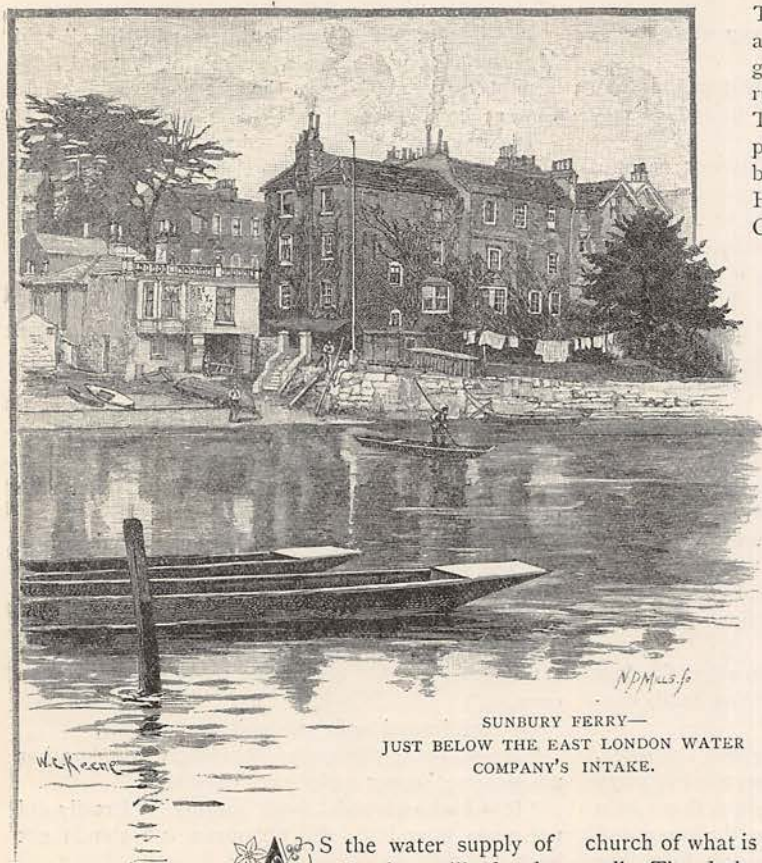


## LONDON'S DRINKING WATER.



SUNBURY FERRY—  
JUST BELOW THE EAST LONDON WATER  
COMPANY'S INTAKE.

There was also Langbourne Water, a great stream breaking out of the ground in Fenchurch Street, and running down Lombard Street to the Thames." In addition to these, pools or ponds were used, there being one at Smithfield called the Horse Pool, and another near St. Giles', Cripplegate; and another in the east of Islington known by the singular name of Dame-Annies-th'-Clear. Close to this was Perilous Pool, so styled because so many youths had lost their lives in it. In more recent times it was used for the Peerless Pool Baths. The pond at Smithfield was filled up after the great fire, because it was nothing more nor less than an open cesspool. The Cripplegate pond was done away with in 1544, because Anne of Lodbury, wife of a citizen of repute, was drowned therein.

The citizens were thus well off for pure water, and, in addition to those already mentioned, there were several public wells, of which the most celebrated were Clement's Well, near Clement's Inn, and Clerk's Well, near the

AS the water supply of London will shortly attract considerable attention in many directions, it may not prove uninteresting to our readers to know something of its general history, without diving into the bewildering and formidable array of statistics connected therewith. In the time of King Henry II., we learn from Fitzstephens, secretary to Thomas à Becket, that there were "round the city and towards the north, as is certain, six excellent springs at a small distance, whose waters are sweet, salubrious, and clear,

' Whose runnels murmur through the shining stones.'

