stake-boat and the tide pushed him into it and he became entangled. Brown proceeded to ram into Hamill's boat, sinking him.[141] Whether this was intentional is unclear, and depends on whose supporters are telling the story, and there was much confusion after Brown rowed home for the victory. The referee was none other than Stephen Roberts, one of the first well-known scullers, and he declared Hamill the winner based on Brown fouling him.

But Walter Brown's career in rowing is marked by his time as a coach and his role as an inventor and innovator as well as a champion oarsman. He was one of the first scullers to try a sliding seat, as far back as 1861, although its introduction is credited to a J.C. Babcock, but the difficulty of rowing with it and the cumbersome nature of the seat caused him to abandon it. But in 1870, when Yale was looking to end a streak of four Harvard victories in their annual race they employed Walter Brown as their coach and he brought back the sliding seat, building them for the Yale crew himself. Yale lost the race in 1870, but the sliding seat was beginning to revolutionize rowing.

With the eventual monumental impact which the sliding seat had on rowing, it is not hard to see how Walter Brown's experimentation as a sculler and as a coach pushed rowing into new territory and assured him a place as one of the great scullers and

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140 Crowther and Ruhl, 156.

141 Crowther and Ruhl, 157.

innovators of the 19th century. Along with the fact that the colleges were eager to find advantages over each other and to try new things and with the English opposition to the sliding seat, Brown's contribution is significant to the history of the development of an American rowing tradition.

Controversy and excitement were part and parcel of rowing's popularity during the second half of the 19th century. Controversy was often centered around the great professional races, some of which we have seen and more of which we will see later, and excitement always followed the changes occurring in the sport. Changes technologically, with new and better equipment, changes technically, with different styles of training and rowing, and changes administratively in how American colleges dealt with the growing demand for paid professional rowing coaches, all marked this period of American rowing. One sculler whose life transcended all of these changes was Michael Davis from Portland, Maine, the inventor of the swivel oarlock.

An Irish immigrant who had abandoned the family business to concentrate on rowing, by 1877 Davis was racing on the Charles River for $1,000 in front of a crowd estimated at 30,000, with betting pools rumored to contain $24,000.[142] His eight boat-length victory over George Faulkner, one of Boston's best scullers at the time, led to a series of races between Boston and Portland crews with Davis victorious in three single-scull races, but defeated in races in doubles and fours. By the spring of 1878 Davis had challenged any Boston sculler to a four mile race with a turn, for $1,000 and the single-sculling championship of New England.

In a testament to the working-class origins of the sport of rowing, Boston sent out Patsy Reagan, a Teamster for the Boston Can Company who lived in a Charlestown tenement with his wife and two young children, and who did not even own his own

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142 Mendenhall, Harvard-Yale, 144.

single, to meet the challenge of the Down Mainers.[143] Like many rowing races designed to make a profit, the race between Davis and Reagan was sponsored by the Old Colony Railroad and was not held on the Charles River, but on Silver Lake, outside of Boston, where the railroad had invested in a recreation area they were to eager to promote. Portland's best sculler lined up against Boston's Patsy Reagan, who was undefeated in a single, on October 8, 1878. The two raced side-by-side until they turned the stake-boat at two miles, but after a poorly executed turn, Reagan fell behind Davis and never caught him, finishing nine boat-lengths behind and rowing poorly. Pulled from the boat by supporters, he told a friend, "Sylvie, the boat pulls like a pig!"[144] Undefeated to date and looking for a break, Reagan had borrowed all the money he could and bet it on himself; he crossed the line a ruined man. Strangely enough, the betting line before the race had changed from 3:1 in favor of Reagan to 4:1 in favor of Davis, and despite fistfights and arguments and charges of corruption, the referee gave Davis the $2,000 prize, and the train headed back to Boston.[145]

The Old Colony train was running late, as had the entire day's events out at Silver Lake, and by the time it left it was packed with spectators, gamblers, railroad personnel and, of course, Patsy Reagan. An undermanned crew at the Wollaston station was hitching up a freight car and using the same track as the train returning from Silver Lake, not knowing that it was running over two hours late. The track signal which should have warned the crews malfunctioned and the Silver Lake excursion train slammed into the freight car, sending cars off the tracks, killing nineteen people and injuring almost two hundred.[146] Reagan was among the dead. Six-thousand mourners attended the funeral

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143 Gookin, 101.

144 Gookin, 105.

145 Mendenhall, Harvard-Yale, 144.

146 Gookin, 108-9.

three days later for this son of an Irish immigrant, who lived in a tenement, but who was the fastest single-sculler Boston had to offer. Michael Davis retired four years later, already having taken up coaching. He was remembered as an oarsman who "besides being a most accomplished sculler and single oar puller he was never accused of dishonesty, and he leaves behind him a record as clean as it is brilliant...."[147] But Davis' impact on the world of rowing was just beginning.

As Harvard and Yale were continuing their rivalry on the water with their annual four-mile race, they were shaping American collegiate athletics at the same time. Harvard and Yale, as the premier American Universities, had attempted to model their rowing programs after those in place at Oxford and Cambridge. It was not a perfect match, however, and had caused many complications and disagreements between the two schools. The American amateur-professional model essentially was a mirror image of the English one. The English version of a professional was a working man, someone who performed manual labor, or who earned his living on the water. The amateur, in England's socially structured system, could pursue rowing or coaching full-time because he was financially secure enough to do so. In America, the amateur was predominantly of a lower socio-economic background, whose need to work on a daily basis prevented him from training with sufficient regularity to be a professional. Occasionally however, they proved to be fast enough so that they could begin to earn cash prizes and become professional. In England athletic status was generally a reflection of social standing; in America it was a reflection of athletic ability.

In their attempts to defeat one another, Harvard and Yale clashed over the use of professional coaches. In the 19th century, with the pursuit of athletics at colleges in its infancy, there was no educational system for coaches, so anyone pursuing coaching was generally either a gentleman-amateur or a professional oarsman (whereas today a

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147 Mendenhall, Harvard-Yale, 144.

"professional" coach may refer to someone who, while never a professional athlete, is a paid coach). Harvard had steadfastly maintained a strict opposition to the professional coach, at least outwardly. Yale had tried both systems at times and had used professionals as early as 1857, but not with any regularity until the 1870s when the debate heated up with the arrival of Michael Davis. Davis' involvement in professional and collegiate rowing spanned a period of dramatic change in rowing. His development of the swivel oarlock, it has been shown, had a far-reaching effect on rowing almost immediately, through the debates it caused between those for and against it, and permanently as it became a standard piece of equipment which forced coaches and athletes to change their approach to the stroke. Likewise, Davis' involvement with the Yale crews took place at a time when colleges and universities were trying to deal with the sudden popularity of sports, helped along by the Aggies' victory over Harvard in 1871. Yale had graduated one of the pioneers in this field, Bob Cook, an oarsman who would be an important influence on collegiate rowing as an athlete, coach and advocate for his beliefs.

Cook started at Yale in the fall of 1871, a year in which Yale had not participated in the race with Harvard because of a dispute surrounding the 1870 race in which Yale was disqualified and Harvard refused to give them a re-row. Cook had been a respected athlete at Andover, and after trying rowing, he was determined to make the varsity crew, which he did by the spring of 1872. Due partly to the rancorous relationship between Harvard and Yale, collegiate rowing had opened up with the formation of the R.A.A.C. The 1872 race was not just a Harvard-Yale affair, and the poor state of Yale rowing at the time led to a crushing defeat with Yale coming in last of six crews, almost two minutes behind the winner, Amherst College.[148] As a sophomore, Cook was elected captain of the crew and was in his first position of authority over the Yale crew, but certainly not his

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148 Mendenhall, Harvard-Yale, 82.

last. In this position, he decided to go directly to the source in order to learn how to solve Yale's problems: England.

