

## THE SPORT OF ROWING

# To the readers of *www.row2k.com*

With **Harvard-Yale** and the **IRA** coming up soon on the United States regatta calendar, I thought it would be interesting to go back and explore the origins of these two venerable institutions. Great crews. Great coaches. Great stories.

The following .pdf is in the format intended for the final printed book. The color you see will be duplicated in the limited collector edition. All these excerpts are from the third of the four volumes.

Incidentally, all the excerpts that have appeared on row2k during the last six months have since been revised as we work toward publication. The most recent drafts are now posted in the row2k archives.

The **limited collector edition** of my new book, *The Sport of Rowing*, from

whence have come all these excerpts, sold out in April in about a week. Thanks so much to all of you who have showed such faith in the book.

The paperback **standard edition** remains on sale at:

[www.row2k.com/rowingmall/](http://www.row2k.com/rowingmall/)

This edition has all the same content as the collector edition. The illustrations are in black and white, and the price is much more affordable.

Both editions will be published in October.

And remember, you can always email me anytime at:

[pmallory@rowingevolution.com](mailto:pmallory@rowingevolution.com)

Many thanks.

# THE SPORT OF ROWING

## 27. Bob Cook

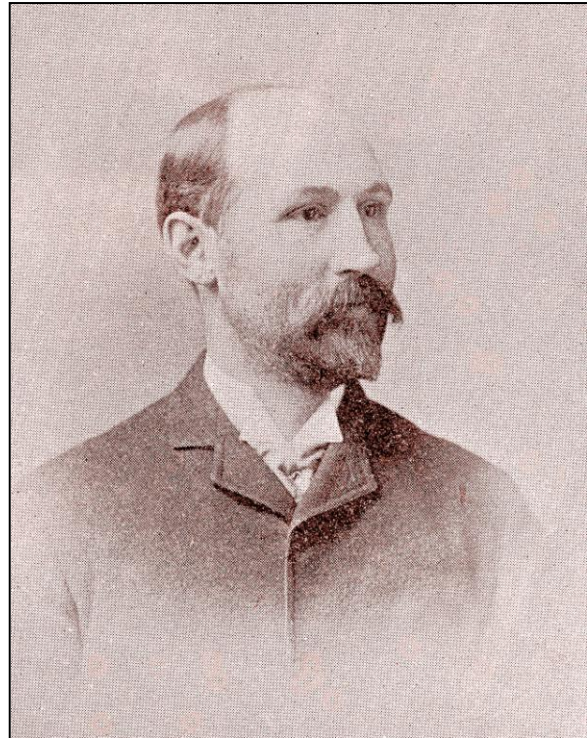
### *Pilgrimage to Britain – The Bob Cook Stroke*

In the aftermath of The Great International Boat Race, the rivalry between Harvard and Yale continued, but in 1871, when Yale challenged Harvard to an individual race, Harvard declined in favor of the **Rowing Association of American Colleges** Regatta in Springfield, Massachusetts.

The race was won by **Massachusetts Agricultural College**,<sup>1183</sup> located in the interior of the state. In 1872, having no alternative, Yale reluctantly brought their short, high, choppy technique to the RAAC Regatta, which had been won by “farmers” the year before, and not only were they beaten by Harvard, but also by overall winner Amherst, Bowdoin, Williams and the Massachusetts Aggies. In fact, they were dead last, a quarter-mile behind the winners.<sup>1184</sup>

In addition, new crews were being formed at colleges that, in Yale’s estimation, hardly compared in prestige to their own college or to Harvard. For Yale, this represented a crisis of epic proportion. Once they had been a power in an elite sport. Now they were becoming increasingly marginalized in an increasingly common, *plebian* sport.

Early in 1873, following the example of 1866 Harvard captain **William Blaikie**,<sup>1185</sup>



*1894 Harvard-Yale Program*

**Bob Cook**

“the Yale Boat Club, at the insistence of some graduate members, had quietly sent their captain to London to gain a few months’ experience among English rowing men, and that his enthusiasm for aquatics had led him to drop back a year in his college courses furnished abundant food for merriment to the gentlemen of the press,”<sup>1186</sup>

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<sup>1183</sup> the predecessor to the University of Massachusetts, Amherst.

<sup>1184</sup> Crowther, p. 41

<sup>1185</sup> See Chapter 26.

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<sup>1186</sup> *The [1897] Yale-Harvard-Cornell Regatta Program*, p. 60

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who had been covering collegiate rowing extensively ever since the 1869 Harvard-Oxford race.

Like a Catholic making a pilgrimage to the Vatican, Yale undergraduate captain **Robert J. Cook** (1849-1922) took a semester leave of absence and went to England to *really* learn how to row.

**Crowther:** "So anxious were they for the English ways that the legends say that furniture and overcoats were sold and pawned to raise money for the captain's trip."<sup>1187</sup>

Bob Cook "had, above everything else, the willingness to break away from custom."<sup>1188</sup> Three months later, he brought back to America not just English Orthodox Technique but also the English prejudice against professionals.

**Cook:** "Professional oarsmen could teach college crews very little, if anything. They were men who had a very crude idea of scientific rowing for college men. They were men of great endurance, and they worked their crews and pumped them dry on hard work and limited diet.

"I was in the Yale boat in '72 and became satisfied that the professional oarsmen have very poor heads as a rule, and they have no idea how to *impart* what knowledge they have."<sup>1189</sup>

This was a direct criticism of the Massachusetts Aggies, who were coached by professional oarsman **Josh Ward**, one of the famous Ward Brothers,<sup>1190</sup> and coached effectively enough to have humbled the Eli.<sup>1191</sup>

Immediately upon his return to the U.S., Bob Cook, employing what he had learned in England, led Yale to victory in the 1873

RAAC Regatta for coxless six-oared shells. Trailing were Wesleyan, Harvard, Columbia, Cornell, Amherst, Dartmouth, Massachusetts Agricultural, Bowdoin, Trinity and Williams in that order.

From the Yale perspective, rationality had been restored to American collegiate rowing.

### The Bob Cook Stroke

In England, Cook had received his first rowing lesson from **Francis C. Gulston**, the same man who had "proven" in front of The London Rowing Club that sliding seats yielded an extra eighteen inches in the water.<sup>1192</sup> In fact, Cook had been there that day to witness the experiment.

**Mendenhall:** "And Bob Cook could not have found a better teacher."<sup>1193</sup>

**Dodd:** "In their first outing together in a tub-pair, Cook exhausted himself trying to prevent being pulled around, while Gulston remained quite fresh. He learned to do as much work with half the fatigue."<sup>1194</sup>

That particular spring in England, the smell of change was in the air. For the first time, both Oxford and Cambridge would employ sliding seats in the Boat Race, and Cook was there to see that, too.

**Crowther:** "Cook came back with a modification of the English university stroke. He took their long sweep and the slow recovery in a degree and retained the American riggings; he reduced the Yale stroke [from 40+] to 32 to 34. It was a sensible stroke and did not attempt too much, but brought rowing at Yale gently from the vicious short dig to a longer and more logical sweep.

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<sup>1187</sup> Crowther, p. 43

<sup>1188</sup> Kelley, p. 205

<sup>1189</sup> Qtd. by Mendenhall, *Coaches*, Ch. I, p. 4

<sup>1190</sup> See Chapter 10.

<sup>1191</sup> nickname for Yale University, which had been named after benefactor Elihu Yale in 1718.

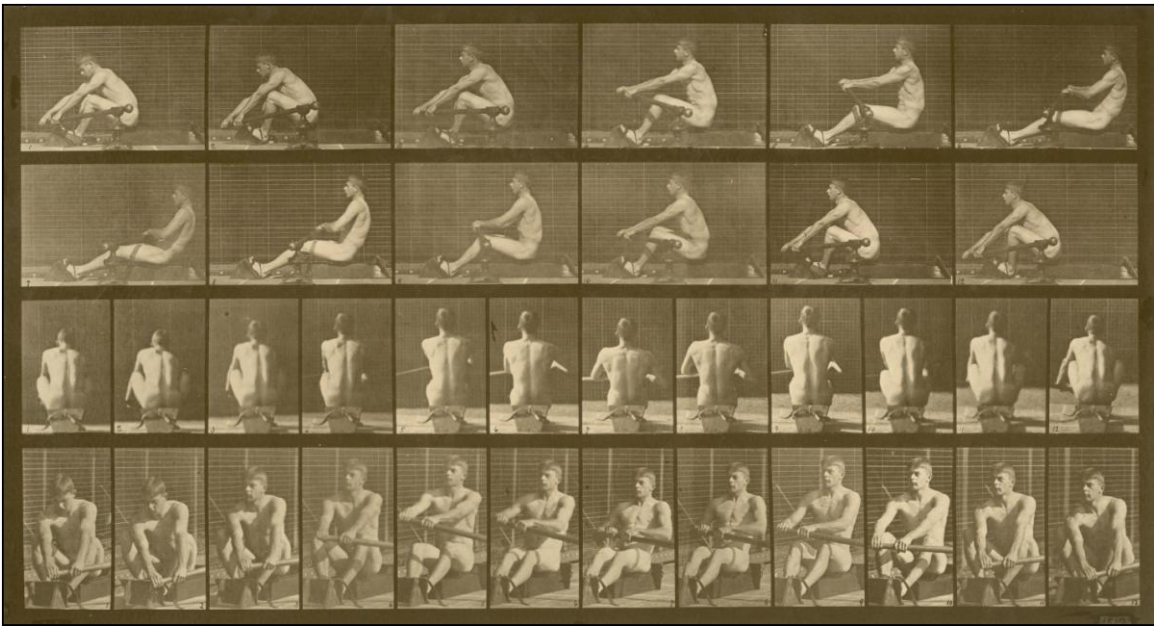
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<sup>1192</sup> See Chapter 8.

<sup>1193</sup> Mendenhall, unpublished biography of Bob Cook, Mystic Seaport Library, pp. 21-2

<sup>1194</sup> Dodd, *Water Boiling Aft*, p. 64

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Thomas E. Weil Collection

*Animal Locomotion,*  
*an Electro-Photographic Investigation of Consecutive Phases of Animal Movements*  
Plate 327  
**Eadweard Muybridge**

“It marks the first step in the process of the development of an American Stroke.<sup>1195</sup> There is something more to rowing than merely ‘jackin’ it up.”<sup>1196</sup>

**Mendenhall:** “By the time Cook graduated in 1876, most other colleges, including Harvard, had adapted some form of the so-called English Stroke.”<sup>1197</sup>

After his graduation, Cook officially became what he had been informally since returning from England, Yale’s unpaid volunteer amateur coach.

*The Century, a popular quarterly:* “[He] played the autocrat with the utmost success. The oarsman who would not row

his stroke had to get out of the boat, and in New Haven, that nest of petty politics and secret-society nonsense, great was the to-do he raised by his arbitrary proceedings.

“But he beat Harvard every time, and the cackling of the old ladies with boy’s faces and sometimes the masculine gray hair, who potter about in the undergraduate politics in Yale, was all drowned in the hurrahs of victory.”<sup>1198</sup>

### **Photographic Evidence of the Bob Cook Stroke**

According to Mendenhall, Cook brought back to America “a most effective version of English Orthodox: a shoulder catch, a sharp leg drive and a long finish

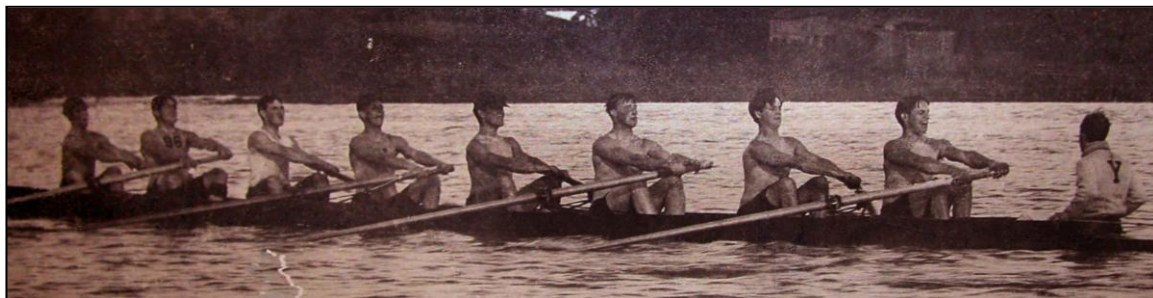
<sup>1195</sup> Actually, it represented the second step in the development of the American stroke after the advances at Harvard brought about by William Blaikie’s 1866 trip to England. See Chapter 26.

<sup>1196</sup> Crowther, pp. 43-4

<sup>1197</sup> Mendenhall, *Coaches*, Ch. II, p. 2

<sup>1198</sup> Eckford, p. 191

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Yale Tanks, Payne Whitney Gymnasium

### Yale University Varsity Eight

1894 Harvard-Yale Boat Race Winner by 52.5 seconds

Bow **Richard Armstrong** 5'8½" 174cm 160lb. 73kg, 2 **H.C. Holcombe** 5'9½" 176cm 177lb. 80kg,  
3 **William M. Beard** 5'9" 175cm 175lb. 79kg, 4 **A.P. Rogers** 6'1½" 187cm 165lb. 75kg,  
5 **A.W. Dater** 6'1½" 187cm 181lb. 82kg, 6 **William R. Cross** 6'2" 188cm 186lb. 84kg,  
7 **Ralph Treadway** 6'1½" 187cm 175lb. 79kg, Stroke **Frederick Johnson** 5'10½" 179cm 165lb. 75kg,  
Coxswain **F.E. Olmstead**

with a real contrast in the ratio between the drive through and the recovery."<sup>1199</sup>

Interestingly, this description does not match the Cook Stroke as it evolved over the next two decades. If the finish was initially lengthened, it didn't stay that way.

In the heavyweight tank room of Payne Whitney Gymnasium hang a number of 1894 photos that may be among the earliest outdoor action photographs ever taken by a rowing coach for the purpose of the instruction of technique.

The Cook photos were taken from the coach's launch during practice in the New Haven Harbor. They came only seven years after the publication the seminal *Animal Locomotion* study of **Eadweard Muybridge** (1830-1904), which included a nude model rowing on a machine in a studio.<sup>1200</sup>

The crew shown in the Payne Whitney photos was the Yale 1894 Varsity, one of Cook's very best. It was based on the freshman crew that had won its race against Harvard in New London the year before.

According to Mendenhall, Cook had changed his normal routine and coached them directly as freshmen.

Essentially, the 1893 Freshman Eight became the 1894 Varsity with three upperclassmen slotting in. The upperclass members:

Junior **A.P. Rogers '95** came in at 4. He had rowed in the 1893 varsity as a sophomore, and sophomore **A.W. Dater '96** switched sides and moved from 4 to 5 to make room for him.

Senior **Frederick A. Johnson '94**, who had rowed bow in the 1892 and 1893 Varsities, switched sides and took over at stroke in 1894, and Senior **F.E. Olmstead '94**, already with two years of varsity coxing experience, continued as Varsity Coxswain.

All the rest of the boat retained the seats they had rowed in the 1893 Freshman Crew.

This was the boat that Cook chose to be his model crew in the photos. Two of them, **William Beard '96** and **Ralph Treadway '96**, would retain their seats through to the 1896 Henley crew.

These pictures hung in a succession of Yale boathouses for more than a century before they were moved into the tanks in

<sup>1199</sup> Mendenhall, *Coaches*, Ch. II, p. 2

<sup>1200</sup> The photos can be seen in stop-motion at <http://photo.ucr.edu/photographers/muybridge/index327.html>

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“Heads up, shoulders square, arms straight, knees natural. The **catch**, light hands, blade buried to upper corner. No back wash.”



“Following the **catch**, the power is quickly applied with the shoulders. The slide is held still until body swing is nearly complete.”



“Body swing following catch. Legs about to go on.”



