

OLD LONDON BRIDGE

BY

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The demolition, early in the year 1921, of the block of buildings known as Adelaide Place, at the north east corner of the present bridge, disclosed the existence of an arch of the first stone bridge built over the Thames. The discovery has aroused great interest in archæological circles, and efforts have been made by various public bodies and institutions to preserve the relic *in situ*. But its retention would so much interfere with the plan of the new buildings that are to be erected, that only at a very large expense could the lessees of the property so modify their plans as to carry out the project. It has therefore been abandoned, as the requisite sum, stated at £11,000, could not be raised. The arch is therefore being removed stone by stone, and is to be re-erected in the grounds of the forthcoming British Empire Exhibition at Wembley.

The question was fully debated by the Common Council, and it was decided that the Bridge House Estates Committee had no power to make a contribution from the funds at its disposal. His Majesty's Office of Works, too, after examining the question, came to the conclusion that they could not advise so large an expenditure from public funds.

By the courtesy of the Architects of the new buildings, Sir John Burnet and Partners, the accompanying plan has been prepared, which shows the position of the arch in its relation to St. Magnus Church and surrounding property. By the favour of Mr. B. W. Perks, General Manager of "The Builder" newspaper, it has been possible to reproduce the sketch of the arch, showing its original dimensions and subsequent additions.

The bridge, of which this arch was the second from the northern end, was commenced in the year 1176, under the direction of Peter, Chaplain of Cole Church in the City of London, who will be referred to hereafter. An earlier bridge of wood

existed up to this time, but it is not known when the first bridge across the Thames was erected.

Dion Cassius, in recording the invasion of Britain by the Emperor Claudius I., A.D. 44, says :—" The Britons having betaken themselves to the River Thames, where it discharges itself into the sea, easily passed over it, being perfectly acquainted with its depths and shallows ; while the Romans pursuing them were thereby brought into great danger. The Gauls, however, again setting sail, and *some of them having passed over by the bridge higher up the river*, they set upon the Britons on all sides with great slaughter until, rashly pursuing those that escaped, many of them perished in the bogs and marshes."

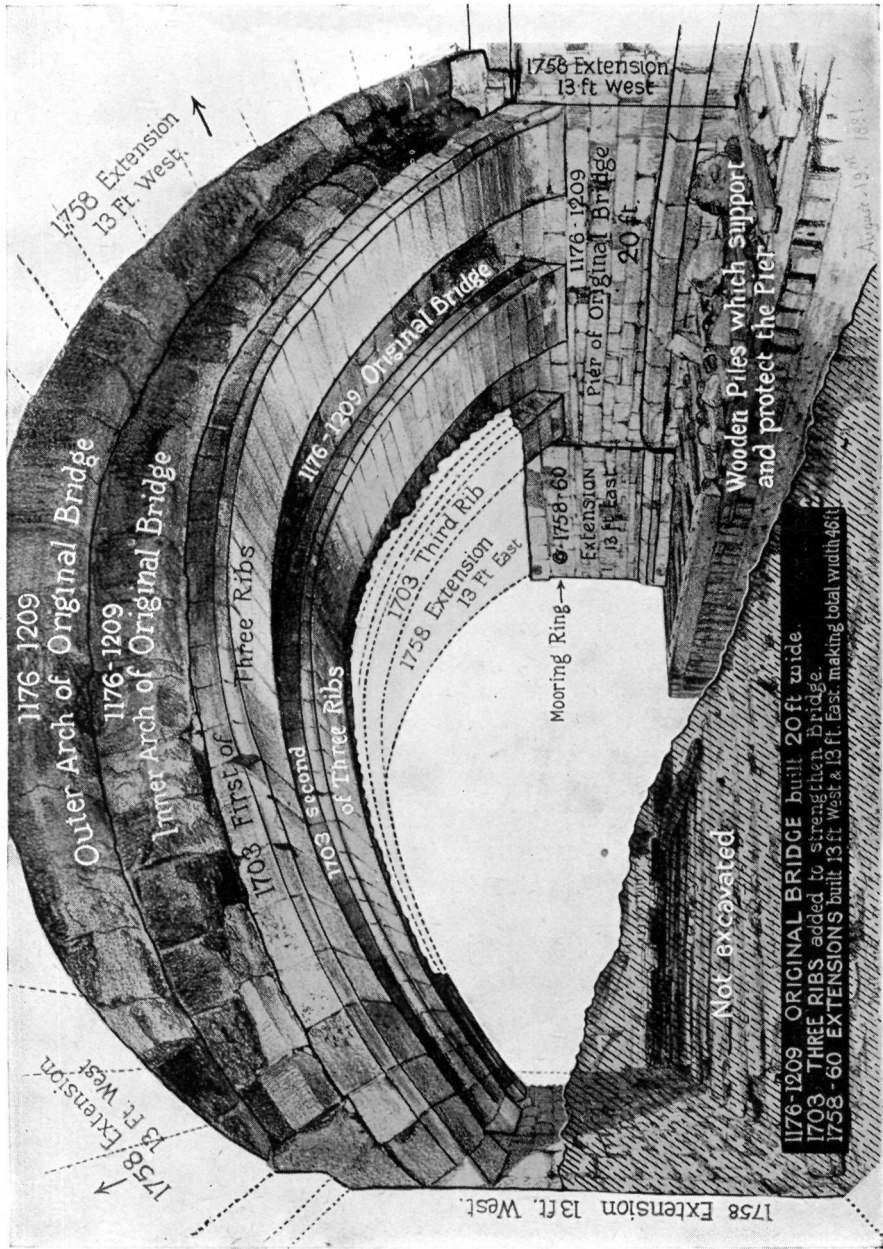
It is nearly certain that prior to the year 994 there was no barrier across the Thames : the *Saxon Chronicle*, sub anno 993, states that the Dane Olaf, Anlaf, or Unlaf, "*mid thrym et hundnigentigon scipum to Stane*" which is to say that "he sailed with ninety-three ships to Staines, which he plundered without, and thence went to Sandwich."