Among these, Holywell and Clerkenwell may be esteemed the principal, being much the best frequented." These wells lasted until the early days of the Tudors, when the famous old chronicler Stowe, writing in the days of Elizabeth, tells us that "anciently, until the conduit's time, the city of London was watered (besides the famous river Thames in the south part) with the river of Wells, as it was then called" (probably what was afterwards the Fleet River, degenerating into the Fleet Ditch), "in the west with a water called Wallbrook, running through the midst of the city, severing the heart thereof."

church of what is now known as the parish of Clerkenwell. The clerks of the City parishes of old time were accustomed "to assemble at this well to play some large history of Scripture": hence its name. Another well, the Skinners', had a piece, lasting for eight days, played around it in 1409 by clerks; it lasted so long, we are told, because "it was of matter from the creation of the world." As well as these public wells, there were a great many belonging to private individuals. After a time "the river of Wells, the running water of Wallbrook, the Bournes, etc., having been destroyed by the encroachments of buildings and the rising of ground as the number of citizens increased," the City was forced to go some distance to obtain a water supply. The water was conveyed through pipes, some of wood, but more often of lead, to what were called conduits, now known as fountains. Gilbert Sandford, at the urgent request of Henry III., granted permission to the citizens to take water from the Tybourne, which was conveyed through leaden pipes for the supply of the great conduit in West Cheap, and this was opened in 1285. The Tybourne was a stream, or rivulet, which took its rise in what was called Conduit Fields, near where the Swiss Cottage now stands. It flowed through what is now Regent's Park, Marylebone Road, Marylebone Lane, Berkeley Square, and the Green Park, to where Buckingham



Palace stands; there it divided, one branch flowing into the now ornamental waters in St. James's Park, the other emptying itself into the Thames, near Westminster Abbey. What was known as the Great Conduit, into which the water of the Tybourne was led, was a large leaden cistern, enclosed within a strong castellated wall. This erection was the first of its kind in London.

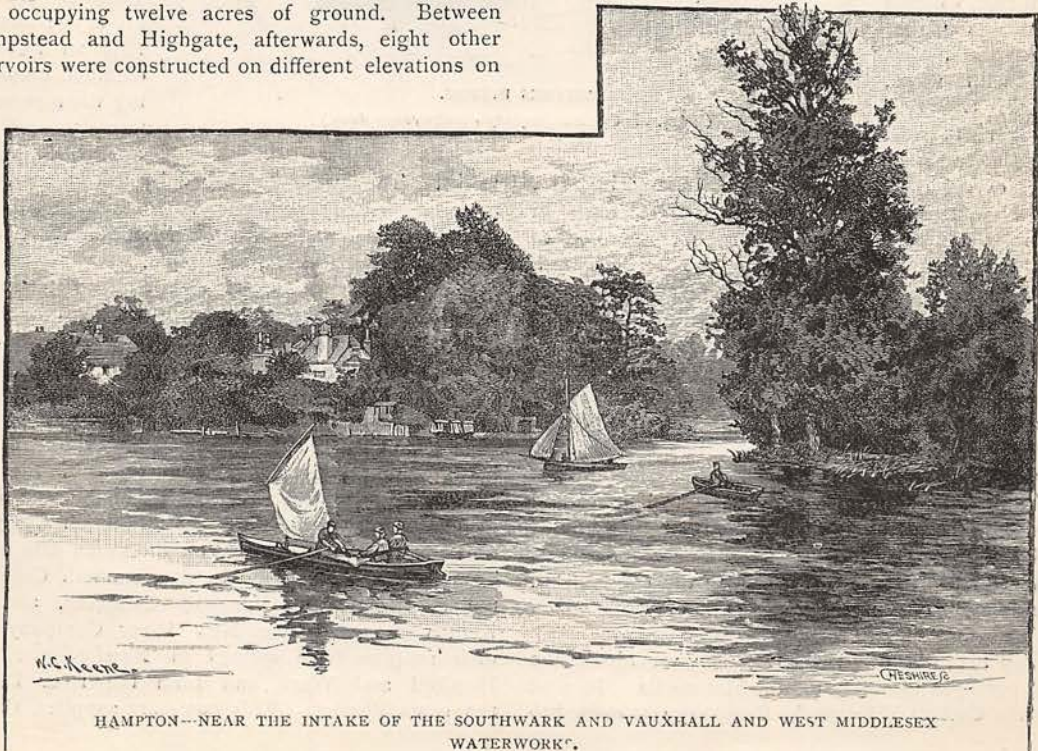
Those who cared to fetch water from the Thames could obtain a good supply. The proprietors of the houses in the lanes which led to the river, and those having riparian rights, levied toll upon those who passed over what they considered their ground to get water. In the reign of Henry III. this unauthorised tax was declared illegal.

