

# Talk: Eugenius Birch – King of Piers

Delivered on: 10<sup>th</sup> November 2021

Haywards Heath & District Probus Club

Given by: Dr Kathryn Ferry



## Eugenius Birch - King of Piers

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On 10<sup>th</sup> November 2021, Dr Kathryn Ferry spoke to Probus members about piers and Eugenius Birch, the leading architect in this field in Victorian Britain.

The first seaside piers were built in England in the early 19<sup>th</sup> century. Constructed initially as simple wooden landing stages for boat trips, they were later developed into complex entertainment venues with ornate pavilions, delicate ironwork, and exotic lighting. As can be seen from the dates on the list of piers (see below), they became very popular, almost trendy, during Queen Victoria's reign. Some piers are not on the list, the ravages of the sea and weather being too much for them to cope with.

- *What is a pier?* A pier is a raised structure that rises above the water and in most cases juts out from its shore, usually supported by piles or pillars, and provides above-water access to offshore areas.
- *How do piers stand upright?* They were usually 'screwed' into the seabed using a system applied by Eugenius Birch that had been invented by Alexander Mitchell, a blind Irish engineer.

### Eugenius Birch

Eugenius Birch, who was born in London and educated in Brighton, designed the Devon and Somerset Railway, Exmouth docks, Ilfracombe harbour, and West Surrey waterworks. Birch's fame is chiefly based upon the system of iron promenade-piers which he and his brother invented and became a feature of nearly every resort on the English coast during the Victorian period. The first example of a screw-pile pier was the Margate jetty, completed in 1853, forming a new departure in marine construction. Similar piers were subsequently erected from Eugenius Birch's designs at Aberystwyth, Blackpool, Bournemouth, Brighton (West), Deal, Eastbourne, Hastings, Hornsea, Lytham, New Brighton, Plymouth, Scarborough, and other places. Sadly, the West Pier in Brighton is no more - succumbing to a fire and a devastating storm. Eugenius Birch also worked on many other structures, including the design of docks, harbours, sea defences, railways, aquariums and waterworks.

### Piers in England, with the date of opening

- Central Pier, Blackpool, May 1868.
- South Pier, Blackpool, March 1893.
- North Pier, Blackpool, May 1863.
- Bognor Regis Pier, May 1865
- Bournemouth Pier, September 1861
- Boscombe Pier, Bournemouth, July 1889
- Palace Pier, Brighton, May 1899
- Burnham-on-Sea Pier, 1858
- Clacton Pier, July 1871
- Cleethorpes Pier, August 1873
- Clevedon Pier, March 1869
- Cromer Pier, June 1901
- Deal Pier, November 1957
- Eastbourne Pier, June 1870
- Prince of Wales Pier, Falmouth, May 1905
- Felixstowe Pier, August 1905
- Harbour Arm, Folkestone, 2016
- Gravesend Town, 1834
- Royal Terrace, Gravesend, 1844
- Britannia Pier, Great Yarmouth, July 1858
- Wellington Pier, Great Yarmouth, October 1853
- Ha'penny Pier, Harwich, July 1853
- Hastings Pier, August 1872
- Herne Bay Pier, 1899
- Hythe Pier, January 1881
- Claremont Pier, Lowestoft, 1903
- South Pier, Lowestoft, 1846
- St Annes Pier, Lytham St Annes, June 1885
- Paignton Pier, June 1879
- Ryde Pier, July 1814
- Saltburn Pier, Saltburn-by-the-Sea, May 1869
- Culver Pier, Sandown, May 1878,
- Skegness Pier, June 1881
- Royal Pier, Southampton, July 1833
- Southend Pier, 1830
- Southport Pier, August 1860
- South Parade Pier, Southsea, July 1879
- Clarence Pier, Southsea, 1861
- Southwold Pier, 1900
- Swanage Pier, March 1897
- Grand Pier, Teignmouth, 1867
- Princess Pier, Torquay, 1890
- Totland Pier, Totland Bay, 1880
- Walton-on-the-Naze Pier, August 1898
- Grand Pier, Weston-Super-Mare, June 1904
- Birnbeck Pier, Weston-Super-Mare, June 1867
- Weymouth Pier, 1860
- Worthing Pier, April 1862
- Yarmouth Pier, 1876

Some of these piers are described below.

## **Ryde Pier, Isle of Wight**

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The first recorded pier in England was Ryde Pier, which opened in 1814 on the Isle of Wight as a landing stage to allow ferries to and from the mainland to berth. It was designed by John Kent of Southampton. Believe it or not, before the pier was built, boat passengers had the uncomfortable (and possibly embarrassing) experience of being carried ashore on the back of a porter and then, depending on the state of the tide, having to walk up to half a mile across wet sand before reaching the town of Ryde.