It is generally believed, however, that the year following Anlaf's invasion, namely 994, there was built a low wooden bridge, which crossed the Thames at St. Botolph's Wharf. William of Malmesbury, the Benedictine Monk, who lived in the reign of King Stephen, and died in 1142, says that in 994 King Sweyn of Denmark, the Invader, ran foul of it with his fleet.

The Icelander Snorro Sturlesonius, who wrote in the thirteenth century, and was assassinated in 1241, on page 90 of that rather rare work by the Rev. James Johnstone, entitled *Antiquitates Celto-Scandicæ*, Copenhagen, 1786, gives the following very interesting particulars of the Battle of Southwark, which took place in the year 1008, in the reign of Ethelred II, surnamed "the Unready."

"They"—that is the Danish forces—"first came to shore at London, where their ships were to remain, and the City was taken by the Danes. Upon the other side of the river is situate a great market called 'Southwark'"—Sudurvirke in the original—"which the Danes fortified with many defences ; producing, for

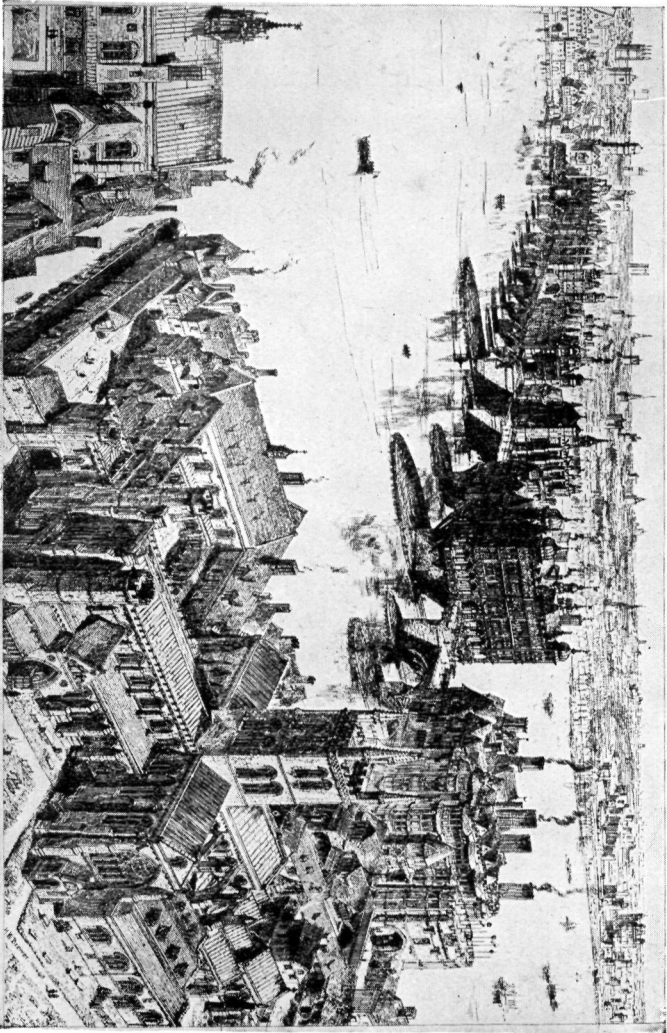
instance, a high and broad ditch, having a pile or rampart within it, formed of wood, stone, and turf, with a large garrison placed there to strengthen it. This, the King Ethelred,"—his name is Adalradr in the original—" attacked and forcibly fought against ; but by the resistance of the Danes it proved but a vain endeavour. There was, at that time, a bridge erected over the river between the City and Southwark, so wide, that if two carriages met they could pass each other. At the sides of the bridge, at those parts that looked upon the river, were erected ramparts and castles that were defended on the top by penthouse-bulwarks and sheltered turrets, covering to the breast those who were fighting in them ; the bridge itself was also sustained by piles which were fixed in the bed of the river. An attack therefore being made, the forces occupying the bridge fully defended it. King Ethelred being thereby enraged, yet anxiously desirous of finding out some means by which he might gain the bridge, at once assembled the Chiefs of the army to a conference on the best method of destroying it. Upon this, King Olaf engaged"—for he was an ally of Ethelred—" that if the Chiefs of the army would support him with their forces, he would make an attack upon it with his ships. It being ordained then in Council, that the army should be marched against the bridge, each one made himself ready for a simultaneous movement both of the ships and of the land forces. King Olaf having determined on the construction of an immense scaffold, to be formed of wooden poles and osier twigs, set about pulling down the old houses in the neighbourhood for the use of the materials. With these, *Vined*, therefore,"—as such defences were anciently termed—" he so enveloped his ships that the scaffolds extended beyond their sides, and they were so well supported as to afford not only a sufficient space for engaging sword in hand, but also a base firm enough for the play of his engines, in case they should be pressed upon from above. The Fleet, as well as the forces, being now ready, they rowed towards the bridge, the tide being adverse ; but no sooner had they reached it than they were violently assailed from above with a shower of missiles and stones, of such immensity that their