Early in the fifteenth century the inhabitants found they needed their supply of water increased, and additional water-works were provided. The Little Conduit was opened in West Cheap in 1442; conduits were constructed in Aldermanbury and Fleet Street in 1471, also at Holborn Cross in 1498, at Stock's Market in 1500, at Bishopsgate in 1513, at Aldgate in 1535, at Lothbury in 1547, and in 1577 a conduit was erected for the public benefit by William Lamb, commemorated by the name of a street—Lamb's Conduit Street. There were also several other conduits besides these erected. An Act was passed in 1544, empowering the City to convey water from Hampstead Heath, "Maribone," Hackney, and Muswell Hill, but the powers were not utilised for nearly fifty years. In 1589—90, when Sir John Hart was Lord Mayor, four reservoirs were formed upon the declivity between Hampstead Heath and Pound Street, and another in the Vale of Health, the whole communicating one with another, and occupying twelve acres of ground. Between Hampstead and Highgate, afterwards, eight other reservoirs were constructed on different elevations on

the slope leading from Caen to Kentish Town. These, too, were in communication, and occupied twenty acres. These works were conveyed to private individuals by the Corporation in 1592, and the works were styled the "Hampstead Water Works." An important and interesting clause is to be found in an Act of 1694, stating that "All the rents and profits arising by any aqueducts and the rights of bringing and conveying water, which do or shall belong to the mayor and commonalty and citizens, are to be appropriated towards the payment of said interest money for the relief of orphans and the creditors of the City of London."

During the first quarter of the fifteenth century the lift pump—then a new invention—was introduced into London. Every parish had at least one pump, erected at the parishioners' cost, for public use, to give a supply of water from surface wells. It is not so very long since these pumps have been done away with, their removal being necessitated by their pollution by sewage filtration, which rendered them quite poisonous.

The reign of Queen Elizabeth saw the erection of a water-wheel in one of the arches of London Bridge, which was moved by the tide, and worked a number of force-pumps. On September 18, 1562, the wheel was put in motion, and great was the delight and astonishment of the City fathers at seeing the water squirted over the steeple of St. Magnus' Church. Peter Morrice, a Dutchman, who erected the wheel, was granted by the City fathers a lease of the arch and of the Thames water, together with the ground on



HAMPTON--NEAR THE INTAKE OF THE SOUTHWARK AND VAUXHALL AND WEST MIDDLESEX WATERWORKS.



which the force-pumps stood, for five hundred years, at the annual rental of ten shillings. His heirs and assigns were included in the grant. Two years afterwards the lease of another arch for five hundred years was granted to Morrice, at an annual rental of thirty shillings. When he sought other arches, however, objections were raised that the traffic of the river would be destroyed, so he had to bide content with the two. Morrice was the first to convey water raised by his pumps into the houses of those who were willing to pay for it. Morrice sold his rights to one Richard Soane for £38,000. Soane applied for another arch when the New River scheme was started, and obtained it, paying an annual rent of twenty shillings, and a yearly fine of £300 for as much of the period of five hundred years as remained. He afterwards formed the London Bridge Waterworks Company, with a capital of three hundred shares of £500 each. The shares being in great request, Soane sold out, and realised a profit of £150,000. This company obtained another arch of the bridge on the south side, where a wheel was placed to supply Southwark with water, and also two more on the north side. The latter were

taken over by the New River Company in 1822. The New River Company came into existence in the reign of James I., and it was empowered to supply water to London north of the Thames by a cutting from springs in Hertfordshire and the upper reaches of the river Lea. The Corporation transferred their rights to Sir Hugh Myddleton, to whom a charter was granted in 1629. He found that the expenditure incurred grew beyond his means, which was caused by the opposition from the landowners. He therefore appealed to the King, who relieved him by advancing one-half of the capital in consideration of half profits for himself and his heirs. The capital consisted of seventy-two shares, thirty-six being known as King's shares and thirty-six as Adventurers' shares. Charles I. transferred his shares to the company in consideration of an annual payment of £500, which has been continued to this day.