“Body swing complete. Leg drive complete – Finishing with arms. Application of power previously applied by body and legs.”



“The beginning of the feather is delayed until the lower corner of the blade is leaving the water. The wrists are then rolled downward deliberately and without jar. **Light hands.**”



Away with the hands. Shoulders **with** slide to follow.”

Yale Tanks, Payne Whitney Gymnasium

### The Bob Cook Stroke

1894 Yale University Varsity Eight

Stroke **Frederick A. Johnson**, 7 **Ralph Treadway**

0°, +30° to -10°, 4-9, 0-5, 5-10

English Orthodox Technique, overlapping-sequential *Kernschlag*

This is the best surviving photographic documentation of pre-Fairbairn back-before-legs English Orthodoxy.

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2004. Under each photo was Cook's own description of the phase of the stroke being illustrated.

Force application was *Kernschlag*.

**The [1897] Yale-Harvard-Cornell Regatta Program:** "The feature of the Cook Stroke is the catch. The men reach well forward and catch the water with a savageness that seems to fairly lift the boat. The oars enter the water at right angles, but are not buried deep.

"There is not a great amount of leg kick, the body and arms being relied upon for most of the power. The power is applied continually, and the finish has little or any of the usual 'boil.'"<sup>1201</sup>

The summary of the Bob Cook Stroke is as follows: 0°, +30° to -10°, 4-9, 0-5, 5-10, *Kernschlag*.

This was a close adaptation of the overlapping-sequential pre-Fairbairn English Orthodoxy but, in force application, it failed to appreciate the new innovation that Cook's British mentor, **Francis Gulston**,<sup>1202</sup> had introduced to the English Orthodox Technique of the 1870s. According to **Mendenhall**, "before Gulston was to learn the enormous possibilities of the sliding seat, he had realized that fixed-seat rowing was attaching so much importance to the beginning of the stroke that the finish was neglected.

"A 'clean, lengthy finish' became the secret of his early success, so that no one was better prepared to take proper advantage of the new technology."<sup>1203</sup>

Five years before Ned Hanlan would arrive from Canada, eight years before Steve Fairbairn would arrive from Australia, F.C.

Gulston was one of the Metropolitan rowers from Thames and London Rowing Clubs who were winning at Henley and, like Joe Sadler, starting to push technique in the direction that Hanlan would eventually take it.<sup>1204</sup>

The Bob Cook Stroke would fail to incorporate Gulston's appreciation of the pullthrough as a whole and maintained its focus on the front half.

### Evolution

Cook began with pure English Orthodoxy as he understood it and evolved from that starting point over the following twenty years in the directions that virtually all American collegiate rowing of the time shared.

Without the decades of British history of fixed-seat rowing, American rowers never acquired the English Orthodox preoccupation with extreme body swing and so were immediately more open to longer and longer slides.

The longer slides presented a specific challenge for boat builders. Foot stretchers were always adjusted so that when the legs were flat at the end of the pullthrough, the seat would come to rest at or near the bow stops of the slide. Lengthening the slide resulted in the foot stretchers being bolted in closer and closer to stern end of the track. Soon the horizontal braces between gunwale and keelson at that point began impinging more and more on the backs of the rower's calves.

The solution was to lessen the angle of the footstretchers, allowing the heels to rise a bit, and to build the tracks on a slope, dropping their stern ends just a bit. (English critics scoffed at how Americans "rowed uphill."<sup>1205</sup>)

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<sup>1201</sup> *The [1897] Yale-Harvard-Cornell Regatta Program*, pp. 26-7

<sup>1202</sup> See Chapter 8.

<sup>1203</sup> Mendenhall, unpublished biography of Bob Cook, Mystic Seaport Library, pp. 21-2

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<sup>1204</sup> See Chapter 14.

<sup>1205</sup> Rowe & Pitman, pp. 66-7

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As the slides lengthened, stroke length increased, and this encouraged a lower stroke rating than that which was being used in Britain.

This trend was also encouraged by the American preference for three- and four-mile race distances, roughly equivalent to that of the yearly Oxford-Cambridge course, but a far cry from the traditional Henley distance of a mile and five-sixteenths.<sup>1206</sup>

And given that American races were often held on courses known for frequent headwinds and rough water, American crews often raced as low as 28 to 30 strokes

per minute, whereas Orthodox crews were often competing, at least at the shorter Henley distance, with ratings as high as 40 and above.

In summary, by the 1880s American crews in general and Bob Cook's Yale crews in particular tended to row a stroke based on the sequential body mechanics of English Orthodoxy but with longer slides, more leg compression and less body swing, in the case of the Bob Cook Stroke at most  $+30^{\circ}$ <sup>1207</sup> to  $-10^{\circ}$  instead of the English Orthodox  $+50^{\circ}$  to  $-40^{\circ}$ , and to row their longer strokes at a lower rating.

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<sup>1206</sup> See Chapter 5.

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<sup>1207</sup> Note that in Cook's Photo 1 the 7-seat had only  $+20^{\circ}$  body angle forward.



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### 28. American Collegiate Rowing Takes Shape

#### *Harvard versus Yale – The IRA*

#### **The True Legacy of Bob Cook**

Cook continued to be the volunteer coach at Yale from 1876 until 1898, but unfortunately for him and his passion, he also had a regular job in Philadelphia, so his personal participation was limited to a few weekends during the year, a couple of weeks during Spring break and another couple of weeks at training camp prior to the Yale-Harvard Race. Here is the very British way he managed from the perspective of 1893:

*The New York Times*: “Rowing men from other colleges have no idea of the high degree of perfection that the art of rowing and the preparation of the crew has attained at Yale. It all started with the victory of 1886, when ‘Bob’ Cook undertook what seemed the forlorn hope of making a winning crew from the material then at hand and found it necessary not only to start to teach his men the first rudiments of the art, but even to make them unlearn what little they thought they already knew.

“Cook made the ‘87 crew somewhat better and faster than the crew of the year before and was assisted by Alfred Cowles, the ‘86 Captain. The ‘88 crew showed marked improvement over its two predecessors, and John Rodgers, the Captain of the ‘87 crew, shared the labor of coaching with Cowles. In 1889 Stevenson, the Captain of the ‘88 crew, was added to the list of coaches, and these three ex-Captains for the five succeeding years, under a general supervision that Cook exercises, have

devoted the best part of their time and brains to the task of putting on the water crews that will do honor to Yale. They have been able to arrange their business affairs so that each of them spends from four to six weeks every year with the crew.”<sup>1208</sup>

Surprisingly, the most lasting effect of Bob Cook on American rowing was not the technique he imported from England. Within half a century, the specifics had disappeared entirely from the continent and nearly from the face of the earth.

Neither was it his abhorrence of professional coaches. No college paid much attention for long. During his tenure, even Yale hired a number of professional coaches disguised as boatmen or riggers.

No. Cook’s greatest contribution to American rowing history was the creation of the **Intercollegiate Rowing Association!**

He didn’t start it. He never joined it, but it was because of him that the IRA became the leading organization in American collegiate rowing.

#### **Cook’s Ideal: An American Version of The Boat Race**

As American collegiate crew racing was developing in the post-Civil War period, venues on rivers and lakes throughout the Northeast region of the United States had already been developed for professional

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<sup>1208</sup> How the ‘Varsity Crews Row, *The New York Times*, June 26, 1893

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sculling, and the norm was out-and-back races over three to four miles.

For colleges, the preferred boat was the coxless-six, which was hard to steer and could not manage a turn around a stake. By the 1870s, three-mile straightaway races on the Connecticut River in Springfield, Massachusetts or on Saratoga Lake in upstate New York had become the preferred venues for RAAC championship regattas.

Bob Cook had held as his ideal the annual Oxford and Cambridge four-plus-mile **Boat Race** in London rowed in eight-oared shells with coxswains, which he had seen and come to appreciate during his trip. In 1873, with Cook newly returned from Britain, Yale won the RAAC championship in Springfield, but when the regatta moved to Lake Saratoga in the following years, Cook quickly became disenchanted.

By this time, Columbia, Wesleyan, Dartmouth, Williams, Cornell, Trinity and Princeton all had professional coaches. Championship regattas were evolving to resemble less and less Cook's ideal: the Oxford and Cambridge Boat Race, two crews coached by amateurs racing point-to-point over four miles.

In 1874 while rowing in second place, poor steering caused Yale to be fouled by Harvard. They broke their starboard bow oar and came in ninth. Columbia won.

Historian **Samuel Crowther**: "Yale was very much disgruntled after this regatta, and the feeling between Harvard and Yale was especially bitter.

"The coxless-sixes were not the most satisfactory of craft, and there was too often the chance that a boat manned by a fast crew might be beaten because of the inability to find a man who could steer.

"Captain Cook wanted Yale to withdraw [from future RAAC championship regattas], claiming there were too many crews in the races to make the test one of rowing ability.

"The matter came to a head at the next meeting of the association when Hamilton and Union asked for admission. Yale voted against them and said that they would withdraw after the next regatta. They gave as a reason the fact that the great number of competitors in the regatta made the racing unsatisfactory, but the real cause for their withdrawal seemed to be their dislike of being beaten by smaller, less prestigious colleges."<sup>1209</sup>

### Early Race Strategy in American Collegiate Rowing

These races could have as many as fifteen crews starting side by side, and this had an interesting influence on race strategy in the United States. Since your opponent's lane might be as far away from you as 300 meters across the river or lake, it was easier to see them and keep track of them through your peripheral vision, even if they got a lead. This made falling behind in the early stages of a race less of a psychological disadvantage, and in a race that lasted more than fifteen minutes, it made a crew that started too fast vulnerable to attack in the late stages by a crew that had paced itself more conservatively.

The fly-and-die strategy that had characterized virtually all early racing throughout history up to that time was quickly driven to extinction by **natural selection**.<sup>1210</sup>

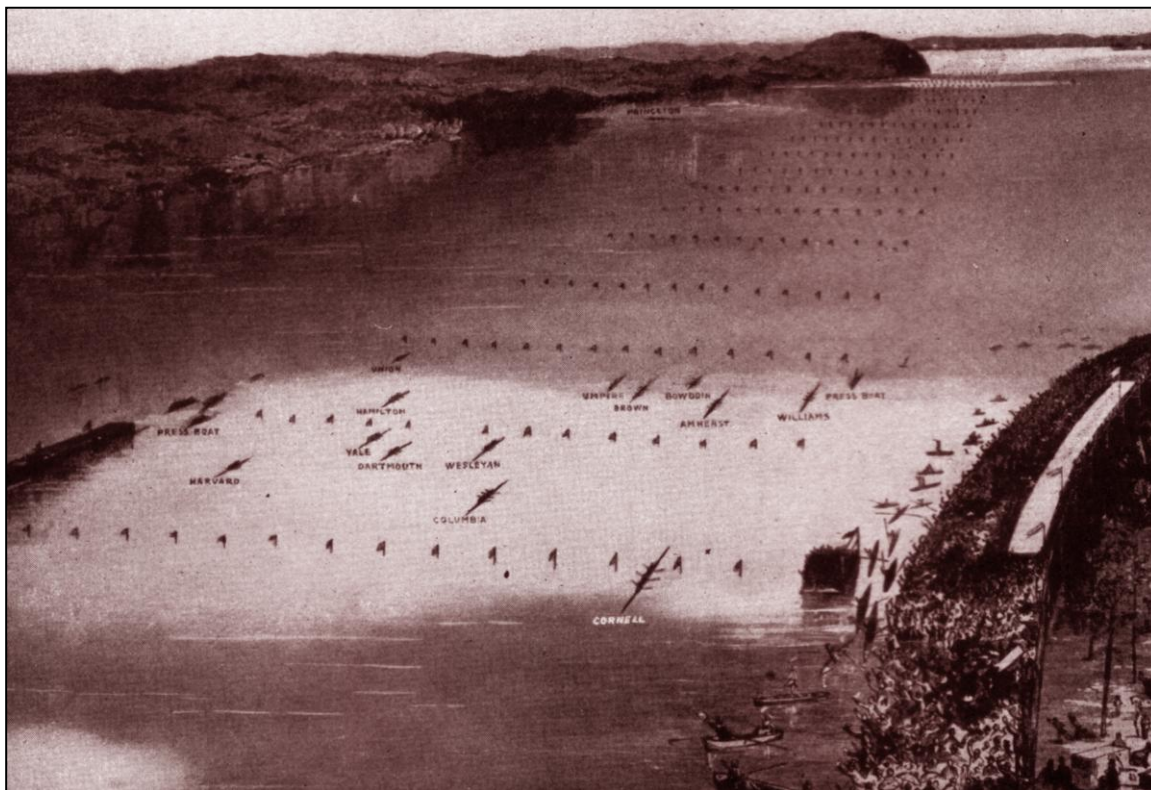
Crews quickly learned by experience that the most successful strategy was to go off the line hard to take advantage of adrenalin flowing and to grab a brief psychological advantage if possible, but then settle to a manageable pace for the body of the race and be ready to increase that pace gradually in the last mile when the real racing was bound to take place.

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<sup>1209</sup> Crowther, pp. 49-53

<sup>1210</sup> See the Introduction.

## AMERICAN ROWING COMES OF AGE



Young, *Courtney and Cornell Rowing*

### 1875 Rowing Association of American Colleges Regatta

Saratoga Lake, New York

1 Cornell, 2 Columbia, 3 Harvard, 4 Dartmouth, 5 Wesleyan, 6 Yale . . .

Early example of a buoyed course (3 miles, 13 lanes)

### The 1875 RAAC Regatta

Crowther in 1905: “The regatta of 1875 was the greatest that has ever been held in this country. There were no less than thirteen crews for the University race.

“The throng in Saratoga was tremendous. For three days the railroad had been unloading the spectators who, on the morning of July 14, crowded every nook from which the least view of the stretch could be had.

“Yale had been picked to win, with the chance of either Harvard or Columbia.”<sup>1211</sup>

Columbia indeed placed second and Harvard third, but Yale placed only sixth. “They were deeply chagrined at their failure, complete and without excuse, for not a foul had happened.”<sup>1212</sup>

Even worse, Cornell, a rural agricultural trade school in Yale’s estimation, swept the varsity and freshman races.

“In December, Yale voted to withdraw from the Rowing Association of American Colleges and asked Harvard, Columbia and Princeton to join them in forming a new organization. [This was the first ever attempt to form an “**Ivy League**” of elite colleges, eighty years before that league was

<sup>1211</sup> Crowther, pp. 49-53

<sup>1212</sup> Ibid, p. 53

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*The Century Magazine*, August 1905

### 1905 Harvard-Yale Boat Race Thames River, New London, Connecticut

actually formed.] Columbia and Princeton refused, but an agreement was made with Harvard to row an annual four-mile race in eight-oars with coxswains instead of sixes.

“The change to eights was a following of English fashion, the Oxford-Cambridge race being rowed in that sort of boat, and Yale withdrawing to row only with Harvard had the great English race strongly in mind.

“The increase in the distance to four miles was another instance of the English influence at Yale, which may be traced to Cook, who had picked up more than mere rowing styles while abroad.”<sup>1213</sup>

When Cornell again swept both races in 1876, Harvard followed Yale and also withdrew from the RAAC, and after that, Cook refused to row in any race with more than two participants, and pointedly refused to row Cornell at all because they had professional coaches, first **Henry Coulter**,<sup>1214</sup> later **Charles Courtney**.<sup>1215</sup>

Losing the two most prestigious institutions in the country dealt an eventual mortal blow to the Rowing Association of American Colleges. They held no regatta at all in 1877 or 1878 and then limped on with fewer and fewer participation into the 1880s.