He arrived in England in February 1873 and received his first rowing lesson there from F.S. Gulston, the same member of the London Rowing Club who, it was noted earlier, also performed experiments on the effectiveness of the sliding seat during the early spring of 1873. It is not known if Cook was serendipitous enough to have been present for the trials, but if he was, he would have been privy to some of the best rowers in London making significant discoveries which would be near the center of debate about English rowing for many years. Cook also spent time at Cambridge and Oxford Universities studying their methods and strokes before returning to campus in April, after watching the University Boat Race of that year, the first in which both crews used sliding seats.

Cook's trip crystallized for him the methods he would use to organize the system of rowing at Yale, from the training to the style of rowing, and perhaps most important, to the role of the professional. Not surprisingly, he felt there was no place for one. Cook essentially wanted to model American collegiate rowing on the English system, and this included banning professional coaches from the sport at the collegiate level. His views on the professional are demonstrated clearly by the following answer to the question of why he had gone to England in the first place:

> Because there was no one in America at that time who understood the subject. Ellis Ward, Josh Ward, Hamill of Pittsburgh, professional scullers, were men who had a very crude idea of scientific rowing for college men....Now and then they would happen to get a crew of tough, strong fellows and win - as the Amherst Aggies did in 1871....I became satisfied that the professional oarsman today in this country, could teach college crews very little if anything. They have very poor heads, as a rule, and they have no idea how to impart what knowledge they have.[149]

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149 Mendenhall, Harvard-Yale, 83.

Fortunately for Cook, Harvard had in Richard Henry Dana (who would author Two Years Before the Mast), a stroke and captain from 1872-74 who felt the same way Cook did. Cook was also elected as president of the R.A.A.C. in the summer of 1873 and his impact soon would be felt.

The explosive growth of rowing led to the Association's regatta growing each year with more and more colleges wanting to compete. Unfortunately, disorganization both on and off the water culminated in Harvard and Yale withdrawing from the R.A.A.C. in 1876 in the hopes of pursuing a four-mile race in eights against one another, in the manner of Oxford and Cambridge. Despite Cook's leadership as the prototypical gentleman-amateur coach (he had a full-time job and was not in New Haven for more than a couple weeks at a time when he would coach the crews) which he wanted to see take hold in America, leading up to the 1879-1880 school year, Yale had won only four of the nineteen races against Harvard. George Rodgers, the president of the Yale Boat Club, was eager to change this. Thus, when the great Ned Hanlan recommended Michael Davis as the "best man in the country to build and rig a boat and coach a crew," Rodgers decided to bring him on board.[150] Davis was at Yale from 1879-1883 and his developments and innovations are truly remarkable, while Harvard, as reported by the New York Times, reminded everyone that "it had been once agreed by Yale and Harvard that professional coaches or trainers would not be employed....The connection of professional coaches with either crew was likely to cause unpleasant complication."[151] But with the dissolution of the R.A.A.C. after Harvard and Yale's withdrawal, the fact that professional coaches had been outlawed was essentially a moot point.

In his first year at Yale, Davis changed many aspects of Yale rowing. The class crews, which were the fall crews made up of rowers from each class year and out of which

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150 Mendenhall, Harvard-Yale, 142.

151 New York Times, March 17, 1880.

came the varsity crews for the spring racing, went from rowing sixes to eights. The varsity began using a very long 25-inch slide and swivel oarlocks, and, perhaps most dramatically, they began using a shorter oar with a wider, deeper blade called "leg-of-mutton" oars.[152] The oars were designed to allow the oarsmen to row a stroke that was shorter through the water and executed at a much higher stroke rating than had been used with sliding seats thus far. The change was based on Davis' experience as a professional, where a short, efficient, quick stroke was the norm. Yale vindicated all the changes by winning the race by over 42 seconds, rarely rowing below 39 strokes per minute for four miles. Davis was retained for the 1880-1881 academic year and he used the same principles and equipment to again row a fierce, and not very pretty, stroke to defeat Harvard by just six seconds in 1881. But his innovations had not yet reached their pinnacle.

Yale had still not given Davis complete rein over rowing, and in the summer of 1881 he promised that if he were given complete freedom over all decisions, that he would have a crew capable of breaking the four-mile record in New Haven Harbor by a full minute, and if he failed, he offered to leave and New Haven and Yale would be controversy-free. Davis planned to continue the type of training already in place, but to have his crew row at even higher stroke rates; consistently at 44 strokes to the minute, but with a new boat that would be faster than any other and particularly suited to his short,

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152 Mendenhall, Harvard-Yale, 147. Over the years, oars went through many changes as did other rowing equipment. But with the exception of Davis' leg-of-mutton oars, which truly resembled a leg of mutton, there was nowhere near the controversy as with other equipment changes. Most decisions about the oar focused on its overall length and the width of the blade, and how those two measurements were related. Usually, longer oars had narrower blades, because to have a long lever (in the oar) meant that the surface area in the water would be less, or else the load on the oarsmen would be too great and thus ineffective. As Davis' oars got shorter, the blades got wider.

choppy stroke. One of the problems of their style was that a lot of water was churned up at both the catch and the finish - the moments where the blades enter the water and are taken out of the water, respectively - and at such high stroke ratings the boat did not have sufficient time with the blades out of the water to run clear of the disturbed water. Davis' idea was to have a shell seventy-feet long (a full ten feet longer than others) and made of traditional cedar (rather than the paper shells that were popular for top college and professional rowers) that would have three feet of deck built in between each pair of oarsmen, so that each rower would have a better chance at catching solid, clean water with his blade.[153] In late April 1882, rowing between 42 and 44 strokes per minute, the Yale varsity took one minute and forty-one seconds off the previous four-mile record. They went into the Harvard-Yale race with high expectations, but some questionable steering decisions by the Yale coxswain and a solid Harvard crew gave Harvard a three-second victory and reopened the debate about the "professional stroke" being used at New Haven.

In what would be Davis' last year at Yale, his strangest experiment yet was unveiled. Yale chalked up the 1882 loss to bad luck and still had confidence in the training, rowing style and equipment changes that had brought them victory in '80 and '81. So they stuck with the long boat, leg-of-mutton oars and high ratings for '83. When Yale appeared for the race with their boat, it became clear why they had kept it hidden from the public eye leading up to the race. Davis had fitted a cedar "sail," four feet long and seven inches high, to the bow deck of the boat with brass tubing.[154] It was hoped that it would counteract any steering difficulties, caused by the length of the boat even in good conditions, which were made worse in windy conditions, and allow the boat to run straight. Yale suffered a disastrous one-minute and twelve-second defeat, with people

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153 Mendenhall, Harvard-Yale, 157.

154 Mendenhall, Harvard-Yale, 164.

speculating that the sail was to blame, or that the crew was over-trained and that the "professional stroke" was ineffective. Whichever anyone chose to believe, it all meant that Davis' career as a coach at Yale was over. He continued in the boat building and invention business though, taking out several patents on swivel oarlocks and employing many professional scullers at his shop in New York City. His successes at Yale proved that professionals could successfully work in the collegiate athletic system and pass on knowledge gained through their own training and racing careers.

The influence of Bob Cook at Yale was a significant one on collegiate rowing and the growth of an American rowing tradition. He provided a voice and a viewpoint, although he was often criticized as simply being slavish to English ways, on how colleges and universities should fit sports into the daily life of a student. The controversy surrounding him frequently demonstrated that there were other ways in which to succeed. America lacked the preparatory school system of rowing to fill Harvard and Yale with experienced oarsmen, the class system of putting boats at the two universities together by class year proved unworkable due to unreliable numbers, and the size of the two schools meant that they simply could not get the same number of students on the water as at Oxford and Cambridge. Geographical distance and a relative lack of qualified coaches, especially if professionals were eliminated from the mix, made a system of volunteer gentleman-amateur coaching unacceptable to students and alumni who were growing increasingly focused on winning the race. It all serves to underscore how important the professional oarsmen were to the growth of the American rowing tradition and how they bridged the gap between the two most influential segments of rowing in American history: professional racing and collegiate racing.

