Lloyd's Register in London

The Collcutt and Rogers buildings

Lloyd's Register

The decorative stonework of the Collcutt building contrasts strongly with the modern glass lines of the Rogers building set behind it.

Lloyd's Register in London

This is the story of Lloyd's Register and its offices in the City of London.

We start with its origin as a classification society in a London coffee house in 1760. As the organisation grew, spreading around the world and into new business sectors, its premises in London followed the varying fortunes of the organisation.

In the late 19th century the society expressed its confidence through the development of a new head office at 71 Fenchurch Street, an impressive Italianate palace designed by Thomas Collcutt. At the end of the 20th century, the organisation had outstripped the jumble of office buildings which by then were attached to the Collcutt building. To replace them the organisation commissioned an exciting modern building designed by the renowned Richard Rogers Partnership and completed in 2000.

Our tour ends with a look at the history of the site on Fenchurch Street before Lloyd's Register, starting with the first Roman settlement, uncovered when work began on the Rogers building.

Lloyd's Register
Working together for a safer world

Lloyd's Register (LR) was set up in 1760 in London and it maintains a happy relationship between tradition and foresight.

We are a global engineering, technical and business services organisation wholly owned by the Lloyd's Register Foundation, a UK charity dedicated to research and education in science and engineering.

Lloyd's Register has a long-standing reputation for integrity, impartiality and technical excellence. Our compliance, risk and technical consultancy services give clients confidence that their assets and businesses are safe, sustainable and dependable.

Since our foundation we have responded to change and led the developments that have made lives safer and helped businesses prosper. The buildings at No. 71 reflect our long history and forward-thinking approach.

From coffee house to No. 71

To turn back to 1760 is to realise just how much the world has changed since Lloyd's Register was founded. At that time the sailing ship was the most reliable and speedy form of transport and the steam engine's full potential was only just being developed. Industrialisation of the western world had not yet accelerated to encourage the wide-spread exploitation of natural resources such as oil and gas, and the nuclear and jet ages were not even envisaged.

A brief history

The Society for the Registry of Shipping was set up in 1760 by customers of Edward Lloyd's Coffee House in Lombard Street, London. The aim was to give merchants and underwriters recorded information on the quality of vessels. The *Register Book* listed vessels rated, or classed, after the condition of their hulls and equipment had been surveyed. The subscriptions generated by the *Register Book* paid for the surveyors to carry out the work. This was the true beginning of classification and the Society was the world's first classification society.

Classification was and continues to be all about quality. Put simply, it is an assessment against defined standards of the seaworthiness of a ship either under construction or already in existence. From 1768, the Society used a1 to indicate a ship of the highest class; from 1775, A1 was used and is now famous as a symbol of quality.

Disputes over the Society's classification system from 1799 to 1833 led to the establishment of a second register and brought both parties to the verge of bankruptcy. Happily agreement was reached in 1834 when they united to form Lloyd's Register of British and Foreign Shipping, establishing a General Committee and formalised the charitable values which still stand today - to enhance the safety of life and property.

The 19th century brought huge changes, as steam superseded sail and timber gave way to iron and steel, creating ships of unprecedented size. Lloyd's Register met these challenges, formulating guidelines based on practical experience.

The organisation rapidly earned widespread respect, giving evidence to government committees and receiving requests to appoint surveyors abroad. The first after the 1834 reconstitution, Thomas Menzies, was appointed to Quebec in 1852. By the early 1880s almost half of the world's shipping was classed by Lloyd's Register. In 1914, with an increasingly international outlook, it was entirely appropriate that the organisation's name was changed to simply Lloyd's Register of Shipping.

Lloyd's Register's first move into non-marine work involved the inspection of land-based cold stores in 1911. During the First World War non-marine work was undertaken for the French government and the Admiralty. The organisation started to establish many national and area committees to promote better understanding of local conditions.

Lloyd's Register retained its place as the leading classification society throughout the inter-war years, thanks in part to its significant overseas operations. It also sowed the seeds of an important future part of the organisation's work in the marine and energy sectors. During the Second World War the demands of war accelerated the pace of change in shipping and industry and Lloyd's Register helped validate many of the innovations.

Reconstruction work following the war allowed Lloyd's Register to gradually revive its activities overseas. The mid-1950s saw a long boom in shipping with many new challenges as shipping and shipbuilding influence shifted towards the east. Lloyd's Register saw remarkable growth of its non-marine operations. The organisation provided consultancy and inspection services to atomic energy plants including the UK's Calder Hall, which in 1956 became the world's first nuclear power station to generate electricity on an industrial scale.

In the decades following 1960, Lloyd's Register facilitated change as the shipping boom continued. Ships became ever larger and containerisation changed the world by revolutionising the flow of goods. The oil crisis of the early 1970s led to a deep depression in shipping, but Lloyd's Register rode the storm through its involvement with the expanding energy industry and offshore business, led by the pioneering development for the extraction of oil and gas under the North Sea.

There followed another difficult period as shipping scarcely grew in terms of tonnage until 1990. At the same time the offshore industry suffered from a collapse in oil prices. Nevertheless, Lloyd's Register strengthened its position in Asia, diversified its offshore operations around the world and consolidated its position as the leading classification society for passenger ships and liquefied natural gas (LNG) carriers. One of the most striking developments was the success of Lloyd's Register Quality Assurance (LRQA), a management systems business established in 1985.

Since the turn of the 21st century, Lloyd's Register has undergone a cultural transformation to ensure greater financial and commercial awareness. The organisation continues to grow and serve client needs, remaining competitive in a rapidly changing world.

Edward Lloyd and his Coffee House

The first recorded news of Lloyd's Coffee House in Great Tower Street dates from February 1688 when Edward Lloyd was 41 years of age. It is believed he was a Welshman and that he moved to the area in 1680. At the end of 1691, Lloyd moved to No. 16 Lombard Street, the very centre of the maritime business district.

Few London merchants had their own offices or counting-houses at this time. Instead, they transacted much of their business at the Royal Exchange, a meeting place in the city for businesses and merchants. News and information were collected in the social atmosphere of the coffee houses which became centres for specialised interests. Lloyd's was fast attracting all those concerned with shipping and he fostered this interest by holding maritime auctions and collating information. In 1696, Lloyd decided to cater for this thirst for news by publishing a paper entitled *Lloyd's News,* three times a week. The newspaper came to an abrupt end in February 1697, when Lloyd had a brush with a libel action because of the addition of some text by his printer. However he continued to supply his customers with the intelligence he gathered.

The coffee house continued to prosper and Lloyd's name was put forward for nomination as a Common Councillor* in 1710. He was unsuccessful, but the proposal alone shows that he had become a man of considerable wealth and reputation. His failure can probably be attributed to poor health.

The earliest surviving Register Book, dating from 1764, provided the template for all its successors. It contained the details of 4,118 ships, including the past and present names of the vessel, the name of the master, the number of crew, the names of the owners, the number of guns carried, when and where the ship was built and the classification given. Making amendments to current registers was known as posting (the changes in red in this photograph). This service was initially available on a weekly basis to London subscribers and later extended to subscribers purchasing two or more copies in other ports.

Common Councillor* The City of London is the oldest continuous municipal democracy in the world. It has two council bodies but at this time the Court of Common Council was the most important. Each ward in the city chooses a number of councillors to serve on this body.

Edward Lloyd's Coffee House by Derek Lucas. Very few businessmen of the 17th and 18th centuries had their own office and they would meet in the convivial atmosphere of the coffee houses to conduct their business and exchange gossip. Customers of a particular coffee house would often use it as their business address and had their post delivered there.

Early in 1713, Lloyd made a will naming his daughters, Mary, Abigail, Elinor and Handy, and third wife, Martha. On 28 January he added a codicil, assigning the lease of his coffee house to his head waiter, William Newton. Events then moved swiftly. Handy Lloyd married William Newton on 30 January, and on 15 February 1713, Edward Lloyd died. When Handy died in 1720 the Lloyd family's connection to the business ended.

A tale of two Lloyd's

Successive proprietors of the coffee house continued to specialise in providing customers with up-to-date and accurate information about shipping and the marine insurance market. In 1727, the coffee house passed into the hands of Thomas and Elizabeth Jemson. Elizabeth was the sister of Handy's second husband, William Newton.

Thomas Jemson founded *Lloyd's List* in 1734. This paper, unlike the earlier *Lloyd's News,* was at first given entirely over to shipping intelligence, taken to be a sign of the growth of the underwriting business in Lloyd's.

When the Society for the Registry of Shipping, which was to become Lloyd's Register, was founded in 1760 Samuel Saunders was the proprietor of the coffee house. On his death in 1763 it became clear that it had owed much of its good management over the past eight years to him.

From then on the reputation of the coffee house declined. To the annoyance of respectable customers, gambling, speculation and stockjobbing* escalated, leading them to procure new premises at No. 5 Pope's Head Alley in 1769. The new house was opened on 21 March in that year, as New Lloyd's Coffee House, and a week later the first edition of *New Lloyd's List* was issued. However 79 merchants, underwriters and brokers decided that the rooms were not really large enough for comfort; in 1771 each agreed to subscribe £100 to build an entirely new establishment but the project came to nothing. It was not until 1774, that the members of Lloyd's moved into their new quarters at the Royal Exchange and began to transact business solely as underwriters.

Stockjobbing* buying and selling of securities with the intent of generating quick profits.

From Lloyd's Coffee House to No. 71

The Society for the Registry of Shipping did not join the move to the new coffee house in 1769, as it had already moved in 1768 to No. 4 Sun Court, Cornhill. By 1797 the *Register Book* had 215 subscribers and the Society was run by an organising committee of 11 members. In this year the Society moved to No. 4 Castle Court, Birchin Lane. The committee updated the classification system but the changes disadvantaged ships built outside London. Protesting subscribers set up their own register called the Society of Merchants, Shipowners and Underwriters and issued the *New Register Book of Shipping* for the first time in 1799. They were based first at No. 3 St Michael's Alley, and then from 1812 at No. 5 Old Broad Street in the city.

By 1815 the two register books were falling out of favour. A joint register was needed as an impartial measure of quality. From 1820 shipowners started to press both parties to remedy the situation. Eventually an agreement was reached in 1834 with the meeting of the first Committee of Lloyd's Register of British and Foreign Shipping. The reconstituted Lloyd's Register took up residence at No. 2 White Lion Court, Cornhill.

There was some concern about whether or not the Society would survive as the number of subscribers fell and funds shrank, but by 1854 it had steadily built up its reserves to more than £20,000 (roughly £1.5 million as at 2015). Towards the end of the 19th century the ever-increasing size of Britain's merchant fleet and the demand for more rigorous standards in the construction of iron and steel steam ships meant that once again Lloyd's Register had outgrown its premises.

All of Lloyd's coffee houses, and subsequently Lloyd's Register's offices, were located within a very small area of the City of London, not far from 71 Fenchurch Street. From left clockwise; Sun Court, 5 Old Broad Street, Castle Court, Pope's Head Alley, 16 Lombard Street and St Michael's Alley, as they look today.

Collcutt's building: Art in architecture

By the end of the 19th century, Lloyd's Register needed more office space in London and took the decision to build its own premises to cater for its expanding business.

In November 1897, a Building Sub-Committee was appointed under the chairmanship of John Corry (1831-1908). James Dixon, a member of the General Committee, offered Lloyd's Register a 7,700 square-foot site fronting Fenchurch Street for £70,000. This was then an unfashionable area of mixed uses and bleak warehousing. Dixon persevered and the Committee eventually bought the site in February 1898 for £66,518.

The new Lloyd's Register building at No. 71 and the subsequent construction of Lloyd's Avenue marked a change in the fortunes of Fenchurch Street. From a grimy mercantile district, it became a prestigious institutional address.