In 1895, a concert pavilion was built at the pier-head, and over the next sixteen years, the original wooden piles were replaced with cast iron. At 1,740 feet, Ryde's pier is the second-longest seaside pier in the country. Only the pier at Southend is longer. The original wooden structure at Ryde opened in July 1814. An article in the Financial Times on 15 June 2015 ([here](#)) says it is the world's oldest seaside pleasure pier. In 1976, Ryde Pier was made a Grade II listed building. In the early 1980s, a modern waiting area, including some of the original buildings, replaced the original Victorian waiting rooms at the pier-head.

## **Southend Pier, Essex**

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Southend Pier is a major landmark in Southend-on-Sea, extending 1.33 miles into the Thames Estuary, and is the longest pleasure pier in the world. The original timber pier was replaced by an iron pier that opened to the public in August 1889. The Southend Pier Railway, which opened in the early 1890s, was the first pier railway in England.

The pier played a role in both of the world wars. In World War I, ships housing German prisoners were moored off the pier-head. In World War II, the pier was renamed HMS Leigh and organised 3,367 convoys. Ships queued at the pier-head for fresh water piped from the shore. Convoys were protected from dive bombers by sausage-like barrage balloons, which were inflated on the pier.

Source: Romford Recorder, [here](#).

Southend Pier has experienced several fires, notably in 1959, 1976, 1995 and 2005, with the latter causing significant damage to the old pier-head and surrounding structures. The pier is now a Grade II listed building.

## **Brighton's Piers, East Sussex**

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Construction of Brighton's first pier, the Royal Suspension Chain Pier, began in September 1822 and was opened on 25 November 1823. It was designed and built by a Brighton resident - Captain Samuel Brown, a Royal Navy Engineer.

In 1866, Eugenius Birch designed the 1,115 ft long West Pier. It was designed specifically as a pleasure pier and was immediately popular with visitors and locals. This was the final nail in the coffin for the Royal Suspension Chain Pier, which was virtually abandoned and fell into a state of disrepair. Then, in 1896, during a huge storm, it was finally washed away by the sea, causing considerable damage to and delayed completion of the under-construction Palace Pier.

The West Pier was successful for over 100 years, finally closing in 1975. In the great storm of 1987, it suffered structural damage. In 1991, access from the shore was removed for safety reasons. In December 2002, another storm seriously damaged the concert hall, followed the next year by serious damage from arson attacks. A 'skeleton' is all that remains today of Brighton's second pier.

The Palace Pier was designed and constructed by R. St. George Moore. It quickly became popular and had become a frequently-visited theatre and entertainment venue by 1911.

Apart from closures owing to war, it continued to hold regular entertainment up to the 1970s. The pier regained its popularity after the war and continued to run regular summer shows, including Tommy Trinder, Doris and Elsie Waters and Dick Emery.

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The theatre at the end of the pier suffered damage in 1973 and was demolished in 1986, changing the pier's character from seaside entertainment to an amusement park with various fairground rides and roller coasters.

The pier was renamed as "Brighton Pier" in 2000, although this legal change was not recognised by the National Piers Society nor some local residents. The local newspaper, *The Argus*, continued to refer to the structure as the Palace Pier. In 2016, the pier was sold to the Eclectic Bar Group, headed by former PizzaExpress owner Luke Johnson, who renamed the pier back to Brighton Palace Pier.

Brighton Palace Pier remains popular with the public, with over four million visitors in 2016, and has been featured in many works of British culture, including the gangster thriller *Brighton Rock*, the comedy *Carry On at Your Convenience* and the *Who's* concept album and film *Quadrophenia*. In 2015, VisitEngland released figures showing that Brighton Palace Pier was the fifth most visited free attraction in the UK, having had 4.5 million visitors the previous year. And in early 2017, National Express named it the fourth most popular free attraction in the country.



Picture Credit: "The Palace Pier" by Rapid Spin is licensed under CC BY-ND 2.0

## Eastbourne Pier, East Sussex

A pier was first mooted at the end of 1863, but the project was delayed and finally abandoned in favour of the present site at the junction of Grand and Marine Parades. In April 1866, work to a design by Eugenius Birch began on construction and was completed two years later.

On New Year's Day 1877, the landward half was swept away in a storm. It was rebuilt at a higher level, creating a drop towards the end of the pier. The pier is effectively built on stilts that rest in cups on the seabed allowing the whole structure to move during rough weather. It is roughly 1000 ft long. A domed 400-seater pavilion was constructed at the seaward end in 1888. A 1000-seater theatre, bar, camera obscura and office suite replaced this in 1899/1901. At the same time, two saloons were built midway along the pier. The camera obscura fell into disuse in the 1960s but was restored in 2003 with a new stairway built to provide access.

Paddle steamers (such as the PS Brighton Queen and the PS Devonian) operated by P and A Campbell ran trips from the pier along the south coast and across the Channel to Boulogne from 1906 until the outbreak of the Second World War. These were resumed after the war, but the paddle steamers were gradually withdrawn from service. In 1957, the final season was operated by a motor vessel.

During World War II, part of the decking was removed. Machine guns were installed in the theatre, providing a useful point from which to repel any attempted enemy landings. A *Bofors* anti-aircraft gun was placed on the pier. Various traditional pier theatres were built over the years, but after the last one was destroyed by fire in 1970, it was replaced by a nightclub and bar, which remain today.