Until 1723 the New River Company was almost the only purveyor of water to the Metropolis. In that year the Chelsea Waterworks Company was started to

supply water to Westminster and the neighbourhood. They drew their water from the Thames near Chelsea Hospital, and they had reservoirs in the Green Park and Hyde Park. The Serpentine also they used as a reservoir, and in 1829, when filter-beds began to be used, the filtered water was stored in their reservoirs in the Green Park.

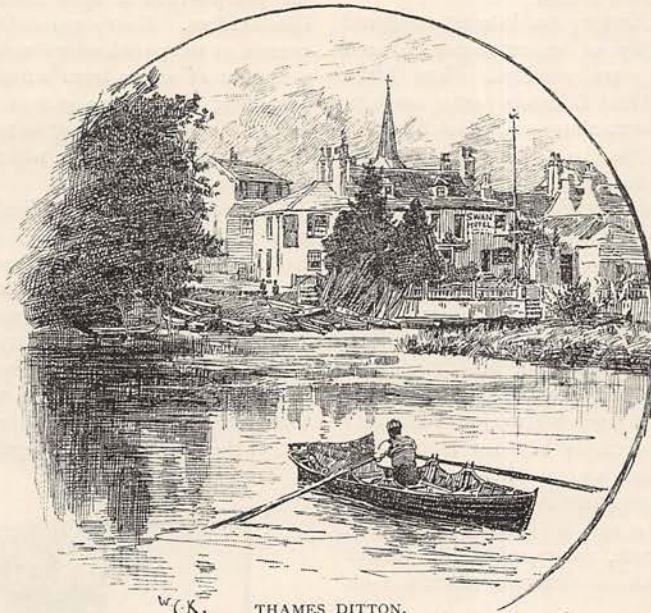
In 1785 the Lambeth Waterworks Company began to supply the parish of St. Mary's, Lambeth, and the adjacent districts; and as London continued to grow, the East London Waterworks was started, and the West Middlesex Water Company, the Grand Junction Company, the Kent Water Company, and the Southwark and Vauxhall Company: the history of the

latter being somewhat peculiar. In 1771 an association was formed for providing part of Southwark with water from a pond at St. Mary Ovarie. This property was acquired from Mr. Edward Vaughan in 1820, and in 1823 he agreed with the New River Company to purchase that part of the London Bridge Works which supplied the southern portion of the Thames. He died in 1832; and in 1834 an Act was obtained empowering the representatives to sell the Southwark Water-

works. They were purchased by a company, and, after long rivalry with the Vauxhall Waterworks—which had been styled the South London Waterworks—the two companies amalgamated.

Such has been the growth of London's water supply, and quite in a haphazard sort of way. The inhabitants are entirely at the mercy of trading companies. A movement now coming vigorously to the fore again is to place this first necessary of life in the hands of the representatives of the ratepayers.

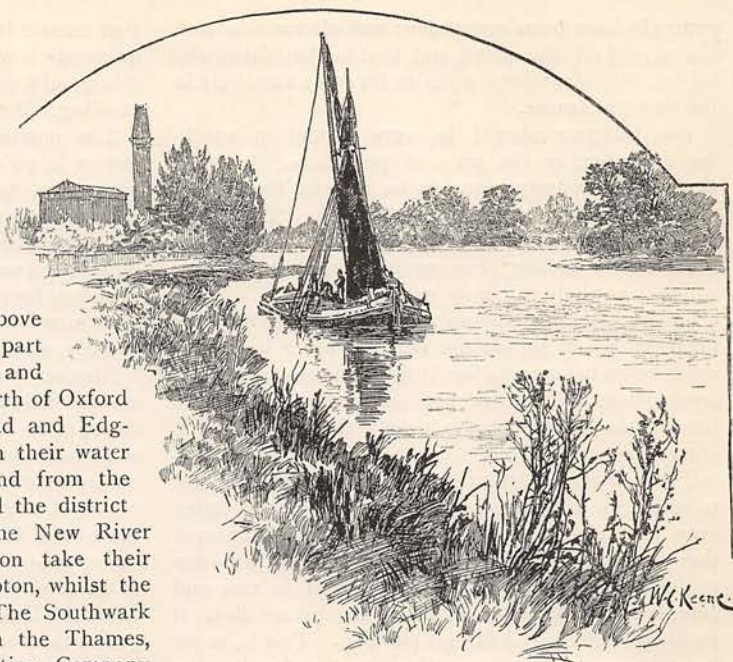
The existing companies providing London with its water supply are eight in number—viz., the New River Company, the Chelsea Company, the West Middlesex Company, the Grand Junction Company, the East London Company on the north side of the Thames; on the south side, the Lambeth Company, the Southwark and Vauxhall Company, and the Kent Company. The New River Company take their supplies from springs in Hertfordshire, near Hertford and Ware, and from the river Lea in the same district. This company supplies Central