Choosing an architect

The Building Sub-Committee next chose an architect, Thomas Edward Collcutt FRIBA, from a short list of ten. Collcutt was born in Oxford in 1840 and died in 1924. He began his architectural training as an articled pupil to RW Armstrong in London, followed by a position with Mills & Murgatroyd. For a time he worked with the great Gothic revival* architect George Edmund Street; and a fellow worker there for a time was Richard Norman Shaw, a pioneer of the Queen Anne revival* style. Street designed the new Law Courts in the Strand, one of the great architectural achievements of the Gothic revival style and his zeal and enthusiasm for architecture greatly influenced Collcutt.

In 1867, Collcutt joined the office of Philip Causton Lockwood, the borough surveyor at Brighton. He worked on the conversion of the Brighton Pavilion stables into 'The Dome'. During the 1870s, Collcutt gained international acclaim for his designs of black ebonised furniture for the firm Collinson & Lock, examples of which are held by the Victoria and Albert Museum in London.

His great career opportunity came in 1872 when, with H Woodzell, Collcutt won a competition to design the public library and museum in Blackburn. In 1877, he won his next competition to design Wakefield Town Hall. Both buildings now have listed building status. His winning design for the town hall was a full-bodied Gothic creation, obviously couched to appeal to the competition assessor, GE Street, Collcutt's old master. The building contrasts sharply with the lighter Queen Anne revival style of his later work.

The seal of Collcutt's professional recognition was first prize in the competition for the Imperial Institute in South Kensington. The building was to provide an exhibition centre for the countries of the British Empire. Constructed between 1887 and 1891, it was a considerable architectural achievement combining massive forms with a lightness of treatment and Renaissance* decoration. Sadly, only the majestic bell tower survives. The building was almost a dress rehearsal for the Lloyd's Register building, with Portland stone* on the outside and marble-lined interiors. George Frampton and Henry Pegram provided sculpture, and carpenters from Great Dunmow made the oak panelling. All these materials, craftsmen and artists would later be employed at 71 Fenchurch Street.

The Imperial Institute was established in commemoration of Queen Victoria's Golden Jubilee to represent 'the arts, manufactures and commerce' of the British Empire. Designed by Collcutt, the building was destroyed after the closure of the Institute in the mid 1950s. The Queen's Tower (seen on the right) still survives as part of the Imperial College buildings.

Gothic revival* 1800s revival of the 12th to 16th century Gothic style, characterised by pointed arches, ribbed vaults and elaborate window openings.

Queen Anne revival* a less formal style influenced by the English rural houses of the early 18th century, and using idioms from the Renaissance, Tudor and medieval styles.

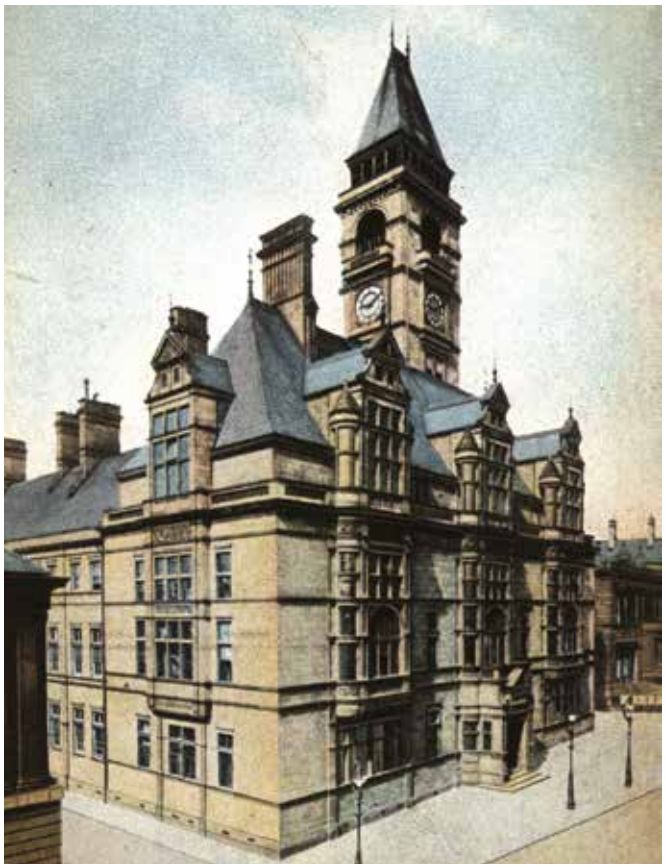
Portland stone* a pale, almost white, oolitic limestone of very good quality and capable of producing large blocks.

Renaissance* 'rebirth', a largely Italian cultural movement of the late 1300s to early 1600s, reintroducing the classical architecture of the ancient Greeks and Romans.

Thomas Edward Collcutt FRIBA
(1840–1924)

In 1889 Collcutt was awarded the Grand Prix for Architecture at the Paris International Exposition.

This portrait, by Sir Arthur Stockland Cope, ARA shows Collcutt wearing his Royal Institute of British Architects (RIBA) Gold Medal, awarded in 1902. He was President of RIBA from 1906 to 1908.



Collcutt won the competition to design Wakefield Town Hall in 1877 and the building was officially opened in 1880. He also designed the interior of which much survives, including the Council Chamber containing rich relief decorations, carved fireplaces and fine woodwork.

Art in architecture

The artists that Collcutt chose to decorate his building shared his beliefs forged in the office of the Gothic revivalist, G E Street. Art must complement architecture and be designed to respect the structure of the building.

The Art Workers' Guild was founded in 1884 to encourage the practice of art in architecture. It sought to make artists craftsmen and craftsmen artists as supposedly had been the case in the Middle Ages.

Many of the artists employed on the decoration of Collcutt's building at No. 71 were enthusiastic members of the Art Workers' Guild.

Around the end of the century, Collcutt worked extensively for the Peninsular & Oriental Steam Navigation Co. (P&O). For about 15 years from 1896, he designed public rooms on a dozen or more P&O liners. The first class music rooms, dining areas and lounges were richly designed with oak or mahogany interiors complemented with stained glass, fine plaster work and murals. Shown here, the first class music saloon of P&O's s.s. *Macedonia* which was completed in 1904 and featured murals by Gerald Moira.

Thomas Collcutt's elevational drawing of the new Lloyd's Register building exhibited at the Royal Academy Exhibition, 1900.

Collcutt designed the Wigmore Hall in London which was completed in 1901. This concert hall was built by the German piano firm Bechstein next to its showrooms on Wigmore Street. Collcutt designed it in the Renaissance style, using alabaster and marble walls, flooring and stairway. The cupola over the stage was designed by Gerald Moira and executed by Frank Lynn Jenkins. The hall was intended to be both grandly impressive but intimate enough for recitals and continues in use today.

Building the new home of Lloyd's Register

With the site and architect secured, the Building Sub-Committee pressed on with planning the new headquarters. Curiously, the Committee's brief to Collcutt was sketchy with little guidance on office needs. It appears to have been more concerned with making a fine architectural show while keeping a keen eye on finances. Collcutt was told to design a building of grandeur, worthy of the leading classification authority. Initial designs were turned down as too understated, but finally a scheme of appropriate splendour was agreed in October 1898.

Collcutt's design was for an impressive classical* stone palazzo* in the 16th century Italian manner. His specification called for first-class materials both inside and out; Portland stone and carved Hoptonwood stone* on the façades*; inside, marble floors and staircase, and oak or mahogany doors, skirting and floors. Artists and the best trade firms were to embellish the building.

The question of the main building contractor was crucial and Collcutt favoured Mowlems Ltd, who had built the Imperial Institute. The fine quality of Mowlems' stonework was much admired and they seemed ideal builders for No. 71. Happily, they also tendered the lowest figure for the work at £71,460, which included everything except light fittings and the ceiling painting in the new General Committee Room.

Work began on the site in January 1899. Inevitably, with a building of such decorative complexity, the works proceeded more slowly than anticipated and Lloyd's Register did not take possession until 16 December 1901.

The Lloyd's Register Ladybadge

The Ladybadge symbol originated in 1799. It showed a nymph standing beside an anchor with a large book bearing the address of the Society next to her.

Much of this design was retained in the badge adopted in 1834 by the reconstituted Lloyd's Register of British and Foreign Shipping. The nymph became a goddess, holding in her right hand a *caduceus,* the winged staff of Mercury, symbolising a messenger of the gods. She wore a mural crown (in the form of a wall), indicating Lloyd's Register's foundation in the City of London. By 1900, the Cornish Ladybadge, shown here, was in common use. Harry Cornish, a talented artist, was Lloyd's Register's Chief Ship Surveyor for many years. His version of the Lloyd's Register Lady was based upon Pallas Athene, the Greek goddess of wisdom, commerce and the liberal arts. Collcutt realised the significance of the female form to Lloyd's Register and used maidens to fine symbolic effect throughout the building.

Bay* division of an elevation or interior space by regular vertical features such as columns.

Classical* architecture influenced by ancient Greek or Roman forms.

Cupola* dome-shaped roof.

Façade* the front or face of a building.

Hoptonwood stone* cream or grey limestone from Derbyshire.

Loggia* covered open-sided verandah.

Palazzo* Italian classical palace.

Piano nobile* most important floor with larger rooms.

Repoussé* metal work hammered into relief from behind.

Tableau* scene depicted by a group of people.

Tourelle* weight-bearing turret projecting from a wall.

The stonework façades

The extent of Thomas Collcutt's achievement is evident from first examination of the façades. The classical style of architecture is derived from 16th century Italy and in particular from Venice. The building's corner tourelles* and cupolas* transform the façades with a flourish of originality. Reminiscent of the French Renaissance, they are a recurring theme in Collcutt's work.

The Fenchurch Street façade

The front of the building is five bays* wide. It has the classical arrangement of a basement, ground floor, first floor piano nobile* and top floors with a crowning roof storey. It is built of best Portland Whitbed stone with Hoptonwood stone for the main carved tableau* on the ground floor.

Rich wrought-iron gates guard a central arched entrance and loggia*. On each gate is a repoussé* copper shield with a Lloyd's Register lady holding a ship and a caduceus. These were originally enamelled but are now painted. The loggia stretches each side of the entrance, its vaulted ceiling stencilled with shells, seaweed and fish by Shrigley and Hunt, a firm best known for producing stained glass. The entrance doors are heavily framed Honduras mahogany with brass plates. A photograph on page 11 shows the entrance in more detail.

Collcutt's building stands solidly on the corner of Fenchurch Street and Lloyd's Avenue. The Rogers building appears just above it. Coronation House is on the left and the double height archway in Nos. 68-70 Fenchurch Street, which is now the main entrance to the complex, can be seen on the right. These buildings are described on page 27.

Above the front bays on the ground floor is a tableau by George Frampton. This celebrates the maritime industry and features classical gods, supported by maidens, and the arms of major UK ports.

The raised keystone* of the central arch has a Lloyd's Register lady and scroll with motto 'Lloyd's Registry' flanked by the arms of Glasgow and Newcastle. This group is supported either side by Arts and Crafts* maidens carrying ships and plans.

The bay to the left has a central figure representing Mercury, messenger of the gods and the god of eloquence and skill. He stands before a globe flanked by sailing ships laden with foodstuffs and supported by processions of maidens bearing gifts, continuing towards the corner with Lloyd's Avenue. The raised keystone over the window in the final bay has a relief carving of the Liver Bird, symbol of the city of Liverpool.

To the right of the central entrance there is a figure of Hermes, standing before the sun, holding a quadrant and an empty tortoise shell (which he used to make the first lyre). He was the god of travel and trade, among other associations. The figure is flanked by laden ships under sail and maidens holding goods and maritime instruments. The last bay on the right has a raised keystone with the shield of the City of London. This is supported by more heraldic shields and by maidens bearing shipbuilding tools.

Nestling in the niches formed by paired columns at each end of the tableau are bronze maidens also by Frampton. The figure on the left cradles a steamship, while the maiden on the right holds a sailing vessel. The other decorative carving to the front façade was the work of the firm of stonemasons, JE Taylerson.