**Crowther**: “The action of Yale was sharply criticized at the time, and looking back, it seems to have been an unfortunate step that needlessly diverged the collegiate rowing interests and created two separate [camps], exchanging few ideas and still less courtesy.”<sup>1216</sup>

### The Harvard-Yale Race

By the 1880s, the Harvard-Yale Race had become firmly ensconced on the Thames<sup>1217</sup> River in New London, Connecticut, each crew eventually acquiring its own private compound on the eastern bank of the river near the north end of the

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<sup>1213</sup> Ibid, pp. 53, 55-6

<sup>1214</sup> See Chapter 9.

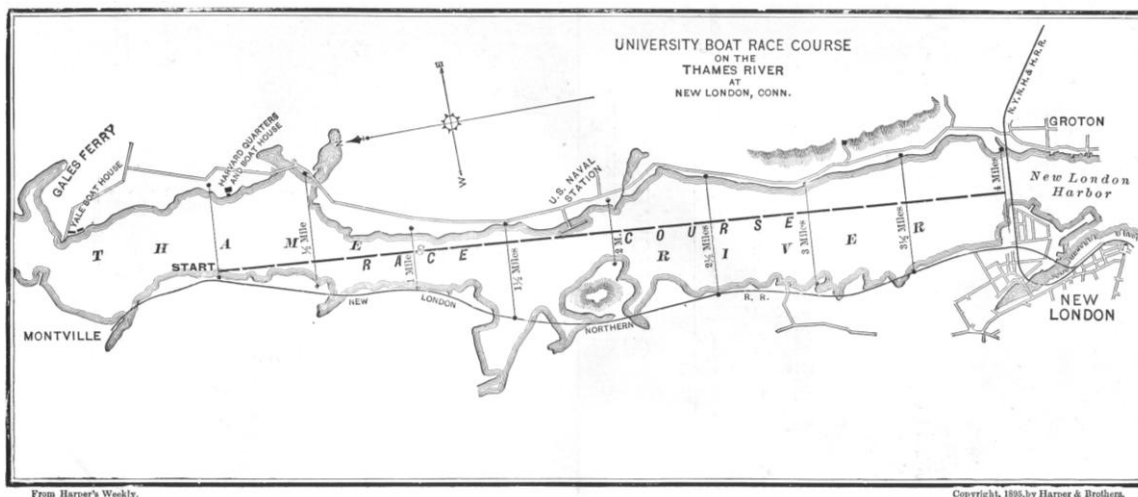
<sup>1215</sup> See Chapter 11.

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<sup>1216</sup> Crowther, pp. 53-4

<sup>1217</sup> rhymes with “James” with a soft “th” sound. The Thames River in England rhymes with “them,” starts with a hard “t” sound and ends with a “z” sound.

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Thomas E. Weil Collection

### Harvard-Yale Course, 1878 to present Thames River, New London, Connecticut

The Yale compound is above the "T" and the Harvard compound is above the "A" in "THAMES."

course, **Red Top** for Harvard and **Gales Ferry** for Yale.

The other major rowing schools very much wanted to join in, but Cook continued to bar their participation.

**Crowther:** "Harvard and Yale, with rowing records before the others had even purchased a boat, felt that they were the leaders of rowing, while the others considered that speed was the best claim for preëminence and not the accident of being first born. Challenges passed to and from, but they were not taken up, and both Yale and Harvard desired to confine rowing to themselves."<sup>1218</sup>

### The IRA

In 1889 in frustration, Cornell, Columbia and Pennsylvania began holding their own race on the Thames right before the Harvard-Yale event. In 1891, the three

colleges proposed<sup>1219</sup> and then formed<sup>1220</sup> the **Intercollegiate Rowing Association**, and in 1892, they finally left New London in frustration and disgust.

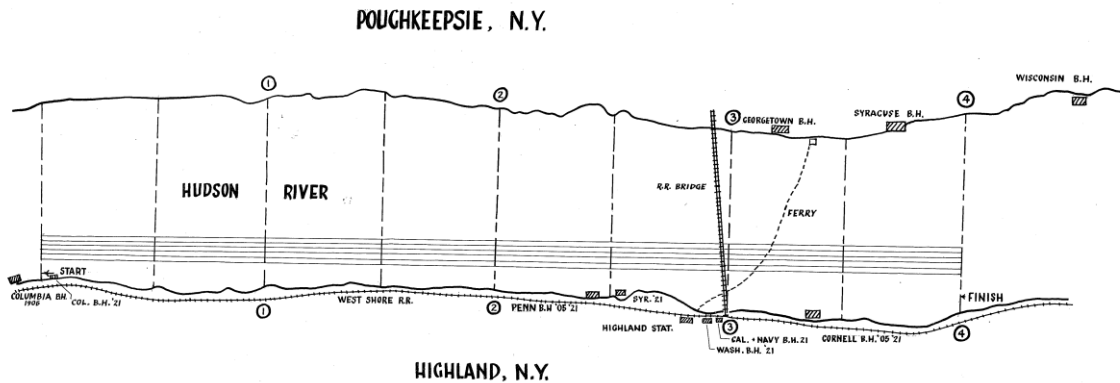
Historian **Robert F. Kelley:** "In the early part of December in 1895, a tug made a journey from Poughkeepsie [New York] upstream [on the Hudson River] for about three miles with three young men aboard her. With the men was a Judge Hasbrouck of Poughkeepsie. The three visitors were **Thomas Reath** of Pennsylvania, **Charles Treman** of Cornell, and **Frederick Sill** of Columbia.

<sup>1218</sup> Crowther, p. 90

<sup>1219</sup> The Crews on the Thames, An Intercollegiate Rowing Association Proposed, *The New York Times*, June 23, 1891

<sup>1220</sup> Collegiate Oarsmen Organize, A New Intercollegiate Rowing Association Formed, *The New York Times*, November 1, 1891

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Alama, *Mark of the Oarsman*

## Intercollegiate Rowing Association Course, 1895-1949 Poughkeepsie, New York

“The three were looking for a rowing course, now that Yale and Harvard were drawing so definitely together and taking over the New London course. They had looked at other places: Saratoga, Cayuga and Seneca Lakes upstate, the Connecticut at Springfield [Massachusetts] and [Lake Quinsigamond] at Worcester [Massachusetts]. They had been down the Hudson at Nyack [New York].

“They liked Poughkeepsie. Judge Hasbrouck told them of the old Dutch sailing course, extending from where they stood on the drifting tug at **Kromme Elbourg**<sup>1221</sup> down out of sight. About four miles, they thought. They came back in [winter], had the course surveyed on the ice – and that June came the first of the Poughkeepsie Regattas.”<sup>1222</sup>

Since the first annual IRA

<sup>1221</sup> the Ten Eyck family home. See Chapter 41.

<sup>1222</sup> 1941 Poughkeepsie Regatta Program, qtd. by Taylor, p. 98

regatta in Poughkeepsie in 1895, the only tarnish on the luster of a “national championship” IRA victory in the intervening century has been the all-too-frequent absences of the two crews that began it all by refusing to participate, namely Yale and Harvard.



Intercollegiate Rowing Association

### Varsity Challenge Cup

## Poughkeepsie, New York

**Crowther:** “The four miles is quite straight, and the river so wide that a score or more of eights may row in the same race without crowding. It is the course for the world to row upon.”<sup>1223</sup>

For its first half-century, the home of the IRA remained in Poughkeepsie, and the site became so important that the IRA championship was referred to simply as the **Poughkeepsie Regatta**.

The racing there took on mythic proportions. **Negley Farson**, a famed journalist and foreign correspondent

<sup>1223</sup> Crowther, p. 111

## AMERICAN ROWING COMES OF AGE



University of Pennsylvania Intercollegiate Athletics

### 1926 Poughkeepsie Regatta

The final strokes viewed from the bridge at one mile to go

1 **Washington** 19:28.6, 2 **Navy** 19:29.6, 3 **Syracuse** 19:53.8, 4 **Penn** 20:03.2,  
5 **Columbia** 20:05.2, 6 **California** 20:06.4, 7 **Wisconsin** 20:07.0, 8 **Cornell** 20:08.0

during the first half of the 20<sup>th</sup> Century, rowed for Coach **Ellis Ward**<sup>1224</sup> at the University of Pennsylvania in 1911.

**Farson:** “In Poughkeepsie, each university had its own boathouse and its own training quarters back on the highlands of the shore. In preparation for the race we lived and rowed there for several weeks.

“The ultimate triumph of rowing in the United States is to win the big Poughkeepsie boat race. Lose the Navy,<sup>1225</sup> lose Henley,<sup>1226</sup> lose all the dual races of a

season; but win the Poughkeepsie race, and everything was all right. That was the only race that counted. It was like the final battle of a war.”<sup>1227</sup>

Describing the **1911** Poughkeepsie Regatta, **Farson** wrote:

“Are you ready, Cornell? Are you ready, Columbia? Are you ready, Syracuse? Are you ready, Wisconsin? Are – you – ready – *Pennsylvania?*”

“There they were; those dreaded words. Watermen, leaning from the stakeboats, were holding our delicate rudders. A man with a pistol stood in the prow of the steward’s yacht. As he called, each cox raised his right arm in signal that his crew

<sup>1224</sup> See Chapters 36 and 37.

<sup>1225</sup> Prior to World War I, the crew at the U.S. Naval Academy was not allowed to leave the base. Accordingly, several crews would make the trip to Annapolis annually to race them.

<sup>1226</sup> the American Henley, an annual regatta for college and club crews often held in Philadelphia or Washington DC.

<sup>1227</sup> Farson, p. 44

## THE SPORT OF ROWING



George Grantham Bain Collection (Library of Congress) Prints and Photographs Division (LC-B2-2739-12)

### 1913 Poughkeepsie Regatta

1 Syracuse 19:28.6, 2 Cornell 19:31.0, 3 Washington 19:33.0,  
4 Wisconsin 19:36.0, 5 Columbia 19:38.2, 6 Pennsylvania 20:11.2

was ready for the start. We were leaning forward, ready to catch.

*“Crack!*

“For twenty strokes, we gave it everything that we had, our blades moiling the water to get the long shell under way. And then we straightened out.

“There was a cannon on the bridge and also a signal arrangement comprised of our university flags. The gun would fire at each mile to denote the crew in the lead; fire one, two, three shots, etc., according to the number of our lane. As we passed under the bridge for the last mile, we heard the gun fire twice – *Columbia was in the lead!*

“That last mile at Poughkeepsie!

“It is a mile that has broken more hearts than any race-course on water, land or air. Broken not only the hearts of the oarsmen, who are sobbing to themselves – ‘one more stroke, one more stroke – just one more stroke – and then I die!’ – but the thousands and thousands of hearts on the palisades of the Hudson, in the hundreds of yachts that line the course, in the long, rumbling observation train that follows the race from along the river edge.

“In that last mile every excursion steamer, yacht, launch and Navy torpedo-boat along the course pulls her whistle down. It is the shrieking of hell. And in this inferno the dying crews fight it out. We



## AMERICAN ROWING COMES OF AGE

passed a crew. We began to overhaul another crew.

“Suddenly – we left it as if we were standing still. Just a dazed glimpse of something wrong with No. 2 – he was rocking in his seat. The cox is giving us tens now, stepping it up – then the last sixty – ‘Give her everything you’ve got left!’

“Roars, whistles, firing of salutes. We are lying, drifting on the tide. Our oars drag lifeless. We lie crumpled up. Big Bill Crawford is sobbing behind me. He leans forward and then slowly falls over my upturned face. I try to push him off . . . We sit up. A crew fresh as paint is already rowing back up the course. It is followed by an increasing gale of cheers.

“Cornell! Cornell! We yell like hell, Cornell!”

“Cornell first, Columbia second, Pennsylvania third . . .

“Afterwards we went along to the Wisconsin boathouse. We wanted to know what happened to No. 2. There he lay, blood all over the place, being attended to by a perplexed doctor. Just before we entered the last sixty strokes he had jumped his seat. He rowed that sixty with his buttock sliding along the brass runners. The brass strips had cut through his rowing shorts, cut through his flesh, until, it seemed, his entire behind was just one wide open sore.

“Otherwise we might have been fourth.”<sup>1228</sup>

### Regatta Week

The town of Poughkeepsie took on a carnival atmosphere for regatta week every June.

Historian and *The New York Times* journalist **Robert F. Kelley**: “In the streets, the lampposts bore flags and bunting. Shortly after breakfast, sombreroed State Troopers, their motorcycles grumbling like machine-guns, came on the scene to help wrestle with the thousands of cars that each June climb the steep, winding streets of this city at the start of what they call ‘America’s Rhineland.’”<sup>1229</sup>

Tens of thousands of revelers would descend upon the town. Hotels on both sides of the river would fill months in advance. Hundreds of thousands of dollars would be openly wagered with newspapers publishing odds as they changed in the days leading up to the regatta.

In 1899, the observation train, described as a moving grandstand, had forty-eight cars and steam engines on both ends.

*The New York Times*, June 28, 1899: “Anchored in the river opposite were half a dozen excursion steamers and a score or so of sizable yachts and sailing craft. Of the lot were the Ballantine yacht *Juanita*, dressed from stem to stern in rainbow fashion with a couple of hundred flags of Cornell, red and white, and one of the prettiest sights on the course. The big black steam yacht *Lagonda* also was elaborately dressed with international code and yacht club signals. The referee’s boat *Aileen*, a handsome white steam yacht, was the gayest of all the craft. Her flags were the biggest, her movements the liveliest.

“Other yachts in the fleet were the *Alciada*, *Nepahwin*, *Maspeth*, *Restless* and *Alfrida*, and several of these had on board some of the Naval Militia boys who last night, as well as tonight, helped to make things hideous for those who wished to sleep. They fired the largest and loudest of

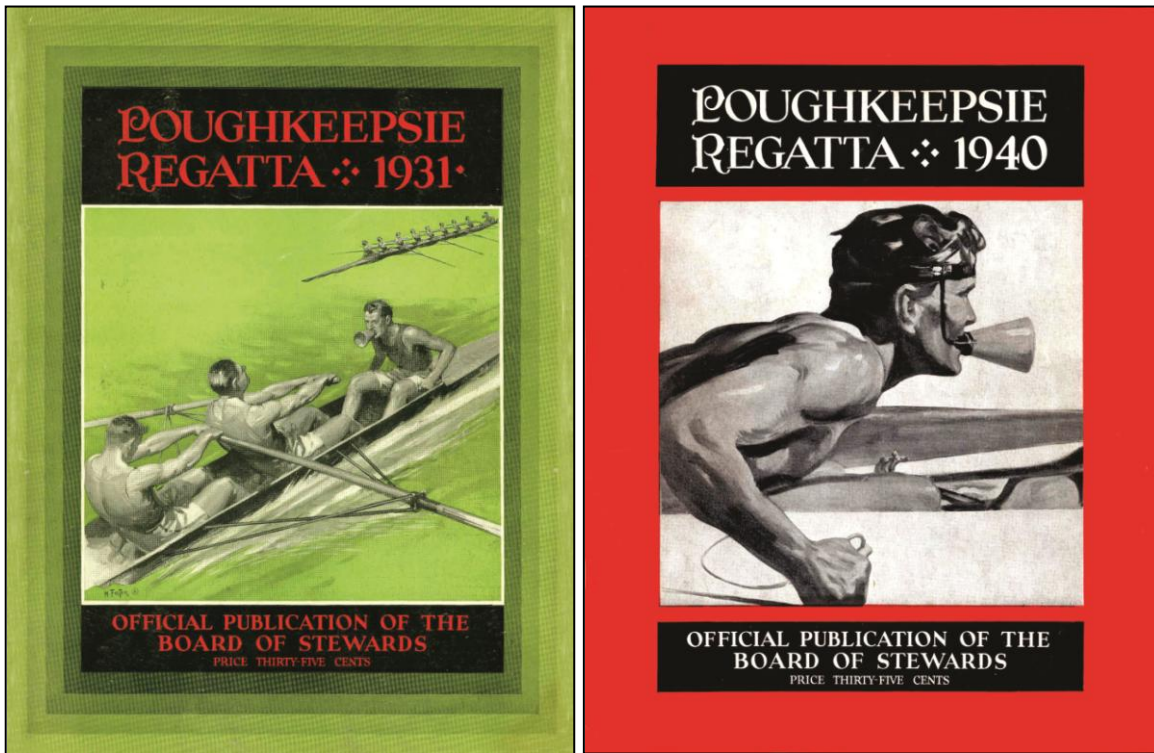
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<sup>1228</sup> Ibid, pp. 46-7

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<sup>1229</sup> Robert F. Kelley, Washington Gains Sweep in Regatta at Poughkeepsie, *The New York Times*, June 23, 1936

## THE SPORT OF ROWING



Thomas E. Weil Collection / Intercollegiate Rowing Association

The **IRA** remained in Poughkeepsie for more than half a century.

the cannon crackers and drank the most beer.

