Before Ernestine Bayer got it into her head that she had a perfect right to row; before she arm-twisted her competitive-rower husband in the 1930s to find a way to get on the river; before she and other strong-willed Philadelphia women passed the baton, one to the next, in a decades-long campaign to upend the no-women-here culture of Boathouse Row and American rowing; before all of that, a few—*very* few—women rowed for sport, and when they did, they were mostly regarded as spectacles.

In 1870, Lottie McAlice and Maggie Lew, two Pittsburgh 16-year-olds, raced each other for 1½ miles on the Monongahela River in what was touted as the “first female regatta.” An estimated 8,000 to 12,000 onlookers crowded the shores to watch the oddity, including press from Chicago, Cincinnati, and New York. McAlice, the victor in just under 18 minutes 10 seconds, won a prize of a gold watch.

On New York City’s East River that same year, five teenage girls wearing dresses competed in a three-mile race in heavy 17-foot workboats as spectators lined the banks “for a considerable distance,” with the water “fairly covered” with pleasure boats, barges, and steamships.
A guest at the Bachelors Barge Club draws a sketch of the “ladies boat,” showing the seating of a boatload of club members and their dates, presumably as they rowed upriver to the Button. Ladies boats, common among all the clubs of Boathouse Row in the 19th century, were wide enough for the ladies to sit next to their beaux, who did all the rowing. The arduous sport could hurt a woman’s fragile body, the Victorians believed.

Logbook, the Button, July 18, 1890. Courtesy of the Bachelors Barge Club.

Another sketch recorded in the Button’s social logbook shows a T-shirted Bachelors’ rower ferrying his elegantly dressed date. It is titled “Sans souci,” or “No worries.”

Logbook, the Button, May 1884. Courtesy of the Bachelors Barge Club.
In 1888, Newport, Kentucky, oarswoman Mollie King publicly challenged any “female” for a “two mile race for stakes.” It’s unlikely that anyone took her up on it because the many newspapers that announced the contest never published a story on the results.

Sure, women figured in the muscular, masculine, high-energy culture of crew, but mostly as dates, not athletes. On Boathouse Row, they sat next to their beaux in “ladies boats” for outings upriver or were entertained in the boat clubs’ “ladies lounges.” The notion that women’s rowing would be taken seriously—even becoming an Olympic sport—was so far-fetched as to be laughable.

Epitomizing the opposition to women’s participation in sculling—and other endurance sports, for that matter—was Pierre de Coubertin, the Frenchman who launched the modern Olympics. He was outspoken about his views, famously saying in 1889, “Women have but one task, that of crowning the winner with garlands. . . . It is indecent that the spectators should be exposed to the risk of seeing the body of a woman being smashed before their very eyes. Besides, no matter how toughened a sportswoman may be, her organism is not cut out to sustain certain shocks.”

Even before de Coubertin made his declaration, women’s push into athletics and competitive sports was moving apace. Still barred from walking into the voting booth, women were determined to prove themselves equal to men in every arena. In the last quarter of the 19th century, they conquered the highest U.S. peaks, crossed Niagara Falls on a tightrope (with 38 pounds on each ankle), swam across the Hudson River, defeated men in a walking race, ballooned solo, launched women’s baseball teams (the Blondes vs. the Brunettes), brought tennis to America, and went at one another with boxing gloves.

A few American women even banded together to start rowing groups, though their main interest was health, fitness, and camaraderie, not competition. In 1875, Wellesley College, near Boston, became the first women’s college to offer rowing, but it would be nearly a century before Wellesley women raced another school.

In 1882, four young women in San Diego formed the country’s oldest surviving women’s rowing club, ZLAC, an acronym of their initials. While the women did row, in whaling barges, ZLAC was largely a social club until 1962, when it bought its first racing shells.

It was not rowing, but rather the popularity of bicycling that was a game changer for women and sports. After all, how do you ride a bike in a long skirt? In 1895, the New York Times hailed the new “duplex riding skirt,” with an inner layer that could be raised with a drawstring, as “an ideal suit for cycling, to which even
the most prudish could not object.” Suffragist Susan B. Anthony remarked, “The bicycle has done more for the emancipation of women than anything else.”