The first floor has a blind balustrade* with tall sash windows between Ionic* columns. The floor above has a balustrade and the windows are set back between heavy blocked columns*. These features give this storey added weight above the dignified simplicity of the first floor.

The tourelles

Collcutt used tourelles at the Imperial Institute and other buildings. They are used here to animate the roofline. The crucial corner with Lloyd's Avenue is marked from the first floor level up by a polygonal corner tower reminiscent of a stair turret on a Loire chateau. On the second floor this tower becomes a round tourelle formed by a circle of blocked columns supporting a dome. This gives a subtle curve to the flat frieze* of the main entablature* above the first floor. Framed by the blocked columns are more of Frampton's maidens in a circular procession. They pay tribute to a Lloyd's Register lady who gazes north east along Fenchurch Street. Topping the tourelle is a copper gilt weather vane of a carrack made by Hardman & Co.

A copper gilt weather vane of a steamship crowned the second tourelle along the Lloyd's Avenue façade. This was also made by Hardman & Co. but did not survive some building alterations in 1910. A plain steel replacement based on the s.s. *Envoy* was made for the dome in 2000.

Sir George James Frampton RA
(1860-1928)

A pupil of the sculptor William Silver Frith, Frampton went on to win a gold medal at the Royal Academy Schools. His best-known work is the bronze of Peter Pan in Kensington Gardens (1912). Frampton had a long career as a memorial and figure sculptor. He had an interest in symbolism* and use of exotic colour in sculpture. In 1902, he became Master of the Art Workers' Guild. He was knighted for his work in 1908.

Arts and Crafts* late 19th/early 20th century movement in architecture and furnishing, based on the revival of traditional crafts and the use of natural materials.

Blind balustrade* one applied to the wall surface.

Blocked column* column interrupted by regular projecting blocks.

Ionic* second classical style, characterised by columns with scroll-shapes on either side at the top.

Entablature* topmost section of a classical building (essentially the beam spanning the columns), including the frieze and cornice.

Frieze* band of decoration, especially at the top of a wall.

Keystone* central locking stone of an arch.

Symbolism* artistic movement using symbols to express ideas and emotions.

The Fenchurch Street façade is richly decorated with the tableau by George Frampton; detail of the scene below shows Mercury flanked by ships and maidens. The wrought iron entrance gates are now usually kept shut as the main entrance to No. 71 is through Nos. 68-70 Fenchurch Street and the Rogers building.

The original plaster cast for the George Frampton bronze maiden who stands in a niche facing Lloyd's Avenue.

The tourelle on the corner of Fenchurch Street and Lloyd's Avenue topped by the carrack by Hardman & Co. (Birmingham). The company was renowned for its metalwork and produced many brass lecterns, screens and altar rails for Victorian cathedral restorations. It was a favourite choice of Augustus Welby Pugin, doyen of Gothic revival architects.

The Lloyd's Avenue façade
To accommodate a kink in the road and complement the grand front façade, the side of the building is a terrace of three distinct 'palaces'.

The three bays seen on first turning the corner form the first palace and repeat the Fenchurch Street treatment. Two bronze maidens holding ships stand between ground floor columns either side of the two windows. Over the first window is a tableau of maidens bearing shipbuilding tools, which includes the shields of Cardiff and Southampton. The second window has a keystone with the three castles of Newcastle, supported by maidens holding ships, plans and metal forging tools. The side entrance to the building is in the wide third bay of the first palace. The entrance has a hooded stone porch framing a Lloyd's Register lady flanked by a steamship and a sailing ship. Above, breaking partly into the first floor frieze, is a round window (pictured on page 17). Either side of the porch is a continuation of Frampton's tableau showing, on the right, three maidens carrying steam ships and to the left, three more bearing galleys.

The second and third palaces are in a baroque* rustic style; the masonry has a rough finish and heavily cut 'V' joints to give visual strength. Next, behind iron railings, is a round tower topped by a dome and the third palace, set back from the street.

Some of the decoration on this side of the building has a playful quality compared to the sombre symbolism of the Fenchurch Street façade. It betrays a lightness of touch associated with the stonemason Taylerson rather than with Frampton. Sinewy merfolk support the second floor columns. Naked sea nymphs sit demurely over the ground floor windows, next to dolphins perched on the stepped voussoirs*. The main frieze under the dome is richly supplied with sea horses and sea monsters cavorting in the waves. Further along the building on the ground floor, keystones are carved with fish entwined around tridents.

The view of the 'three palaces' on Lloyd's Avenue, with the third palace in the foreground. This is one of the photographs of the building taken in 1901 by SB Bolas & Co, notable architectural photographers.

One of Taylerson's figures, a merman, supports a second floor column on the round tower between the second and third palaces.

Art nouveau* decorative, flowing curvilinear style of the late 19th/early 20th century with natural forms, for example, plants and waves.

Astragal* narrow, mainly semi-circular section moulding or beading.

Baroque* highly ornate style of the 17th and 18th century.

Carrara marble* from Tuscany in Italy.

Doric* the first and simplest style of classical architecture and decoration.

Voussoir* wedge shaped stones forming an arch.

Inside Collcutt's palazzo

Collcutt continued the theme of a palazzo inside the building. The entrance hall, staircase and first floor landing were conceived as a single processional way to the grand rooms of the piano nobile, the first floor.

The Library

The richly decorated Library, on the corner of Fenchurch Street and Lloyd's Avenue, is one of the first rooms reached from the entrance hall. It is essentially L-shaped as the main entrance loggia of the building intrudes into the room. The window looking into the loggia has yellow stain-painted glass, designed in a 17th-century manner.

The mahogany bookcases that line the room are inlaid with rosewood and fruitwoods, with an art nouveau* flower motif. The upper bookcases are glazed while the lower doors are solid and decorated with a small astragal* moulding reminiscent of Robert Adam's work of the late 18th century. This joinery is of high quality. The lightness of handling, both in design and colour, are an example of the newly fashionable reaction against the earnest designs of the Victorian Gothic revival.

Alexander Howard supervised the woodwork and chose West African mahogany which had been seasoned for 100 years. To preserve the wood's beautiful colour and grain he resisted requests for it to be stained dark in the usual fashion. The carpenters were John Ayton and his sons, who had worked for the Great Dunmow brewers who supplied oak for the Chairman's Office.

The Library ceiling is barrel-vaulted and elaborately stencilled by Shrigley and Hunt in iron red, beige and green classical patterns. The main part of the ceiling incorporates the coats of arms of the major shipbuilding ports of the time: Belfast, Glasgow, Stockton-on-Tees, Greenock, Liverpool, Newcastle, Hartlepool, Sunderland and London. The white Carrara* marble fireplace is by Henry Pegram and has a raised keystone with a relief carving of sea horses supported by shipwrights.

A distinctive feature of the room is a pair of blue grey Doric* columns, on a podium formed by a bookcase, which support the junction of the ceiling barrel vaults. These baroque columns are of cipollino mandolato marble from the French Pyrenees.

The Library has the decoration and architectural features still preserved. The window looking into the entrance loggia is on the left. The ceiling decoration was by Shrigley and Hunt, one of many firms spawned by the Gothic revival and the Arts and Crafts movement, who produced craft decoration to clients' requirements. They generally did ecclesiastical work such as stained glass and stencilled wall decoration.

A rich mix of grey, liver red and black marble was used in the entrance hall. On the left is a bronze war memorial for employees lost in the First World War, designed by F Arnold Wright. The double doors under the staircase lead out to Lloyd's Avenue. Note the technique used to capture this image has distorted some of the straight lines.

The entrance hall
With a striking black and white marble floor, the entrance hall sets the scene for the rooms on the first floor. The hall also gave access to several offices on the ground floor and now links to the Rogers building.

The deeply coffered* ceiling with modillions* and egg and dart* moulding is by George Jackson and Co., the London plaster workers who over one hundred years earlier had been Robert Adam's plaster craftsmen.

Leading from the entrance hall was one of the two offices of the Chairman. The room has mahogany moulded dado* panelling and a coffered ceiling decorated with egg and dart moulding. The chimney piece is by Bertram Pegram. It is made of the same Hoptonwood stone used by George Frampton in his tableaux on the exterior of the building. The deep frieze is carved in relief, with Neptune accompanied by attendants, and is a sensitively rendered piece of work. The chimney piece encloses a copper fire surround framed by green 'art' tiles (as shown in detail on the back cover) and an iron grate.

Route to the Rogers building
Facing the main entrance, double mahogany doors lead into an office space from the entrance hall, seen on the right of the photograph above. Originally this was the General Office where clerks worked behind mahogany desks. Now the space is split into two floors with a mezzanine that links the old and new buildings. Restoration work in 1998 revealed the original highly ornate coffered plaster ceiling, which has been restored to its former splendour. This space, and all rooms on the ground floor, now house the Lloyd's Register Foundation archive and library.

Marble in Collcutt's palazzo
Collcutt's use of multi-coloured marble, referencing 16th century Italian baroque work, is a special feature of his architecture. The building is decorated with marble sourced from across Europe and north Africa, juxtaposed to stunning effect.

The marble in the entrance hall produces a sleek and cool interior. The Belgian black and Tuscan white chequered marble floor contrasts with a grey veined marble, grey Petitor, used for the wall linings in the entrance, staircase and first floor landing. The pillars and pilasters* in red Ogwell marble have simple dark bronze capitals and bases. The plinths, skirting, arches and door cases are elegantly picked out in black Ashburton marble. The Petitor, Ogwell and Ashburton stones came from Devon, most likely supplied by HT Jenkins and Co. of Torquay. This firm laid the black and white marble floor and the rest of the marble work was mostly by the London firm of Burke and Co.

The same marbles feature in the grand sweeping staircase and the first floor landing. The broad Sicilian marble staircase has black Ashburton handrails with gooseneck* detail and newels; balustrade and skirting of grey Petitor; and liver red Ogwell pilasters. The first floor landing marbles also include a warmer toned yellow Petitor used for the balusters and red floor tiles of Jurassic Rosso Ammonitico from Verona (as pictured on pages 18). Unlike the entrance hall where the marble provides the main decoration, on the landing and in the General Committee Room, the marble serves as a foil, framing the glorious artwork and wall and ceiling decorations.

The Lions of Genoa

A pair of speckled grey alabaster lions guard the entrance hall. These sculptures were the gift of Francisco Schiaffino, the first Lloyd's Register surveyor in Genoa, appointed in 1872.

Genoa remains to this day the most important port in Italy and the lion has long been associated with that city. These two Genoese lions are 19th century versions of a bronze group of twelve similar lions sculpted in 1651 by Matteo Bonicelli. Four of this group now guard the royal throne in the Palacio de Oriente in Madrid.

A story has it that a dissatisfied Lloyd's Register client smashed one of the lions when he threw it down the entrance steps of White Lion Court, Lloyd's Register's offices before the move to Fenchurch Street. Fortunately, Signor Schiaffino's generosity extended to a replacement lion.

Much of the marble work in the entrance hall echoes a Roman villa but the clock on the wall above the reception desk keeps us right. The elaborate Victorian hands reach across a minimalist face without bezel or numerals; so the clock stands us between the centuries. The clock is isolated on a grey Petitor wall between two contrasting bright red Ogwell pillars. This interior needs no showy frills; the marbles provide these and, in design terms, the clock says 1900.

Sir Henry Alfred Pegram RA
(1862-1937)

Educated at the Royal Academy Schools, Henry Pegram was assistant to the important sculptor Sir Hamo Thornycroft between 1887-91. Pegram designed the bronze candelabra in St Paul's Cathedral.

A Bertram Pegram
(1873-1941)

Another sculptor from the Royal Academy Schools, Bertram Pegram also worked for Thomas Collcutt at the Savoy Hotel, London. There is no evidence to show whether the two Pegram's were related.