“Highland [the town across the river from Poughkeepsie] was converted into a sort of Coney Island. Lemonade vendors, peanut merchants and banana salesmen did a thriving business along the fronts of the waiting train, where all were hungry and thirsty before the cars were moved up to the starting point. The ‘all hot’ men did a splendid business at their roadside stands, and the verdant pie and cake men and women who had been farmers until today reaped a harvest they will not soon forget.

“The darky who holds his head in a hole in a sheet for men to throw baseballs at was there, and there were a hundred and one other catch-penny affairs of the usual Coney Island type about the Highland station, where the crowds who didn’t walk down to the observation train lingered and killed time

for from an hour upward, according to their anxiety and their patience.

“A few venturesome three-card monte and shell game workers from New York with an army of ‘cappers’,<sup>1230</sup> plied their trade at intervals in shady nooks on the roadside and in spots back of the observation trains, where they were out of view of the deputy sheriffs and special policemen, who were thick on that side of the river. Some farmers lost their money in this way, and there were several fights which did not result in anything serious as a consequence when the countrymen found they had been swindled. Only the number and strength of his confederates saved the man who sold the fraudulent little boxes ‘packed with soap and greenbacks’ from

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<sup>1230</sup> handicappers or bookies, ready to place illegal bets.

## AMERICAN ROWING COMES OF AGE



Author / Gilder Boathouse, Yale University

The plaque dedicating  
the Robert J. Cook Boathouse  
Derby Connecticut, 1923

severe usage by some young farmers who had been fleeced of their money by the swindlers. The gold-ring game was worked with some success on some of the young college boys more flush with money than wise in its use. This evening the swindlers managed to get away before the old fraud was discovered.

“This sort of a thing is always a part of the regatta week programme, and it was carried out as it always will be so long as fools exist.”<sup>1231</sup>

Early in the 20<sup>th</sup> Century, the Poughkeepsie Regatta was the greatest one-day sporting event in America, easily outdrawing the Indianapolis 500 automobile race and the Kentucky Derby horse race. It remained in Poughkeepsie for more than half a century.

Yale and Harvard remained self-segregated, and it wasn't until the very end of the century that the two great universities which had originated collegiate athletic competition in the United States began to participate regularly in the Intercollegiate Rowing Association National Championship.

### Postscript

A year after Cook's death in 1922, Yale erected a bronze tablet in their new **Robert J. Cook Boathouse**. That tablet has now been relegated to a storage closet in the new **Gilder Boathouse** in Derby, Connecticut. It seems that ever since his grandson decided to attend Harvard, Bob Cook arouses at best mixed feelings at Yale.

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<sup>1231</sup> [Pennsylvania Wins at Poughkeepsie](#), *The New York Times*, June 28, 1899

# THE SPORT OF ROWING

## 29. Foxey Bancroft

### *The Jack-Knife Stroke*

The rise of Bob Cook at Yale ended Harvard's recent domination of their great rival and caused great consternation in Cambridge. It was only natural that Harvard should again look back, as Yale had, to England, where they had raced in 1869.

Colonel **William Amos Bancroft** (1855-1922), Harvard '78, the Crimson coach from 1880 to 1885, prided himself in having his crews row English Orthodox Technique "as taught at Eton."<sup>1232</sup>

His nickname was "Foxey," and he was known for imposing "an erect military bearing."<sup>1233</sup> He had been stroke and captain of the 1876 Harvard crew in the first Yale-Harvard race over four miles in eights. Yale won by more than seven lengths.

**Kelley:** "The Harvard stroke was jerky, and the slide so fast that a writer of the time naïvely said 'they came forward with a rush very taking to the eye.' The stroke was

the same for scarcely two minutes in succession, and Bancroft had it all the way from 35 up to 50."<sup>1234</sup>

The Harvard crew had three weeks after the Yale-Harvard race to prepare for their last appearance in the 1876 RAAC Regatta in Saratoga, and since Yale was not participating, Bob Cook "came up for several days and helped out [Alden] Loring,<sup>1235</sup> who was then coaching, and essayed to teach the Yale stroke to the Harvard men."<sup>1236</sup>

Harvard pressed defending champion Cornell all the way before finishing a respectable second, well ahead of the rest of the field.

**Crowther:** "In the fall of 1876, some of the Harvard men put their heads together and concluded that change was necessary in the Harvard stroke. Their idea was to go back to the longer, sweeping stroke of the older Harvard crews and abandon the quick jerk that had been losing the races. Captain Bancroft was eager for a change.



Harvard University Archives

W.A. "Foxey" Bancroft

<sup>1232</sup> Kelley, p. 212

<sup>1233</sup> Ibid.

<sup>1234</sup> Crowther, p. 56

<sup>1235</sup> from the 1869 Harvard crew that raced Oxford. See Chapter 26.

<sup>1236</sup> Crowther, p. 57

## AMERICAN ROWING COMES OF AGE

“The resulting stroke was an adaptation of the stroke of a fixed seat to a slide. The swing was long, the men going far down in the boat at both ends, while the slide was very short. Critics dubbed it the ‘**jack-knife stroke**,’ but it was better than that of the previous year, and it managed to win for three years.

“Yale said it was only the Cook Stroke changed a little.”<sup>1237</sup>

**Mendenhall:** “Professional scullers put in mileage in small boats, which enabled them to combine back, arms and legs most effectively on the drive. [When he became Harvard coach in 1880,] Bancroft tended to teach a sequence rather than a combination.”<sup>1238</sup>

**Kelley:** “On the pullthrough, the men were drilled to lift their bodies with a violent heave at the beginning of the stroke, holding their slides rigid, but this seemingly impossible feat was done successfully because they were taught to cover their blades gradually; or, in other words, to row

them into the water so that, as a matter of fact, the blade was not covered until the preliminary heave was finished, and the legs came into full play.”<sup>1239</sup>

This is an interesting integration of the “Jesus Bell-Note” entry into pre-Fairbairn English Orthodox Technique.

**Mendenhall:** “The legs were held until the body was well up. Then the legs gave a violent push, and the arms pulled home and shot away slowly.”<sup>1240</sup>

This is actually very close to the technique of the 1894 Yale crew, recorded for posterity in the photos on the walls of Payne Whitney Gymnasium.

In such a manner, Harvard and Yale continued forward, repeatedly returning to English models in their efforts to win their own annual Boat Race.

Foxy Bancroft had two sons and grandson Nick Bancroft, Class of 1963, follow in his footsteps and row for Harvard University.<sup>1241</sup>

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<sup>1237</sup> Ibid, p. 60

<sup>1238</sup> Mendenhall, *Harvard-Yale*, p. 187

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<sup>1239</sup> Kelley, p. 212

<sup>1240</sup> Mendenhall, *Harvard-Yale*, p. 187

<sup>1241</sup> Sigward, p. 40

## THE SPORT OF ROWING

### 30. Columbia Goes to Henley

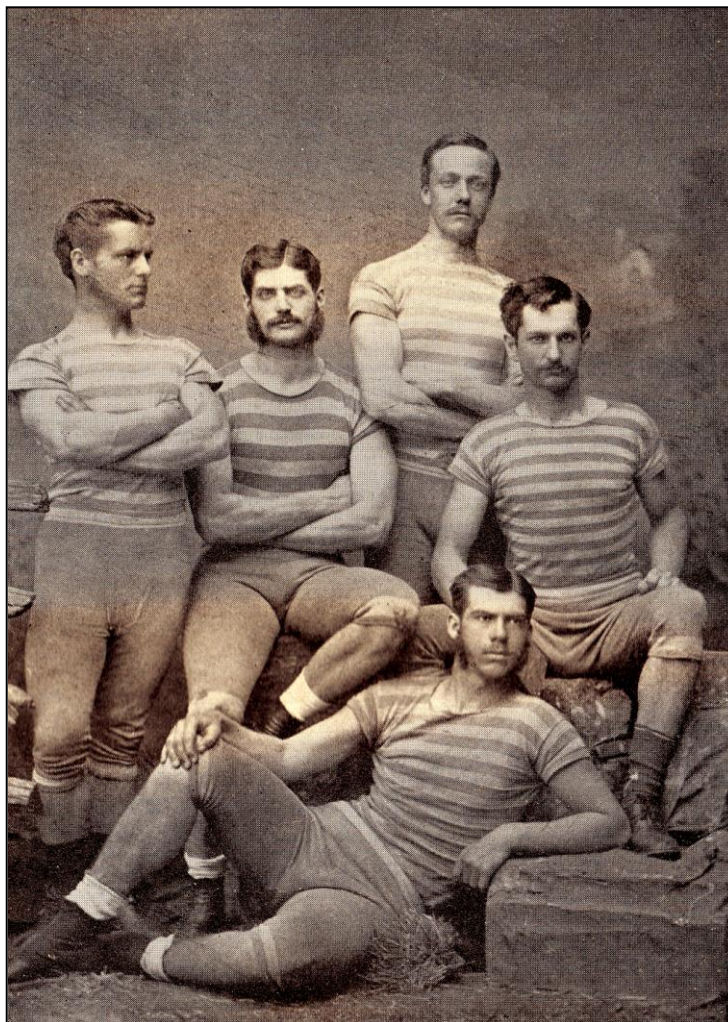
#### *The Childs Cup – 1878 Visitors' Cup*

Another consequence of the disintegration of the RAAC after 1875 was that American colleges suddenly had to look elsewhere for championship competition.

In 1879, George W. Childs donated a cup 'to be rowed for annually by the Columbia College crew of New York, the College of New Jersey at Princeton, and the University of Pennsylvania. **The Childs Cup** race is still held annually.

College crews also entered non-collegiate amateur competitions. Fours from Yale and Columbia entered the 1876 Centennial Regatta in Philadelphia, and the victory of an American club crew, the Beaverwycks of Albany, New York, over The London Rowing Club of Great Britain in the final there "prompted American oarsmen to send crews to Henley in 1878.

**Crowther:** "Columbia, not having a race with Harvard, decided to have a try with their four-oared shell, which had the critical positions – bow and stroke – filled with two men, **E.E. Sage** and **J.T. Goodwin**, the equals of whom were not to be found in college rowing of the period.



Crowther

**Columbia College Coxless-Four**  
1878 Visitor's Cup Champion, Henley  
(above) Spare **Charles Eldridge**,  
Bow **E.E. Sage** 170lb. 77kg, 2 **Cyrus Edson** 161lb. 73kg,  
Stroke **J.T. Goodwin** 153lb. 69kg,  
(below) 3 **H.G. Ridabock** 170lb. 77kg

## AMERICAN ROWING COMES OF AGE

“Every member of the Columbia four had been in at least one important race, and they were well qualified to be the first college representatives of America at Henley.

“**George Rives**, who had rowed at Cambridge, and **R.C. Cornell**, a member of the [RAAC] winning ‘74 crew, looked after the coaching.

At Henley, “their style had the sharp criticism of the English press. Of their stroke, the *Pall Mall Gazette* said, ‘They keep their backs straight, but their swing has a wooden appearance; they hang at both ends of the stroke – on the recovery when their hands touch the chest, and again when a full reach forward.’”<sup>1242</sup>

Their technique would have been at odds with English Orthodoxy, as it relied on “high strokes, with considerable leg and arm work and not much swing,”<sup>1243</sup> in other words, long American slides, emphasis of leg drive over body swing, and ending in a ferryman’s finish.

At Henley in 1878 in the Visitor’s Cup, open to college fours, the entries were **Columbia University** from the United States, Oxford’s **University College** and **Hertford College**, and Cambridge’s **Trinity College**, **Lady Margaret Boat Club** and **Jesus College**, the defending champions.

**Crowther**: “At the time, the Henley Stewards had three crews in each heat instead of two as at the present day. Columbia drew the centre with Jesus in the Bucks and University in the Berks station. Thus the real trial for the cup was to be made on the first day, for any crew that could beat Jesus would win.

“Columbia left beautifully rowing 40 and had a lead at the quarter, and at the

Remenham Farm (about half a mile then) they had a length and took the University water. Jesus made a spurt for Columbia, and it looked as though a deliberate foul would occur, and the oars did touch, but the crews straightened out and the struggle started between Columbia and Jesus.

“The Cambridge men spurted grandly, and on the last quarter the boats were almost stroke for stroke, but Goodwin roused his men to 44, took at first inches on each stroke, then feet, and finally at the line had over a length.

“Hertford won [the other] heat and were the American opponents for the final.

“In the final, Columbia had the Bucks and Hertford the Berks shore. Both started nicely, but Columbia had the speed and at Fawley Court led by a length and started over to take the Hertford water. The crowd of oarsmen following on the bank yelled to Hertford to spurt in order to win on the foul, and Hertford did spurt.

“Their only hope lay in this spurt, and their oars nearly touched the Columbia stern when Goodwin called for another burst of speed, which took Columbia two lengths ahead.

“The rally had been too much for the Englishmen, and bow grew weak, lost his control, and the shell ran into the bank with its fainting crew. Columbia, seeing the accident, slowed up and paddled down to the finish line.

“Columbia’s four – **E.E. Sage** bow, **Cyrus Edson**, **H.G. Ridabock** and **J.T. Goodwin** stroke – were a remarkable crew. They conducted themselves so well that even the English, who lose so badly, could find nothing to suggest as to the demeanor of future crews.”<sup>1244</sup>

**Gilbert Bourne**: “Socially they were very acceptable to English oarsmen. After they had won their race, an American College yell was heard for the first time at

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<sup>1242</sup> Crowther, p. 62

<sup>1243</sup> Ibid, p. 68

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<sup>1244</sup> Ibid, pp. 63-5

## THE SPORT OF ROWING

Henley, the crew shouting out the letters C. O. L. U. M. B. I. A. at the top of their voices.”<sup>1245</sup>

This was America’s first victory at Henley, and it would be thirty-six years before another U.S. crew would match their accomplishment.

In 1881, Cornell University entered a four in the Stewards’ and Visitors’ Cups. They were denied admission to the latter and were eliminated by Thames R.C. in the heats of the former. After the regatta, they

challenged the Stewards’ winner, Hertford, and lost handily, twice running into shore.

The Cornell crew elicited grumbling that even though they were classified as amateurs in America, they did not fit the English definition of gentleman amateur.<sup>1246</sup>

**Rowing Almanack:** “It is well known now that one was an acrobat, and another a swivel rowlock and rigger maker, who were made members of the Cornell University in order that they might row in the crew.”<sup>1247</sup>

This controversy would haunt American entries at Henley for the next half century.

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<sup>1245</sup> Bourne, *Memoirs*, p. 73

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<sup>1246</sup> There was also the shameful matter of the Cornell stroke-seat, Shinkle, conspiring with an Ithaca saloon keeper to fix the races at Henley and other stops in Britain and Vienna. See Crowther, pp. 75-6

<sup>1247</sup> Qtd. by Page, p. 21



## AMERICAN ROWING COMES OF AGE

### 31. The Rise of the American Professional Coach

#### *Charles Courtney – The Pump-Handle Style*



Cornell Archive

Charles Courtney on shore coaching the 1892 Cornell crew

By the 1880s, there were no longer enough gentleman amateur rowing enthusiasts like Bob Cook available to coach all of America's colleges, and so the prohibition against professional coaches that Cook had championed was first winked at, then side-stepped, until finally it withered and died.