Some Philadelphia women who enjoyed bicycling, riding horseback, and canoeing in Fairmount Park broke into the all-male Boathouse Row in 1897 when they rented the Skating Club, not for rowing, but as a place to relax after their park outings and to socialize over luncheons and teas. But when they sought to build their own house in 1902, the park turned down the idea of a women’s club on the Row as “a trifle advanced.” The well-connected women, who now numbered 300, brought pressure to bear and won permission to build “Sedgeley” adjacent to the Lighthouse. In 1929, with its slip needing major repairs, the Sedgeley Club dispensed with its one canoe and conceded that it was “purely social.”

Into this time of women’s restraint and modesty, the feisty, do-not-tell-me-I-cannot-do-it Ernestine Steppacher (Bayer) was born on March 25, 1909. It was her mother’s world and Ernestine—the first in a wave of Philadelphia women to break men’s lock on competitive rowing—would have none of it. Her earliest memory, at age four, was of her brother mounting a horse for a photo shoot, while she was not allowed to do so. Her mother said the pose was not “ladylike.” When Ernestine wanted a bike, her mother denied her for the same reason. Ernie should learn to knit and sew and cook so she could be a good wife, her mother told her.

She was 11 years old in 1920, when women finally won the right to vote. They had yet to win the right to row.

Despite her mother, Ernie played “captain ball,” a game akin to basketball, on a team that won the city championship. She swam competitively and excelled at running cross-country. “The coach said she could make the national team, but she would have to quit dancing because it worked the wrong muscles,” said her daughter, Tina Bayer. “So she stopped running.”

Ernestine Steppacher met Ernest Bayer on a blind date. Ernie and Ernie fell in love. But how could they marry? Ernest was training for the Olympics and “newlyweds wore themselves out having sex. That was the thinking at the time. You wouldn’t be strong,” Tina explained. “My dad was afraid that if it was known he’d gotten married, they wouldn’t let him compete.”

On January 28, 1928, six months before the Summer Olympics, Ernie and Ernie quietly traveled from Philadelphia to New York City, where they secretly wed. She was 18; he was 24. That summer, with his Pennsylvania Barge Club crewmates unaware of his transgression, Ernest Bayer’s four without coxswain raced to a

Grace, Not Grit at Wellesley

In 1875, Wellesley College in Massachusetts starts the oldest surviving collegiate rowing program for women. The idea isn’t to compete, but to promote grace and posture. It takes nearly a century, until 1966, before a crew from the all-women’s college races another school, the Massachusetts Institute of Technology.

Crew of the Argo, 1879. Courtesy of Wellesley College Archives. Photograph by Seaver.
silver medal in Amsterdam. On September 18, the news that he had married broke in the *Evening Bulletin* under the headline “Cupid Hits Boat Clubs.”

“Marriage does not always mean the end of an oarsman’s career,” the article concluded, citing two married men who had gone on to win world single sculls, “but these scullers have been exceptions.”