Coffer* ornamental sunken panels in a ceiling.

Dado* lower part of a wall decorated with panelling or decorative border.

Cornice* projecting ornamental moulding, just below a ceiling or the topmost part of a classical building.

Gooseneck* handrail consisting of an up-ramp and a vertical turn. It is used at a landing or balcony to raise the rake handrail to the height of the balcony handrail.

Egg and dart* moulding in the form of eggs and arrow heads, representing life and death.

Modillion* small bracket supporting upper part of a cornice.

Pilaster* a rectangular column projecting slightly from a wall.

The staircase
The great marble open-well* staircase proceeds in a set of three flights to the first floor. The stair carpet is a 1947 replica of the original Turkey carpet specified by Collcutt and supplied by Maples & Co. At the foot of the stairs, a bronze sculpture and plaque by F Arnold Wright commemorates Lloyd's Register personnel who died in the First World War. A marble plaque by Esmond Burton, commemorating employees who died in the Second World War, is under the first-floor-landing balustrade, facing the stairwell.

Over the second flight of stairs is a round stained glass window with emblems of Great Britain: the English rose, the Scottish thistle, the Welsh leek and the Irish shamrock. This handsome jewel-like window was designed by Gerald Moira and it was probably made by James Powell & Sons. Moira was building a reputation at this time as a stained glass designer as well as a painter and muralist. He designed similar heraldic glass and painted murals for the Old Bailey in London.

At the top of the second flight of stairs is a marble bust of John Corry, Chairman of the Building Sub-Committee. Corry donated the magnificent figure of *The Spirit of Maritime Commerce* by Frank Lynn Jenkins.

The first floor landing
The relief frieze running around three sides of the landing, probably of electrotyped* copper, is also by Lynn Jenkins. This depicts scenes of the development of shipping from Viking longships to the 16th century. In between each scene is a maiden. These goddesses personify safety, navigation, registration, peace, justice, universality, shipping and treaty.

Each maiden has flowing robes highlighted with silver and is set against a silver roundel within an art nouveau frame. A single maiden is highlighted with gold. The background clouds and waves are picked out with shimmering mother of pearl and silver. Many of the maidens' head-dresses contain brooches of turquoise, coral or pearls. Their faces and hands are delicately carved in ivory.

Lynn Jenkins had already rehearsed the idea of a series of symbolic maidens. This was in the frieze of the Muse of Music he had jointly designed with Moira for the Wigmore Hall in London, a building also designed by Collcutt. There, however, funds permitted only painted relief plaster work. At Lloyd's Register, he was given the means to carry out a major programme of sculpture in noble materials in a fitting architectural context. There are few other places in Britain where the promise of Arts and Crafts sculpture has been more richly accomplished.

The Spirit of Maritime Commerce

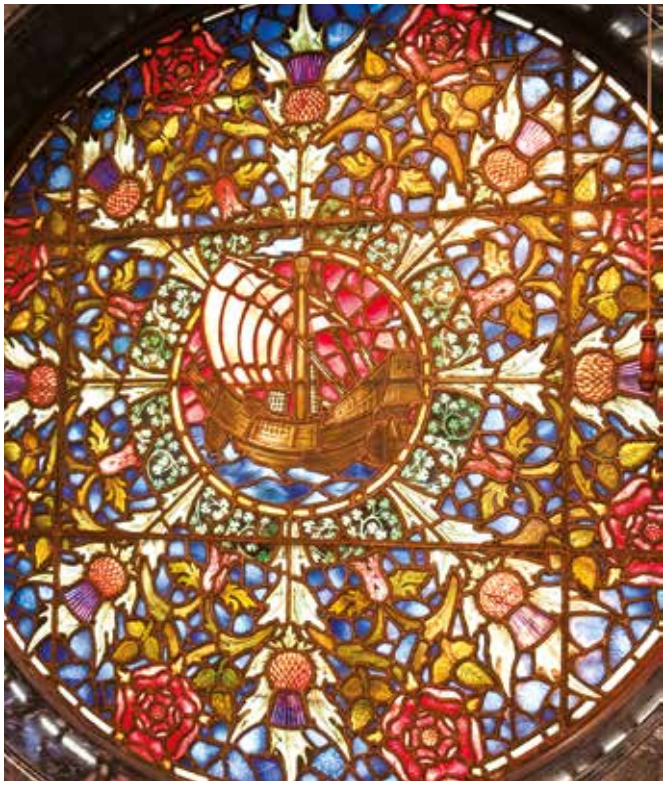
This bronze sculpture by Frank Lynn Jenkins sits on top of the newel post at the head of the stairs. It is a remarkable example of how Arts and Crafts, symbolist and art nouveau influences came together at the end of the 19th century in British sculpture. It is difficult to imagine a better representation of how Victorian entrepreneurial industry harnessed aesthetic values to glorify its zeal for trade.

The head, shoulders and arms of this maiden are crafted in smooth white Carrara marble. The sweep of her patinated* bronze wings is highlighted with mother of pearl. The flowing lines of her dress are held by a ruby glass clasp. The figure holds a caduceus, the winged staff of Mercury entwined with snakes, symbolising peace, commerce, negotiation and riches. She sits at the stern of a barge laden with goods, a lion's head at the prow, borne through the bronze surf by long haired sea nymphs. Matching this sculpture is a marble seat on the first floor landing. This has bronze bench ends swept up as swirling barge prows.

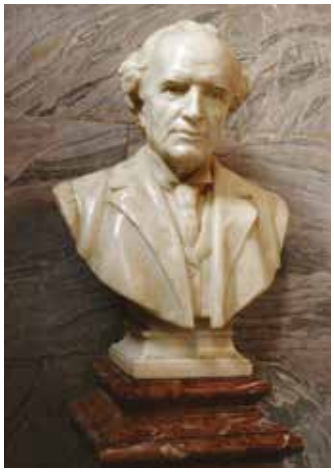
Frank Lynn Jenkins (1870-1927)

Frank Lynn Jenkins studied under the sculptor W S Frith at Lambeth School of Art, going on to the Royal Academy Schools. A member of the Art Workers' Guild, he was born in Torquay, Devon, source of the marble for the entrance hall of Collcutt's building. Indeed, it was his family's firm of HT Jenkins & Co. that laid the black and white marble floor at 25 shillings per yard. Lynn Jenkins worked on a number of commissions for Collcutt and with Gerald Moira. His work is distinguished by a luminous medieval quality, showing a Pre-Raphaelite influence. He achieved exotic effects through the use of precious stones and electro-plated metals. His compositions have a strong art nouveau feel with sinewy maidens in flowing robes.

Detail from the first floor landing frieze by Lynn Jenkins. A rich mixture of art nouveau style in bronze or electrotyped copper, silver, ivory, mother of pearl and semi-precious stones.



The heraldic stained glass window in the bull's eye on the main staircase glows richly when it catches the morning sun from Lloyd's Avenue.



Marble bust of John Corry by Frank Lynn Jenkins.

The marble-lined entrance hall and staircase lead to the grand rooms of the first floor. The plaque facing the stairs commemorates employees who died in the Second World War.

Open well* a staircase with two or more flights around an open space.

Electrotyping* a chemical method for forming metal parts that exactly reproduce a model. In art, several important 'bronze' sculptures created in the 19th century are actually electrotyped copper; sculptures were executed using electrotyping at least into the 1930s.

Patinated* the weathered or aged exposed surface of a material, often a different colour from the original.

A rich combination of Collcutt's marble architecture and the art of Gerald Moira and Frank Lynn Jenkins appears on the first floor landing. Collcutt designed the marble floor of the landing in the Italian manner. White squares are set in a black grid with ox-blood marble at the intersections and the centre of some squares. Grey veined-marble wall linings reach up to the Lynn Jenkins bronze frieze, which is capped by a dark marble cornice. The great arch over the staircase and the surrounds to the openings and doorways are in the same dark marble. In this picture a blue carpet protects the marble floor.

The original proposal for the landing decoration was for paintings showing the development of ship design. In the event, this was changed to a mixture of stained glass, paintings and bronze reliefs. Moira's tondos (circular paintings) in the blind bull's-eye openings on the landing represent 'safety'and 'watchfulness'.

Bronze bust of David Moorhouse, CBE, by Annie Field.

The quadripartite* vault ceiling of the landing was decorated by Gerald Moira with a repeated tulip motif on a pale background. The vault ribs are marked by decorative painted bands of roses in garlands of laurel and fruit. The staircase and landing has a mixture of stained glass, paintings and bronze reliefs in the bull's-eye openings and lunettes* around the walls, several incorporating an 'LR' monogram. Above the double doors to the Chairman's corridor is a blind bull's-eye opening filled with an allegorical painting by Moira of a ship representing 'safety'. Opposite, over the double mahogany doors to the General Committee Room, is a corresponding Moira painting. It depicts a symbolic figure and a lighthouse representing 'watchfulness'. Below this, in a lunette over the double doors, is a bronze relief by Lynn Jenkins. This has caravels sailing towards a rising sun; underneath is an 'LR' monogram with the year 1901 between the letters.

A bronze bust of David Moorhouse, CBE, Chairman of Lloyd's Register from 2000-2010, rests on a marble plinth by the door to the General Committee Room. The sculpture by Annie Field was commissioned in 2010 to mark the Chairman's retirement.

The Classing Room

A small lobby on the west side of the landing leads to the Classing Room. Convenient for the adjacent General Committee Room, it was originally the members' Luncheon Room. Above the door, there were clerestory* windows. The ceiling had stencil decoration by Shrigley and Hunt. Edwin J Lambert painted a series of nine panels, richly decorated in gold leaf, depicting the history of shipping to the time of Nelson. These features were partially destroyed in the late 1960s, by the installation of a false ceiling containing air conditioning, and the remains are now hidden.

The room retains the bolection* moulded wall panels and an elaborate fireplace. This has decorated copper doors concealing the grate, surrounded by beautiful William de Morgan tiles.

The Classing Room was originally the Luncheon Room. Note the clerestory windows.

Annie Field (1947-)

After thirty years as an internationally acclaimed interior designer, Annie Field turned her hand to art, studying at the Sculpture Academy in London for four years. She produces a wide range of figurative and abstract sculptures, paintings and drawings, many created with organic materials.

Edwin J Lambert (fl. 1877-1928)

A somewhat elusive figure, Edwin Lambert's work in the original Luncheon Room no longer remains. He was a landscape, architectural and animal painter based in London and exhibiting at the major galleries, including the Royal Academy, between 1881 and 1928.

Bolection* convex decorative moulding covering the joins around a panel.

Clerestory* top storey of a church or high-level windows in secular buildings.

Lunette* semi-circular aperture in a wall or concave ceiling.

Quadripartite* vault divided into four triangular compartments or cells by two pairs of diagonal ribs.

The original Classification Room, shown here in 2001 when it was used as the Chairman's office.

The first floor corridor

Double doors opposite the General Committee Room led originally to the Classification Committee Room and offices of the chief clerks and surveyors. Now these rooms are offices for the Lloyd's Register Foundation and meeting rooms.

After passing through these doors, the original Classification Committee Room is on the left of the corridor. It has walls covered in beautifully executed oak panelling with raised and fielded* panels and Ionic pilasters. There is a limed fruit wood frieze with foliated carving around the top of the room.

Originally, the room had ornate oak beams framing a Shrigley and Hunt stencilled ceiling. These were partially destroyed in the 1960s and covered with a false ceiling to house the air conditioning. The restoration works of the late 1990s found that, although the canvas panels were damaged beyond repair, the beams were in better condition. The full decoration has now been restored using a Henry Rushbury watercolour of the original room to reproduce the stencilled designs.

The oak panelling was made from 60-year old Essex oak. Collcutt had already used the carpenters of Webb and Gibbons, a firm of Great Dunmow brewers, for panelling in the Imperial Institute.

