

The Fastnet Rock Lighthouse

(Irish: An Charraig Aonair, meaning "Solitary Rock or Lone Rock")



On Ireland's south-western tip, at the mouth of the Atlantic, stands a monument of man's gift to mankind
("I can think of no other edifice constructed by man as altruistic as a lighthouse. They were built only to serve."

George Bernard Shaw)

IT WAS a hazy night in July 1904 and the steamer Alexandra ploughed slowly through the waters of West Cork, as an extraordinary experiment took place on deck. She was a rickety vessel, "as leaky as a sprat net" in the words of Sir Robert Ball, Ireland's most feted astronomer of the time. But he loved being aboard her. Almost every night her bespectacled old chef served him copious helpings of boiled lobster. After supper, he could climb on deck and relish two of his night-time passions: study of the gentle stars and, as scientific adviser to the Commissioners of Irish Lights, study of the illumination from lighthouses built around Ireland's treacherous coastline.

On this night, there were no stars visible; a light drizzle fell. But with the help of a mirror that he manoeuvred expertly, he measured the intensity of a new light from a lighthouse that he had never seen before. At 19 miles (30km) distance, the flashes were "splendid". At 22 miles, the glow still spread over the surface of the sea. As the Alexandra turned back to port, Sir Robert was spellbound by the brilliant whiteness of the light he was watching. "I cannot describe them otherwise than by saying they were magnificent. At ten miles, the great revolving spokes of light, succeeding each other at intervals of five seconds, gave the most distinctive character possible...it was a most beautiful optical phenomenon."

It was the stars that first helped sailors navigate as they ventured out at night in the world's earliest leaky boats. But for thousands of years, man-made lights have helped, too. The object of Sir Robert's wonder was the light from the Fastnet Lighthouse, completed just a month before on a clump of jagged rock at the gateway to the Atlantic Ocean. At 177 feet (54 metres) high, with a lamp the strength of 1.3m candles, the lighthouse was, as Sir Robert put it after visiting it the next day, "from the navigator's point of view, the most important outpost of Europe".

It was quickly regarded as one of the continent's most beautiful beacons. For the quality of its engineering, its smooth, cylindrical structure graced the cover of Scientific American, an American scholarly magazine. Its rosette of light inspired numerous poems. For more than 100 years afterwards, its light has helped steer countless people to safety. It provides the first glimmer of Europe for passengers emerging from the grey mists of the Atlantic; for ships passing the other way, it is "the teardrop of Ireland"—a farewell to familiar shores for mournful Irish émigrés.



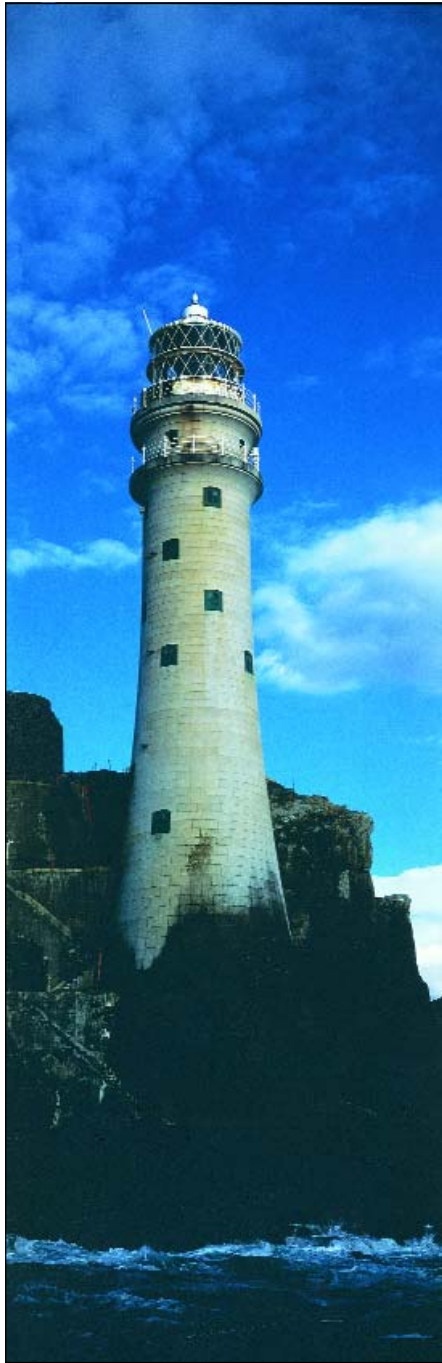
The men who built the lighthouse, usually photographed with their jackets fastened and their ties done up, were not seamen, nor would they have been particularly accustomed to the huge swells that batter that part of Ireland's coastline. They were a tiny group of civil servants, far more fascinated by the precise details (weights, measures, sizes, costs) of the engineering feat they were attempting than the human courage that the project required.