Chapter 9

Charles Courtney

If the Ward Brothers were the first family of professional oarsmen and Walter Brown and Michael Davis were the most inventive coaches once their professional careers were over, then Charles Courtney most thoroughly encompasses all of those qualities. His professional career was marked by numerous controversies which have never been fully explained, and which were critical to the decline of professional rowing. His coaching career at Cornell University was full of unprecedented and sustained success for over three decades. All that was wrong with professional rowing unfortunately found itself occurring frequently around Courtney, while all that was right, yet still controversial, with the growth of rowing at the college level also found itself occurring with Courtney at Cornell.

Charles Courtney was born in 1849 in Union Springs, New York, on the shores of Cayuga Lake, the sixth of seven children. He learned early how to sail small boats and row in skiffs and wherries around the lake, and built his own boat by the age of twelve. By his early twenties his local prowess in a boat was well known, and by 1873 he had embarked on what would be a remarkable amateur career. Splitting his time among his careers as a carpenter, an oarsman and a husband, Courtney compiled an undefeated record in singles, doubles and fours, which culminated with commanding victories in the International Amateur Championship single and double-scull races at the Centennial Exposition in Philadelphia in July of 1876.[155] This regatta marked two major turning points for Courtney: it was his last amateur race before turning professional, and it was the professional debut on American waters of the Canadian oarsman Ned Hanlan,

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155 Margaret K. Look, Courtney: Master Oarsman, Champion Coach. Empire State Books: Interlaken, New York. 1989. 54.

arguably the greatest single sculler North America has ever produced. Courtney's rowing career and his life would never be the same again.

Courtney's professional career got off to a rough start in July, 1877, when he was to take on James Riley in what would be the first in a series of races that included plenty of drama and intrigue. Their first meeting came on the heels of eighty-eight straight amateur victories for Courtney, so expectations were high for the race on Greenwood Lake in New Jersey. The New York Times reported that among the large crowd, "New York City had sent a large delegation of her 'toughest' citizens. Thieves, swindlers, gamblers, and ruffians of every sort were to be met with on every hand."[156] In the days leading up to the event, Courtney had reported a lot of men in row boats trying to disrupt his training with verbal taunts and even stone-throwing, but having defeated Riley twice when they were amateurs, he simply became more determined to prove himself faster. At lunch on the afternoon of the race, Courtney, who by all reports was feeling good and was eager to race, asked for, and was given, a glass of iced tea by the manager of the hotel where he was headquartered. He promptly felt ill and vomited up his entire meal. Courtney was able to drag himself into his boat by about 6:30pm that evening, but Riley had already visited him and declared he did not want to race a sick man, and so even though Courtney went down the course, all bets except time bets were off.[157] The Times concluded that Courtney was dosed with a tartar emetic which had been mixed too powerfully and took effect far too soon. It was likely that the perpetrators desired to have it hit Courtney while he was on the water. The 'blacklegs,' as gamblers were called, in the Hoboken pool rooms had seen the line on Riley go from an underdog to a 2:1 favorite in the hours leading up to the race. Courtney immediately expressed his desire to race

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156 New York Times, July 15, 1877.

157 Look, 64.

Riley again and they met up once each month in August, September and October of 1877 and Courtney won each race, free from controversy.

The next step was to pit Courtney against the great Canadian sculler Ned Hanlan. When the details were worked out, a race was arranged at Lachine, Quebec on October 3, 1878, with a prize of $11,000. The popularity of professional rowing was at an all-time high in the 1870s and the newspapers, both Canadian and American, went to work promoting their favorite and disparaging the other. Unfortunately for Courtney, his career had not been controversy-free, regardless of the incident at Greenwood Lake. As an amateur he had once overturned on Seneca Lake during a race and claimed to have snagged his oar on a submerged wire, but no such wire was ever found. Another incident in Philadelphia saw Courtney's fragile paper shell get smashed in an accident on the water, which some claim Courtney caused intentionally. So there was plenty of fuel for newspapers to build up the race between him and Hanlan.

A crowd estimated at 20,000 showed up to see them race on a windy and rough St. Lawrence River. Not surprisingly, there are various accounts of what actually transpired during the race, but in the end both oarsmen said it had been fair, and that Hanlan's victory was clean. With so much money on the line however, elaborate charges were brought against Courtney saying that he had thrown the race and taken bribes and profited quite handsomely because of it. But a New York Times interview paints a picture of an angry Courtney who is truly troubled by the charges:

> You cannot have - and I pray God you may never have - an idea of what it is to go home to a wife who has cried herself sick over the most damnable charges ever brought against an innocent man....I am also daily in receipt of hundreds of letters from men telling me how much money they lost when I lost the race, and charging me with their ruin....I have a great mind to take an oath never to step into a racing shell again.[158]

158 New York Times, October 11, 1878.

But Courtney did step into a racing shell again, for what was to be billed as the race of the century, a rematch between him and Hanlan set for October 8, 1879, and to be rowed on the neutral waters of Chautauqua Lake, near Jamestown, New York. It was called the Hop Bitters Prize Race because the president of the Hop Bitters Company, who made the medicine known as the "Invalid's Friend and Hope," put up $6,000 for the winner of a five-mile race with a turn.[159] Both men and their entourages arrived in late September, Courtney bringing two boats, one for training and one for racing named the *Hop Bitters*, and Hanlan bringing three boats. In a time when butter was ten-cents a pound and $21 a month was a good wage, the $6,000 prize for a two-man, non-championship race was truly extraordinary.[160] The 'blacklegs' were again out in force with every conceivable game of chance offered to anybody willing to try. Betting on the race was overseen by a New York pool operator, with Hanlan a slight favorite despite asking for, and receiving, an eight-day postponement due to illness. Race day arrived to crowds of 25,000 spectators. But late the night before, Courtney's backers, who had been assigned to watch his boat at the boathouse, came back from dinner to find both of Courtney's shells sawed in half. Rumors and charges were rampant, and the referee told Courtney to row either in one of Hanlan's other boats or in the boat belonging to 'Frenchy' Johnson,[161] Courtney's trainer, but he refused and Hanlan rowed the course alone, never collecting the purse as all bets were called off. It has never been determined who sawed the shells in half. Courtney testified to having been approached with many

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159 Look, 81.

160 Look, 86.

161 Frenchy Johnson is a fascinating character on whom very little information was available. He was a black man who had learned to row in the deep South at some point, likely in the slave races which were popular among plantation owners during the period when rowing was exploding in popularity around the country. How he came to be Courtney's trainer and many other facets of his career are unclear.

offers to throw the race by Hanlan's backers, which he denied accepting, and the possibility of some of Courtney's own friends falling prey to gamblers was raised but never proven.

Regardless, the cloud was darkening over professional rowing. So much publicity and so much dishonesty, with no firm answers, was taking its toll. When another five-mile race was planned for Rochester, New York in December, Courtney fell ill with "nephritis and lumbago" and withdrew.[162] Then another was scheduled for Washington D.C. in May of 1880. Odds were running 5:4 in favor of Hanlan and this time both men started the race, but only Hanlan finished. Courtney dropped out less than halfway through, claiming that overtraining and fatigue from the heat had done him in.

Professional rowing would never recover the popularity it lost as a result of these dramas. Courtney's reflections on turning professional reveal his own regret, as well as a hint of possible answers to some of his troubles. When asked why he had given up amateur racing he replied, "I was a fool to do it....but I was led into it - urged on by my friends against my better judgement."[163] The papers crucified Courtney. The New York Times, in the days leading up to the Washington D.C. race, ridiculed him in an editorial, saying of Courtney and his reputation:

> When the prospect that he will row is a doubtful one, the country is in a feverish and unsettled state. People sometimes wonder why the United States Government has to pay 4 per cent. for money when England can borrow all she wants at 2 1/2 per cent. Beyond any question, the real reason is the uncertainty which capitalists feel as to Mr. Courtney's intentions....What we need is a sixteenth amendment, declaring that in no uncertain circumstances shall a proposition be made to or accepted by Mr. Courtney to row a race with anybody.[164]

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162 Look, 97.