Oak was much used for brewers' barrels and Mr Gibbons had a private collection of old seasoned oak. This was used by his craftsmen for the work in Collcutt's building. Another office, originally used by the Chairman, on the third floor is also beautifully panelled in oak by the Great Dunmow carpenters in Tudor style with a strapwork* frieze.

Over the oak chimney-piece is a moulded overmantel containing a canvas by Sir Frank Brangwyn, *The Visit of Queen Elizabeth to Sir Francis Drake at Deptford, November 1580, after his circumnavigation of the world.*

Among other works by Brangwyn owned by Lloyd's Register are a large oil painting, *Blake's return after the capture of the Plate vessels 1657,* which hung in the General Committee Room for many years, and the prints for his largest commission for Lloyd's Register, ten panels and one lunette canvas depicting *Dockside Labour (1908-1914).* This celebration of the working class trades at the dockside originally decorated the third floor Committee Luncheon Room. However, they never found favour with the Committee and the canvas panels, which had been glued to the walls, were removed some years later. The exquisite sketches for *Dockside Labour* deserve to be better known as examples of Brangwyn at his best.

The Rug Porters by Brangwyn, a cartoon for one of 11 panels, painted for the Committee Luncheon Room on the third floor.

Raised and fielded* where the central flat area within panelling projects slightly beyond the framing.

Strapwork* decoration like interlaced leather straps.

The Board Room
Located on the right of the corridor, the windows of the Board Room now overlook the second atrium of the Rogers building.

The long horizontal character of this room is reminiscent of a wardroom in a capital ship. The main features of this room were originally in the third floor Smoking Room and were relocated in the late 1990s restoration. It has a fine oak parquet floor and a marble neo-classical chimney-piece. The 17th-century style plaster ceiling is richly moulded.

The room houses the original table supplied by Maples & Co. in 1901 for the first Luncheon Room. Seventy years later, Maples was able to supply matching extra leaves from the same timber still held in stock. There are several fine pictures in the room including the first ship to be classed ✠100A1, the *Lizzie Leslie,* painted by John Scott.

The iron barque *Lizzie Leslie* off Tynemouth by John Scott, 1867.

The Board Room contains ceiling mouldings and other features previously in the third floor Smoking Room.

Sir Frank Brangwyn (1867-1956)

Born in Belgium, Frank Brangwyn was christened Francois Guillaume Brangwyn. He started work as a tapestry cartoonist for William Morris but he chose to take a different path and explore the world to find his own inspiration. His affinity for travel meant he frequently choose early navigators and the romance of the sea as his subject matter. This led to many commissions from shipowners and he was a natural choice for the decoration at No. 71.

His early devotion to the swirls of art nouveau can be detected in his vigorous use of paint. Brangwyn's flamboyant style led him to be somewhat cavalier with painterly technique, and some of his work has failed to survive.

He was elected to the Royal Academy in 1919 and knighted in 1941.

John Scott (1802-1885)

John Scott lived most of his life in South Shields He spent his early career at sea, but settled ashore about 1834.

He almost certainly studied under the leading Tyneside artist of the day, John Wilson Carmichael. The Tyne provided a great variety of shipping for Scott to portray.

Many of his paintings are in the collection of the Tyne and Wear museums as well as the National Maritime Museum at Greenwich, the Mariners' Museum of Newport News, Virginia, and the Peabody Museum of Salem, Massachusetts.

The General Committee Room

The great classical saloon on the first floor is the architectural climax of Collcutt's building. The scale and quality of the sumptuous decoration celebrate its status.

Double mahogany doors lead into the room from the first floor landing. The room is double height, occupying the first and second floor space; it is four window bays long and two bays wide with a central fireplace at each end. Coupled Ionic columns mark each of the window bays and are mirrored on the wall opposite. These rise to a barrel-vaulted ceiling. The columns have shafts of red Breche Sanguine marble from Algeria. The black Belgian marble bases, with bronze ovolo* moulding rest on green Connemara marble plinths*. The capitals* are gilded and support a black pulvinated* frieze and gilded modillioned cornice. Behind the columns are pilasters of grey Petitor marble.

On the north wall the frieze is inscribed with the names of three British worthies; inventor, scientist and explorer - Watt, Newton and Cook. The rest of the frieze quotes The Book of Psalms, 107 v. 23 & 24: 'They that go down to the sea in ships, that do business in great waters; These see the works of the Lord and his wonders in the deep'.

Covering the oak floor is the original Turkey carpet, supplied by Ziegler to Collcutt's specification. The mahogany dado, inlaid with rosewood and fruit wood decoration, has an art nouveau flower motif. Above, covering the walls up to the frieze, are tapestry hangings similar to the William Morris 'Damask' pattern. The present tapestries are reproductions; the originals are in the Victoria and Albert Museum.

Capital* head of a column.

Ovolo* convex moulding forming a quarter of a circle, sometimes called a quarter round.

Plinth* projecting base for a wall or column.

Pulvinated* rounded like a cushion.

Tempera* paint made from egg whites, glue, pigments and water.

Gerald Moira's paintings

The barrel-vaulted ceiling and lunette panels of the room are filled with glowing tempera* paintings by Moira which took 17 months to complete. The Italianate architecture of the room inspired Moira to produce a composition largely drawn from Michelangelo's Sistine Chapel ceiling in the Vatican. In the late 19th century there was great interest in high Renaissance Italian art and architects freely quoted from Michelangelo's sculpture and architecture.

The four central ceiling panels depict the elements: water, fire, air and earth. Each scene holds strong echoes of the Sistine Chapel. Air, for example, has two flying figures clearly taken from Michelangelo's Creation of the Planets and The Creation of Adam. In the rectangular panels alongside the four elements are the symbols of the zodiac. These are pale golden brown to avoid detracting from the main panels.

Side lunette panels are cut into the barrel vault of the ceiling, between the coupled wall columns. The paintings on these panels are of figures illustrating celestial bodies, seasons and divisions of the day, just as Michelangelo used sibyls and prophets to surround the central theme of creation and the fall from grace. The cross-vault ceilings, over each lunette, have paintings of skies associated with these figures.

The General Committee Room has a barrel-vaulted ceiling with side and end lunette panels. This image features (from the top) the depiction of the element 'earth'; two rams for Aries; a swirling universe; and a woman symbolising the moon.

The entrance lunette
The lunette over the double doors has a semi-circular bronze relief by Frank Lynn Jenkins. Two classically-robed figures support a central clock. The maiden on the right, holding a *Register Book,* draws back her veil with her free hand and the man on the left holds a steamship and a *Rule* book. As in the frieze on the first floor landing, Lynn Jenkins used mother of pearl as a foil to the surrounding bronze, in this case as a clock facing.

The chimney pieces
The west-end has an elaborate chimney piece. A Breche Sanguine marble under mantel with raised voussoirs and keystone spans the fireplace opening. Set between the voussoirs are bronzed reliefs depicting dolphins. Above the heavily moulded mantel shelf, Ionic Breche Sanguine columns frame the chimney breast. Set between the columns is a white Carrara marble relief by Bertram Pegram of a Lloyd's Register lady with attendant naval architects, shipowners, ship builders and marine engine builders. The columns rise to the main frieze and cornice, which supports a cambered pediment* framing Moira's painting of a globe flanked by the coats of arms of England, Scotland, Ireland and Wales. Sirens playing harps support this on either side of the chimney piece.

The fireplace has a fan-shaped copper smoke hood decorated with repoussé sea horses, dolphins and tritons. Magnificent William de Morgan tiles, of Persian floral design typical of the artist's work, surround the grate. Brass studs are set at the intersections of every four tiles. The curved grate front has bronze balustrade-like metalwork extending beyond the fireplace opening. Complementing this elaborate metal grate is a beautiful pair of Italian bronze andirons* in a Renaissance style with filigree* decoration and winged putti* as finials*. The companion set of large tongs, poker and shovel are of fine quality, each with a classical tyrme* finial.

The chimney-piece on the east-end wall is similar to the west end but of a simpler design. There are sea horses between the raised voussoirs and plain green 'art' tiles. The iron grate has the Lloyd's Register monogram worked into the metal casting decoration. Above, the east-end lunette is devoted to a depiction by Moira of Aurora, the goddess of the dawn, shown on page 26. Sea horses with webbed feet and fish scales draw her in a cockleshell through the surging waves. She is a romantic maiden with flowing hair and a generously draped robe. Sea nymphs and water-babies support her in the water.

Frank Lynn Jenkins' bronze figures support the pediment clock over the inlaid mahogany doors of the General Committee Room.

The mahogany entrance doors have handles shaped as dolphins and sea sprites and escutcheons with mermaids and sprites, all in patinated bronze. The doors have the same rosewood and fruitwood inlaid decoration as the dado around the room.

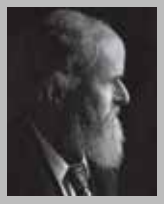
William de Morgan tiles and copper smoke hood, in the west-end fireplace.

The chimney piece on the west-end wall has a white Carrara marble relief, by Bertram Pegram. This was hidden behind a Brangywn painting for many years as the early 1900s Committee disliked the cool pallor of the marble. Above, a Moira painting is framed by the semi-circular cambered pediment.

Professor Gerald Edward Moira
(1867-1959)

Gerald Moira, born in London of Portuguese parents, trained at the Royal Academy Schools from 1888 and became well regarded as an oil and water landscape painter and a muralist. He admired the earthy colours of the paintings of Puvis de Chavannes and Paul Gauguin; he was influenced too by Michelangelo. Working for Collcutt on many P&O commissions, he produced classical, allegorical scenes to grace the richly decorated public areas of the ocean liners. As a member of the Art Workers' Guild, Moira was interested in reviving techniques such as fresco* painting, an almost forgotten Renaissance form of mural decoration.

Moira was professor of Decorative and Mural Painting at the Royal College of Art (1900-22) and principal of Edinburgh College of Art (1924-31).



William Frend de Morgan
(1839-1917)

William de Morgan was the greatest Arts and Crafts potter and ceramicist of the late 19th century. He pioneered the rediscovery of the brilliant blue and green glazes of Persian tiles and the luminous iron reds of lustre ware.

During his long association with Collcutt, he provided tile decoration for many of Collcutt's P&O liner interiors. His fame was such that he provided tiles for His Imperial Royal Highness, the Tsar of Russia's steam yacht *Livadia*.

In later years, he began writing novels which became so lucrative that in the end he abandoned art.

Andiron* metal stand on a hearth originally for logs or a spit.

Filigree* fine ornamental work.

Finial* carved ornamentation on a spire or pinnacle.

Fresco* technique of painting on damp plaster.

Pediment* classical form of corniced gable used at openings.

Putti* decorative classical figures of small children or cherubs.

Tyrme* pedestal supporting a bust of a mythical figure.

The furniture of the General Committee Room
Ever mindful of costs, the Building Sub-Committee did not ask Collcutt to design the chairs and tables. This must have particularly galled an architect who began his career as a furniture designer.

Maples & Co. was commissioned to produce the neo-Georgian mahogany furniture that is still in use today. The design is given a slight art nouveau twist by the rosewood inlay. The Chairman's heavy mahogany chair has a fine inlay depicting a Lloyd's Register lady. The splendid electroliers* both here and elsewhere in the building were designed by Collcutt.

Meeting of the General Committe in 1901 showing the room before the ceiling paintings were finished by Moira.

The furniture in the room was refurbished in 2005. Set in three crescents, the tables and chairs face the Chairman's raised dais. A full picture of the room appears inside the back cover.

Above the chimney-piece on the east-end wall, is a depiction by Moira of Aurora, the goddess of dawn.

Electrolier* a fixture usually hung from the ceiling for electric lamps.

Developments after Collcutt's building

In addition to selling the Fenchurch Street plot to Lloyd's Register, James Dixon's company, the Lloyd's Avenue Land Co., had given land to the City of London to form a new road. As Lloyd's Register completed its headquarters he then developed the plots along this road, Lloyd's Avenue.