1176-1209 ORIGINAL BRIDGE built 20 ft wide.
 1703 THREE RIBS added to strengthen Bridge.
 1758-60 EXTENSIONS built 13 ft West & 13 ft East, making total width 46 ft.

ARCH OF LONDON BRIDGE.

[By kind permission of The Builder.



OLD LONDON BRIDGE

[By kind permission of *The Builder*.

helmets and shields were shattered, and the ships themselves very seriously injured. Many of them, therefore, retired. But Olaf the King and his Norsemen having rowed their ships close up to the bridge, made them fast to the piles with ropes and cables, with which they strained them, and the tide seconding their united efforts, the piles gradually gave way, and were withdrawn from under the bridge. At this time there was an immense pressure of stones and other weapons, so that the piles being removed, the whole bridge broke down and involved in its fall the ruin of many. Numbers, however, were left to seek refuge by flight; some into the City, others into Southwark. And now it was determined to attack Southwark; but the Citizens, seeing their River Thames occupied by the enemy's navies, so as to cut off all intercourse that way with their interior provinces, were seized with fear, and having surrendered the City, received Ethelred as King."

Olaf, son of Herald Grenscius, Prince of Westfold, in Norway, came to England and remained here as an ally of King Ethelred for three years, expelling the Danes from the cities, towns and fortresses, and ultimately returning home with great spoil. He was created King of Norway by the voice of the nation. He was murdered by his subjects at Stichstadt, to the north of Drontheim, in 1030, and was buried at Drontheim. Having embraced Christianity, he was honoured as a Saint with the title of Martyr. The Church of St. Olave, Southwark, is named after him.

Canute, the Dane, son of Sweyn, upon his invasion in 1016, set laboriously to work to construct a ditch to enable him to bring his ships above the bridge. In the words of the *Saxon Chronicle*: "Then came the ships to Greenwich, and within a short interval to London, where they dug a great ditch on the south side and dragged their ships to the west side of the bridge. Afterwards they trenched the city without, so that no man could go in or out, and often fought against it; but the citizens bravely withstood them." William Maitland set himself to discover proofs of Canute's trench. He tells us in his work that this artificial watercourse began at the great wet-dock at Rotherhithe

(the Howland Dock, now called the Greenland Dock), and passing through the Kent Road, continued in a crescent form to Vauxhall and fell again into the Thames at the lower end of Chelsea Reach. The proofs of this hypothesis were great quantities of fascines of hazels, willows, and brushwood, pointing northward, and fastened down by rows of stakes, which were found at the digging of Rotherhithe Dock in 1694, as well as numbers of large oaken planks and piles, also found in other parts.

Florence of Worcester, who wrote in 1101 and died in 1119, in his *Chronicon ex Chronicis* and the *Saxon Chronicle*, both mention the easy passage of Earl Godwin as he passed Southwark in the year 1052. The latter states: "And Godwin stationed himself continually before London with his fleet, until he came to Southwark, where he abode some time, until the flood came up. When he had arranged his whole expedition, then came the flood, and they soon weighed anchor and steered *through the bridge* by the south shore."