As mentioned, even Yale hired a series of watermen in the capacity of "boatman," who actually spent as much time coaching the crew in secret as they did repairing the boats.

And there were plenty of famous newly-retired professional scullers ready to fill the need. By 1900, in the wake of betting

scandals,<sup>1248</sup> the professional sport had largely collapsed worldwide, but according to coach **Richard Glendon**,<sup>1249</sup> "in spite of the passing of the professional sculling races, the styles of rowing and methods of training of the old professional scullers left a strong impression upon the amateurs who followed; and it is due to these pioneers of the sport (many of whom are now [1923] coaches) that American crews rank today among the best in the world."<sup>1250</sup>

Thanks to the presence of these professionals, the memory of Ned Hanlan's

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<sup>1248</sup> See Chapter 11.

<sup>1249</sup> See Chapter 51.

<sup>1250</sup> Glendon, p. 61

## THE SPORT OF ROWING

Classical Technique permeated the American rowing psyche for generations.

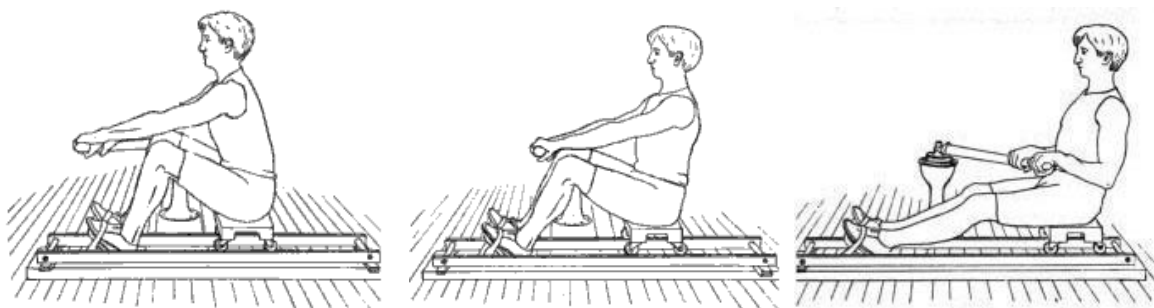
Nearly half a century after Hanlan first raced in America, **John B. Kelly** (1889-1960) of Philadelphia won the singles and doubles Gold Medals at the 1920 Olympics.<sup>1251</sup> He was described as having “great ease of style, which was reminiscent of the grace of Ned Hanlan at the latter’s best.”<sup>1252</sup>

Late in his life, Hanlan became coach of Columbia University, but like many great athletes who turn to coaching, he seemed not to have the stomach for driving his crews to greatness.

involvement in those questionable races against Hanlan.

Naturally, his employment was extremely controversial, causing *The New York Times* to opine: “If college boys cannot learn to row without associating with persons like Courtney, perhaps they would be quite as well off if they devoted a little more time to classics and mathematics and a little less to rowing.”<sup>1253</sup>

The embracing of professional coaches by American colleges marked a major turn away from the English model, where professionals were still banned and where technique still had to be passed down inefficiently within the boats by



*Johnson's Universal Cyclopedia*

**Position 1**

**Position 2**

**Position 3**

### The First Courtney Stroke: The Pump-Handle Style

-15°, +15° to -10°, 3-8, 0-3, 7-10, *Schubschlag*

In contrast to Ned Hanlan, **Charles Courtney** (1849-1920), the sculler who met with only frustration and failure whenever he raced Hanlan, turned out to have everything necessary to be a great coach. He became known as “Pop” or “the Old Man” while he coached at Cornell from 1884 to 1916.

Courtney became the first full-time professional coach to be officially hired by any American college in any sport, and the public knew his name well from his

upperclassmen to freshmen.

### The Pump-Handle Style

Charles Courtney was coach at Cornell for thirty-two years, and he had the opportunity to mature and grow through several phases as a coach.

For the first decade of his coaching career, his approach to rowing technique was still based upon his own professional sculling technique. Force application was

<sup>1251</sup> See Chapter 55.

<sup>1252</sup> Kelley, p. 66

<sup>1253</sup> Qtd. by [www.hickocksports.com](http://www.hickocksports.com)

## AMERICAN ROWING COMES OF AGE

*Schubschlag*, typical of most scullers throughout history down to the present.

*Johnson's Universal Cyclopedia*: "The beginning of the stroke, known as the forward reach, is illustrated in **Position 1** [see illustration, previous page]. In this, the seat is pulled forward with the feet until it was within nine to twelve inches from the bottom of the foot brace [footstretcher], the distance varying with individuals.

"The seat is held in position 1 while the oar catches the water, being dipped as to just fairly cover the oar blade. [The body then swings at the hips until the blade is set and the shoulders have reached] **Position 2**.

"The shoulders go back no further, and the stroke is finished by the legs and arms, as in **Position 3**. The arms are kept straight until just before the legs are fully straightened. Then the elbows are bent and the hands brought sharply into the body, and then are dropped almost to the lap to bring the oar cleanly out of the water. Then the wrist is turned over.

"On the recover, the hands are shot forward and the slide started quickly forward and slowed down as it reaches its limit, when the oarsman will again be in Position 1."<sup>1254</sup>

Relatively short in the water, Cornell relied on high ratings to tick the boat along. Historian **Samuel Crowther, Jr.**, a member of the 1901 University of Pennsylvania Grand Challenge Cup entry, called it "a short pump-handle stroke."<sup>1255</sup>

Leg drive was not stressed in the above *Cyclopedia* depiction, but other contemporaneous descriptions, including Crowther and Rowe & Pitman, emphasized the oars put in the water sharply with the back, and the balance of the pullthrough being dominated by piston-like leg drive ending in a ferryman's finish.

The back, then legs sequentiality resembled English Orthodoxy as imported to America by Bob Cook in the 1870s, and the strong leg drive resembled the Thames Waterman's Stroke, while the late arm draw was not dissimilar from the technique of the Biglin Brothers in the 1870s as recorded in the paintings of Thomas Eakins,<sup>1256</sup> but at this point in Courtney's career, there is no indication of any direct influence. More likely, his approach was based on his own sculling technique when he was still racing.

Courtney was still teaching the Pump-Handle Style into the mid-1890s.

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<sup>1254</sup> Adams, pp. 200-1

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<sup>1255</sup> Crowther, p. 117

<sup>1256</sup> See Chapter 9.

# THE SPORT OF ROWING

## 32. Charles Courtney Goes to Henley *1895 Grand Challenge Cup*



Young, *Cornell Navy*

### 1895 Cornell University Crew at Henley

Coxswain **Frederick Colson**,

Stroke **T. Hall** 174lb. 79kg, 7 **C.A. Louis** 160lb. 73kg,

6 **G.P. Dyer** 161lb. 73kg, 5 **T.F. Fennell** 173lb. 78kg,

4 **F.W. Freeborn** 171lb. 78kg, 3 **E.C. Hager** 166lb. 75kg,

2 **Edward Spillman** 162lb. 73kg, Bow **M.W. Roe** 169lb. 77kg

Rowing had started at Cornell after a series of lectures to students in the fall of 1870 by Englishman **Thomas Hughes** M.P. (1822-1896), the author of *Tom Brown at Oxford*, which featured rowing.

Cornell was a power in rowing from the very beginning. By 1873, they were being coached by professional oarsman **Henry Coulter**.<sup>1257</sup> In 1881, a Cornell four participated in the Stewards' Cup at Henley.<sup>1258</sup> In 1885, **Charles Courtney** became the coach.

This was their record from the perspective of 1897:

“In the twenty-six years of the life of Cornell boating, there have been twenty-six

Varsity races, of which Cornell has won eighteen. But the most creditable list of all was the stretch from 1885 to 1895 when Cornell scored twenty successive victories on the water. Her freshman crews have never suffered defeat. The men who represent Cornell this year have a splendid record to sustain, and one which may be pointed to with pride.”<sup>1259</sup>

In 1895, the year that Cornell, Columbia and Penn competed in the first Intercollegiate Rowing Association regatta, Courtney, frustrated by a decade of efforts to arrange races with Harvard and Yale, split his squad into two eights, an “**American**

<sup>1257</sup> See Chapter 9.

<sup>1258</sup> See Chapter 5.

<sup>1259</sup> *The Yale-Harvard-Cornell Regatta Program*, p. 44

## AMERICAN ROWING COMES OF AGE



1897 Yale-Harvard-Cornell Regatta Program

### 1895 Cornell University Crew at Henley

**Varsity**” to row in Poughkeepsie and a “**Henley Varsity**” to compete in England.<sup>1260</sup> According to Mendenhall, the Henley crew was the first boat and the Poughkeepsie crew the second.<sup>1261</sup>

At the debut Poughkeepsie Regatta, the Cornell American Varsity came in second to Columbia. The favored Penn boat swamped and did not finish the course.

The trip to Henley would turn out to be a journey of discovery for Charles Courtney. It would put an end to the initial **Pump-Handle Style** phase of his coaching career.

When Cornell arrived in England to become the first American crew to race for the Grand Challenge Cup, the English

Orthodox community was not ready to see anything to praise in American collegiate rowing.

From the British perspective, “the American style is designed for poor watermen rowing in eights, rather than for good watermen rowing in fours or pairs, little of which is done in American universities.

“The American term for rowing – ‘crew’ – suggests quite accurately a collective approach to rowing rather than an individual approach, as in England, where the oarsman is encouraged to think and later to coach for himself.”<sup>1262</sup>

The Cornell “crew,” like future American visitors to Henley, was manned by taller, heavier athletes than many of their English counterparts.

<sup>1260</sup> According to articles in *The New York Times* on May 24 and 25 and on June 11, 1895, per Bill Miller, personal correspondence, 2011

<sup>1261</sup> Mendenhall, *Harvard-Yale*, p. 210

<sup>1262</sup> Haig-Thomas & Nicholson, p. 121

## THE SPORT OF ROWING

According to historian and Henley veteran **Samuel Crowther**, some Englishmen of the time “said that all the [Cornell] rowing was done with the arms.”<sup>1263</sup> As a matter of fact, it was done mostly with the legs, but since there was minimal body swing in the Pump-Handle Style compared to English Orthodoxy, the British eye was drawn to Cornell’s ferryman’s finish. Hence the “all arms” impression amongst the British.

American **Crowther**: “They rowed a stroke anywhere from 43 to 48 with piston-rod [leg] action, but they were well together, and in the trials on the course made 7:04.”<sup>1264</sup>

### The First Round

In 1895, Cornell’s trip to Henley took unfortunate turns from beginning to end.

**Crowther**: “As the race came on, the men began to fall off in condition, either because of the climate or because of too much work, or more probably on account of the combination, and several of them were scarcely fit to row by the day of the race.”<sup>1265</sup>

Cornell’s first-round opponent was an extraordinary crew from **Leander Club**, with five Oxford Blues combining for twelve Boat Race wins between them. They were coached by **Rudie Lehmann**, and they actually outweighed Cornell by just under two pounds per man, 170lb. 77kg to 168lb. 76kg.

Courtney, as a professional coach, was disdained by the British.

**Century Magazine**: “His methods were disliked by the English rowing men because he kept his charges so close in hand that

social intercourse with their jolly and hospitable rivals was grimly tabooed.

“Suspicion of these secretive methods was shifted to positive resentment when Cornell left her most formidable rival, the Leander eight, at the starting post, and rowed alone over the course to a technical and empty victory.”<sup>1266</sup>

According to Cornell crew historian **Charles Van Patten Young**, that heat against the champions of the previous year “was won on a fluke, the Leanders not rowing more than half a dozen strokes and protesting the start; the protest, however, was not allowed.

“The Cornell crew slowed up when they saw their opponents had stopped rowing, but the umpire waved to them to go ahead, and unfortunately, in the excitement of the moment, they followed his instructions.”<sup>1267</sup>

Historian **Bill Miller**: “C.V.P. Young is not accurate in his description. There are numerous reports describing the scene the same way. Not even half of the Leander crew took a couple of strokes, and the boat ‘did not move 1/2 length from the stake boat.’ (*The New York Times*, July 10, 1895) The Cornell crew never stopped or hesitated rowing and the umpire never directed them to continue. Leander sat at the start protesting while Cornell rowed away.”<sup>1268</sup>

The British reaction was immediate and withering. “*The London Saturday Review* had this to say: ‘The unsportsmanlike conduct of the Cornell crew in the heat with Leander for the Grand Challenge Cup has been the subject of severe criticism at Henley.

“The cause of the unpleasantness marks a characteristic difference between English and American attitude towards games of sport.

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<sup>1263</sup> Crowther, p. 112

<sup>1264</sup> Ibid.

<sup>1265</sup> Ibid.

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<sup>1266</sup> Paine, *Century*, p. 484

<sup>1267</sup> Young, *Courtney*, p. 42

<sup>1268</sup> Miller, personal correspondence, 2011

## AMERICAN ROWING COMES OF AGE

“An American enters upon a competition with the one purpose of winning, and he considers that so long as he keeps to the strict letter of the law he is justified. English sportsmen, on the other hand, consider the contest a means rather than an end. Of course, if they can win, they will win, but they desire to win generously.”<sup>1269</sup>

However, contemporary British historian **Christopher Dodd** lays the blame on the race umpire, Colonel **Frank Willan**, four-time winner of the Boat Race and bow-seat of the Oxford four which had defeated Harvard in 1869,<sup>1270</sup> who “had his eyes wholly on his visitors to see that they got fair play, and he did not hear the Leander coxswain say ‘No’ in response to his ‘Are you ready?’”

“The wind was blowing off the Bucks shore and the Leander men’s pleas with it. One or two of them took a stroke as Cornell streaked off along the island, while the rest sat expecting Colonel Willan to call the Americans back. Eventually they were too far ahead to be recalled.”<sup>1271</sup>

**Miller**: “The London press was very critical of Cornell’s actions, but there was a very good letter written by R.C. Lehmann to the Cornell Captain (quoted July 12, 1895 – *The New York Times*) after the incident acknowledging their appropriate and proper conduct under the circumstances to continue as they did. Courtney was also gracious in his comments (*The New York Times*, July 10, 1895) about how the Cornell crew was respectfully and cordially treated by the British.”<sup>1272</sup>

### The Second Round

“Their second heat, rowed on the day following, was against the **Trinity Hall**, Cambridge eight.”<sup>1273</sup>

Leander coach **Lehmann**: “There had been little to choose between the times accomplished between these two crews over the course in practice. The advantage, if anything was slightly in the favor of Cornell.

“But the Englishmen relied on their great uniformity and their stronger and more consistent body work, as against the piston action of the Americans.”<sup>1274</sup>

“Cornell started with 46 strokes to the minute, Trinity Hall pulling 42. At the half mile her lead had been increased to half a length. From this point, although pulling 44 to Trinity’s 38, Cornell could not get away from the Cambridge men.

“For an eighth of a mile neither gained – the struggle was magnificent. Suddenly the Cornell shell began to come back to Trinity. The straining in her boat was intense, the rapid, short stroke killing, but the men kept at their work until at the mile when Trinity began to leave them.

“Then came absolute collapse.”<sup>1275</sup>

**Young**: “At the mile post, when in the lead, a Cornell man caught a crab which knocked the oar out of his hand, and the crew went to pieces, thus dashing their hopes with a humiliating failure.”<sup>1276</sup>

The following day, Trinity Hall won the Grand Challenge Cup by one-third of a length over New College, Oxford.

Based on his own experience at Henley in 1901,<sup>1277</sup> **Crowther** would conclude that

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<sup>1269</sup> Ibid, p. 44

<sup>1270</sup> See Chapter 26.