One of these developments was Coronation House, a speculative office building on Lloyd's Avenue next to the Lloyd's Register building, completed in 1902. It was designed by Barron Emmanuel with Thomas Collcutt as consultant and built of Hamstone, a cheaper limestone than the fine Portland used at Lloyd's Register. The baroque richness of the classical treatment pays homage to Collcutt's work at 71 Fenchurch Street, but Coronation House was less sure-handed architecturally. Lloyd's Register bought the building in 1960. Having contemplated demolition, it eventually bought out the remaining leaseholders and occupied Coronation House after a refurbishment in 1969. Now only the façade remains.

By 1908, James Dixon was chairman of the General Committee. He suggested Lloyd's Register should acquire the new office development proposed at Nos. 68-70 Fenchurch Street but Lloyd's Register could not come to terms with the site owners, the Ecclesiastical Commissioners.

In 1910, the building that exists today was built to the designs of the architect Paul Hoffman; the house of the rector of St. Katherine Coleman was demolished to accommodate this building. Hoffman's Portland stone façade shows the more simplified use of classical motifs that typified the early 20th century. Lloyd's Register finally acquired the building at Nos. 68-70 in 1925. A double height archway has been created through this terrace to provide the main entrance from Fenchurch Street to the Rogers building. A photograph showing the façade of this building is on page nine.

Lloyd's Avenue, July 2010; only the façade of Coronation House remains today.

Also in 1925, Lloyd's Register purchased the church of St. Katherine Coleman. The church had been closed in 1918, one of many city churches to suffer the same fate as the local population declined. It was demolished in 1926 for redevelopment. Stanley Hinge Hamp, Collcutt's partner, proposed an imaginative scheme for the site. However, Lloyd's Register drew back from such a large commitment and sold it on a long lease to Edward Howard. He commissioned the architect Ernest G W Souster to design a speculative office building, Haddon House. Souster was not an architect of imagination and Stanley Hamp was called in to save the day with his exuberant detailing of the elevation. The design still did not relate to the Fenchurch Street buildings or the preserved churchyard as well as Hamp's original proposal, but it was at least richly decorative.

Lloyd's Register bought back the lease of Haddon House in 1956 and purchased 66 Fenchurch Street in 1959. 65A Fenchurch Street and the adjacent 1-7 Railway Place were added in 1962. Even with all this accommodation, it was still necessary to house the Industrial Services Department 10 miles away, at Norfolk House, Croydon, which was first rented in 1956.

Rationalisation of all this diverse space was needed and a scheme creating open-plan space linked by a new core of lifts and stairs was agreed. William Holford & Partners were the architects of this modernisation. Her Majesty the Queen formally re-opened the refurbished complex in June 1972.

In 1975, 66 Fenchurch Street and 1-7 Railway Place were rebuilt as Magpie House to the designs of William Holford & Partners. The T-shaped plan of the new building linked with the newly refurbished accommodation on the site.

However by the 1990s, the office accommodation was far from ideal, so once again Lloyd's Register carried out a review of its offices in London.

Stanley Hinge Hamp
(1877-1968)

Stanley Hinge Hamp was the son of Thomas Hamp, who had engaged Collcutt in the late 1880s to design a church in Alperton, London. From 1906, Stanley Hamp entered into partnership with Collcutt, although they were in practice together from at least 1904. He carried on the practice of Collcutt & Hamp for many years. The practice still continues today.

Stanley Hamp's elevational drawing of Haddon House used in the original letting brochure, which described the elevation as 'of Spanish Renaissance design, executed in red brick, with stone embellishments and red-tiled roof'.

The church of St. Katherine Coleman before it was demolished in 1926. The railings to the old church yard still remain and one gravestone, with the carving: 'Mr Joseph Wise, Obiit 18th February 1809, Æ 81'.

Right: Views across the west of the City of London. No. 71 is near the heart of the capital's financial and historical areas, with its ever-changing skyline.

The Lloyd's Register building cannot compete with the growing height of buildings in the city. In order of height here: 1) Heron Tower, 46 floors, 230 metres, currently third tallest building in London; The Shard is the tallest at 306 m; 2) The Leadenhall Building, 48 floors, 225 m; 3) Tower 42, 47 floors, 183 m, only top visible here; 4) 30 St Mary Axe - The Gherkin, 41 floors, 180 m; 5) 20 Fenchurch Street - Walkie Talkie, 34 floors, 160 m; 6) Willis Building, 28 floors, 125 m; 7) St Helen's, 23 floors, 118 m; 8) Lloyd's of London, 14 floors, 95 m, seen left and right behind Willis Building; 9) Lloyd's Register, 14 floors, 58 m.

A new building for the new millennium

In the 70 years following the completion of Collcutt's building in 1901, Lloyd's Register acquired six adjacent office blocks to accommodate its growing business. But by the early 1990s, it was clear the jumble of buildings would not suit the business world of the new millennium.

Lloyd's Register considered relocating its London office to new purpose-built offices in Hampshire but this scheme was rejected by the Secretary of State for the Environment. Instead, it was decided to redevelop the site in Fenchurch Street to provide an energy-saving, efficient, high quality working space which preserved and enhanced the Collcutt building.

An oasis within

The first step was to establish how much of the site could be redeveloped. Two of the buildings owned by Lloyd's Register were protected under planning law; Collcutt's building is a Grade II* listed building and the façade of Coronation House lies within a conservation area. Additionally, Lloyd's Register was only granted permission to demolish a rear wing of 68-70 Fenchurch Street. Two buildings, Magpie House and Haddon House, were demolished entirely together with the structure behind the façade of Coronation House. This demolition work provided the site for the new building. The retained buildings reduced the aspect and access to the site but provided a protective 'rind' to create a quiet oasis for the new building.

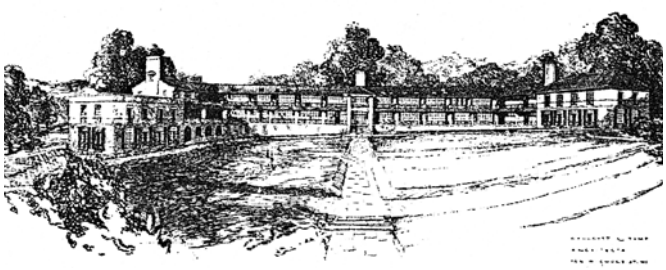
In the 1890s, Lloyd's Register had employed one of the finest architects of the period, Thomas Edward Collcutt, to create the original No. 71. The organisation continued this tradition 100 years later by commissioning the Richard Rogers Partnership (RRP), one the world's most famous and respected architectural firms.

Surrounding buildings protect the entrance courtyard from the busy London roads.

Richard Rogers (1933-)

Lord Rogers of Riverside is a senior partner at Rogers Stirk Harbour + Partners.

In 2007 Rogers was made Laureate of the Pritzker Architecture Prize - architecture's highest honour.



The proposed site for the new Lloyd's Register headquarters in Liphook, Hampshire, was the former location of the King George's Sanatorium for Sailors. Coincidentally, the sanatorium was designed by Stanley Hamp, of Collcutt & Hamp.

The architects

Richard Rogers was born in 1933 in Florence. He attended the Architectural Association in London and Yale University in the USA. His first commercial commission was to design three small houses in a north London mews during the 1960s, a joint project with another young, now notable modern architect, Norman Foster (Lord Foster of Thames Bank). After the success of this project, Rogers continued his interests in structural and technological innovation and he now occupies an influential position in contemporary architecture.

He has received many awards including the Royal Gold Medal for Architecture from the Royal Institute of British Architects (RIBA) in 1985, and the 2000 Praemium Imperiale Prize for Architecture. In 2007 Rogers was made Laureate of the Pritzker Architecture Prize - architecture's highest honour.

In 1970, Rogers teamed up with Renzo Piano to win the inter-national competition for the design of the Pompidou Centre in Paris. In their radical design, over half the site is given over to a public piazza. Some of the features of the Rogers building at 71 Fenchurch Street can be traced back to the design elements employed there. For example, keeping all the vertical structures and services on the outside of the building and leaving the floor space inside uninterrupted.

Rogers set up RRP in 1977 and in 2007 the practice changed its name to Rogers Stirk Harbour + Partners. The practice has designed a wide range of projects including the celebrated Lloyd's of London building in Lime Street completed in 1986; European Court of Human Rights building, Strasbourg, 1995; the Millennium Dome, London, 1999; the Terminal 3 at Madrid Barajas Airport, 2005; and The Leadenhall Building, London, 2013 (pictured on page 29).

The partnership has addressed growing concerns for the global environment by researching a responsible approach to energy consumption and sustainability. It aims to construct low energy buildings, regulating harmful emissions. No. 71 Fenchurch Street is a model of these principles.

In the early 1990s, RRP worked on the design of the proposed new headquarters for Lloyd's Register in Liphook, Hampshire. When Lloyd's Register decided to consider the Fenchurch Street site as an alternative, the partnership was keen to be involved and was chosen over another short listed practice. The architect leading the team responsible for the design of the new building was Graham Stirk.

Graham Stirk (1957-)

Having joined the Richard Rogers Partnership in 1983, Graham became a director in 1988. In 2007 the practice's name changed to Rogers Stirk Harbour + Partners in recognition of his contribution, along with fellow partner Ivan Harbour. For more than 30 years, Graham has been a key figure in driving the evolution of RRP's design language to create sustainable and thought-provoking architecture for the future. He has brought clear design leadership to many high-profile projects, particularly in London, where his work includes The Leadenhall Building, One Hyde Park and an extension to The British Museum.

The construction of the Rogers building seen from the west with Fenchurch Street Station on the right – July 1997 and March 1999.

A view across the roof tops of Fenchurch Street to the Rogers building. The motor rooms of the wall-climbing lifts give a distinctive shape to the top of the two front towers.

The glass and steel towers

The modern structure of glass, steel and concrete soars from the ground. Like Collcutt's original, the building is a product of its time. In typical style of the practice, it wears its components on the outside. The main lifts and stairs are on view at the front, behind full-height glazing. Inside, the building's structure of concrete and steel is also on display. The energy-saving concepts used also influenced the building's design and appearance. The result is a building of some detail and complexity without the use of ornamentation.

The architects started on the brief in 1995 and work on site began in 1996. The building was completed in 2000 and opened by Her Majesty the Queen in November of that year. Today, it still attracts much attention from visitors to London.

The building was designed to make the best use of the space available with minimum impact on Collcutt's building and the surrounding streets. From Lloyd's Avenue in the east, the building is hardly visible. Starting at the roof height of Coronation House, the building rises to two towers of 11 and 14 storeys, including basements, in the middle of the site. On the west side, the development has six storeys, helping it to blend in with the other buildings on Fenchurch Place and be a sympathetic neighbour to Fenchurch Street Station. The towers and two flanking sections are linked by office floor space and dramatic glazed atria* that bring daylight and space into the heart of the building.

The building has won, or been short listed for, a number of notable awards including: Concrete Society Certificate of Excellence 'Building Category' 2000; Aluminium Imagination Awards Commendation 2001; RIBA award Stirling shortlist 2002; World Architecture Award for 'Best Commercial Building in the World' 2002; and a Civic Trust Award 2002.

Main consultants and contractors

Architects:
Richard Rogers Partnership Ltd.

Main contractor:
Sir Robert McAlpine Ltd.

Structural engineer:
Anthony Hunt Associates Ltd.

Services consultants:
Ove Arup & Partners Ltd.

Project manager:
Insignia Richard Ellis Ltd.

Quantity surveyor, cost consultant:
AYH plc

The two front towers each have four external wall climbing lifts; seen here is a bank of three lifts on one side of a tower. The glass-walled lifts offer spectacular views across London.