Now began the summers of Ernestine Bayer’s discontent. In a story she would often repeat over the years, she recounted how, after work, she and Ernest would go down to the river, where she would sit on the porch of the Pennsylvania Barge Club and wait for her husband to finish his row.
One day, after years of this, she asked him, “Why don’t girls row?” His response: “Oh, girls don’t row.”
“I accepted that for a while,” she said. Until she saw a woman sculling alone in a single; her boyfriend had lent her his boat. “I decided then that if she could row, so could I.” To which her husband, captain of the Pennsylvania Barge Club, replied: “Not out of my club you can’t.”
Ernestine stood her ground and Ernest changed course. With his medals and club standing, he had sufficient clout to grant her radical request. But not without blowback. A friend told him that by rowing, Ernestine could get tuberculosis and die, Tina Bayer said. “You should not permit your wife to row,” he warned.
“The problem was that men on Boathouse Row did not want women rowing,” said Tina. “They were taking up space on the water. That attitude persisted for decades.”
Other women, mostly the girlfriends, wives, and sisters of oarsmen, were also yearning to row. Enter serendipity and fast reflexes. Ernestine, who worked at Fidelity Trust Company, heard from a coworker—a member of the Philadelphia Skating Club—that it was vacating its 1860 building on the Row and moving to an indoor rink on the Main Line, in Ardmore. In early 1938, before any oarsmen learned of the opening, Ernestine and club cofounder Ruth Adams (Robinhold) had pulled together 17 women and signed a lease.
Ernestine was named president. Ruth was treasurer. Lovey Kohut (Farrell), whose daring in a scull had sparked Ernestine’s jealousy, was captain. The women, described as “secretaries, saleswomen, nurses, models, typists, and just plain ladies of leisure,” voted to call themselves the Philadelphia Girls’ Rowing Club (PGRC).
The press regularly chided the group as a “matrimonial club,” pointing to the many young women who were dating and marrying men on Boathouse Row. But unlike ZLAC in San Diego, PGRC was intent on competing. Almost immediately, it hired a serious coach—Fred Plaisted. By then 89, he had been an internationally acclaimed professional sculler and respected college coach, with a public boathouse named in his honor, standing at the foot of the Row (replaced by Lloyd Hall). Ernest Bayer also helped coach, as did Tom Curran, who had rowed in Penn AC’s championship “Big Eight” earlier in the decade.
On June 29, 1938, the women made a dramatic appearance, rowing in a crew shell wearing “lighted electric headsets,” as part of a Schuylkill Navy pageant held that evening. In an era before television, a crowd estimated at 250,000 lined the river lit by anti-aircraft searchlights to see antics and races involving clowns, acrobats, surfboard riders, motorboats, and scullers.
On June 27, 1938, a month after the first women’s competitive rowing club in the country is organized, the Philadelphia Girls’ Rowing Club practices before its debut two days later in an exhibition row at the Schuylkill Navy Rowing Pageant. The Philadelphia Inquirer reports that 250,000 people crowd both sides of the river to watch the carnival, which includes an aerial show, surfboard acrobatics, canoe jousters, and sculling races. Prince Bertil of Sweden also attends the event, which marks 300 years since the Swedes landed in America.

The women are photographed in a Rockette-like pose on the wall outside their newly acquired boathouse. Philadelphia greets the “girls” of PGRC with amusement and condescension. Headlines call them a “matrimonial club” because some of the women are dating male rowers.

On June 29, 1938.


A Historic First Row, 1938
The next year, PGRC convinced the Schuylkill Navy to include an “exhibition race” for women in its July regatta. Three doubles, all from PGRC, competed in the first recorded women’s race on the Schuylkill River. Ernestine and Jeanette Waetjen (Hoover) won.

The women of PGRC raced against one another, but finding others to challenge was proving futile. “The girls are endeavoring to find competition and have scoured the entire nation for rivals among their own sex. But there has been no response to their urgent appeal,” the Philadelphia Inquirer reported on May 10, 1942, the club’s fifth season. The women’s colleges that had taken up crew, including Radcliffe, Mt. Holyoke, and Wellesley, had still not gotten beyond intramural rowing. Even the University of Pennsylvania, which had offered women’s rowing as a class in 1934, would not field a varsity women’s crew until 1975.

So the PGRC women continued to compete among themselves, even traveling out of town to do so. In 1953, at two major meets—the President’s Cup Regatta in Washington, DC, and the Middle States Regatta in Travers Island, New York—PGRC oarswomen squared off against one another. No other women’s crews had entered.

It would be 1955 before they finally met another club, a sorority team from Florida Southern University. A Lakeland, Florida, newspaper called the match-up historic: the day “women took over man’s traditional eight-oared shell and launched intersectional competition.” By then the intrepid Ernestine Bayer was almost
Rusty Callow, who coached crew at the University of Pennsylvania from 1927 to 1950, helps undergraduate women get their eight on the water in 1935, albeit for intramural sport. An innovative coach, he also comes up with the idea for a smaller college competition at a time when the University of Pennsylvania is still the only college in the Philadelphia region with crew. The Dad Vail, which takes place in Philadelphia every May, starts in 1934 with six collegiate crews. It officially admits women only in 1976. Today the Dad Vail is the largest collegiate regatta in the country. More than 120 schools compete, with the number of women edging out that of men.
46 and would not be dissuaded from racing, despite criticism that she was too old. Rowing in the eight-oared boat, she and her PGRC crew lost by only a foot.

As PGRC approached its 20th anniversary, the New York Times took the occasion to write a feature story about the club. “What the Lorelei is to the Rhine, the PGRC is to the placid Schuylkill River,” wrote William Conklin on May 6, 1956. But unlike the Lorelei, which enchanted the Rhine, PGRC women were still battling old resentments.