It would appear from this account that the bridge was broken at the date mentioned; it can hardly have remained in this condition since the invasion by King Sweyn in 1008, and was probably damaged by flood.

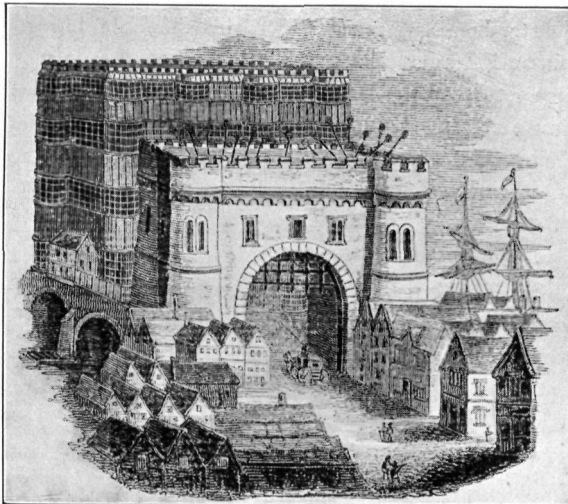
This first wooden bridge was destroyed on the 16th November, 1091, by a hurricane which caused the water in the Thames to rush along with such rapidity that the bridge was entirely swept away.

In 1097 King William Rufus imposed a heavy tax upon his subjects for the re-building of London Bridge of wood. This bridge was destroyed by fire in the year 1136, in the reign of King Stephen. It was soon after repaired, since Stephanides, whose description of London was written between 1170 and 1182, speaks of it as affording a convenient standing place to the spectators of the Citizens' Water Tournaments.

John Stow, the Antiquary, in his "Survey of London," says: "Now in the year 1163 the same bridge was not only repaired but newly made of timber as before by Peter of Cole Church, priest and chaplain."



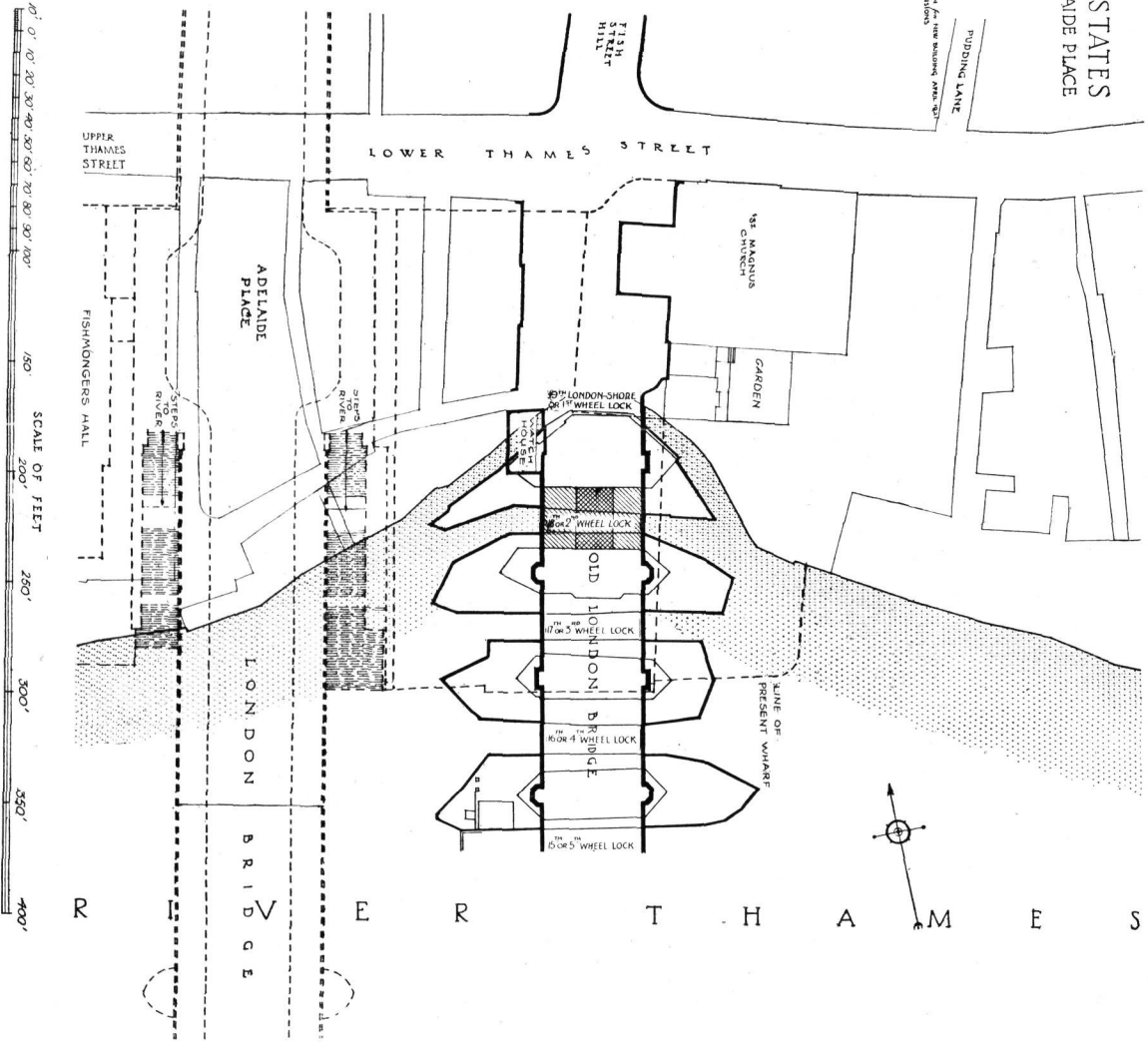
Nonsuch House, Old London Bridge.