Such descriptions as they left of their work are as shorn of embellishment as the granite stonework.

C.W. Scott, who managed part of the project and published its definitive history in 1906, rarely lets himself get swept away by lyricism. He uses far more words explaining the reasons for the 50mm mantles that lit the lamp than he does over the hardships endured by the workers. Those who wanted to go home too often "were gradually got rid of, and their places filled with men who were better satisfied with their rock quarters."

The dramatic sunset photo of the lighthouse on it's rock I got from Google Earth





Yet their work, technical as it appears, is anything but prosaic. For building a lighthouse could be considered one of man's most noble endeavours. The boldest advance came in the 17th-century, when Henry Winstanley, an eccentric inventor and practical joker (he had chairs in his house that flew up in the air), took it upon himself to build a lighthouse on the lethal Eddystone Rock, 14 miles from the English port of Plymouth. Ultimately it killed him. He, his men and his Oriental-looking tower were washed away in a freak storm in 1703. But it marked the beginning of man's realisation that lighthouses could be built on the most inhospitable rocks. Two hundred years later, the Fastnet became the latest testimony to that belief.

Construction of the first Fastnet lighthouse started in 1853, and it first produced a light on 1 January 1854. The lighthouse replaced an early one built on Cape Clear Island in 1818, partly motivated by the loss of an American sailing packet, Stephen Whitney, in thick fog during November 1847 on nearby West Calf Island causing the death of 92 of her 110 passengers and crew. The new lighthouse was constructed of cast iron with an inner lining of brick and was designed by George Halpin. Costing £17,390, the tower was 63 feet 9 inches (19.4 m) high with a 27 feet 8 inch (8.4 m) high lantern structure on top, giving a total height of around 91 feet (27.7 m). It had an oil burning lamp of 38 kilocandelas; in contrast modern lighthouses typically produce 1,300 kilocandelas. In 1883 an explosive fog signal was installed, which electrically detonated a small charge of guncotton every five minutes in fog.

The tower proved to be too weak, since gales shook it to the point that crockery was sometimes thrown off tables, and a 60 imperial gallon (273 L) cask of water lashed to the gallery 133 feet (40.5 m) above high water was washed away. Various steps were taken to strengthen the tower including fitting a casing around the bottom section up to the second floor and filling it with stone, and the surrounding rock smoothed over.

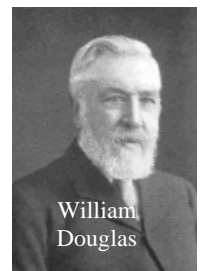
In 1865 the lower floors were filled in with solid material.