163 Charles Van Patten Young: Courtney and Cornell Rowing. Cornell Publications Printing Company: Ithaca, New York. 1923. 23.

164 New York Times, April 30, 1880.

Sadly enough, their prediction that he would not row came at least somewhat true, when he failed to complete the course.

By 1884, even his fellow professionals, fearful of the damage done by Courtney's multiple incidents, regardless of fault, boycotted him after he dropped out of yet another race, this time against Wallace Ross in May of 1884. Their statement to the New York Times read:

> To the Public:
> In view of the public career of Charles E. Courtney for several years past, and particularly because he has done so much to disgrace professional sculling, we the undersigned, in order to protect ourselves and encourage square, manly rowing, hereby pledge ourselves never in any respect to associate or connect ourselves with said Courtney, either by rowing with him or against him, at regattas or elsewhere - Wallace A. Ross, Fred A. Plaisted, George H. Hosmer, Albert Hamm, George Gaisel, George W. Lee, H. Peterson, James A. Ten Eyck, John Teemer, and James H. Reilly.[165]

As his professional rowing career ended, his professional coaching career was just getting underway. He first worked with Cornell University in 1883 for just ten days, coaching a four that was to race Pennsylvania, Princeton and Wesleyan. With just a short time together they mastered Courtney's "git thar" stroke and won by over thirty seconds.[166] The "git thar" (or, get there) stroke that became a trademark of Courtney's crews was based on his professional experiences, and was similar to Davis' teachings at Yale, although not quite as extreme. It was a short, efficient motion, not flashy, and was designed to help the crew "git thar" faster than the other crews. He would be at Cornell University continuously until 1916, and of the 146 races his crews participated in, 98 were victories. He had an unprecedented and unequaled string of team-wide success at

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165 New York Times, July 13, 1884.

166 Young, 31.

the Intercollegiate Rowing Association championships, winning fourteen times and placing second six other times in the twenty-four appearances by varsity crews.[167]

Courtney had seen many technological innovations to come along since his early rowing days; he modified some and developed others of his own, in addition to bringing his carpentry skills to boat building and repair. His boat rigging experience taught him the best way to set up a shell to be comfortable for the rowers. He built his own version of a sliding seat by putting the seat on wheels, attached to axles, so that the rotation of the wheels allowed greater ease of movement for the seat.[168] In the late 1890s, eager to make land training more effective and to see how hard his rowers were actually working on the indoor rowing machines, Courtney had an engineering graduate student, who had rowed for him, hook up a device which measured each oarsman's power output with a pen marking the power curve on a sheet of paper. By evaluating the way their power was being applied, Courtney was able to make the appropriate changes to their rowing technique, so as to maximize boat speed. One of the first times he used it he decided to change the oarsmen's leg drive by starting the push with the legs right at the catch, rather than after the body had started to swing open, so that the power curve better matched the natural rhythm of the boat.[169] Stylistically it was a big change from the English Orthodox style of rowing, which was caught in a debate about the sliding seat, and was still advocating the same large, exaggerated body swing at the catch with sliding seats, as had been necessary with fixed seat rowing. It is also similar to the Fairbairn idea of letting the oarsman freely use his body weight without trying to superimpose "body form." Furthermore, generations of rowers can also testify to the significance of this machine, as

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167 Young, 101.

168 Look, 11.

169 Look, 139.

every rower now knows the brutal honesty displayed by the monitors on all the various indoor rowing machines which are a standard part of today's training.

Courtney applied the same desire to evaluate his oarsmen on the water and he is credited with introducing another modern day standard to rowing known as "seat-racing."[170] He would have two crews on the water together doing race simulation pieces (a "piece" being a period of time the rowers would row at racing cadences and pressures); after a piece he would switch two oarsman from opposite boats and the crews would race again. By evaluating the difference in winning and losing margins between the crews as oarsmen were switched, Courtney could determine who the most effective oarsmen were. He also developed a machine which resembled the set-up of a racing shell, and allowed him to take significant measurements of each oarsman, so that those measurements could be applied to the seat he normally sat in in the boat, thus making each oarsman as comfortable and efficient as possible. Courtney also used the advances being made in photography to his advantage by photographing his crews and pointing out the technical flaws to the rowers.

Mercifully, for rowing and for Courtney, his coaching career saw an unprecedented and sustained level of success which his professional racing career never did. While the true story of many of the misadventures which plagued his rowing career may never be known, there is no doubt that his coaching career saw the most consistent and dominating work done by any of the former professional oarsmen at the college level. Courtney is unique for the virtually perfect timing of his two careers and the simultaneous rise of collegiate rowing following the decline, and eventual fall, of professional sculling and rowing from the public consciousness that matched his own rowing and coaching careers.

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170 Mendenhall, Harvard-Yale, 227.

With hindsight, it is easy to say that it is fortunate that no long-term, sustained, vocal opposition to professional coaches ever galvanized into any widely held or obeyed stance. By 1894, in an edition of the Harvard Graduates' Magazine which addressed the "crisis in rowing," it is clear that the stance against professionals was softening. An 1883 graduate remarked, "I should also like to see the professional help the amateur." A member of the class of '85 laments the recent string of losses to Yale: "this miserable record is the result of the boating policy as it is at present conducted in Cambridge."[171] Clearly, despite the downfall of professional rowing and the elitist attitude displayed towards the professionals by those opposed to them, these coaches got through to the ones whose opinions mattered - the rowers. By 1906, F.S. Lang, the Chairman of the Board of Stewards for the Intercollegiate Rowing Association, wrote of the professionals,

> With confidence I say of all of them that their personal influence over the crews in their care is safe and sound, and I should have no misgivings in leaving my sons in their charge. It is a noteworthy fact that in college rowing, in which the professional has been so conspicuous, that standards of morals and of sportsmanship have been of the highest, and 'professionalism' has been conspicuously absent.[172]

The aggregate role of all of these men, and others who have gone unmentioned, in the larger debate occurring in America during the second half of the 19th century regarding amateur and professional coaching at the collegiate level, is worth exploring because of their legacy as groundbreakers in the growth of collegiate sports. So to examine this aspect of their lives and careers helps to draw each of the different characters explored thus far into a more unified group, whereas at a glance, their varied careers as coaches - some long, some short, some successful, some less successful - may

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171 W.A. Bancroft, "The Crisis in Rowing." The Harvard Graduates' Magazine: Volume 3, September 1894. 30-36. 33.

172 F.S. Lang, "The Problem of Professional Rowing Coaches." The Illustrated Outdoor News: Volume 5, May 1906. 2.

leave them less thoroughly understood. One of the most significant aspects of their legacy is the growth of rowing at the collegiate level; the egalitarian nature of American society encouraged participation by anyone. It was at this level, under the guidance of a professional coach, that the developing American rowing tradition was made manifest.

Chapter 10

America As the Premier Rowing Nation: The Second Generation of Coaches

Professional racing faded away as a result of the scandals which had surrounded so many of the key events, and because Americans became attracted to some of the more spectator friendly games such as baseball, football and basketball. Mendenhall also points to the rebirth of the Olympic Games themselves in 1896, as providing a focus on, and for, the amateur athlete which had previously been absent.[173] In the middle of the 19th century many who had become followers of professional racing were simply carrying their familiarity with the water as a mode and means of transportation, and with the ubiquitousness of boats used to ferry goods and passengers, to the next logical level, that of competition. But by the early years of the 20th century the industrial revolution had significantly altered how Americans worked and how they enjoyed their leisure time. The natural feeder system for professional oarsmen, in both England and America, those who worked on the water for a living, faded away with these changes. It was only a matter of time before the scandals, the growth of other sports and an increasing distance from the water, both physically and spiritually, for many Americans, led to the end of the professional oarsman.