Southwark Gate, Old London Bridge.

BRIDGE HOUSE ESTATES FRESH WHARF AND ADELAIDE PLACE

NOTES
 THE PLAN DRAWN IN SOLID BLACK LINES
 SHOWS THE PROPOSED BRIDGE HOUSE ESTATES
 THE NORTH LINE OF THE PROPOSED BRIDGE
 IS SHOWN BY DASHED LINES
 THE PROPOSED BRIDGE HOUSE ESTATES
 ARE SHOWN BY STIPPLED LINES
 THE PROPOSED BRIDGE HOUSE ESTATES
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 THE PROPOSED BRIDGE HOUSE ESTATES
 ARE SHOWN BY STIPPLED LINES



Plan of Site of Old London Bridge, Adelaide Place.

The correctness of this statement is very doubtful, inasmuch as it is certain that thirteen years later—namely, in 1176—the new bridge of timber and stone was commenced under the direction of the said Peter of Cole Church. In all probability the work done in 1163 was limited to the repair of the old bridge.

In the year 1176 the first timber and stone bridge was commenced by Peter, a priest, and Chaplain of St. Mary Cole Church, which until the Great Fire of London in 1666 stood on the north side of the Poultry, at the south end of the turning denominated Conyhoop Lane, from a Poulterer's shop having the sign of three conies hanging over it. This Chapel was dedicated to the Blessed Virgin and was famous as the place where St. Edmund and St. Thomas à Beckett were baptized. Fredericks Place, Old Jewry, now occupies the site of the old Chapel, which was destroyed in the Great Fire, and not rebuilt.

The new bridge was erected near unto the bridge of timber, but somewhat more towards the west than the old bridge, which had its northern end at Botolph's Wharf. The northern approach was by way of Fish Street Hill, which was a steep gradient, and past the Church of St. Magnus. It consisted of nineteen arches of unequal dimensions, only three being high enough for boats to pass under, together with a drawbridge at the fourteenth arch or opening. It was erected on oak and elm piles, driven close together into the bed of the river; the superstructure being of stone. Its dimensions were 926 feet long, breadth originally 20 feet, and height above low watermark 43 feet 7 inches. A Chapel was erected upon the tenth or great pier, which measured 35 feet in breadth and 115 feet from point to point, whilst the edifice itself was 60 feet in length by 20 feet in breadth, and stood over the parapet on the eastern side of the bridge, leaving a pathway on the west about a quarter of the breadth of the pier in front of the Chapel. The fane of the building itself was 40 feet in height, having a plain gable surmounted by a cross of about 6 feet more, whilst four buttresses, crowned by crocketed spires, divided the western end into three parts. The wide centre contained a rich pointed arch window of one mullion, with a quatrefoil

in the top ; and the two sides were occupied by the entrances to the Chapel from the Bridge-street, each being ascended by three steps. Such was the appearance of the west front of the Chapel on London Bridge. When this magnificent fane was transformed into a warehouse, a wooden ceiling, with stout beams crossing each other in squares, was executed, which cut off the arches where they sprang from the pillars, and divided into two parts the interior of the upper Chapel of St. Thomas. The eastern extremity of this building formed a semi-hexagon, having a smaller window in each of its divisions, with richly carved arches under them. Beneath this principal edifice was a short descending passage, having, on the left hand, a stone basin cut in a recess in the wall for containing Holy Water, and leading, through the solid masonry of the pier, into the lower Chapel of St. Thomas, which was constructed in the bridge itself. The crypt was entered both from the upper apartment and the street, as well as by a flight of stone stairs winding round a pillar, which led into it from the nearest pier ; whilst in the front of the latter entrance, the sterling formed a platform at low water, which thus rendered it accessible from the river. Peter, the architect, who died in 1205, was buried in this Chapel.