Finally, the newly formed Commissioners of Irish Lights decided on a replacement. They were lucky; much about lighthouses is a family affair, handed down from generation to generation. William Douglass, a member of a famous family of lighthouse engineers, was now the Board's Engineer. His family who were legends in the lighthouse-engineering business. His family had already built lighthouses from Wolf Rock in Cornwall to Ceylon He made a special survey of the Rock and submitted two models to the Board, one showing the Rock as it was and the other as it would be when the new lighthouse was built, together with an estimate for carrying out the work. This estimate amounted to £70,387, which seems an extraordinarily modest sum today, particularly when one realises that it included £10,000 for building the SS *Ierne* as a special tender for the work. The SS *Ierne* continued to give excellent service to the Commissioners until 1954, when she was replaced by a new *Ierne*.

Douglass when he surveyed Fastnet, he quickly realised that the existing tower was built on the wrong part of the rock. He favoured the harder slate lower down, facing the Atlantic head-on; the base was below high-water level at the water's edge, but that meant the tower would receive the blow of the heaviest seas before they reached full height. It turned out to be an enlightened suggestion.

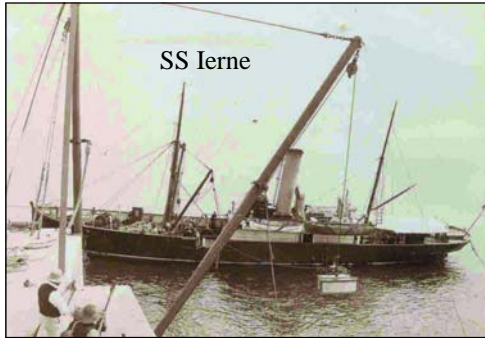
The masonry 'jigsaw' Douglass's method of building was one invented by his father, Nicholas, on another lighthouse in the 1860s (and used long afterwards in British lighthouses). Blocks were dovetailed into those around it, and cemented into those above and below, like a Chinese puzzle, so that it was impossible to remove any one stone without removing those above it. "This system of dovetail joggles absolutely bonds the entire structure into a virtual monolith," wrote Scott. The contract to supply the granite was won by Messrs John Freeman and Sons of Penrhyn, Cornwall. In 1897 its workers started chiseling away at 2,074 stones, each weighing from 1.7 to 3 tons to create the puzzle.

Meticulous to a fault, Douglass ordered the contractors to assemble the tower in sections first in their Cornish yard, to ensure that not a stone was out of place. Each rock was to be delicately wrapped and shipped to Ireland. But from the start of the building work in 1898, bad weather and problems in finding enough good granite delayed the project. Douglass, used to a lifetime of such setbacks, went out to the rock in 1898 to push things along. It was exhausting work, though, and he fell ill. He never really recovered, and the "quiet and reserved man" retired in 1900. "There was probably no man in the world so well fitted by experience to carry out this important and difficult piece of work," wrote Scott, who then took over the project.



Each rock to be delicately wrapped and sent to Ireland, Scott was now technically the boss, but the execution of the project fell into the hands of another remarkable man, James Kavanagh, a young stonemason from Wicklow Town near Dublin, who had first landed on the rock as foreman in 1896 and was personally to place every stone laid in the tower. He was not a lighthouse man by background, but he had that same stubbornness of character. Grainy photographs of him show a portly, charismatic man with a bushy moustache and white jacket, always keeping up appearances.

He lived on the rock continuously for ten to 12 months of each year from August 1896 to June 1903, sleeping on a damp bed of rock close to the landing strip in quarters carved out of the rock face, known to this day as "Kavanagh's hole". He drove his men hard; the day began at 5am, and their first task each day was to clean themselves and their quarters thoroughly. There was no time for sickness. He was fastidious about safety; the men worked with no safety harnesses, but there were only a few minor accidents. As is customary on lighthouses, each man would be responsible for his own food, in this case, mainly rice, peas, tinned meat, biscuits, tea and cocoa. Those on the rock were paid three shillings and sixpence for a nine-hour day, and most stayed on the rock for the whole season, for fear of losing wages if they went ashore and bad weather then prevented them from returning. Kavanagh drove himself harder still. In the years that he allowed himself a few months off, he would return to his wife and eight children in Wicklow. Even then, his grandson James Kavanagh says, the family recall him complaining on fine days that he should be back on the rock, "not wasting time".