However, these men and their efforts positioned American rowing in such a way that as time went on, and they grew older and were no longer directly involved in rowing, it was a strong and vital part of the athletic life at many American colleges. This came at a time when colleges were increasingly ready to embrace the changing tide on campus to include extracurricular activities such as athletics, along with the necessary infrastructure to make them successful, including professional coaches. In roughly the first quarter of

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173 Thomas Mendenhall, "An Historical Perspective on the isms of Rowing: Amateur and Professional." The Oarsman: September/October, 1975. 27-8. & November/December, 1975. 36, 46-7.

the 20th century comes the advent of the professional coach in a new sense of the word. Not necessarily a former, or current, professional oarsman now serving as a coach, but instead a person hired by the college or university specifically to teach, train and prepare crews for competition, and to win races. It was this second generation of American rowing coaches who would continue building the legacy.

The debate about professional rowing coaches was a long and usually cyclical one. In the early years of organized collegiate competition, if crews with professional coaches experienced success, or if it was feared they would, somebody would usually voice opposition. Or if a crew with an amateur coach was winning, it was usually touted as a more virtuous system. But as with so much that we have seen to this point, clarity on the issue is lacking and the truth lies somewhere in between the two extremes. As time went on and athletics became ensconced at colleges and universities however, the situation changed. Ronald Smith, in his essay "The Historic Amateur-Professional Dilemma in College Sport," notes as significant the inherently hypocritical nature of athletics at the university level: an institution may espouse amateurism, but is trying to reap professional benefits (money and prestige) out of their athletes at the same time, and that this has been the case since the 19th century.[174] Yet high-stakes (athletic and financial) intercollegiate athletics were on campus to stay, and coaches were needed to help the universities and the athletes achieve their goals.

Perhaps surprisingly, this second generation of coaches who would bring America to the fore of world rowing were largely, although not exclusively, the product of the American Northwest and the University of Washington rather than from any private, Eastern institution. There, in Seattle in the first half of the 20th century on the shores of Lake Washington, grew a most remarkable breeding ground for future rowing coaches

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174 Ronald Smith, "The Historic Amateur-Professional Dilemma in College Sport." The British Journal of Sport History: Volume 2, Number 3. pp. 221-231. 222-223.

who would go on to create their own legacies at colleges and universities across America, and elevate rowing in this country to its highest standards yet seen.

This unlikely story began with an even more unlikely source, a man named Hiram Conibear, who was involved in rowing for only about twelve years, never rowed competitively, didn't coach rowing until his mid-30's, and died at age 46 at the height of his new career. Furthermore, it is not simply the race results which affirm the tradition he began and the legacy he left behind; rather, it was his Fairbairn-like qualities of leadership of men, charismatic personality and ability to teach, train and adapt as necessary.

Born in 1871 in Illinois, Conibear was drawn to sports almost by chance. Working in the office of a company which had decided to switch from making watches to making bicycles in order to capitalize on the country's sudden fascination with them, he soon found himself managing and training a bicycle racing team sponsored by his company. Like professional rowing, professional cycling would not hold the nation's interest for long, and in 1896 he was hired by Amos Alonzo Stagg at the University of Chicago to be the trainer for the track and football squads. By 1901 he was the track coach and football trainer at the University of Illinois and in 1904 he became the Director of Athletics at the Montana State University. To prepare for this wider range of responsibilities Conibear enrolled in a summer athletics course in 1905 in Chautauqua, New York, sponsored by a church promoting Muscular Christianity, and it was there that he was first introduced to and given his first lessons in rowing.[175] For four weeks he received classroom instruction and on the water practice in fours, and lost the first rowing race he ever participated in at the end of the course. Conibear did not return to Montana that fall; instead he worked for Stagg at the University of Chicago again and in

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175 Thomas Mendenhall, "Coaches and Coaching IV: Hiram Conibear." The Oarsman: September/October, 1978. 22-29.

the summer of 1906 he was the trainer for the world champion Chicago White Sox baseball team. That autumn Conibear was offered the job as trainer for the football team at the University of Washington, where the next and perhaps most successful chapter of his life in athletics began.

By the fall of 1907 some University students and interested citizens of Seattle wanted to start a rowing program, so they bought two boats from Charles Courtney at Cornell, and Conibear volunteered for the job of coaching the crew. "Connie," as he was often called, was a colorful character who immediately set about learning all that he could about rowing through the books in the library and discussions with anyone who had rowing experience. Out on the water in his coaching launch his often profane language raised the ire of people living alongside the lake and brought the athletic director down to the boathouse to investigate. "I have to yell and cuss a little, Lorin" he told his boss, "in order to bluff my way along until I have a chance to grasp what I'm trying to coach."[176] With years of athletic training experience in a variety of sports and a borrowed skeleton from a university library, Conibear went about working out for himself the best way to move a boat over the water. They won their first race against Stanford University on June 1, 1907 on Lake Washington.

Rowing on the West coast in the early 1900s was an isolated undertaking however, and Conibear had not yet won over the entire University. In 1910, an effort to take control of the crew away from Conibear and place it under the guidance of physical education with a part-time instructor threatened the program. In front of his oarsmen and those who would have him removed, Conibear spoke, and changed the course of rowing in America:

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176 Al Ulbrickson and Clarence Dirks, "Rockne of Rowing." Saturday Evening Post: June 19, 1937. Philadelphia, Pennsylvania. 14, 93-7. 93.

I may be hard-boiled, I may cuss, I may do considerable more talking on the campus than I should. But honestly I've put my heart and my very soul into this work and, no matter what, I want to keep on. Don't fire me. Let me keep on. We are on the road to something really worthwhile![177]

Conibear was not fired and his legend grew, with the fortuitous help of unlikely saviors in the form of two young English brothers who came from a family of boatbuilders and had themselves been watermen on the Thames. George Pocock and his older brother Dick were the children of Aaron Pocock, one of the five boatmen hired by Edmond Warre at Eton to maintain the fleet of 650 boats used by the wet-bobs, and they grew up in and around boats of all kinds. In 1903 Aaron became the head boatbuilder, providing the family with security and status it had not yet known. At the time, when a boy turned fourteen years old, the English system of free schooling ended, so at that age George tried to earn a scholarship to the London Polytechnic School. He missed by just one point on the examination and his chances for a formal education ended.[178] His boatbuilding career began as he then became an apprentice to his father at Eton for five years.

The family may have lived and worked at Eton, but the chasm of social standing between the Pococks and the students at Eton was wide, and so much of their young lives were spent following the careers of the English professional oarsmen whom they often met through their father. Aaron held the title of Bargemaster to the Company of Fishmonger's for forty years, which long before had been prestigious while watermen filled the Thames, but in 1910 the Bargemaster acted mainly as the starter and the umpire for the race for Doggett's Coat and Badge. George's older brother Dick, who came out of his apprenticeship earlier than George, even won the race in 1910. However, in that same year Aaron lost his job at Eton, forcing the family to move and

177 Ulbrickson and Dirks, 95.

178 Gordon Newell, Ready All! George Yeoman Pocock and Crew Racing. University of Washington Press: Seattle, Washington. 1987. 11.

requiring Dick and George to look for work in London, which they found nearly impossible.

Young, hardworking and ready for a challenge, they decided to head to British Columbia where they heard that men were earning ten pounds a week cutting trees. After some unsuccessful forays into work at logging camps, the two brothers' reputation as oarsmen and boatbuilders landed them a job building two single-sculls for the Vancouver Rowing Club, a member of which had rowed at Cambridge University and remembered their names. George recalls:

> We were told they would give us an initial order for two singles if we were willing to meet their conditions. They would pay us $200 for the two boats. The club had a very old shed floating on logs nearby, which they would let us have for $100 for use as a workshop and residence....They made it clear that we couldn't leave it where it was, but would have to move it out into Coal Harbor, where the members wouldn't have to look at it.[179]

Orders continued to come and word began to spread through the rowing communities in the Pacific Northwest until one day in 1912 they watched a man row across the harbor to their shop and introduce himself as Hiram Conibear. He told them the details of his vision for the Washington crews and of his plan for bringing Dick and George to Seattle as permanent boatbuilders for the University, and he told them that he needed them to build 12 new eights immediately. This was partly bluster, like his language on the water, but the essence of it was all true. The Pococks wired their father Aaron, and he came to America to help his sons launch the next, and most famous, phase of the family boatbuilding career. Clearly Conibear was serious when he told people that they were onto something worthwhile; he was about to back it up by clearing the way for the Pocock family to become the first family of boat builders in America and for George to become the patron saint of the University of Washington crews.