The tower at the end of the pier is often used as a viewing point during the annual air show. The pier is featured in the 2001 film *Last Orders* and the 2008 film *Angus, Thongs and Perfect Snogging*. In May 2009, the pier's listed building status was upgraded from Grade II to Grade II\*.

## Bournemouth Pier

The first pier in Bournemouth consisted of a short wooden jetty that was completed in 1856. It was replaced by a longer wooden pier, designed by George Rennie in September 1861.

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The wooden piles were replaced by cast iron in 1866, but even so, just over a year later, the pier was made unusable when the landing stage was swept away in a storm. After repair, the pier continued in use for a further ten years when another severe storm caused further collapse making the pier too short for steamboat traffic. In 1880, a new pier, designed by Eugenius Birch, was completed. It stretched to a length of 838 ft. Two extensions, in 1894 and 1909 respectively, took the pier's overall length to more than 1000 ft.

Bournemouth Pier was substantially demolished by soldiers from the 18<sup>th</sup> Field Park Company of the Royal Engineers on 5 July 1940 as a precaution against German invasion. The pier was repaired and re-opened in August 1946, followed by refurbishment of the pier head in 1950, and ten years later, a rebuild of the substructure was completed in concrete to take the weight of a new pier theatre.

## Cromer Pier

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There are records of a pier in Cromer back as far as 1391, although then it was in the form of a jetty. In the year 1582, Queen Elizabeth I, in a letter to the inhabitants of Cromer, granted rights to export wheat, barley and malt with the proceeds to be used for the maintenance and well-being of the pier and the town of Cromer.

In 1822, a 210-foot-long cast iron jetty was built, but it lasted just 24 years before being destroyed in a storm. Another wooden structure replaced this jetty, but this time it was a little longer, being 240 feet. This jetty soon became very popular for promenading. The last wooden jetty survived until 1897 when it was damaged beyond repair after a coal boat smashed into it. It was dismantled and the timber sold for £40. In 1902, a new pier was completed and opened to the public. This new pier, designed by Douglass and Arnott, was 450 feet long. In the early years, the pier consisted of glass-screened shelters and a bandstand on the end of the pier. The shelters were roofed over in 1905 to form a pavilion; the bandstand was later replaced with a stage and arch. The pier is owned and maintained by North Norfolk District Council, which undertook responsibility for running and funding after the 1974 local government re-organisation. Since then, the District Council has carried out several major repairs and refurbishments, most recently in 2013.

In March 2015, the pier was voted Pier of the Year 2015 by the National Piers Society.

## Worthing Pier, West Sussex

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Worthing Pier was designed by Sir Robert Rawlinson and was opened in April 1862. It remains open to the public.

Originally, the pier was a simple promenade deck 960 ft long and 15 ft wide. In 1888, the pier was upgraded with the width increased to 30 ft and the pier head increased to 105 ft for a 650-seat pavilion to be built. In 1894, a steamship operation began between Worthing Pier and the Royal Suspension Chain Pier in Brighton, twelve miles to the east. In March 1913, the pier suffered serious storm, damage with only the southern end remaining, completely cut off from land. A rebuilt pier was opened on 29 May 1914. In 1933, the pier and all but the northern pavilion was destroyed by fire. In 1935, the remodelled *Streamline Moderne* pier was opened, and it is this that remains today.

In World War II, Worthing Pier was sectioned in 1940 for fear of German invasion after the British retreat at Dunkirk. Army engineers used explosives to blow a 120ft. hole by in the pier to prevent it from being used as a possible landing stage in the event of an invasion.

Worthing Pier has been named *Pier of the Year* by the National Piers Society on two occasions - first in 2006 and again in 2019. It is a Grade II listed building structure and is owned by Worthing Borough Council,

## The National Piers Society

The National Piers Society ([here](#)) was founded in 1979 under Sir John Betjeman when some of the finest piers in Britain were threatened with demolition.

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Over the years, the Society has grown steadily and has become well established as the leading authority on piers. Through its efforts, several piers that would otherwise have vanished remain for the enjoyment of everyone.

## Sources and Further Reading

- <https://piers.org.uk/pier-type/surviving-piers>
- <https://www.building.co.uk/features/pleasure-piers-the-test-of-time/5059042.article>
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- [https://en.wikipedia.org/wiki/Bournemouth\\_Pier](https://en.wikipedia.org/wiki/Bournemouth_Pier)
- <http://www.fatbadgers.co.uk/britain/piers.htm>

## About the Speaker



Dr Kathryn Ferry grew up near the sea in North Devon and remembers childhood holidays around the UK, many by the sea. Victorian architecture and design were her first academic interests, but she is now better known as an architectural historian and a writer and broadcaster on many seaside-related subjects, including holidays, beach huts and bungalows.

She is the author of several books and articles and regularly contributes to television and radio. She also lectures to a wide range of audiences. Her website is at:

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