“Some of the old-timers here are dead set against girls rowing,” said PGRC Captain Nancy Wiegand. “But Grace Kelly’s father and her brother are all for us. They have given us a lot of help and encouragement.”

As Joanne Wright (Iverson), was growing up in the 1940s and 50s in Miquon, a dozen miles upriver from Boathouse Row, she knew nothing about Ernestine Bayer or PGRC or their difficulties developing women’s rowing. She was just having fun on the Schuylkill, racing her brothers in the rowboats her father liked to build.

“I was 18 or 19,” she recalled, when a friend in 1959 invited her to PGRC to try sculling in a “quad”—a four-person boat in which each person sculls with a pair of oars. Joanne found it nothing like her rowboat. The sliding seat meant she had to use her legs in a forceful rearward drive. The narrow hull and long oars demanded exquisite balance. There was so much technique to think about, and the boat moved so fast. “I had a blister on the ring finger of both hands, and the insides of my thumbs were raw . . . but I didn’t care,” she would later write. “I was absolutely hooked.”

After that, Joanne was out sculling every morning and sometimes again that night, getting stronger, getting faster. She did not care what anyone thought. The stereotype was “we were either guy crazy and looking for marriage, or we were lesbians. . . . It wasn’t feminine to be proud of being strong.” She quickly began winning races against PGRC’s top rowers, impressing even Ernestine Bayer. Within months, Joanne was elected club captain. With her string of victories, albeit against club members, she saw herself as the unofficial singles champion of the country and dreamed of rowing in the Olympics.
On a Mission: Joanne Wright Iverson

In her late teens, having fallen in love with sculling, Joanne Wright (Iverson) is shocked to learn that women's rowing is not an Olympic sport, so she pours her boundless energy into making that happen, if not for herself, then for others. She coaches young women at PGRC and in 1964 becomes the first women's crew coach at the University of Pennsylvania. No one back then understands how hard women's bodies can be pushed to train. "We didn't know what kind of weights they could lift. We didn't know if they could run Lemon Hill and stay alive and be able to not have a heart attack. We didn't know any of these things, and a lot of this had to be found out by trial and error," Iverson said.
She was shocked to learn that it was impossible. Women’s rowing was not an Olympic event. Men’s crew had been an Olympic sport from the start of the modern games in 1896. Women had entered the games in 1900 with tennis and golf. Gradually, women’s archery, figure-skating, swimming, fencing, gymnastics, alpine skiing, canoeing, and equestrian sports had been added. But in 1960, women’s Olympic crew was still not a consideration. For that matter, in 1960 the National Association of Amateur Oarsmen (NAAO)—the national organization that set standards for amateur racing—had no women members. The college regattas—the IRA and the Dad Vail—had no women members. And no high school women had ever competed in the Stotesbury Regatta, formed in Philadelphia in 1927.

“All I wanted to do was get women racing,” Joanne said in an interview. Like Ernestine Bayer, she single-mindedly tackled the challenge and found allies in two men from the West Coast, where tradition is less deeply etched than in the East.

Edwin Lickiss, founder of the Lake Merritt Rowing Club in Oakland, California, was recruiting women to race. So was Ted Nash, who was training for the 1960 Olympics with Seattle’s Lake Washington Rowing Club; his wife, Aldina, also rowed. California and Washington women had started racing one another.

Resistance to women on the water came from the very top. As Nash was flying to Rome to compete in the 1960 summer Olympics, a member of the United States Olympic Committee asked Nash’s seatmate to move “so he could talk to me,” Nash said, recounting the incident. The official sat down next to the 6-foot 3½-inch Nash, who within days would win a gold medal in the four without coxswain, and warned: “You just stop this shit with the women; you’re screwing everything up.” After Nash’s victory, a delegation from the NAAO
visited him in person to say that he was “making too many waves,” that women now wanted to be in the men’s national championships. “They reminded me that the governing body is the National Association of Amateur Oarsmen not Oarswomen.” Nonetheless, in 1961, the same year that President John F. Kennedy established a Commission on the Status of Women, the NAAO agreed to allow one Women’s National Single Championship race during its 87th annual regatta in Philadelphia. Joanne was to race Nash’s wife, Aldina. With her two-year record of eight wins and one loss, Joanne was training hard to finally claim the national title in an official race. But at the last moment, Aldina Nash took ill, and no women rowed.