<sup>1271</sup> Dodd, *Henley*, p. 90

<sup>1272</sup> Miller, *op.cit.*

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<sup>1273</sup> Young, *Courtney*, p. 42

<sup>1274</sup> Lehmann, p. 214

<sup>1275</sup> *The Yale-Harvard-Cornell Regatta Program*, p. 64

<sup>1276</sup> Young, *Courtney*, p. 42

<sup>1277</sup> See Chapter 37.

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Cornell (and later Yale in 1896) had made the mistake of seeking lodgings near the river and so were subject to the Thames Valley vapors.<sup>1278</sup>

**The 1897 Yale-Harvard-Cornell Regatta Program** also spoke of the challenge of maintaining form into the summer when it included a transatlantic voyage to an unfamiliar climate. “At the end of their American training, the Cornell eight rowed over a course equivalent to the

Henley in less than seven minutes and had plenty of spurt left at the finish. Their first public trial at Henley was 7 min. 5 sec. This was the fastest rowed over the course that year and caused a genuine panic among university boating men. From that time on, however, the crew fell off, losing first all spirit, then appetite. In the race they rowed a short, choppy stroke, but so long as the men lasted, they pulled with remarkable precision and rapidity.”<sup>1279</sup>

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<sup>1278</sup> Crowther, p. 132

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<sup>1279</sup> *The Yale-Harvard-Cornell Regatta Program*, p. 64



## AMERICAN ROWING COMES OF AGE

### 33. Courtney Responds to British Criticism

#### *Extended Body Swing Style*

#### **British Reaction to Courtney's Technique**

British criticism of Cornell was not limited to sportsmanship. The technique they rowed was also not just criticized but ridiculed.

**Courtney** described the recovery he coached as follows: "The slide on recovery should be started at first rapidly, but gradually slowed up before the finish in order not to have the weight of the oarsmen brought up too suddenly on the stretcher."<sup>1280</sup>

Though by no means unique, this fast-slow recovery rhythm would come to be associated with the best American collegiate rowing for the next half-century. How was it described by the English critics? "[T]hey hurry forward after their hands, swing short, and hang."<sup>1281</sup>

Of course, "swing short" is a reference to Cornell's lack of body angle forward on their long slides, only +15°, compared to nearly +45° of English crews on shorter slides.

The English were also dismissive of Cornell's pullthrough.

**Rowe & Pitman:** "They rowed a very fast stroke – nearly fifty – but so short that the only wonder seemed to be why they did not row faster. They had not the smallest pretence to body-swing, the force of their

stroke being due solely to the piston-like action of the legs, the bodies throughout remaining practically upright."<sup>1282</sup>

British observers were willing to concede that the Cornellians "drive well with their legs,"<sup>1283</sup> but added, "With regard to Cornell, the difficulty with our ideas of style is to understand why they went as fast as they did."<sup>1284</sup>

*The London Saturday Review* did not let up, expanding its criticism to the rhythm rowed by Cornell: "There can be no doubt that our own stroke is much better for any distance over a mile than that in favor in America. Probably in bumping races, the short, quick arm-stroke (48 to the minute) would prove effective; but the defeat of Cornell by Trinity Hall should cause its abandonment in America in ordinary rowing matches."<sup>1285</sup>

#### **Courtney's Response**

Charles Courtney agreed. For ten years he had been teaching his crews a "short pump-handle stroke that had no swing."<sup>1286</sup>

Having been impressed with the English crews he saw at Henley, upon returning to Ithaca, he made significant changes.

**Guy Nickalls**<sup>1287</sup> was a member of the 1895 Leander crew that Cornell left sitting

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<sup>1280</sup> Qtd. by Kelley, pp. 217-8

<sup>1281</sup> Rowe & Pitman, p. 64

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<sup>1282</sup> Ibid, pp. 65-6

<sup>1283</sup> Ibid, p. 64

<sup>1284</sup> Ibid, p. 65

<sup>1285</sup> Qtd. by Young, *Courtney*, p. 44

<sup>1286</sup> Crowther, p. 117

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at the start line. Later he got to know Courtney when he came to America in 1913 to coach Yale.<sup>1288</sup> “[Courtney] got Cornell to the top of the tree and kept them there for a decade. He always admitted to me that he owed this entirely to experience of the Cornell crew which competed for the Grand Challenge Cup in 1895. When his crew first arrived at Henley, it rowed a short quick stroke as high as 46 or even up to 48, but the coach soon saw that such high rates of striking were not conducive to speed on the Henley water, whatever they may have been on Cayuga Lake.

“He altered their rig and the size of their blades, slowed their stroke down considerably and got them going faster. He had learnt a lot, and he admitted it.”<sup>1289</sup>

Cornell Professor **B.I. Wheeler**, the university administrator in charge of the crew program during those years: “There is no doubt that our crew in the Henley year tried a sharper, quicker stroke, having some regard to the shortness of the Henley course, and that in the following years the stroke was gradually lengthened out.

“Mr. Courtney at the time told me that the stroke accommodated itself to the convenience and power of the men who happened to be in the boat, particularly the stroke oar.

“There can be no doubt, however, that the Cornell stroke was a much longer and slower stroke in the years succeeding Henley, but it must be remembered that in 1897 and 1898 a stroke oar of characteristic figure [**Frederick Briggs**, 5’6” 168cm 150lb. 68kg according to the 1897 Poughkeepsie Regatta Program] sat in the boat, and he was not unlikely to be a very determining factor in what the crew did.

“In training his crews, Mr. Courtney rarely paid attention to the number of

strokes a minute further than to note the fact. He rarely, if ever, gave any directions as to the length of the stroke or the time. I have been with him so much on the coaching launch that I can vouch for this much. If you can solve the riddle of the fact of the lengthened stroke, you can certainly do more than I can.”<sup>1290</sup>

Cornell rowing historian **Charles Van Patten Young**: “This view would seem to bear out the contention of Cornell oarsmen and of Mr. Courtney himself that the stroke has always been fundamentally the same with the exception of slight modifications, but that its length or rapidity is largely determined by the individual characteristics of the crew.”<sup>1291</sup>

**Crowther**: “Courtney brought in a long reach and a very hard catch that nearly resulted in a jerk at the beginning. Cornell tossed their heads away trying to catch hard.

“The slide was cut down to seventeen inches, and the finish was well back. It was a remarkable change from the stroke of the previous years, and the rate reduced from the 40s to 34 and 36 and lower.”<sup>1292</sup>

### Body Swing

The shortening of the slide allowed for increased body swing forward, and this was accompanied by increased layback, yielding an overall doubling of the range of body swing, from +15° to -15° to perhaps +30° to -30°, but that was still nothing near English Orthodox +45° to -45°.

### Force Application

Crowther’s analysis quoted above also describes “a very hard catch that nearly resulted in a jerk at the beginning,” strongly indicating segmented *Kernschlag* force

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<sup>1287</sup> See Chapter 24.

<sup>1288</sup> See Chapter 42.

<sup>1289</sup> Nickalls, *Life*, pp. 243-4

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<sup>1290</sup> Qtd. by Young, *Cornell Navy*, pp. 38-9

<sup>1291</sup> *Ibid*, pp. 38-9

<sup>1292</sup> Crowther, pp. 117, 213

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application, but this is contradicted by other contemporary accounts.

*The 1897 Yale-Harvard-Cornell Regatta Program*: “Cornell rowed a much longer stroke and pulled it through more evenly. Her men caught the water hard and pulled it through ‘in one piece.’”<sup>1293</sup>

It is likely that Crowther’s eye was drawn to the head lift and the considerably expanded use of the back to initiate the pullthrough. Nevertheless, and especially with the benefit of hindsight,<sup>1294</sup> it seems probable that the Cornell crew of 1896 was indeed emphasizing the front half. Within less than five years, Courtney would revisit the issue of technique in order to specifically address force application.

### 1896 Poughkeepsie Regatta

During the fall of 1895, the same year the IRA was formed, shortly after Cornell returned from Henley, after a particularly brutal Harvard-Yale football game all athletic contests between those two schools were suspended.

“As the instigator of the break, the Harvard Athletic Committee was determined to create a new, less intensive rivalry, and thus in the words of the chairman, ‘escape from the idea of an exclusive arrangement with anybody.’

“The committee could not ‘accept the idea of an American Oxford and Cambridge.

As the eldest of a family, Harvard claims sisterhood with all but admits twin sistership with none.’

“Meanwhile, the committee contracted a two-year arrangement with Cornell in all sports. The Cornell crew was committed to continue racing Penn and Columbia [in the second-annual IRA] at Poughkeepsie and refused to row two separate races. So Harvard finally agreed to make a fourth on the Hudson.”<sup>1295</sup>

“Cornell, with their new [longer body swing] stroke set by little **F.A. Briggs**, who weighed less than 140 pounds,<sup>1296</sup> won the race. Harvard and Pennsylvania disputed Cornell for a mile, then Pennsylvania fell behind a little, and Harvard fought with Cornell until the second mile when Cornell threw them off and entered the third mile a certain winner.

“Cornell won by three lengths from Harvard.”<sup>1297</sup>

**Mendenhall**: “Already in his 1896 victory over a fast Harvard crew, Courtney had shown his ability to profit from the Henley defeat by giving Cornell a longer swing forward and a longer, smoother finish.”<sup>1298</sup>

Courtney was to hold on to his **Extended Body Swing Style** for only a few years.

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<sup>1293</sup> *The Yale-Harvard-Cornell Regatta Program*,

p. 66

<sup>1294</sup> See Chapter 38.

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<sup>1295</sup> Mendenhall, *Harvard-Yale*, p. 211

<sup>1296</sup> 63 kg

<sup>1297</sup> Crowther, p. 118

<sup>1298</sup> Mendenhall, *Coaches*, Ch. I, p. 89

## THE SPORT OF ROWING

### 34. Bob Cook Returns to England

#### *1896 Grand Challenge Cup*



Gilder Boathouse, Yale University

#### **1896 Yale Crew**

Eliminated, Grand Challenge Cup, Henley

Bow **James Simpson** 5'10½" 179cm 160lb. 73kg, 2 **Alexander Brown, Jr.** 6'1" 188cm 168lb. 76 kg,  
3 **William Beard** 5'8½" 174cm 183lb. 83kg, 4 **James Rodgers** 6'0" 185cm 185lb. 84kg,  
5 **Philip Bailey** 6'0" 185cm 175lb. 79kg, 6 **John Longacre** 6'0" 185cm 182lb. 83kg,  
7 **Ralph Treadway** 5'11" 180cm 174lb. 79kg, Stroke **George Langford** 6'1½" 189cm 173lb. 78kg,  
Coxswain **Thomas Clark**

Even with Harvard boycotting them, Yale was unwilling to row against anyone else in the United States, so Bob Cook had no choice but to take his 1896 crew to Henley.

*The Century Magazine*: "Mr. Robert J. Cook was then recognized by the British as the leading 'gentleman coach' of the United States, with a wide acquaintance among English rowing men. The lavish courtesies showered upon these guests were returned in kind at the Yale quarters, where life had none of the self-isolation associated with Cornell's visit."<sup>1299</sup>

Cook arrived completely believing he was still a faithful disciple of English Orthodox Technique.

He could not have been more mistaken.

His New England version of English Orthodoxy had devolved so far as to be unrecognizable to the British when it returned to its source.

Cook had received his lessons from **F.C. Gulston** just twenty-three years earlier,<sup>1300</sup> but in the meantime, while English Orthodoxy had undergone the Fairbairn revolution, entered its Golden Age and then to a certain extent begun retrenching, Cook had consciously and/or unconsciously adapted the technique

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<sup>1299</sup> Paine, *Century*, p. 484

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<sup>1300</sup> See Chapter 27.

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Gulston had taught him to American conditions and to the longer slides and heavier rigging loads built into American equipment.

Because they began with high expectations, the British critics were even more unmerciful to Cook's crew than they had been the previous year to Courtney's crew.

**Rowe & Pitman:** "From reports from America that had preceded them, it was understood that they rowed a long stroke, quite different from that of Cornell, [but still they were] ridiculously short. They, too, rowed in uniform style (with the inevitable hurry forward and apparent hang) and to some extent, though very slightly, they swung their bodies. They certainly looked a better crew than Cornell, but it is doubtful if they were as fast.

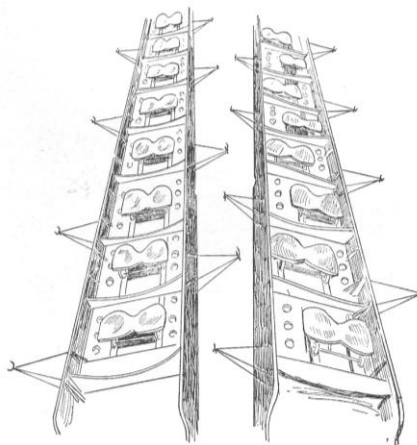
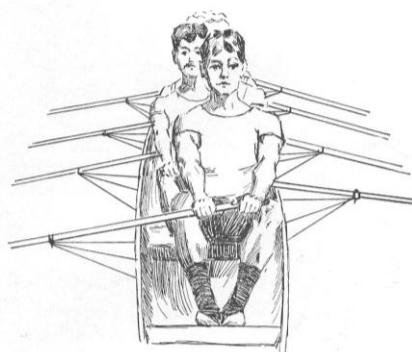
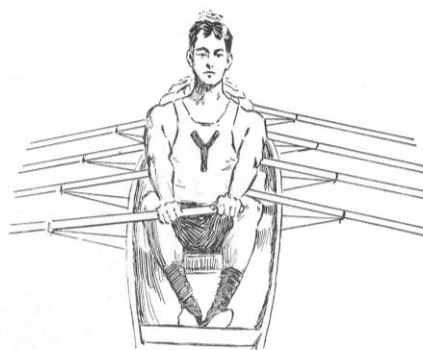
"The natural explanation of this is that their stroke, if slightly longer, was very much slower than that of Cornell."<sup>1301</sup>

### Technique and Equipment

As it had been for Cornell the previous year, Yale's competition in the first round of the Grand Challenge Cup was to be **Leander Club**, coached by **Rudie Lehmann**.

His crew had been "picked from the Oxford and Cambridge crews of a dozen years," "an eight of decidedly good class, better certainly than that which defeated Cornell in the previous year."<sup>1302</sup>

**Mendenhall:** "Although outweighed by Yale by an average of nine pounds,<sup>1303</sup> six had won Blues at Oxford, and all had figured in Grand-winning crews over the last



1897 Yale-Harvard-Cornell Regatta Program

**American center seating** (top and left)  
**British offset seating** (middle and right)

ten years, **Guy Nickalls**<sup>1304</sup> in 6-seat was to win sixty-seven out of eighty-one races at Henley before he finally retired in 1908."<sup>1305</sup>

<sup>1301</sup> Rowe & Pitman, p. 66

<sup>1302</sup> Rowe & Pitman, p. 66

<sup>1303</sup> According to *The Times* of London, it was actually 12½ pounds, 178½ lb. 81 kg to 166 lb. 75 kg. Yale was a very heavy crew for its time.

<sup>1304</sup> See Chapter 24.

<sup>1305</sup> Mendenhall, *Harvard-Yale*, p. 215

## THE SPORT OF ROWING

The 1896 Leander Style was Lehmann's interpretation of post-Fairbairn Golden Age English Orthodox Technique as documented in Rowe & Pitman and by Lehmann himself:<sup>1306</sup> -10°, +40° to -45°, 1-10, 0-10, 5-10 concurrent *Schubschlag*.

Cook's technique was based on the pre-Fairbairn English Orthodoxy, and in adapting to longer slides, had allowed body angle forward to diminish from the +45° norm of the 1870s to +30°. Layback had shrunk from -45° to -10°.