The front lifts and stairs also provide wide views across London for those with no fear of heights. Concrete flooring with glass 'portholes' is used in the landings. This flooring also forms the ceiling to the landing areas, as seen here.

Atrium* (pl. atria) an inner courtyard of a building that is open to the sky or covered by a skylight, now often used as a general term to describe large glazed sections in buildings.

The reception desk for the building and visitors' seating area sit in alcoves created in the main office floor space beside the main atrium, 2009.

Entrances and landscape

The main entrance to the site is through a double height archway created through 68-70 Fenchurch Street. A courtyard links this entrance with St. Katherine's Row and the building's entrance. The courtyard was formerly the churchyard of St. Katherine Coleman, demolished in 1926. The landscaping in this irregular space is based on the design of a Bauhaus* tapestry. The design binds together the mature trees, planting, seating and water feature in a geometric composition.

You can only glimpse the site from the surrounding streets so the entrance walk was designed to provide a clear view of the building. A long flight of concrete steps, sheltered by a glass canopy, leads up to the main reception.

The entrance hall is in the central 10-storey atrium where the building's space and light make an immediate impact. The hall links the two main circulation towers and leads through a second atrium to the Collcutt building.

The difficulty of using the lofty atria soon became apparent. The original planted feature in the second atrium failed to thrive and lack of heating in the winter months resulted in a cold working environment for reception staff. Since 2013, this second atrium has been used by Lloyd's Register to host a series of special exhibitions by selected artists and groups under the name Gallery@LR. In 2009 the entrance area was refurbished to allow the reception area to be contained with lower ceiling heights within the main floor space. This space is due to be restyled in 2015 as part of a programme of works to improve the comfort and performance of the building.

Bauhaus* a German design school 1919-1933, with the basic ideology of the better integration of art and technology for the benefit of both. The school combined the role of artisan and craftsman and applied this to everything from architecture and theatre to typography.

New life for Nos. 68-70 Fenchurch Street

The organisation had hoped to redevelop Nos. 68-70 as part of the Rogers scheme but the plans were not passed by the local authority and the building was left unrenovated, suitable only for storage purposes. In 2009 the demand for office space meant it was viable to bring the building back in to office use. The internal renovation used themes to refer to the Rogers building - stainless steel handrails and neutral décor. The building is very narrow but with inventive use of space now provides 29 work stations, basement storage and a flat for business use. Nos. 68-70 face the Rogers building across the courtyard.

A long flight of steps leads to the revolving entrance door.

Argosy

In 2002, Lloyd's Register commissioned William Pye to create a new water sculpture to grace the entrance courtyard. Called *Argosy,* the sculpture is a superb complement to the Rogers building.

The water action of the sculpture adopts the coanda principle, where water clings to overhanging surfaces, moving downwards in rollwave patterning, a feature used on many of Pye's works. The shape is suggestive of a ship's hull. The mirror-polished stainless steel form rises through a floor of variegated green marble, cut and shaped to represent the sea.

The name for the sculpture has its roots in Arragosa, the English name for the port city now called Dubrovnik in Croatia. During the Middle Ages, the Italian version of the name of the city, Ragusa, came to be used as a name for the laden merchant ships that sailed from there. Later, 'argosy' came to refer to any merchant vessel or rich store.

William Pye (1938-)

Born in London in 1938, William Pye studied at Wimbledon School of Art and at the Royal College of Art. Employing water as a sculptural material is Pye's speciality. Its qualities may be used to evoke mood and interest in ways unlike any other means available to the sculptor.

Many of his works are in prominent sites, including Gatwick Airport and the Millennium Square, Bristol. His font for Salisbury Cathedral was awarded the 2009 Marsh Award for best new fountain or water feature in the last five years.

The office space is open plan, cooled by air from the chilled beams above and by fresh air pumped though the round grills on the floor. Blue carpets and red seating provide a note of colour in the offices.

Building elements

The building follows one of Rogers' signature themes, that of two elements; served, the main workspace; and servant, the cores providing the essential support. By keeping the two separate, office floor space is open and uninterrupted. These two elements are distinctly expressed in the building's architectural form, and are influenced by the work of architect Louis Kahn.

To make the best use of the irregular site, the office floorplates* are fan shaped, tapering towards the front of the building. These floorplates are formed around the atria. The atria structures are continuous ladders of steel tubes with an array of suspension rods that span between the office floorplates.

The main structure is a fair-faced* concrete frame containing white limestone. This has been left exposed inside the building to help control the office environment. The frame is stabilised by distinctive concrete 'K' bracings at the ends of the floorplates, which are also open to view.

The concrete frame eliminates the need for a suspended ceiling*. Instead, the ceiling is a series of beams spanned by vaulted soffits*. Chilled beams, the main means of environment control, are suspended under the centre of each vault and are a distinctive feature on each floor. They also carry the lighting, sprinklers and public address speakers.

Most of the office space is open plan. There are some spaces enclosed with a glazed and opaque walled partition system which allow different permutations of enclosed office space. The principal service cores are connected by simple circulation routes which are the same for each floor.

The building's design enables sub-division, horizontally and vertically. This allows Lloyd's Register to make the best possible use of space to suit its operational needs and provides self contained accommodation for business tenants.

Servant

The two front service cores are architecturally expressed as delicate towers of exposed steel frames. These are attached to the central concrete frame - the 'served' element - for lateral support.

The main passenger lifts and stairs are in these two circulation towers at the front of the building. These are fully glazed so the movement of people up and down the building adds life to the exterior. The towers give a strong dynamic identity to the development, as they are visible from the courtyard entrance and Fenchurch Street. Other service cores are at the rear of the site, which has a poor aspect, and contain toilets, stairs and lifts.

The design of the service towers reflects their function. Colour has been used to emphasise their structure and verticality as well as to identify their constituent parts. Blue is used for the main structure, yellow for stairs and red for lifts, with secondary elements in silver grey.

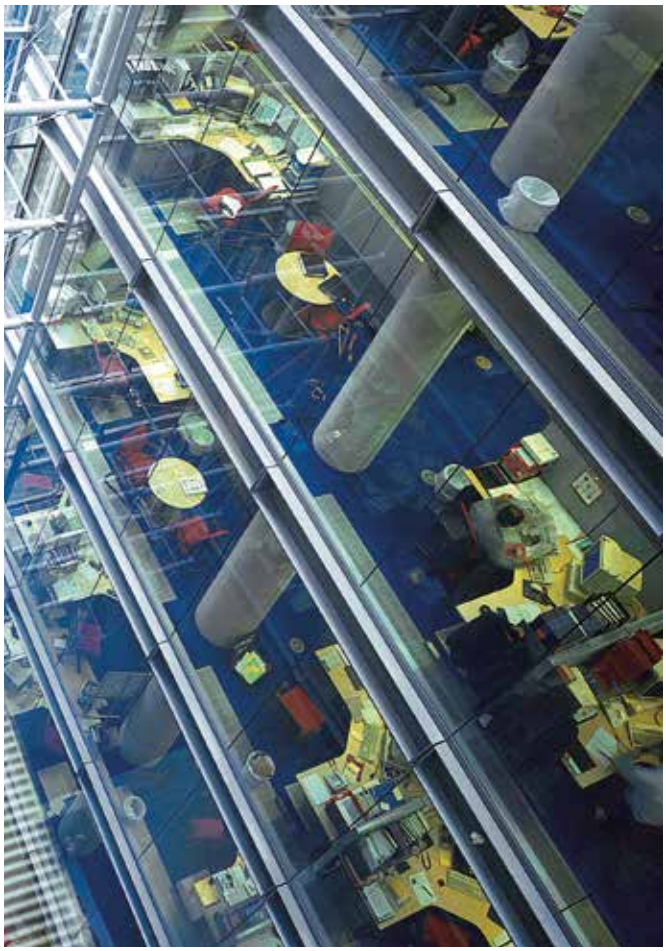
Yellow, blue and silver grey elements on the front stairs. The stair treads are pre-cast concrete attached to a steel frame. The rear stairs are also fully glazed.

Fair faced* unsurfaced exposed concrete finished to a very high standard.

Floorplates* the sections that make up the floor space.

Soffit* the underside of a beam, or lintel.

Suspended ceiling* false ceiling hung from joists often to cover up pipework and other services.



The atria bring light into the building and mean that more employees benefit from direct daylight at their desks.

Security turnstiles control movement into the front circulation towers from the entrance hall. The exposed concrete structure plays a part in the building's environmental control. The bottom or top half (as seen here) of the distinctive 'K' bracings can be seen on each floor.

Green architecture

Buildings that can reduce energy consumption without significantly reducing comfort levels have become a major priority for the architectural profession. Indeed, Rogers Stirk Harbour + Partners regard a building's energy use and environmental impact as critical concerns in the design process and 71 Fenchurch Street was designed as a low energy building.

As an 'intelligent' building, conventional design and high technology are used to control the office environment. The architects designed the building to use up to 30% less energy and emit 33% less greenhouse gas than conventionally air conditioned ones.

Ove Arup & Partners developed the design of the building's environmental control system. The main office areas use the principle of 'displacement' ventilation. This system introduces slightly cooled fresh air into the workspace through the floor. Warm air within the room rises to the ceiling where it is cooled by the chilled beams and flows back into the workspace. The ceiling vaults facilitate this air flow. As the beams are chilled by cooled water, the system is more energy efficient and carbon emissions are reduced. On cooler days, when the outside temperature is under 18C, air is brought in from the outside to cool the system so reducing energy consumption even further. No. 71 Fenchurch Street was one of the first construction projects to use these new multi-service chilled beams. The system was tested rigorously by Ove Arup and Richard Rogers and it was so innovative that it received much interest in the construction industry. Chilled beams are now used in a wide range of applications throughout the UK and mainland Europe.

The exposed concrete structure also helps to control the temperature. During the day, the building fabric absorbs heat from the offices and releases it when the building cools at night. The glazed atria act as thermal buffers between the office space and the outside environment so reducing the amount of energy used to heat or cool the building. The top vents in the atria open in hot weather.

Several design features reduce the use of artificial lighting. The long thin shape of the building offers the best orientation for natural daylight and the atria provide more light in the heart of the offices. Also, the distance of any occupant from the glass walls has been kept to a minimum. The low energy lighting switches off automatically if no movement is detected for a given period of time.

The transparency of the building becomes particularly apparent at night.

Main façades
The main façades also play a part in controlling the office environment. The building's skin includes high performance glass and external louvres.

The façades are designed to maximise daylight in the building and the views out, while limiting solar heat gains in summer and heat losses in winter. To achieve this, double glazed, low emission glass has been used and the east and west façades have external panels of louvres. The computer-controlled building management system, triggered by roof-top photocells, rotates these motorised louvres according to the angle of the sun's rays. Vivid yellow blinds in the roofs and southern walls are operated by the same system. This combination works with the cooling system to make sure any solar heat gains are kept to comfortable levels.

Typically, the louvres are angled at 45 degrees for as little as 10% of the year and are open for the remainder of the time. This maintains good daylight levels even under poor weather conditions and overcomes the constraints of a compact city site. Perforations in the louvres allow views out even when they are shut.

The building management system also operates all the office and other environmental controls including natural ventilation in the service cores and atria, chilled beam water pipes, occupant-activated lighting, a central security system and central fire panel.

The external louvres on the building's east and west façades are an important means of controlling the office environment.

Bright yellow blinds flood the atria and offices with colour when the sun activates the environmental control system.

Works to Collcutt's building

The original 71 Fenchurch Street was carefully integrated in the redevelopment. Collcutt's building was given a new lease of life, providing further office and support space for the whole complex, which should allow it to function well into this century.

Generally, the clarity of the original building plan was restored as various additions made since 1901 were demolished. A new service core was built outside the main old structure to provide modern stairs, lifts, toilets and plant rooms. A wall to the rear needed rebuilding and a series of simple 'spine' walls* faced in Portland stone were also built. These create a clean edge between the old and the new and delimit one side of the churchyard.