Russians on the Schuylkill

In the depths of the Cold War, over 50,000 people turn out in 1962 to watch Soviet rowers, especially world champion Vyacheslav Ivanov, race the Boathouse Row clubs in the Independence Day Regatta. John B. Kelly Jr., who rowed in the 1956 and 1960 Olympics where Ivanov won gold medals in the single scull, helped arrange the visit, and here gives Ivanov advice about the Schuylkill course. (Ivanov would win a third gold in 1964, tying the records of John B. Kelly Sr. and Paul Costello for three gold rowing medals.) During Ivanov’s Philadelphia visit, Kelly introduces him to Joanne Wright as the country’s “best female sculler,” and they develop “a crush” on each other, she said.
In Canada that summer, the St. Catharines Rowing Club, which touted itself as “Building Character and Manhood for 53 Years,” invited Joanne to do an exhibition row. She accepted. The more that men saw women on the water, the quicker their perception would change, she believed. Still, she felt that spectators viewed her as amusing—“a cute little girl trying to row.”

On the other hand, that same summer the Schuylkill Navy asked the 22-year-old to be a regatta judge—a first for a woman on the Schuylkill. And the annual *NAAO Rowing Guide* asked her to write an article. In it, Joanne argued to the American rowing community that European women were racing (they had started to do so in 1954) and that the United States should step up its support of women rowers because, she wrote, in a leap of faith, “the day is coming when women’s rowing events will be on the Olympics program.”

To seriously compete, though, American women needed more support and more racing opportunities. Unlike the men who had national rowing organizations to finance their equipment and travel, the women were begging and borrowing. Without funds to pay for boats designed to their size and physique, they were still using oversized men’s boats.

Joanne, who was racing out West in the meets that Nash and Lickiss were organizing, discovered that they shared an idea: a national rowing group for women. On July 3, 1963, the three met at an Oakland, California, restaurant and created the National Women’s Rowing Association (NWRA). It had three members—Nash’s Lake Washington Rowing Club, Lickiss’ Lake Merritt Rowing Club, and Iverson’s PGRC. That January, the all-male NAAO accepted the group’s application for membership, “although most of the delegates said they did not favor the adding of women’s events to a man’s regatta,” the *New York Times* reported on January 19, 1964.

Joanne Wright Iverson, 25, and Ernestine Steppacher Bayer, 55, the two most prominent and visionary women in American rowing, now saw their priorities differently. Joanne, still captain of PGRC, was obsessed with her national agenda of building the NWRA. She was reaching out all over the country for colleges and clubs to join in. Back home, though, club members saw her as high-handed. She was ignoring their equipment and training needs and committing the club to national events without consulting them.

Ernestine, concerned about the future of PGRC and fearing that the city could revoke its charter if the club languished, stepped in to wrest control from Joanne, who resigned from the club. To help with training, Ernestine brought in Ted Nash, who had arrived in Philadelphia in 1964 to coach freshmen crew at Penn. Despite the tension, the two women valued one another’s work. Ernestine “was really good for
publicizing the sport for women,” Joanne conceded. “Much better than I was, because I didn’t realize the value of it.”

In 1966, the NWRA hosted its first regatta in Seattle. By then, Joanne’s efforts had raised membership to nine groups. And Ernestine had built a strong eight-oared crew, which included her daughter, Tina. PGRC was victorious in the premier event, defeating the able West Coast teams. It would repeat the win again the next year.

But the real prize, what Joanne and Ernestine both had their eyes on, was international competition. They wanted American women—PGRC women—to participate in the European championships being held in Vichy, France, in September 1967. Getting to compete on the world stage was a critical step to finally opening the Olympics to women.

But to get to Vichy, the International Rowing Federation, known as FISA, would have to first approve the women’s entry. Both Ernestine and her husband, Ernest, who was then treasurer of the NAAO, laid out their case to John Carlin, who headed the FISA governing body in the United States. Both groups operated out of #4 Boathouse Row, which the Pennsylvania Barge Club, on hard times after the war, rented to them.

Carlin denied the request. “He said, ‘No. You’re not in the same class as the Europeans. If the Communists win, they’ll rub our noses in it,’” recalled Tina Bayer, then 22 and herself seeking to race in Vichy.