The white granite rocks, once shipped from Cornwall, would be dropped at a staging post near Crookhaven, then shipped out to Fastnet on a specially built steamer, the Ierne. Landing was impossible; the swell is so high at the rock that only about 12 times a year is a boat able to dock. Instead, the Ierne was moored at sea, and steam derricks from the rock and the ship hoisted the stone out into the sea before lifting it up to the tower. There, Kavanagh would tenderly tease each of the giant stones into place; only six were chipped during the whole process. When the tower was completed, the vertical variation from the plan drawn up seven years before was just 3/16th of an inch, or 0.6cm. It remains a remarkable feat of masonry. The stones are still smooth to the touch. The gunmetal windows fit perfectly. There are elegant mosaics in the floors. Inside, there is no hint that a

century of storms have penetrated the flawless exterior.

Sadly, Kavanagh had no time to admire the result of his craftsmanship. Seven years of living in a hole in the rock, progress frustrated by maverick tides and his delayed shipments, suddenly shattered his health. Having set the last stone, he went ashore with his son (also a mason on the rock) at the end of June 1903 complaining of illness, and died of apoplexy a week later. He never saw the light, which was still being assembled in

Birmingham crown the tower, let alone shine.

Five days later, his obituary in the Wicklow Newsletter said that more than a thousand people turned out in his home town to follow his remains from the quayside to his family home. "The greatest respect was shown towards the deceased, all the business houses being shuttered and business suspended while the cortège was passing through." He was only 47 years old.



(I got the following section (in italics) from a geneology website called www.rootschat.com Catherine (Doolittle) Kavanagh: Obituary in *The Wicklow People*.

Catherine is James's wife ed.

"Her home was haven of shelter for men 'on the run' during troubled times.

She loved to tell of events which occurred in her local town from the days of the famine.

The cortège to 3 mile water cemetery on Sat included 13 grand-sons 3 grand-daughters 7

great grand-children. Mourners were:

James & Richard (sons) Mrs Nellie Mitchell & Miss Bride Kavanagh daughters Mrs Nora McGann sister. (Thanks to Mrs Ann Mitchell (wife of John) for cuttings Oct 2000) Her Husband James Kavanagh died of a Heart attack while working on The Fastnet Lighthouse died when his 9th child, Bridie was just 8 mths old. See Obituary "Wicklow People"

Sat 11th July 1903.

"Remains were conveyed by Irish Lights Tender "Ierne". The ensign was lowered to half mast when the Coastguard station was in view. 2 boats were lowered, the coffin lowered from starboard into one & towed by 2 Irish Lights men to pier. Lifted by 4 men from Wicklow Coastguard station.

Over 1000 people followed remains along quay to deceased's home".

Funeral on Wed, "business houses shuttered & business suspended while the cortege passed through the town". My thanks to his grandson, James Kavanagh for birth & death dates of His grandparents, Aunts & Uncles. (March 2005)

His Headstone in the 'Old' cemetery' reads

"Foreman of Irish Lights Service Works who dept this life at Rock Island This stone was erected by his sorrowing family & officers & fellow workmen of the service as a token of their esteem and regard" (researched 18th August 1996)

Interestingly I read on the site that many relatives of James's wife Catherine Doolittle emigrated to America looking for a better life two of the males it says "were lost to the Indians"



The unfortunate James Kavanagh was not the last of Fastnet's good men, however. For almost 90 years afterwards, the light, which rotates almost soundlessly in the same vat of mercury that it was built with, was tended by lighthouse keepers who kept the tradition of devout public service alive.

Lighthouse engineers may be painstakingly conservative, but lighthouse keepers are just as likely to be unusual.

On duty they have any number of tasks to fulfill, but off-duty there are many empty hours to fill.

These might have been spent watching storms build up, fishing, reading, or making ships in bottles.