The bridge was finished in 1209, four years after the death of Peter, its architect. The King assisted this work. Cardinal Hugo, a Roman being then legate here, and Richard, Archbishop of Canterbury, gave one thousand marks towards the foundation. Stow says that the course of the river, for the time, was diverted by a trench cast for that purpose, beginning, as is supposed, in the east about Redriff (*Rotherhithe*), and ending in the west about Patricksey (*Battersea*). Doubt has been raised upon this statement, and it is conjectured that Stow was misled by the fact of Canute's trench having left certain traces of its course.

In the year 1212, on the 10th of July, at night, the borough of Southwark took fire which extended to the Bridge, and caused the death of a large number of persons, estimated at three thousand. At Christmas 1281, through a great frost and deep

snow, five arches of the bridge were carried away. In the year 1289, the bridge was so decayed that men were afraid to pass thereon, and a subsidy was granted towards the repairs, Sir John Britain being *custos* of London. In 1381, a great collection was made of all Archbishops, Bishops, and other ecclesiastical persons for the reparation of the bridge. In the same year Wat Tyler, and other rebels of Kent, entered the city by this bridge.

The bridge was doubly fortified at the south end, while at the City entrance there was a single gateway. There were numerous buildings on either side, inhabited by wealthy citizens, which were probably erected at different dates. The earliest reference to the erection of houses occurs in a letter of King John to the Mayor and citizens of London, dated the 18th of April, 1205, recommending Isenbert, Master of the Schools of Xainetes, a learned and worthy Clerk, to be architect of the bridge, and granting that the rents and profits of the several houses which the said Master of the Schools should cause to be erected upon the bridge be for ever appropriated to repair, maintain and uphold the same. It would appear, therefore, that the erection of houses on the bridge was contemplated at that early date. There is no record, however, that Isenbert actually performed the duties of architect, nor when the first houses were built, but in the Patent of relief granted by Edward I, in 1280, it is observed that "the dilapidations of the bridge may occasion not only its sudden fall, but also the destruction of the innumerable people dwelling on it." Stow assumes that there were no houses on the Bridge before the close of the 14th century, for he says:—

"In the year 1395, on St. George's Day, was a great jousting on London Bridge, betwixt David, Earl of Crawford, of Scotland, and the Lord Wells of England, in which the Lord Wells was, at the third course, borne out of the saddle: which history proveth that, at that time, the bridge being coped on either side, was not replenished with houses built thereupon, as it hath since been and now is."

It is not improbable that at the date of the tournament, which some authorities place as in the year 1390, not 1395, the bridge was only partially covered with houses.

The Tower on London Bridge, at the north end of the Drawbridge, was commenced in the year 1426 in the mayoralty of John Reynwell. This Tower was, at first, built of stone, and continued until the year 1577, when the same, being decayed, was taken down, and the heads of the traitors, which were placed on poles on the top of the Tower, removed and set on the Tower over the gate at the Southwark end of the bridge.

The gate at the south end of the bridge, with the Tower upon it, and two of the most southern arches, fell down in the year 1436. This gate, being newly built was, with seventeen houses on the bridge, burnt in the year 1471 by the mariners of Kent; the bastard Falconbridge being their captain.

Jack Cade, at the head of the rebels of Kent, passed over the bridge in the year 1450, but was overcome and put to flight by the citizens.

In the year 1481, a house called the 'Common Stage,' fell down into the Thames, whereby five men were drowned.

On the night of Thursday, 21st November, 1504, a fire commenced at the sign of the Pannier, at the northern end of the bridge, where six tenements were consumed.

A romantic story is told of an occurrence in the year 1536, when Edward Osborne, apprentice to Sir William Hewet, a Clothworker, who subsequently became Lord Mayor, jumped from Sir William's house on the bridge into the Thames and rescued his master's young daughter, who had fallen into the river. He eventually married her, and was one of the ancestors of the Duke of Leeds in a direct line.

In the year 1553, Sir Thomas Wyatt, a gentleman of Kent, fearing the introduction of the Inquisition into England during the reign of Queen Mary, placed himself at the head of an insurrection and, on the 3rd of February, arrived at Southwark with the intention of passing over the bridge into the City. But his efforts were frustrated by the measures taken by Sir Thomas White, the then Lord Mayor, for the defence of the bridge.