But Tina’s mother, Ernestine, had a subterfuge. Through a connection with a Canadian sports writer, PGRC wrangled an invitation to row an exhibition race at St. Catharines in Ontario in early August. The event was a huge moment in rowing—the First North American Rowing Championships, which coincided with Canada’s centennial.

The young PGRC women, yearning for competition, were slated to race a crew of distinguished older men, most of whom had rowed in the Olympics or European championships. Among the athletes was Thomi Keller, international president of FISA.

“They had never rowed together. We had,” Tina said. “We beat them at the start and kept pace with them—and won! At the finish line, they did the sexist thing and kissed the woman in the corresponding [boat] seat. We were all invited that night to a cocktail party.”

As mother and daughter were surveying the crowd that evening, Tina recalled, Keller walked over to them. “With his Swiss-German accent, he said, ‘Ernestine, I vant your girls to come to Vichy.’

“‘We’d love to but John Carlin won’t let us,’ Mom replied.
“I’ll take care of John Carlin if you take care of the entry and the money.’

“The entry’s due at midnight and we don’t have the money,” Mom said. Keller pointed to a table and said, “There’s the entry. Minutes later, Carlin signed off on it.”

The money problem remained. PGRC needed $6,000 to get its crew and equipment to Vichy. The women, most in their early 20s and working as secretaries, students, teachers, and receptionists, did not have it. That same evening, Ernestine approached Horace Davenport, a former champion rower at Columbia University and head of the National Rowing Foundation. Would the foundation fund PGRC’s expenses? she asked.

Davenport candidly confessed to Ernestine, “If the foundation funded a woman’s boat, we’d probably lose all our contributors.”

“Instead, he secretly loaned us the $6,000,” Tina said. “We took 18 people to Vichy, and within a year every girl paid back the money. We could not reveal where we got the money, and the story was never told until after his death” in 1991.

Why was there still so much opposition to women’s competition, so late in the game?

Tina believes that American women were held back by the traditionalism of Philadelphia, home to both the NAAO (now USRowing) and FISA until 1985.

“Boathouse Row had a stranglehold on the country,” said Tina. Others, though, believed the reason was more than provincialism and that Carlin truly felt that women were not yet ready for international competition.

They got ready fast. With only three weeks before Vichy, the PGRC women moved from their homes into their boathouse. “We woke up, rowed, ate, went to our jobs, rowed, ate, went to sleep. In between we did fundraising. Our total focus was Vichy,” Tina said.

On their last row past the boathouses before leaving for France, they were stupefied to see the men of the Row wave banners saying, “Good luck, PGRC.”

In Vichy, Tina and the other PGRC women struggled with logistics and equipment and had to sew their own uniforms. They were awed by the towering heights of their European opponents. In a preliminary quad race, a rigger—the metal bracket that extends from the racing shell and holds the oarlock—broke, and they had to drop out. In the eight, PGRC came in last. Still, they were the first American women’s rowing club to
compete in Europe, and the European women treated them as equals, hopeful that their presence might open the door to the Olympics. PGRC’s 1967 appearance in Vichy was a milestone for women rowers, and back home on Boathouse Row, where all the other clubs were still all male, the Vesper Boat Club took notice.

In Hollywood, future stars could be found working in soda fountains. In Philadelphia, they were spotted running along Kelly Drive. Which is how a 26-year-old with strong-looking legs in 1969 caught the attention of Gus Constant, a coach who was trying to assemble the first women’s crew for the Vesper Boat Club.

The premier rowing club had never had a woman member in its 104-year history, but after PGRC’s historic appearance at Vichy, it was clearly time for Vesper, if not all of Boathouse Row, to break with tradition.

“Here comes this little guy saying, ‘Would you like to row?’” Karin Constant remembers. A native of Germany, Karin had always been intrigued by rowing but had never had the chance to try it, even in Europe, where women had been competing for 15 years.

“So when he asked me if I wanted to row, I said, ‘Sure.’ And he said, ‘When would you like to start?’ And I said, ‘Well, I can start tomorrow.’”

Gus and Karin, who within six months would marry, began scouring the city for women with “good legs.” They checked out basketball players and swimmers at recreation centers. They eyed passersby in front of Vesper. “There’s a woman with good legs—let’s ask her,” they’d say to each other. By good legs, they meant muscular legs that could help drive the boat. They did not even have to be long legs.