The result was 0°, +30° to -10°, 4-9, 0-5, 5-10, sequential *Kernschlag* with a back arc of 40°, which was less than half of Leander's 85°.<sup>1307</sup>

"Cook became immediately aware that his crew was much shorter at both ends of the stroke than the English crews. A few brushes on the river and his stopwatch persuaded Bob to attempt a drastic change."<sup>1308</sup>

**Bob Cook:** "When I arrived at Henley, it was not difficult to see that we were wrong and that it would be necessary to learn our ABCs over again.

"The English and American systems both have good points, and by their combination the best results can be obtained."<sup>1309</sup>

**Rowe & Pitman:** "Towards the end of their practice they openly professed to be attempting the English style – an eleventh-hour change of policy that was not likely to prove successful."<sup>1310</sup>

**Mendenhall:** "English observers marveled that in less than a week 'the short, snatchy stroke' had been replaced by fair length, steadier forward and a certain

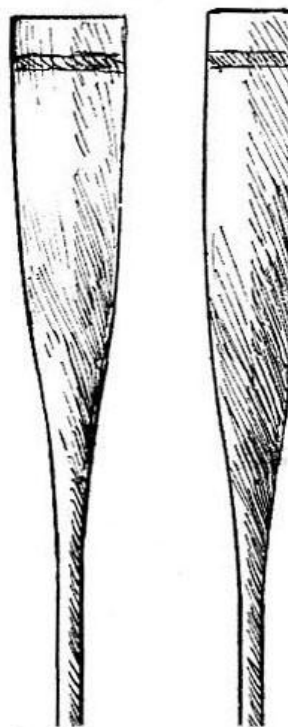
<sup>1306</sup> Lehmann, pp. 48-51

<sup>1307</sup> See Chapter 27.

<sup>1308</sup> Paine, *Harper's*, p. 764

<sup>1309</sup> Qtd. by *The Yale-Harvard-Cornell Regatta Program*, p. 24

<sup>1310</sup> Rowe & Pitman, p. 66



1897 Yale-Harvard-Cornell Regatta Program

**American blade** (left)  
**British blade** (right)

amount of body swing with no sacrificing of the uniformity of the bodies or the blades – the only part of the stroke that the English admired."<sup>1311</sup>

The difficulty Yale ran into was that as they lengthened their stroke, the load built into their American equipment became oppressive.

Unable or unwilling to change from the center-seated paper shell with swivel oarlocks that they had brought with them from America, Cook made the only practical equipment change that could make an instant difference. He bought a set of English oars.

Leander used standard British 12'0" oars with 2'7" x 6" blades and 44"

<sup>1311</sup> Mendenhall, *Harvard-Yale*, p. 214

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inboard.<sup>1312</sup> The center of area of this blade was approximately 16” from the blade tip,<sup>1313</sup> yielding an effective **load ratio** of **2.0**.

Yale’s original oars would probably have been 12’4” in length with 2’6” x 8” American blades and 42” inboard.<sup>1314</sup> The center of area of this blade was approximately 10” from the blade tip,<sup>1315</sup> yielding an effective load ratio around **2.3**.

Changing from American to British oars would have meant reducing load by almost 15%, which would have felt indescribably huge to the unfortunate oarsmen having to adjust overnight.

*Harper’s Weekly*: “The ease with which they tore through the water was surprising and disturbing.”<sup>1316</sup>

American journalist **Ralph W. Paine** believed incorrectly that the crucial difference between the English and American oars was blade width, the same mistake made twenty years earlier by observers of Ned Hanlan’s custom oars.<sup>1317</sup>

“The theory of the Yale stroke is absolutely correct for wide blades. The shorter swing than that of the Englishmen is necessary with our oars, and the shorter length of stick [reach at blade entry] and lessened leverage [layback] are the results of the use of our blades.

“There was not time for the men to accustom themselves to the change. The British oars were balanced differently<sup>1318</sup> and felt awkward.”<sup>1319</sup>

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<sup>1312</sup> oars: 366 cm, blades 79 x 15 cm, inboard 112 cm, Lehmann, p. 70

<sup>1313</sup> Glendon, p. 151

<sup>1314</sup> oars: 376 cm, blades 76 x 20 cm, inboard 107 cm

<sup>1315</sup> Glendon, p. 151

<sup>1316</sup> Paine, *Harper’s*, p. 764

<sup>1317</sup> See Chapter 13.

<sup>1318</sup> probably due to the requested custom collar placement.

<sup>1319</sup> Paine, *Harper’s*, p. 764

## The Grand Challenge Cup

The opening round between Yale and Leander turned out to be tremendously nerve-wracking, with both boats within one deck until well past the half-way point.

*The Times* of London: “As was expected, the Americans began at the quicker stroke, 22 and 43 in the half and full minute respectively, to the 21 and 41 of Leander. Yale were all aboard for the first four strokes, and Leander drew a quarter of a length in advance, but the strangers steadying themselves lost no more by the top of the island.

“They then went the faster, so that the boats were nearly level at the quarter-mile post, and Yale led by their forward canvass between Remenham Rectory and the Farm.

“However, Leander once more gained steadily, being a few feet to the good at Fawley Court boathouse, which is the half distance, and which was reached in 3min. 25sec. Leander then drew away foot by foot off the big wood above the boathouse, and led by five or six feet at the little gate on the towpath.”<sup>1320</sup>

“Then at the three-quarter-mile mark, where Yale were getting short in their stroke, and where want of swing and absence of length in their rowing were beginning to tell against them, the Leander eight drew right away, rowing very steadily and lengthening out and getting clear at the mile post. Yale could not go the pace, and Leander continued to draw away and won by a length and three-quarters. Time 7min. 14sec.”<sup>1321</sup>

**Guy Nickalls**, Leander 6-seat: “We rowed almost stroke for stroke, practically dead level to Fawley, when we began to forge slowly ahead. We must have had a quarter of a length at the three-quarter mile

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<sup>1320</sup> For Henley course landmarks, see Chapter 5.

<sup>1321</sup> Henley Royal Regatta, *The Times* of London, July 8, 1896

## THE SPORT OF ROWING



Rowe & Pitman

### 1896 Yale University Crew

Losing to Leander Club in the heats for the Grand Challenge Cup

mark, and were not quite clear at the mile, where Yale, who had been showing distinct signs of grogginess for a few strokes, disintegrated entirely. We were two lengths ahead at the Isthmian Enclosure and paddled in easy winners.”<sup>1322</sup>

Leander’s turned out to be the fastest time of the day, and they went on to win the final by more than two lengths.

Cook could not have realized what impact the English oars would have until Leander had pulled home ahead of the Yale

eight. The lighter load would have made them feel like they had no purchase at all on the water, and they eventually exhausted themselves, ineffectively rushing up and down their slides.

*Harper’s Weekly*: “Schooled in four-mile races at New London, which has been carried at 38 for the first mile more than once, Yale could not hold 40 per minute for one mile on the Henley course. Yale was in the race at half a mile, and a hundred yards further she was whipped.”<sup>1323</sup>

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<sup>1322</sup> Nickalls, p. 121

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<sup>1323</sup> Paine, *Harper’s*, p. 764



## AMERICAN ROWING COMES OF AGE

### 35. The 1897 Cornell-Harvard-Yale Race

#### *Rudie Lehmann at Harvard – Cornell Wins*

##### The English Perspective

A few months after Cook returned from Henley, the Harvard-Yale football rift was settled, but Harvard had a signed commitment to row Cornell at Poughkeepsie for one more year, so Yale had no choice but to reluctantly participate in the 1897 Harvard-Cornell race. They refused, however, to race if IRA members Penn and Columbia were included, so Cornell first raced Yale and Harvard in a preliminary regatta, then six days later raced the others in the Poughkeepsie Regatta.

Shortly after the 1896 Henley Regatta, **Rudie Lehmann** had been hired by Harvard, and he brought with him English Orthodox Technique and equipment, so the race promised to be a reunion of sorts, Lehmann having coached “recent Leander crews, including the men who sent Yale packing at Henley and those who had been left on the start by Cornell.”<sup>1324</sup>

**Crowther:** “Harvard was taught the English university stroke [by Lehmann]. The slides were cut down to sixteen inches, the swing was long and hard, or intended to be hard, and the legs helped the finish instead of the centre of the stroke [i.e. were used sequentially *after* the back swing was completed instead of concurrently *with* the back swing<sup>1325</sup>] – the radical difference

between the general styles of the two countries, and something which no American coach had yet attempted to teach.”<sup>1326</sup>

In 1898, the **Rowe & Pitman** book came out and was hailed as the most authoritative work ever on our sport. Literally and figuratively, it became the last word on British rowing during the 19<sup>th</sup> Century.

On American rowing, the book stated: “There is reason to believe that American eccentricities displayed at Henley [by Cornell in 1895 and Yale in 1896] have since been either modified or altogether discarded. Cornell and Yale, as well as Harvard, have apparently come to the conclusion that in rowing, America still has something to learn from England.

“At any rate, it is the present fashion with all three Universities to copy the English style, and according to Mr. R.C. Lehmann (who has acted recently as the Harvard coach), both Cornell and Yale, as well as his own crew, rowed a very much longer and lower stroke in their last race (1897) than had been their previous custom.”<sup>1327</sup>

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Muttlebury had brought to Leander Club nearly a decade earlier. See Chapter 15.

<sup>1326</sup> Crowther, p. 120. This conclusion was incorrect. Bob Cook’s Yale crews and Charles Courtney’s Cornell crews of the era were also using their backs first and legs second.

<sup>1327</sup> Rowe & Pitman, p. 67

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<sup>1324</sup> Dodd, *Henley*, p. 93

<sup>1325</sup> another indication that Lehmann still did not understand the Fairbairn revolution that

# THE SPORT OF ROWING

## The American Perspective

American rowing historian **Tom Mendenhall**, describing the same 1897 Yale-Harvard-Cornell race: “Lehmann’s English style and rigging versus Courtney’s American tradition, with Cook somewhere in between.

“Lehmann’s English reserve, the shy, uncommunicative Courtney and the blustering, irascible Cook. Certainly, the crews must have looked very different.”<sup>1328</sup>

Seattle historian **John Lundin**: “The 1897 IRA<sup>1329</sup> received extensive press coverage. Not only was college rowing widely followed in the late 1800s, but 1897 was the first time in over twenty years that Cornell got to face off against Yale and Harvard, so the race held special significance.

“Cornell last rowed against Yale and Harvard in 1875 and 1876 [in the RAAC Regattas<sup>1330</sup>]. Even though Cornell’s rowing program had only begun in 1870, it won both races, marking the school’s emergence into the rowing community, and making its oarsmen instant heroes.

“After the 1875 victory, ‘enthusiastic Cornellians rushed into the water lifting the oarsmen from the boat, marched them upon their shoulders up and down in front of the grandstand. At Ithaca, a great arch had been erected on campus and the town turned out en masse to join in the welcome.”<sup>1331</sup>

Cornell 5-seat **Mark Odell** wrote extensively about the 1897 race, so long in coming. He “described Cornell’s frustration in his hometown newspaper, the *Baldwinsville* [New York] *Gazette and*

*Farmers’ Journal*, on July 1, 1897: ‘Cornell defeated Harvard and Yale [in 1875], which latter institution has claimed the championship in rowing for years, and which we have been waiting twenty-two long years to get a whack at.

“‘We rowed them in 1875 on Lake Saratoga and beat them. The next year [Yale] withdrew from the regatta, and since 1875 we have challenged them for a varsity race in vain.”<sup>1332</sup>

The American press was highly critical of Yale and Harvard.

*The New York Journal*, June 25, 1897 “The two eastern colleges had regarded it as condescension to permit Cornell to join the contest.”<sup>1333</sup>

*The New York Press*, June 26, 1897: “For twenty years [Cornell] has sought an opportunity to meet on one course the crews of the two superior rowing universities. Through a puzzling policy of Yalensian ‘exclusiveness,’ this opportunity had been until yesterday denied her.”<sup>1334</sup>

*The Rochester Democrat*, June 26, 1897: “The old system which limited the great race of the year to Yale and Harvard . . . was unsportsmanlike. Time and time again it has left the brawny sons of Eli in the position of claiming a championship which they refused to defend. College sportsmanship should be as broad on the waterways as it is on the football gridiron.”<sup>1335</sup>

## Technical Differences

The disparate techniques seen at the 1897 Poughkeepsie Regatta were reported on in detail by American journalists, and they drew quite different conclusions from that of Rowe & Pitman.

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<sup>1328</sup> Mendenhall, *Harvard-Yale*, p. 218

<sup>1329</sup> It wasn’t the IRA but the Cornell-Harvard-Yale Race.

<sup>1330</sup> See Chapter 27.

<sup>1331</sup> Lundin, pp. 3-4

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<sup>1332</sup> Lundin, pp. 3-4

<sup>1333</sup> Ibid.

<sup>1334</sup> Ibid.

<sup>1335</sup> Ibid.

## AMERICAN ROWING COMES OF AGE



James Burtan, *The Sketch*

### 1897 Yale Varsity Eight

“Exaggerated lean to the stern is avoided, and the angle is but little more than the perpendicular.”  
- *1897 Yale-Harvard-Cornell Regatta Program*

### Cornell

“The distinguishing points about the [Cornell] stroke are the strong leg drive and hard finish and the recovery is more rapid than in either of the other strokes [Harvard and Yale]. The bodies of the men are not extended as far front or back as in the English stroke, and furthermore are always in line.

“The gist of the question is whether in the extreme swing back used by Harvard and Yale the oarsman does not go beyond the point of efficacy, which in the modified swing used by Cornell he never passes.”<sup>1336</sup>

In a fine description of a surging *Schubschlag* concurrent pullthrough leading to an effective send of the boat, the journalist continues, “No point of Cornell’s stroke appears to be emphasized; she gets hold of the water cleanly and firmly, with blades put into the water at a slight angle, and holds on to it to the end of the stroke, getting a longer slide and a stronger leg drive by not swinging back too far.

<sup>1336</sup> Qtd. by Young, *Courtney*, p. 52

“It is the unhesitating travel of the Cornell boat between strokes which impresses the experienced observer, and when the uninitiated reader learns that a gain of one inch to every stroke means a gain of a boat’s length in four miles, perhaps he will appreciate the advantage of an art that propels the boat with no checks between strokes.”<sup>1337</sup>

### Yale

Cook had made changes since Henley. *1897 Yale-Harvard-Cornell Regatta Program*: “The length of the strokes has been increased since last year, but even now does not equal that of English crews. Their exaggerated lean to the stern is avoided, and the angle is but little more than the perpendicular.”<sup>1338</sup>

“This year the blades are narrowed and planed to the thickness that suits each man’s strength.

<sup>1337</sup> Ibid.

<sup>1338</sup> Note that this sentence is contradicted by the rest of the article in *The Yale-Harvard-Cornell Regatta Program*.

## THE SPORT OF ROWING



James Burtan, *The Sketch*

### 1897 Harvard Varsity Eight

“The men are taught to extend the arms to utmost length, and the body is brought forward until the knees appear to be on a level with the ears.”

- *1897 Yale-Harvard-Cornell Regatta Program*

“[Cook] has gotten the long body reach and great leverage on the oar that the Englishmen get by shortening up Yale’s slides. Last year they were a trifle over twenty-one inches; this year they have been cut down to sixteen inches. The slides formerly were raised aft at an angle of fifteen degrees; this year Yale’s slides run on a horizontal plane.

“These changes have been made to suit the longer body reach of the English stroke. The idea of the English method of boating is to have the body swing from the hips as a fulcrum and to use the slides only for the purpose of lengthening out this body swing [toward the release].

“The result of these changes has made Yale’s stroke considerably longer, both fore and aft of the outrigger, especially fore of the perpendicular through the outrigger.