When, in 1577, the Tower at the north end of the drawbridge was taken down, it was replaced by a new structure called "Non-such House." It was constructed in Holland, entirely of wood, and, being brought over in pieces, was put together with wooden pegs only, not a single nail being used in the whole fabric. It is not known for what purpose it was constructed, but it is conjectured that it may have been the residence of the Lord Mayor. This building was one of the finest and most curious of any that were erected on the bridge.

About the same date a new building, the foundation stone of which was laid by Sir John Langley, the Lord Mayor, on the 28th of August, 1577, was erected a short distance north of the Southwark Gate, all the fabric above the bridge being of timber. The structure consisted of four circular turrets, connected by curtains. It was finished in September, 1579.

In the year 1582, one, Peter Morris, a Dutchman, but a free denizen, conceived the idea of supplying the City with water from the Thames by means of a Water-mill under the arches at the north end of the bridge, and lead pipes carried over the steeple of St. Magnus' Church, and so into the houses in the neighbourhood. The engine used for pumping the water was situated at the north-west corner of the bridge.

A great fire occurred on the 13th of February, 1632, commencing near St. Magnus' Church, and consuming all the buildings from the north end of the bridge to the first vacant space, and involving fortytwo houses. For some years afterwards only temporary erections were set up, but about the year 1645 the north end began to be rebuilt and was finished in 1646, timber being used for the purpose.

Of all the stirring events connected with the history of London Bridge, the entry into the City of King Charles II, on his restoration to the Throne, stands out most conspicuously. On Tuesday, the 29th of May, 1660, His Majesty, having been magnificently entertained in St. George's Fields, about three in the afternoon, arrived in Southwark, and thence proceeded over the bridge into the City, and from the bridge to Whitehall.

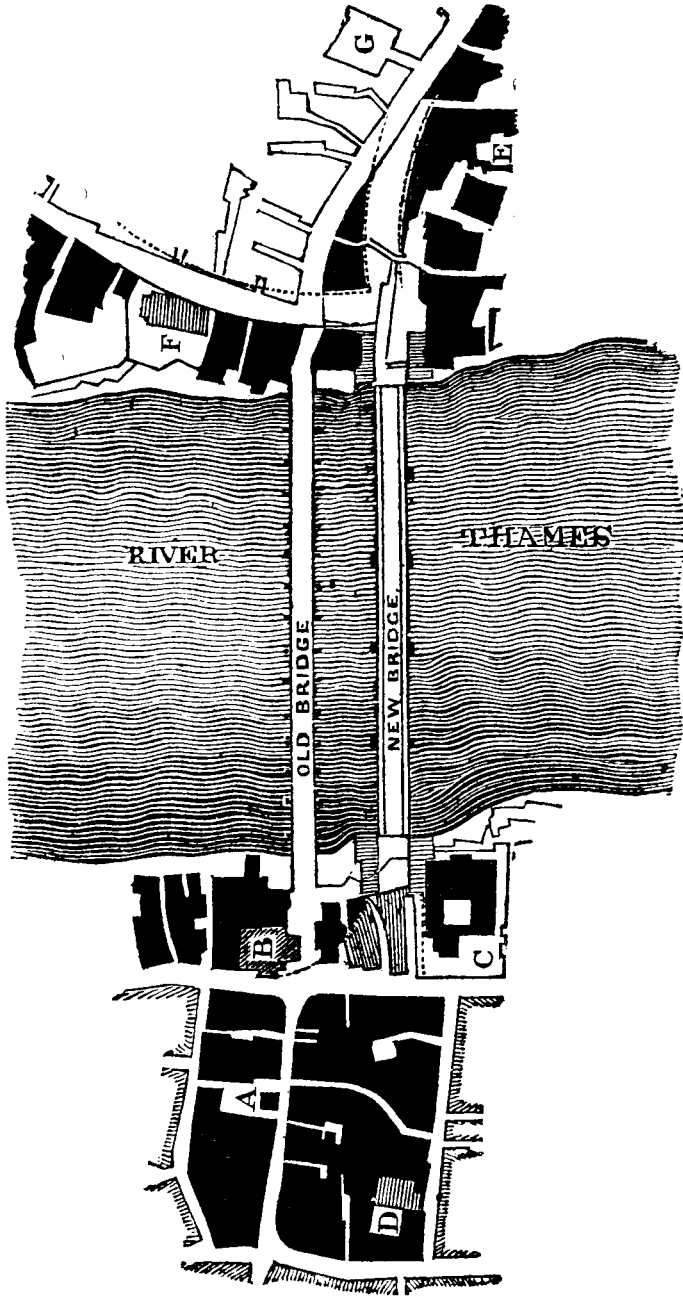
The streets were richly adorned with tapestry, and beyond Temple Bar were lined with the Trained Bands. The procession was chiefly an equestrian one, and comprised the City Sheriffs and their followers, the City Companies, all splendidly attired, and the Lord Mayor, Sir Thomas Allen, who carried the Sword of London immediately before the King.