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179 Newell, 27.

Thus began what would have seemed a wholly improbable relationship just a few years before and which became the setting for a story that would be the foundation for the next generation of American rowing success. For a man who had never rowed competitively to take over a non-existent program, and to stumble upon the man who would become the best builder of racing shells America had ever known living in a floating workshop in a Vancouver harbor, certainly defied the odds. But the quiet and respectful George Pocock would go on to influence every Washington coach and oarsman for decades as his family's boatbuilding business grew into the premier rowing shell manufacturer in America. In addition to building boats, the Pococks were an immediate source of rowing knowledge which Conibear badly needed, and they imparted their ideas of rowing to him willingly. The stroke which Conibear developed became famous, but as Fairbairn was doing in England at the same time, it was not a series of strict motions, for even Conibear described it simply as "the stroke that gets you there." One of his oarsman at the time later recalled that it "changed every year."[180]

Things started to improve almost immediately. In 1913, Washington sent its first crew to the East Coast to race in the Intercollegiate Rowing Association Regatta on the Hudson River in Poughkeepsie, New York. The I.R.A. Regatta had become the premier race for colleges and universities ever since Harvard and Yale had solidified their annual race against one another many years earlier, to the exclusion of other schools. The Washington varsity was third that year and fifth the next, and with the outbreak of World War I in 1917, rowing at Washington was temporarily suspended. While the first results were not eye-popping in and of themselves, the story was. Tragically, however, the story of rowing at Washington would change when, in September of 1917, Conibear fell from a tree while picking fruit in his backyard, broke his neck and died almost instantly.

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180 Newell, 42.

Hiram Conibear had set a new standard for American rowing to consider. He was as far removed from the typical channels of becoming a rower or coach as possible. He succeeded in producing not only fast crews, but he did so with a self-taught method and a personality that broke free from many of the typical Eastern patterns. He was a successful coach and program builder who had never rowed, and one of his most significant legacies was the tradition which kept the University of Washington producing first-class crews and world-class coaches for decades. By the time World War I ended and American colleges and universities began to get back on their feet athletically, the University of Washington started to send graduates of its rowing program all over the country.

It began with Ed Leader, and left almost no collegiate boathouse in the east or west untouched. Leader was an oarsman for Conibear on his 1913 and 1916 varsity crews. He grew up in Oregon and spent summers earning money for college by working on fishing boats on the Columbia River. Upon Conibear's death, Leader took over the coaching duties at Washington and remained there for four years, losing only once during that time. By 1922, Yale was looking for a new coach who could help the still well-supported, but now badly struggling program, regain some of the stability it had been lacking. On the conditions that he could bring his own freshman coach and boatman (Dick Pocock went with him, while George remained employed at Boeing Company building airplanes, which he did during the war), Yale hired Leader away from Washington.[181]

While physically imposing because of his size and penchant for "language colored with brimstone and vulgarity,"[182] Leader was also extremely bright, holding a law degree from Washington and earning another from Yale while balancing his coaching duties. In

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181 Thomas Mendenhall, "Ed Leader." The Oarsman: December/January, 1981-82. 16.

182 Mendenhall, "Ed Leader," 16.

just his second year at Yale his varsity crew would win the Olympic Trials, earning the right to represent the United States at the Paris Olympics in 1924 and then go on to win the Olympic gold medal as well. He stayed at Yale until rowing was again suspended, this time in 1942 for World War II, and would win the race against Harvard ten times in his first fifteen tries. Equally important are the qualities which can be seen in Leader's coaching which were present, in some form, in the other successful coaches both English and American before him. He was "a compelling personality,"[183] systematic in his methods, and adaptable in style. An insightful quote comes from his speech at the opening of the Bob Cook Boathouse at Yale in 1923 regarding the rowing stroke. Leader felt that while most coaches agree on the basic principles of rowing, "their crews would look very different in action" because "somewhere in the mind's eye every crew coach has a picture or vision of his perfect oarsman, his ideal, and he is forever trying to make the real conform to his ideal and in doing so applied each principle in a different way."[184] This vision is clearly reminiscent of the freedom Steve Fairbairn gave to his crews, in its realization of the danger of rigidity and recognizing the difference between the notions of what his ideal oarsman should look like instead of what the ideal oarsman must look like. Likewise, it is a quality that would be present in the other second generation coaches who would continue to lead American rowing, two of whom would begin their careers as Leader went East.

Ed Leader's move to Yale meant that Washington had to find a new coach, and their search went no farther than another member of Conibear's crews. Rusty Callow had rowed in the 1914 and 1915 varsity crews. He too was from a rugged Northwestern upbringing, working and teaching in logging camps before going to college, and during summers while a student. Like Leader, he was a tremendous student in the classroom, a

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183 Kelley, 229.

184 Mendenhall, "Ed Leader," 16.

member of the honor society with a double major.[185] He was brought back into the Washington fold to help restore stability when Leader left, in 1922. Just as Conibear was an experienced coach, but not an accomplished oarsman, Callow was an experienced oarsman but had never coached, having gone into banking in Seattle upon graduation. He relied heavily on the advice and wisdom of George Pocock, who had stayed in Seattle when his brother Dick went to Yale with Leader, and was now back at his first love, building boats. Callow had similar concerns as Conibear did before him, that he knew little more than the oarsmen knew. He solved this problem quite ingeniously, at the suggestion of George Pocock. He had each varsity oarsman write down their version of the rowing stroke, ostensibly to motivate them to truly ponder what they were doing, but equally to help their new coach understand as well.[186]

Working with a man like Callow was a new experience for Pocock. In England he had not been in the class of the gentlemen at Eton, or anywhere else. But Callow had no such preconceptions regarding his relationship with Pocock. He made George a guest of the Callow brothers' annual "week in the Olympics," a ritual of rest and relaxation at the Callow family homestead where doctors and lawyers mingled with loggers and laborers.[187] It was exactly the sort of experience which he never could have had back in England, and which made a strong impression on him. Such were the differences between the worlds of rowing in England and America, and men like Callow were responsible for it. Their close friendship was financially helpful to Pocock as well. As he travelled East with the Washington crews and was able to meet the coaches of the East Coast rowing programs, they were impressed by him and his boats which were helping

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185 Thomas Mendenhall, "Rusty Callow." The Oarsman: September/October, 1980. 5.

186 Mendenhall, "Rusty Callow," 8.

187 Newell, 69.

Washington win races. Subsequently, orders were made for more boats and the business took off.

Callow was clearly a skillful motivator and leader of men; George Pocock had said that "For Rusty the handling of men was not to kill the spirit but to raise it." Yet despite the time away from the sport, his results on the water were immediately impressive. In his five years as Head Coach, the Varsity and Freshmen crews lost to California only once, while at the I.R.A. Regatta, his varsity won three times and were second the other two times. His success also led to overtures from East Coast institutions looking to follow Yale's lead, and in 1927 Callow was lured to the University of Pennsylvania, where he would stay until 1950, when he moved on again to coach at the Naval Academy. His time at Penn was difficult, owing to the quirky Schuylkill River and the inability to organize the rowing as he had done at Washington, but at the Naval Academy, Callow rediscovered the Midas touch.