W. C. THAMES DITTON.  
(Where the Chelsea Company's water comes from.)



London. Its district is bounded by Charing Cross, the Haymarket, Tottenham Court Road, and Hampstead Road, on the west, by the Thames on the south, and the Tower and Stamford Hill on the east. The Chelsea Company take their water from the Thames at Ditton, and they supply Chelsea, Knightsbridge, Pimlico, Belgravia, and some parts of Westminster. The West Middlesex take their water from the Thames above Hampton, and this company supplies part of Fulham, Hammersmith, Kensington, and Brompton, and also a large territory north of Oxford Street, between Tottenham Court Road and Edgware Road. The East London obtain their water from the Lea, near Walthamstow, and from the Thames at Sunbury. They supply all the district north of the Thames and east of the New River Company's line. The Grand Junction take their water from the Thames, above Hampton, whilst the Lambeth take theirs from Molesey. The Southwark and Vauxhall also obtain theirs from the Thames, above Hampton. The Grand Junction Company supply a very irregularly shaped district, including portions of the parish of St. George, north of Piccadilly, parts of Marylebone, most of Paddington, and a small portion of Westminster. The Lambeth Company supply a district reaching from the Thames on the north to Croydon on the south. The Southwark and Vauxhall Company supply the borough of Southwark and as far as Rotherhithe on the east side of the Lambeth Company; and Clapham, Battersea, and parts of Lambeth on the west side of the Lambeth Company. The Kent Company obtain their water from wells sunk into the chalk. Of these there are three at Deptford, two at Charlton, one at Plumstead, one at Crayford, and one at Bromley. The depths of these wells vary from 120 feet at Crayford to 420 feet at Plumstead. The Government offices and some other places in Westminster, and the fountains



THE LAMBETH WATERWORKS—INLET BETWEEN SUNBURY AND HAMPTON.

in Trafalgar Square, are supplied from Government wells near Charing Cross. London's total actual daily supply is some 157,000,000 gallons, of which more than one-half is taken from the Thames. It is not improbable that our noble Father Thames will not be able to supply London, with its ever-increasing demands, and authorities on the subject are busily engaged considering whence our extended supplies can best be brought. Dartmoor and Wales seem the favoured spots. In Wales, the valley of the Upper Wye and Upper Severn have been fixed upon. Any of these schemes would mean bringing our water from a distance of 180 to 200 miles; but the schemes are regarded as quite feasible.

## NEW PUDDINGS.

BY A. G. PAYNE, AUTHOR OF "CHOICE DISHES," ETC.

**P**ROBABLY all people will admit that there is a charm in novelty. Educated persons feel this want more than those who are uneducated; and within certain limits a change of diet is advisable, not only for the well-being of the body, but for that portion of the body which we may term brain, and which is so intimately connected with our thoughts that we hesitate to call it body.

In most households it will be found that the general thought is to settle down into a course of routine, and

if we are not careful, we allow our cook to degenerate from being an *artiste* who ought to be able to play from sight, into an organ-grinder who can only play a certain number of tunes.

There are perhaps few parts of the dinner more open to change than that known as sweets. Of late years this portion of the dinner has received greater attention in consequence of the enormous increase in the number of those who have given up the habit of taking any kind of alcoholic stimulant with their meals. The amount of saving and the additional happiness that have ensued in consequence throughout the country