The Great Fire, which occurred between the night of Saturday and the morning of Sunday, the 2nd of September, 1666, caused serious damage to the bridge. It commenced in Pudding Lane, the site being marked by "The Monument," and extended to the bridge, consuming St. Magnus' Church at the bridge foot and a large number of buildings on the bridge, as well as the Waterworks at the north end. The buildings saved included the Chapel and a few edifices standing at the south end, of the time of King John. The bridge itself was damaged. In five years the repairs at the north end were completely finished, and new houses erected four stories high, with a street of 20 feet in breadth between them.

In the year 1703 the Arch or Mill Lock (recently discovered), was strengthened by the addition of three ribs of Portland stone. The middle rib bears the date 17W03.

Another Fire broke out on the 8th of September, 1725, in Tooley Street, at the south end of the bridge, and burnt on both sides of the way for four or five hours. About sixty houses were consumed, some upon the first and second arches of the bridge. The old Bridge Gate was so damaged that in 1726 it was taken down and rebuilt, being finished in the year 1728.

In the year 1756 an Act was passed empowering the Corporation of London to improve and widen the passage over the bridge, by removing the houses and other obstructions thereon. The passage for carriages, etc., was to be 31 feet, and for each of the footways 7 feet. By an Act passed in 1757 a grant of £15,000 was made by Parliament towards the work, which cost £100,000. All the buildings were removed; the great middle pier was cleared away, and the two adjoining arches replaced by a central arch designed by Sir Robert Taylor in connection with G. Dance,



Plan of London Bridge.

the elder. A temporary bridge of timber was constructed on the western side of the stone one, to accommodate the traffic during the repair and widening of the old bridge. This temporary bridge was destroyed by fire, the origin of which was never discovered, but was supposed to have been caused by incendiaries, on the 11th of April, 1758. A new temporary bridge was immediately commenced, and was re-opened for foot passengers on the 19th of April. The whole of the new structure was ready for carriages on Wednesday, the 18th of October, 1758. The new centre arch measured 70 feet span by 48 feet wide, and the rise 23 feet ; the wooden drawbridge was removed and a new arch erected in place of it. The breadth of the bridge was increased by the addition of 13 feet on each side, and by the year 1762 all the buildings had been removed and the work completed.

About the year 1800, in consequence of the difficulties of navigation caused by the old bridge, active exertions were commenced for the erection of a new bridge. The question was considered by Parliament and other public bodies, and various schemes and plans were submitted. Eventually it was decided to construct a new bridge under the authority of an Act of Parliament, the 4th of George IV., chapter 50, dated the 4th of July, 1823, which conferred extensive powers on the City Corporation. The old bridge was to be taken down, and a new one constructed of granite, either on the existing site or within 180 feet westward, according to the designs of John Rennie, Esq. The proposed form of the bridge was a very flat segment, the rise not being more than 7 feet, and to consist of 5 elliptical arches, having plain rectangular buttresses, standing upon plinths and cutwaters, with two straight flights of stairs, 22 feet wide, at each end. The pier foundations are of piles, chiefly beech, about 4 feet apart, having two rows of sills, each about a foot square, and filled in with large blocks of stone, upon which is laid a 6-inch beech planking, bearing the first course of masonry. The length of the bridge, including the abutments, is 928 feet ; width from outside to outside of the parapet, 56 feet ; width of

the carriage way, 36 feet, and of each footpath, 9 feet. The total height of the bridge from low water, 55 feet.

The first stone was laid on the 15th of June, 1825, by the Lord Mayor, John Garratt, Esq., in presence of a large company, including the Duke of York.

The financial means by which the original wooden bridge and the first stone bridge were erected appear to have been partly by voluntary contributions and partly by levies on property, including dues on coal imported in to the City. The King seems to have exercised jurisdiction, for, in the year 1491, it is stated that officers were anciently appointed by the King's Writ or Patent. The principal of these officers were two Bridge Masters, having certain fees and profits, yearly elected or continued by the Livery at the Common Hall, held upon Midsummer Day after the Sheriffs and Chamberlain. On the 15th of April, 1643, this was repeated, and the whole motion has since remained in the Livery.

The management of the bridges is now exercised by the Corporation of London by the Bridge House Estates Committee. The funds at the disposal of the Committee are devoted exclusively to the establishment and maintenance of bridges within the City.