In just his second year, and after a horrendous first year, the Navy Varsity won the 1952 Olympic Trials to represent the United States in Helsinki. They won all of their qualifying races and beat Russia, Australia and England in the final to win yet another gold medal for a coach schooled in the Pacific Northwest by Hiram Conibear. It was the sixth consecutive Olympic gold medal in the eights race won by coaches from Washington, three who had rowed together for Conibear (Callow, Leader and Ky Ebright at California) and one who had rowed for Callow.[188] Despite a difficult start in understanding rowing technique from a coach's perspective, Callow displayed the qualities which have been seen in the likes of Fairbairn and other successful coaches. At Penn he tried to make up for the fact that his oarsmen were smaller than he'd had at Washington, by adding more "layback" to their stroke; having them swing their bodies further into the bow of the boat in an effort to lengthen the stroke and keep the blades in

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188 Mendenhall, "Rusty Callow: Part III." The Oarsman: February/March, 1981. 8-10. 8.

the water longer.[189] Likewise, he forgave some technical faults in his rowers if he was convinced that he saw their blade doing solid work in the water. This too, is reminiscent of Fairbairn urging his rowers to drive at the blade and let the legs and body take care of themselves.

While Callow was first coaching at Washington, their main west coast rival, the University of California, hired yet another Conibear protégé, Ky Ebright, in 1924 as their first full-time professional rowing coach. Ebright had been the coxswain on Conibear's varsity crew from 1915-17 and had coxed what would be the last race of Conibear's coaching career. By the time he took over at California the cat was out of the bag regarding coaches from Washington and the pressure on Ebright to produce victories was immediate. In his first year they lost to Washington by ten boat-lengths; the next year it was only eight; the next it was down to five, and Washington, under Rusty Callow, won the I.R.A. Regatta that same year as well. By 1927 Cal had turned the tide and beat Washington by four boat-lengths. Ebright accomplished this in part by producing "bulletins" which he would send to his oarsmen and which articulated what had come to be known as the "comfortable stroke," started by Conibear almost twenty years prior.[190] These bulletins covered all of the physical and mental aspects of competitive rowing he thought were crucial, and he would mark them "confidential" to help impart their importance to the crew.

The year 1928 brought the Amsterdam Olympics. Ebright's varsity crew had won the right to represent the United States. By the time the final arrived, the Cal crew had won nine consecutive races during their collegiate season, the Olympic Trials and the

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189 Thomas Mendenhall, "Rusty Callow: Part II." The Oarsman: November/December, 1980 & January, 1981. 5-7. 6.

190 Thomas Mendenhall, "The Little Admiral from the Oakland Estuary." The Oarsman: May/June, 1979. 17.

first rounds of Olympic racing. They met Great Britain in the two-boat final and won by a half boat-length, giving the United States its third consecutive gold medal in the premier Olympic rowing race, the eight-oared shell.

In 1932 the Olympics came back to the United States (Los Angeles) and California was determined to defend their title in their home state. They did so in a four boat final which included Great Britain, Canada and Italy. Careful after such brilliant success to avoid the pitfalls that had struck other styles which had also become widely imitated, such as the English Orthodox style (it had become a series of movements oarsmen and coaches mimicked but misunderstood), Ebright stopped sending out his bulletins and focused on the principles of Fairbairn's teaching. He experimented with new equipment, boats and oars, and stuck with the basic motto of "wonderful morale, beautiful form and crushing power"[191] to mold his crews. Among his innovations was a rigger for the Pocock-built boats, subsequently adopted and used by George Pocock. While it still used the same three-point system for attachment to the side of the boat as previous riggers, this new design contained just a single bar that ran in a perpendicular from the gunwale to the oarlock, instead of two bars placed one above the other. This allowed the boat to be easier to handle in rough water, as the single bar provided extra clearance that the previous style did not.[192]

This new approach worked, because after a twelve year hiatus the Olympics returned in 1948, on the legendary waters of the Henley Reach, the site of triumph for "the Ancient Mariners" forty years earlier. California again represented the United States and won their easiest gold medal yet, again over the crew from England. The '48 crew was comprised of a wide variety of oarsmen, some who had rowed before the war, others

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191 Mendenhall, "The Little Admiral," 22.

192 Jim Lemmon, The Log of Rowing at the University of California, Berkeley: 1870s-1987. Western Heritage Press: Berkeley, California. 1989. 28.

who were brand new, and a coxswain who was thirty-two years old and had served as a combat infantry man in the Pacific during the war.[193] Ky Ebright retired in 1959 after 35 years of coaching at California, continuing the legacy of the "comfortable stroke" begun by Conibear, with more success than any other coach to come from the program.

The University of Washington had suffered its third departed coach in ten years when Callow left for Penn in 1927. Taking up the challenge next was another former oarsman, Al Ulbrickson. Ulbrickson lived on an island on Lake Washington as a youngster, rowing over a mile to school everyday and to his summer job, so becoming a successful member of the crew was a natural step for him. He rowed for Callow from 1923-26, stroking the varsity eight for his last three years, and became Callow's freshmen coach when he graduated. At only 24 years old, he was recommended by both Callow and George Pocock to be Callow's successor to the head coaching position and he chose a teammate of his, Tom Bolles, to be his new freshmen coach.

Ulbrickson provided the long-term stability the Washington program needed after the meteoric success experienced by his predecessors, Leader and Callow. He stayed at Washington for 32 years, won the I.R.A. Regatta six times in twenty-three trips, and beat California in 20 out of 28 races. Most important, however, his 1936 crew continued the American-Washington-Conibear-protégé streak of Olympic gold medals in the eights race by winning the Berlin Olympics. Perhaps most significant for sustained American rowing success was Ulbrickson's adaptability and insight in knowing how to make the necessary changes to his crews' training and rowing style, accompanied by the steadying influence of George Pocock.[194] Through the early 1930s Ulbrickson slowly adapted the

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193 Lemmon, 39.

194 Thomas Mendenhall, "Al Ulbrickson: The Dour Dane, Part II." Rowing USA: October/November, 1982. 24-28. 25. Pocock was so important to Ulbrickson and Washington that in 1948, after the Washington varsity eight lost the semifinal of the Olympic Trials to California but four of

Conibear stroke as it had come to him through Callow's coaching. Unwittingly, the school of Washington coaches had developed what became known in the rowing world as the American Orthodox style. This is probably more a by product of human nature's desire to impart names to things, rather than because they were all teaching the same things; as Ed Leader had pointed out, the stroke looked different in every coach's mind and in every crew that it was taught to.

Ulbrickson's first freshman coach, as previously mentioned, was Tom Bolles, another Washington oarsman. After working at Washington for ten very successful years, during which his freshmen crews won the freshmen race at the I.R.A. Regatta four times, Bolles was tapped to take over the Head coaching position at Harvard in September 1936. Bolles, along with Leader at Yale, provided a link between where collegiate rowing began in America during the 19th century and where it was already headed in the 20th century under the care of men in the Pacific Northwest. Bolles displayed the now familiar qualities of leadership and adaptability, seen in all of the successful coaches, who were able to arrive in a new coaching situation (new river, new student body, new administration) and make immediate and positive contributions to the programs. He rewarded Harvard with a victory over Yale in his first attempt in 1937.

In his twelve years at Harvard, Bolles' record was more successful than any Harvard coach yet had been. Of 79 races, he won 63 of them and was second in 14 others; he had three undefeated crews (in 1938, 1941 and 1942); he won the race against Yale eleven times in twelve years. On the international stage he won the Grand

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the junior varsity oarsmen rowing won Trials for the coxed-four, Pocock worked double-duty as the US Team boatman and coach of the Washington/US coxed-four, which went on to win the only Olympic gold medal ever won by a US crew in that event.

Challenge Cup at Henley twice, in 1939 and 1950.[195] These victories helped solidify the American position of dominance in world rowing. Up until World War II, foreign victors in the Grand at Henley were still not commonplace (there were eight foreign winners through 1939) although they were increasing in frequency. But after the war, foreign crews begin to dominate the results of the Grand Challenge Cup, with collegiate crews from the United States showing great success; Harvard winning in '39, '50 and '59, Penn winning in '55 and Cornell victorious in '57.