“The minute the oar touches the water the heavy body swing is made to tell the utmost to the very first part of the stroke [*Kernschlag*]. This is the English idea of the hard catch. The English coaches shout at their crews constantly to ‘bite it,’ and this describes in a word the terrific catch which

the Englishmen get on the stream. Their oars hit the water with a thud which is perceptible, and usually send up a spray from every oar blade.

“They get their strength in the instant their oars touch the water, and this is the distinctive point of English rowing, and is the all powerful point in any successful method of boating.

“The long stroke without this catch may be to a certain extent wasted energy and prove more tiring upon the men than a somewhat shorter stroke that gets a better grip upon the water at the catch.”<sup>1339</sup>

### Harvard

Lehmann brought to Harvard in 1897 unadulterated English Orthodoxy.

*1897 Yale-Harvard-Cornell Regatta Program*: “The tremendous reach of the Lehmann stroke seems almost an impossibility to a novice. The men are

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<sup>1339</sup> *The Yale-Harvard-Cornell Regatta Program*, pp. 27-9

## AMERICAN ROWING COMES OF AGE

taught to extend the arms to utmost length, and the body is brought forward until the knees appear to be on a level with the ears. The oars are brought into the water with a vicious bite, and the stroke is rowed well through.”<sup>1340</sup>

This last sentence is a good description of the dichotomy represented by *Kernschlag* force application. “Vicious bite” versus “rowed well through.” Many crews in history have indeed managed to apply maximal force virtually instantaneously after entry and still managed to carry through the stroke in one continuous motion to the release, but it is not easy to marry the two concepts, and the possibility of a two-part segmented pullthrough is always lurking.

“At the finish, the men seem in danger of falling over backwards, and the incline toward the bow of the boat has at least ten degrees more angle than the American swing. The hands are shot out almost mechanically for the reach, and while the position looks ungainly, the results testify to its efficiency.

“The intention in such a long reach and late finish is to keep the oar in the water as long as possible with good results. The finish must be hard and strong, but without any jerky motions. Mr. Lehmann says: ‘An eight-oared crew should be coached to get the greatest amount of power with the least amount of exhaustion.

“While our stroke seems to be exhausting, it is really not. The men, of course, swing the extreme distance on the slide, and the doubling up does not tire the men, as might be imagined.

“I believe in bringing all the strength of the back, legs and arms possible. Power, form and strength combined will win any race, and to obtain the maximum of these three is the object of the English stroke. The

material for crews in this country, as far as I have been able to observe, is just as good as in England. The Yale crew that visited us at Henley was the finest specimen of brawn in the races. It is simply a question of teaching them the correct principles.”<sup>1341</sup>

A summary of the styles of the three crews in 1897 points out the differences:

**Yale:** -15°, +40° to -20°, 4-9, 0-5, 5-10

**Harvard:** -15°, +40° to -45°, 2-10, 0-10, 5-10

**Cornell:** 0°, +30° to -30°, 4-8, 0-5, 7-10

Body mechanics did show detail but not fundamental differences. The true divide was in force application. While Cornell perhaps hit the water aggressively, as was observed by Crowther,<sup>1342</sup> the other two put all their efforts into front-half *Kernschlag* force application. By contrast, Cornell followed up its entry with a strong effort to the release which sent the boat gliding.

### The Race

Bob Cook, still adjusting his stroke after his experience at Henley, was only confident that both Yale and Harvard would beat Cornell. “In the old days of New London, or rather under former conditions, I would say that Yale was a sure winner. But this year Harvard has the fastest crew she ever had. I think Harvard and Yale are evenly matched for tomorrow’s race – at least for three miles. After that, the crew that holds its form and has the endurance should win.

“Mr. Lehmann and I agree that both Harvard and Yale will defeat Cornell, and from what he said to me tonight, I believe he thinks his crew has a slight better chance of winning than my crew. Mr. Lehmann has produced better form than Yale possesses, but I think my failure to get as good a steady swing is due to the difficulty I experienced

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<sup>1340</sup> Ibid, p. 53

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<sup>1341</sup> Ibid.

<sup>1342</sup> See Chapter 33.

## THE SPORT OF ROWING

in changing Yale's stroke this year. For my part, I am in doubt whether it will be Harvard or Yale."<sup>1343</sup>

Historian **Mendenhall**: "On Friday, 25 June 1897, the varsity boats got ready to race under good but not fast conditions before a crowd estimated at one hundred thousand that thronged hills along the course in Poughkeepsie, filling the fifty-car observation train with 'Jack' Astor aboard and joining the fleet of yachts and steamers led by J.P. Morgan, Jr.'s *Corsair*."<sup>1344</sup>

*The New York Journal*: "Harvard was the first to reach her stakeboat. Cornell pulled out next, in her colorless, mechanical, uninteresting way, and nobody paid much attention to her. Finally proud Yale deigned to get into her boat and took her position; and it was 3:44 o'clock, local time.

"The referee's steamer came down within sixty feet of them, and 'Are you ready?'

"'No.' Yale was not. But when the question was repeated they all were ready, and 'Go!' thundered through the megaphone.

"They were off, amid a roar miles long, followed by a hush, as we bent forward to see who had the lead. Yale started behind Harvard, but they were as nearly level as possible after rowing a dozen strokes. Cornell was half a length to the rear, and would, of course, soon disappear entirely.

"Then, for a moment all were even, or else the slant of the course deceived the eye. The race was really very close here, and we were all so intent and anxious that we forgot to make our usual noise.

"At the mile it certainly looked as if Cornell were ahead a little, but it must be an ocular deception; the thing was absurd.

"At the mile and a half, we were forced to the belief that our eyes were truer than we thought; and now Yale was half a length

before Harvard. Yale also seemed to be gaining a bit on the weird and incomprehensible Cornell. But at the two miles Yale had dropped back once more, and Harvard was nearer to her than before, though still last.

"Their changes meant desperate spurts that came and died away, but Cornell did not spurt; she didn't have to; she just rowed on with perfect ease and lightness, and at two and a half miles were two lengths to the good.

"Three miles had been rowed; one remained. And here both Yale and Harvard made a final and gallant effort to retrieve themselves. Yale's effort was the stronger, and it shortened the gap between her and her light-footed enemy, but in vain. As they passed along the roaring and steam-whistling array of yachts, Cornell seemed to start forward afresh; but it was only the others dying away. She crossed the line two lengths and a half ahead of Yale, who led Harvard by a length and a half.

"Harvard, it seemed to me, stopped just short of the finish; her stroke oar dropped senseless in the bottom of the boat; all the men hung limp over their oars; the bow collapsed. Meanwhile Yale sat still, blown but not knocked out. Cornell, scarcely stopping, rowed lightly on and out of sight, champions of America. It was a proud and joyful hour for her. And in this hour of her rejoicing I will make no remarks that would seem to cast a shadow upon it. It was a great race, splendidly won."<sup>1345</sup>

Cornell 5-seat **Mark Odell**: "The only sounds I realized for three miles were the words of our coxswain and the hoarse cheer of exultation from the train when we began to lead. The other yells I did not hear or did not notice, although the din I know was terrific and constant.

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<sup>1343</sup> Qtd. by Lundin, pp. 5-6

<sup>1344</sup> Mendenhall, *Harvard-Yale*, p. 218

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<sup>1345</sup> *The New York Journal*, June 25, 1897

## AMERICAN ROWING COMES OF AGE

“The last mile was along a flotilla of yachts, which kept up the most infernal pandemonium you can imagine. Not a word could we hear of our coxswain’s orders. Cannons were going off right above our heads, which made it feel as though the top of the skull was coming off at each shot, whistles of the most infernal screeching power went off in our ears.

“‘Hell was let loose,’ as they say in the classics.”<sup>1346</sup>

After the race, press coverage was dripping with sarcasm.

“*The New York Journal*: ‘Here were Yale and Harvard, aristocratic and exclusive, standing apart together and communing with courteous hostility as to which of them would cross the finish line first, and in their self-sufficient haughtiness altogether ignoring poor little Cornell, who, it was agreed, had not so much as a ‘look-in’ in the matter.

“And there were about all the most renowned rowing experts in this country and in England adopting the same point of view and standing upon their experiences of ten, twenty, or thirty years . . .

“And, after all, poor, slighted little Cornell, with her unconsidered crew, came bashfully to the most remote and cold-shouldered of the three stakeboats, and didn’t do a thing but win the race, with so little seeming effort that one could hardly believe she wasn’t rowing in a steam launch, and by her haughty rivals, who were

<sup>1346</sup> Qtd. by Lundin, p. 8

<b>Score Sheet for Varsity Race.</b>					
COURSE—FOUR MILES.					
Conditions—Wind.....		Tide.....		Water.....	
Time, Etc., per Half Mile.					
YALE.		HARVARD.		CORNELL.	
No. of Strokes	Time	No. of Strokes	Time	No. of Strokes	Time
... 34.	½ mile .....	... 34.	½ mile .....	... 36	½ mile .....
... 33.	1 “ .....	... 33.	1 “ .....	... 33.	1 “ 4.45
... 35.	1½ miles.....	... 35.	1½ miles.....	... 37.	1½ miles.....
... 34.	2 “ .....	... 34.	2 “ .....	... 37.	2 “ 10.39
... 35.	2½ “ .....	... 35.	2½ “ .....	... 37.	2½ “ .....
... 34.	3 “ .....	... 34.	3 “ .....	... 32.	3 “ 15.34 3/5
... 36.	3½ “ .....	... 36.	3½ “ .....	... 32.	3½ “ .....
... 35.	4 “ .....	... 35.	4 “ .....	... 34.	4 “ 20.24
RECAPITULATION.					
Winner..	<i>Cornell</i>	Time..	<i>20.24</i>	By...	<i>3 1/3</i> Lengths
Second..	<i>Yale</i>	“	<i>20.44</i>	“	<i>5 1/3</i> “
Third..	<i>Harvard</i>	“	<i>21.</i>	“	“

Thomas E. Weil Collection

### 1897 Yale-Harvard-Cornell Race as recorded by an observer

staggering and fainting in her wake, in the same glance.”<sup>1347</sup>

*The New York Press*: “With a light and hastily, if not ill, assorted crew rowing a stroke at which the experts of aquatics first shook their heads and then averted them, she has defeated with ease her great rivals on an occasion to which both had been brought in the pink of perfection by the highest coaching authorities of the new and old worlds. Cornell has not only beaten Yale and Harvard. . . She has beaten the Cook Stroke, and she has beaten the Lehmann Stroke in their latest model and highest stage of development.”<sup>1348</sup>

<sup>1347</sup> Ibid, p. 6

<sup>1348</sup> Ibid, p. 12

## THE SPORT OF ROWING



E. McGillivray, Cornell University Boathouse

**Cornell University** in front of their boathouse, Ithaca, New York  
1897 Yale-Harvard-Cornell Champion, New London  
Poughkeepsie Regatta Champion  
Coxswain **Frederick Colson**,

Stroke **Frederick Briggs** 5'6" 168cm 150lb. 68kg, 7 **Edward Savage** 5'11 $\frac{3}{4}$ " 183cm 165lb. 75kg,  
6 **Edward Spillman** 5'10 $\frac{1}{2}$ " 179cm 165lb. 75kg, 5 **Mark Odell** 5'11" 180cm 165lb. 75kg,  
4 **Asa King** 6'0" 183cm 167lb. 76kg, 3 **C.F. Moore** 5'10 $\frac{1}{2}$ " 179cm 158lb. 72kg,  
2 **W. Bentley** 5'11" 180cm 158lb. 72kg, Bow **Samuel Wakeman** 6'0" 183cm 160lb. 73kg

*The New York Herald*: "So far as the race afforded a test of the relative value of the doctrines of Mr. Cook or Mr. Lehmann, the pupils of both were beaten up by a set of up-country youngsters who pulled in a style that has been condemned by all the great rowing authorities of the world, but was singularly useful today."<sup>1349</sup>

**Casper Whitney**, *Harper's Weekly*: "At no time was there sufficient reason for the supreme confidence which before the race adjudged either Harvard or Yale the winner and entirely ignored Cornell. Prejudice for the 'beef' in the boat and for the rowing fad of the year (the extreme English swing) blinded old college oarsmen

to the subtle efficacy of that uninterrupted gliding between strokes of the Cornell boat, caused by the modified back swing, a magnificent back swing, and a wonderfully smooth recovery."<sup>1350</sup>

**Mendenhall**: "After such an impressive display, the critics could finally recognize the secret of Cornell's success: a better run at a lower stroke, thanks to a *more effective linkage of legs, backs and arms*, plus perfect slide control on the way forward. By contrast, Yale's hard catch [segmented *Kernschlag*] proved too rough, even though they kept driving over the last mile. Harvard's efforts to acquire in a few months the English stroke with its extreme swing

<sup>1349</sup> Ibid, p. 13

<sup>1350</sup> Ibid, p. 13



## AMERICAN ROWING COMES OF AGE



Young, *Cornell Navy*

### 1897 Cornell University Crew

Poughkeepsie Regatta Champion

Top row: substitute W.C. Dalzell, 4 A.C. King, 5 **Mark Odell**, substitute E.B. Carter,  
Middle row: 3 C.S. Moore, Bow S.W. Wakeman, 6 E.O. Spillman, 2 W. Bentley, 7 E.J. Savage,  
Bottom row: Stroke F.A. Briggs, Coxswain F.D. Colson,

and short slide were obviously as exaggerated as they were tiring. [my emphasis]<sup>1351</sup>

The day after the race, **Mark Odell** wrote: “The newsstand at the station had reaped a harvest that morning, and for some miles all was quiet in the car while we read in those great metropolitan dailies that see all and know all, just how we did it, and like

a revelation it came to us: . . . how Cornell was the greatest and most glorious institution in the country, and Charles E. Courtney the greatest coach that ever yelled through a megaphone, which we had known all along.”<sup>1352</sup>

**Young:** “Odell gained notoriety from his writings about the 1897 race. He wrote

<sup>1351</sup> Mendenhall, *Harvard-Yale*, p. 218

<sup>1352</sup> Qtd. by Lundin, p. 10

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articles for his hometown newspaper in Baldwinsville and a long description, 'Story of the Race and Return to Ithaca,' for *Cornell Era*. When Odell returned home, he was welcomed as a hero, and a parade was held in his honor.

"With his typical reserve, Odell later said, 'Contrary to the enthusiastic imaginings of many of my home Baldwinsville friends, I was not the only one in the crew. There were seven other oarsmen and a coxswain in the crew which won the race.'

"A picture of the 1897 crew still hangs on the wall of Cornell's crew house, a lasting tribute to the 'boys whose faithful training and earnest work, have combined to make Cornell pre-eminent in Intercollegiate Rowing.'<sup>1353</sup>

**Lundin:** "Odell returned to Cornell in 1947 for the 50<sup>th</sup> reunion of the class of 1897. All of his fellow crew members were alive and well and attended the reunion, except for their coxswain. They took out an eight and rowed it for old times' sake, likely not equaling their IRA championship time

that made Cornell 'champions of America' in 1897, but still rowing with enthusiasm and love of the sport."<sup>1354</sup>

### Postscript

Rudie Lehmann had to satisfy himself with other achievements besides winning races in America.

*Century Magazine:* "While the visits of Mr. R.C. Lehmann, the foremost English varsity coach, did not win victories for Harvard, his influence achieved more important results; for he taught the undergraduate that rowing was, by right, a pastime, and that where one eight was seen on the Charles, a dozen ought to flourish."<sup>1355</sup>

According to current Harvard Coach **Harry Parker**,<sup>1356</sup> it was Rudie Lehmann who was responsible for the installation of indoor tanks in Newell Boathouse at Harvard in 1900, a facility still used by Harvard oarsmen.<sup>1357</sup>



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<sup>1353</sup> *Cornell Navy*

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<sup>1354</sup> Lundin, p. 17

<sup>1355</sup> Paine, *Century*, p. 503

<sup>1356</sup> See Chapter 100 ff

<sup>1357</sup> Wang, p. 2