Dick O'Driscoll, a keeper who spent 14 years on the rock (and is descended from the original O'Driscoll clan who fished the local waters), recalls morsemen in the lighthouse and on shore became so adept that they would flash messages—even chess moves—to each other in the clouds.

For exercise, he would string a rope from the seventh-floor balcony and climb down hand over hand with no safety harness. "What did we do? Sometimes we'd sit. More times we'd sit and think," he comments wryly.

Fastnet was peculiar, he says, as he points to a picture of the lighthouse on his sitting-room wall.

It may look like Alcatraz on the outside, but inside time never drags. Perhaps that is because of the weight of green and white water that surrounds one; it never stops churning.

In stormy winter weather, the "big seas would come sailing up over the entire building like the field of horses in the Grand National," as one former Fastnet keeper put it.

Sometimes, there were almost disastrous consequences; Mr O'Driscoll remembers a storm in 1985 when a wave reached as high as the light and came crashing through the glass, overturning the vat of mercury and sending the poisonous liquid pouring down the stairs. He doubts the tower would have withstood another wallop as great as that, but it never came. Suddenly, there was a great calmness.

There were moments of deep sadness, too. Missing children's birthdays, for example, because the weather turned and the ship could not get close enough to the rock to take him ashore. What do you do at those times? "There's nothing you can do," he says. "You slowly climb back upstairs and bake more bread."

There was lots of mischief-making, though, that for a time would make the lonely rock light up with Irish laughter. In 1920 a band of volunteer independence fighters raided Fastnet at night, seizing guncotton and detonators to use against the British forces. Curiously, the doors to the arsenal had been conveniently left open that night. A few decades later, Kathleen Lynch, a young lady from Cape Clear whose talent for "hearing the weather" eventually made her invaluable to relief ships and helicopters servicing the lighthouse, also rowed out to it as a teenager. "Once there, the lads would leap out and set to operating the crane and its basket. They'd lift the girls from the boat right onto the rock. And then they'd dance Cape Clear sets, two opposite two, and do slides, a young man squeezing the box for all he was worth away out there in the middle of the sea."

Back to loneliness

Electricity came in 1969, and 20 years later the last full-time keeper left. It is now fully automated any necessary maintenance is done by Neilly O'Reilly, a local man who retains the lighthouse keeper's deep affection for the rock and the stories from its past. But there is no disguising the sense of loss that has crept in since it became fully automated. As Mr O'Reilly kicks hard to open the heavy steel doors on arrival at the lighthouse, he notes that they swing inwards. When Douglass designed them, and Kavanagh built them, they were never made to be opened from outside, because it was not envisaged that the lighthouse would be unmanned. Mr O'Driscoll refers to those doors in his letter* to the Cork Examiner in April 1989 when he last left the lighthouse. "The closing is a very poignant moment, as these large gun-metal doors crash into place behind me for the last time, sealed like a tomb." Once again, An Charraig Aonair was alone.

Fastnet Rock (Irish: An Charraig Aonair, meaning "Solitary Rock or Lone Rock") is a small clay-slate island with quartz veins and the most southerly point of Ireland, 6.5 km southwest of Cape Clear Island (Oileán Chléire) in County Cork, which is itself 13 km (8 miles) from the mainland. It lies in the Atlantic Ocean 11.3 km south of mainland County Cork, at latitude 51.37°N.[1] It rises to about 30 m above low water mark. Study of the documentary record suggests that the English name is derived from Old Norse Hvas-tann-ey meaning 'sharp tooth island'.



Story made up from excerpts taken from 'Light on a lonely rock-' The Economist print edition

*Several of the quotes in this article were first reproduced by James Morrissey in "A History of the Fastnet Lighthouse".

And from local Irish websites including Wicklow & local tourist centres And the website magazine. www.beam

Left the Catholic Cathedral in Wicklow. A very beautiful part of the world.

A pity in rained for the whole month we were there in 1997