Open plan offices were created on the second, third and fourth floors where almost no original architectural features survive, with the exception of the former smoking room and a chairman's office on the third floor. Most of the features from the smoking room were relocated to the first floor Board Room to complement the architectural richness on this floor (see page 21). Most notably, the richly moulded 17th century-style plaster ceiling was carefully cut out, stored and reassembled. Small sections were added to stretch the moulding to fit the new ceiling.

The fifth floor was completely rebuilt, using Westmoreland slate for the roof, to provide a more sympathetic form to the roofline. This created a dramatic top-lit space that serves as the main dining facilities and kitchen for the whole complex. The dining area is enlivened by a large modern metal-work depiction, *The Lutine Bell.*

A conference suite was added in the basement. On the ground floor a gallery space was created from what was originally the General Office, linking the new and old buildings. In 2005 a mezzanine floor was added, returning this area to office space. A staircase from the mezzanine floor leads down towards a set of mahogany double doors opening into the entrance hall of Collcutt's building.

The needs of the business do not stand still and by 2006 it was recognised that a move to the campus of the University of Southampton by our Marine business would facilitate even closer co-operation with academia and industry in research and development. This was completed in 2014, as 400 employees moved into a new purpose built facility on the Boldrewood campus. Continuing the tradition of employing pioneering designers, an award-winning international practice, Grimshaw Architects, were contracted to design the new high-tech building. The result is a convivial building communicating a calm and understated nobility.

Spine wall* structural supporting wall.

The Lutine Bell

In 2000 the (UK) Staff Association (since replaced by the Staff Consultative Council) ran a competition to produce a piece of commemorative artwork for the employees of Lloyd's Register. Students of the London Guildhall University were invited to submit designs and the winning entry was by Luke Maitland.

The Lutine Bell, a large three-dimensional representation of ships at sea created in metal, hangs in the A1 Café, the employee restaurant on the top floor of Collcutt's building. The actual Lutine Bell came from HMS *Lutine,* which sank in 1799 with a large amount of bullion. The loss fell on the underwriters, members of Lloyd's of London, where the bell now hangs. The bell used to be rung once if a ship had sunk and twice for good news.

The piece has an underlying flow and energy as befits its setting. Maitland used an electric plasma cutter to burn into the metal and create the delicate swirling design.

Luke Maitland (1980-)

Luke is a versatile painter who works with an array of styles and media. In 2002 he won a competition to design a community conscious piece of art in East London. He then spent a year working as an artist in Western Australia before returning to Bath, UK. His work has been strongly influenced by the landscapes of Western Australia and his paintings of the West Country combine brilliant colour with English style and subject.

History of the site uncovered

The construction of the Rogers building provided the archaeologists with a rare opportunity to examine a large area within the eastern part of the Roman and medieval city. The Museum of London Archaeology Service (MoLAS) unearthed the first signs of occupation on this site dating from the first century. The archaeological excavations took place between December 1996 and June 1997, following the demolition of Haddon House, Magpie House and most of Coronation House.

While the major landmarks of the Roman city are well known, there were many unanswered questions relating to this corner of the city. The early settlement is thought to have been founded in the Cornhill area circa 50AD, but it was not clear how far this extended to the east. There was also very little information on the nature of the settlement. The character and date of the end of Roman occupation were also of great interest to the archaeologists. The Roman administration officially left London in 410AD. However, there is evidence that many outlying areas within the city had been abandoned before then. MoLAS hoped that the site might provide some clues. Post-excavation analysis of the findings from the site provided MoLAS with new insights into the history of the area, included in a major academic book published in 2006*.

Remains beneath former Haddon House looking south from 68-70 Fenchurch Street. The large white blocks are the foundations of Haddon House, the smaller brick piers are from St. Katherine Coleman church and the walls on a different alignment are Roman.

Museum of London Archaeology

The Museum of London Archaeology (MOLA formerly MoLAS) is an experienced and innovative archaeology and built heritage practice with 250 staff. Formerly part of the Museum of London, MOLA is now an independent charity. It has been providing professional heritage advice and services for over 40 years across the UK and internationally on schemes both large and small.

Work in the city, in particular on major sites like the one in Fenchurch Street, is of enormous importance in piecing together the history of Roman and medieval London.

This bronze figurine, depicting a seated sphinx, was possibly used as decoration on a vessel lid. The sphinx is a classical symbol of death.

**Roman and later development east of the forum and Cornhill: excavations at Lloyd's Register, 71 Fenchurch Street, City of London.* MoLAS Monograph 30 (2006) by Trevor Brigham with Robin Nielsen and Richard Bluer.

Roman occupation uncovered
The earliest signs of settlement on the site were Roman boundary or drainage ditches dating from the first century AD.

Research has confirmed that the site was occupied by successive phases of Roman buildings from the late first century. Interestingly, the alignment of the buildings was generally east-west, matching that of the basilica and forum beneath Leadenhall Market nearby rather than the line of Fenchurch Street and Aldgate High Street, which had been thought to match a Roman road alignment. Some of the later Roman buildings were large, stone-built structures with shallow basements surrounded by timber outbuildings.

One of the interesting features found early in the excavation was evidence of a small stream. This would have provided fresh water and may have been a stimulus to development. It had obviously flowed in the Roman period but was blocked up as the city developed.

Foundations and walls of buildings of the late first and early second century were found and the decoration of some of the walls was still apparent. The ragstone* walls of one large, slightly sunken room were internally coated with a wash or render of opus signinum*. Rooms added later in the second century included one whose brick-earth walls were plastered and painted with panels in five colours. Large fragments of this plaster have been pieced together by Museum of London conservators and the decoration can now be seen in more detail.

An L-shaped ragstone wall, part of another sunken room dating from the second century, was rendered on the inside with ribbon pointing. The rough faces of the stones were left exposed and thin red lines were painted onto the pointing. The overall result was a curious combination of a rustic and ashlar* effect, apparently unique as a Roman internal decoration scheme.

In the west of the site, a large and important building (possibly public) of the second century was found. Again, this was sunk below the ground level of that time. Parts were decorated with the same ribbon-pointing motif. This building may well have been destroyed by fire. Items recovered from its debris included a bronze sphinx of near-eastern origin, vessel glass from the Balkans, and fragments of a shale table. These hint not only at the high status of its occupants but also possibly their origins. In the late second century, all these structures fell out of use. The dereliction of the area reflects trends seen elsewhere on the fringes of the Roman city in the same period.

It appears the site was re-occupied during the middle of the third century. Impressions of pilae* confirmed that another structure was the sub-floor of a hypocausted* room, dating to the late third to early fourth century. The arrangement of rooms added later to the building perhaps reflected the continued presence of the watercourse. These later buildings were clearly high status residences or town houses. The presence of a contemporary timber structure to the east, possibly a warehouse, suggests a commercial basis for the wealth they manifested. Coins indicate that the buildings were probably abandoned in the later fourth century in common with much of the rest of the declining Roman city.

The latest evidence for Roman activity on the site consists of one shard of pottery in a rubbish pit dating to the fifth century. The area was covered in 'dark earth' representing a period of abandonment that lasted until the 11th century.

Detail showing the five colours used on a fragment of Roman painted wall-plaster.

Ashlar* squared blocks of stone intended to be seen as wall facing.

Hypocaust* the Roman form of central heating; air heated in nearby furnaces would pass beneath a suspended floor, and sometimes up the walls, through special hollow tiles.

Opus signinum* distinctive pink Roman concrete made with crushed bricks.

Pilae* brick stacks supporting a suspended floor, typically found in a building with underfloor heating.

Ragstone* stone commonly used in Roman buildings in London, imported from Kent.

A shallow 17th century Persian ceramic dish decorated with stylised deer and landscape in the centre, and foliate decoration around the edge. This was found in an old cesspit.

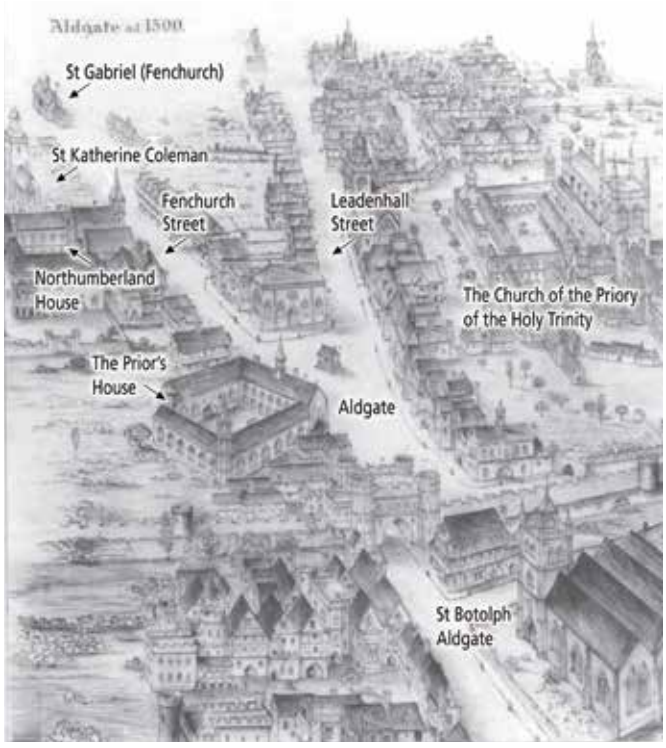
Medieval developments

Stone from the Roman buildings was 'robbed' for re-use in the early medieval period. Medieval rubbish pits and wells found in the excavation were probably associated with buildings along Fenchurch Street, where some properties dated from as early as the 11th century. However, little of the original ground levels and floor surfaces remained.

In the courtyard adjacent to 68-70 Fenchurch Street the foundations of the first 12th century church of St. Katherine Coleman were revealed, along with twelve burials. Walls and internal pier-bases from the brick built church were also found. The church was pulled down and rebuilt in 1741.

Some spectacular finds came from 16th- and 17th-century brick-lined cesspits. The backfill of one contained the earliest known example of imported late 17th-century Persian pottery.

The excavation of three medieval burials.



A pictorial map of Aldgate, circa 1500.

This medieval gaming counter found on the site is inscribed with a head.

The General Committee Room, 2010.

Fenchurch Street before Lloyd's Register

By the late 18th century, a great brooding mass of the East & West India Company warehouses occupied the Fenchurch Street frontage up to Northumberland Alley and extending back to Crutched Friars. Remains of the brick vaults of the tea and drug warehouse were found in the archaeological excavation.

Numbers 67-70 Fenchurch Street were the classic London stock brick terrace. The buildings contained a wide range of trades and businesses associated with the city and the East & West India Docks, from tea dealers to a manure and sewage company. Today, only the East India Arms public house (No. 67) survives of this terrace.

The sale of the site to Lloyd's Register by General Committee member James Dixon in 1898 was clearly something of a coup. It instantly upgraded the prestige of the neighbourhood. Dixon was later able to ask for the sum of £100,000 for a remaining smaller site. The scene was set for the establishment of Lloyd's Register in Fenchurch Street, its home for now over 114 years.

This sketch of Fenchurch Street, by Robert Blemmell Schnebbelie in 1816, shows the row of buildings which once existed where part of Lloyd's Register and the East India Arms now stand. The two posts at the far right are the entrance to Magpie Alley, now known as St. Katherine's Row, where St. Katherine Coleman church and Hambros Synagogue once stood.

No. 67 Fenchurch Street, now the East India Arms public house, dates back to the late 18th century.


SINESS · IN · GREAT
· THE · DEEP ·

Lloyd's Register

Working together for a safer world

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Bill Robinson
Dan Stevens
Adrian Wright

Editor: Kathy Davis
E lloydsreg@lr.org
Contributors:
Nigel Watson, Martin O'Rourke, Prof Gordon Walkden
Research: Barbara Jones
Designed by: Dawn Smith - Pipeline

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