Stylistically, Bolles displayed fantastic ability, although not always with the approval or understanding of fellow coaches. Bolles had eliminated much of the layback of the oarsmen at the finish, or end, of the stroke, a rather significant change from earlier versions of Conibear and Callow. A reporter from the New York Times who covered rowing, Bob Kelley, said of Bolles' early Harvard crews, "inboard the men are not so handsome but outboard there is unmistakable power."[196] Bolles had developed a deep belief in the power the oarsmen applied to his oar and he wanted it to be "sustained" and "unwavering" both through the entire stroke, and throughout an entire race. Out of this belief came the ability of Harvard crews to understroke (row fewer strokes per minute) their opponents, spot them leads early in races while Harvard found its rhythm and power and then relentlessly bring the stroke rating up and maintain their power to then row crews down from behind. This is yet another example of a well-taught coach being able to build on what he has learned, not be hamstrung by any of it, and to develop and

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195 Thomas Mendenhall, "The Old Man in the Felt Hat: Thomas D. Bolles." The Oarsman: September/October, 1979. 10-13. 10.

196 Mendenhall, "Thomas Bolles," 13. Kelley was eventually won over by Bolles' style of rowing and confessed in 1938 that Bolles' "wacky stroke almost has me won over." At Henley in 1939 however, an English coach said, "If that stroke can win I am through with coaching." It is not known if that coach retired after Harvard won the Grand that year.

perfect his own philosophy based on sound fundamentals which helped his crews consistently win races.

So perhaps more than any specific style of rowing (for we have seen ample evidence that the coaches who fanned out over the United States from the University of Washington developed their own nuances and emphases depending on their material and experiences) what this second generation of professional rowing coaches did for the American rowing tradition was to continue the basic American tradition of freedom and individuality and apply it to rowing. It is important to note that the influence from the University of Washington did not stop with the previously mentioned men; they were simply the elite coaches who came from the young program started by Conibear. Other college coaches who had either rowed or coxed for Conibear, Leader or Callow included Chuck Logg at Princeton, Bob Butler at Navy, Hoot MacDonald at Marietta, Russ Nagler (who served as Ky Ebright's freshman coach at California for 24 years) and Stork Sanford at Cornell. Those who hadn't rowed for Conibear directly were known as his "grandsons."[197] Beyond the sheer number of oarsmen who went on to coach, their longevity was equally important to the legacy they created. Through such longevity they were able to exact a prolonged influence over American rowing and over tens of thousands of oarsmen, and thousands of races on at least three continents.

A brief glance at the numbers surrounding the Olympic Games and Henley will demonstrate statistically what has been mentioned previously. Between the 1920 and 1956 Olympic Games, the United States won 30 of the 151 medals (19%) in rowing, twice as many as England, the next closest country. Of the 54 possible gold medals in that time, the United States won 18 of them (33%), while England, again the next closest

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197 Ulbrickson and Dirks, 96.

country, won 9 gold medals.[198] In the results of the Henley Royal Regatta there is a similar pattern of foreign strength, led by crews (both college and high school) from the United States. In addition to the victories in the Grand Challenge Cup, there are numerous victories in other events such as the Thames Cup, a race originally founded for crews below the level of competition in the Grand. The Thames Cup was first brought to America in 1929 by the Browne and Nichols School, and over the next forty-four years it was won by American high schools or colleges twenty-five times. The Princess Elizabeth Challenge Cup, founded in 1946 specifically for school-boy crews, was won by American schools ten times in the first thirty years of the event.[199] Certainly the United States was not the sole country to make inroads into the Olympic Games and the Henley Royal Regatta and take over for the success which England had had for so many years. European nations and Commonwealth countries were producing increasingly faster crews, while Germany was beginning to appear on the medal platform at the Olympics almost as often as England in the middle of the 20th century. Likewise, it has been pointed out that the distance and expense of travelling to England for a regatta such as Henley necessarily means that any foreign crew going over to race will have sufficient speed to be competitive. Thus, the argument follows, the fact that American crews won frequently should not be surprising, while it is a home race for English crews which means that many will not meet the competitive standards of some foreign crews. Such explanations, while not invalid, miss the point. The point is that the when the best crews from America were meeting the best crews from England and other nations, the

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198 Thomas Mendenhall, "Rowing in the Olympics: From Then to Now." The Oarsman: March/April, 1980. 9.

199 Dodd, Henley Royal Regatta, 236-256. The lists of foreign winners is also extensive, with most European nations represented more than once in the records. The comparison is not to solely demonstrate English failings, rather to show American strength as rowing spread throughout the world.

American crews were winning far more frequently than they were losing as the 20th century progressed. This is true both at Henley and the Olympic Games.

Conclusion

Any sporting activity is a reflection of the society in which it takes place, and the development of the sport of competitive rowing in England and America in the 19th and 20th centuries is no different. Rowing for sport in England became largely a feature of the upper classes; at least to the extent that the lower echelons of society were largely excluded from the premier races and thus from competing against an entire segment of the rowing population, and the significant administrative decisions were made following this same socioeconomic pattern. As the sport became divided along class lines, the technology surrounding the sport was changing the way in which it was practiced; changes in hull design, the development of outriggers, swivel oarlocks and sliding seats, were all impacting the sport. Rowing in England was studied and approached not only as a sport, but also as a science, as demonstrated by Warre and Bourne. In this way they hoped to find, and they were sure they had found, not simply *a* way to move a boat, but *the* way to move a boat. And the rowing stroke was like any machine; if its component parts were not put together properly, then in their eyes, it would not work. The English Orthodox style was their ideal rowing machine, and because to succeed in rowing one needs near perfect harmony with the others in the boat, the parts must match.

Steve Fairbairn brought the human element back into the picture in England however. And because he was an insider, who had followed in the family footsteps which led to Cambridge University, he was not able to be shut out entirely on class lines. But his Australian background gave him a foot in two worlds. He was a gentleman who didn't need to work to survive, yet he came from a country of castaways, which allowed him to separate himself from the practitioners of Orthodoxy. He made rowing fun for his oarsmen; he gave them freedom to express themselves on the water through their oars, something that was entirely new for them, and which threatened many observers. As

English rowing was suffering this split, the world was changing. England was losing its hold as the premier nation in many areas and rowing was simply one example of this.

America was moving ahead militarily, industrially, economically and athletically. As it had to do in so many endeavors, the United States forged its own identity on the water. Harvard and Yale tried to follow in the footsteps of Oxford and Cambridge, but the systems were simply too different and it could not be superimposed in America. Socioeconomic considerations did not dominate the decisions regarding the sport in the United States. Working class men like Patsy Reagan came out to save the honor of a city in times of athletic crisis. The professionals in America helped rowing take hold, despite the death of professional rowing itself, and they became the first collegiate coaches. Yet they didn't learn out of books; the first manual, published by a boat manufacturer, didn't appear in the U.S. until 1871. It was the 'git thar' stroke of Courtney, the maniacally aggressive rowing of Davis' Yale crews, and the Aggies who pulled "all over the boat, but like death" with a "fearful stroke," which mirrored what they had taught themselves, which helped their crews win races. It was the experimentation, the innovation, the intuitive understanding of boats on the water gleaned from the thousands of miles they had rowed and the millions of strokes they had taken, which helped to propel American rowing into its next phase. Colleges and universities thus linked the professional from one phase to the next, and with their help, rowing as a sport flourished on the collegiate level.

After World War I, with rowing firmly in place throughout the country, the United States was in a position to take over the mantle as the premier rowing nation as the long term ramifications of England's inability to unify its efforts on the water came home to roost. It was the second generation of professional coaches, those who had never raced as professionals but were brought on board by schools looking for recognition through their athletic programs, who elevated the sport in the United States to its highest level. The impact of the graduates of a young rowing program in the Pacific Northwest on the development of American rowing is a microcosm of the growth of America itself.

Ingenuity, leadership, hard work, high levels of creativity and individuality framed in the context of working for a greater end, all apply to the success of both the United States and its success as a rowing nation.

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