



Vange Hall Brick Works 1886—1921



29 Pages

£3.30

Vange Hall Brick Works 1886—1921



Vange Hall was demolished in the 1976 the area is now a golf course and nature reserve.



Vange Brick Works before Robert

For absolute Sale.—To Brickmakers, Builders, and others.—Lease, Stock, &c.
MR. FRANK LEWIS will **SELL** by **AUCTION**, on **THURSDAY, July 8**, at Twelve for One, on the Property, at Vange, near Pitsea Station, on the London, Tilbury, and Southend Railway, the unexpired term in the **LEASE** of 21 years, from December, 1863, of the **BRICKFIELD**, containing 10a. 5c. 39p., having a great depth of brick earth, and held upon very low terms, together with the exclusive right to a wharf on Vange-creek; also, in suitable Lots, the whole of the Stock, including about 11,000 stock and place bricks, 170 yards screened and other breeze, 170 yards sand, 200 yards coke ashes, a chalk mill complete, five pug mills and stools, 450 rail sleepers, 60 navy and other barrows, 50 iron wheeling plates, wheeling planks, a Clinton and Owen's pump, and other items. The stock and plant may be viewed the day before and morning of sale, and catalogues and particulars had on the premises; at the Barge Inn, Vange; at the Railway Tavern, Pitsea; and of Mr. Frank Lewis, Auctioneer, Surveyor, &c., 35, Coleman-street, E.C.

London City Press Saturday 26th June 1869

For absolute Sale,- To Brickmakers,Builders and others,-lease,

Mr Frank Lewis will sell by Auction on Thursday, July 8th at twelve for one, on the property, at Vange, near Pitsea Station on the London, Tilbury and Southend railway, the unexpired term in the LEASE of 21 years from December 1869 of the BRICKFIELD, containing

??, having a great depth of brick earth, and held upon very low terms, together with exclusive right to a wharf on Vange creek, also in suitable lot, the whole of the stock, including about 11,000 stock and place bricks, 170 yards screened and other breeze, 170 yards

Sand, 200 yards coke ashes, a chalk mill complete, five pug mills and stools, 450 rail sleepers, 60 navy and other barrows, 50 iron wheeling plates, wheeling planks, Clinton and Owen's pump, and other items. The stock and plant may be viewed the day before and morning of sale, and catalogues and particulars had on the premises: at the Barge

A NEW BRICKFIELD.—Mr. A. Moss, D.C., for Vange, is about to start a new brickfield in the parish, adjacent to the Barge Inn.

Alfred Moss was there 1876?

1911 Enumerator's Records Show's : Address Vange Wharf Brickfields, Shed's and Stores, Mr J Avery as manager. And a John Avery was in Vange from around 1883.

There was also a smaller brick field owned by Messers Clark, Nicholls and Coombs Ltd. From around around 1908. This was situated in a field to the west of the Wharf or Mericks Lane and possibly dismantled around 1921. John Avery of Kent View Villa's shown as Manager of brickfield. (1917 Trade Directory.)

Vange Brick fields

What we do know

We know where they were

We know who owed it and when

We know about the barges used

We know where the materials came from

We know some who worked there and where they came from

We know they had a 15in gauge light railway.

We know a kiln was there in 1930 ref sell family owners of Marsh farm

It is shown that Robert Leabon Curtis was at the hall in 1886 (1886 Kelly's Directories)

The brickfields advertised *Under Brick and Tile makers Kelly's 1917 as below*

Clarke, Nickolls and Combes were their 1917 John Avery was Manager

Robert L Curtis was also there

The military was there 1914— 1918

It was up for sale May 1921

We know Alfred Perkins Curtis was the Brick works and Estate manager
and a magistrate.

What we do not know

How they got the material from the hall to the works there are two accounts of this.

The methods used for brick making. I have looked at two areas making bricks around
this time one is Teynham Kent (where most brick workers came from).

And lived in Vange.

And The Salvation Army Brickworks. Chappel Lane, South Benfleet. Essex around
1900's.

With the equipment listed in the advert for the sale of the brick fields in 1869.

The methods described in the making of bricks are similar.

The brickworks started life in the 1890s and worked the Claygate Beds, which were described in 1922 as laminated clays with beds of fairly coarse, current-bedded sands. In the lowest beds were septarian nodules that contained fossil shells – six species of marine mollusc that lived in the shallow waters of the London Clay Sea. In 1974 a section of the pit face was cleared to reveal a 9 metre (30 foot) thick section, which was documented in detail. It was assigned to the upper part of the middle division of the Claygate Beds.

The section is now overgrown and mostly obscured but it remains probably the only exposure of Claygate. Vange Hill is a prominent area of high ground with steep slopes and land slipped ground to the south. The eastern end of the hill, alongside Vange Hill Drive, is now a local nature reserve owned by Basildon Council. Basildon Golf Course occupies the western end and in the centre of the golf course, at the highest point, is the former pit of Vange Hall Brickworks.



Courtesy of Essex Field Club

Summary of geological interest

The bedrock geology of Pitsea and Vange is London Clay, laid down in a subtropical sea some 50 million years ago. As the sea became shallower the sea floor became increasingly sandy and the London Clay passes up into a sandy clay called the Claygate Beds. Erosion of the whole area during the Ice Age has removed all the younger strata that originally existed on top of the London Clay, including the Claygate Beds, but a few isolated patches of Claygate Beds remain on high ground such as the Langdon Hills to the west, and a kilometre long patch here on Vange Hill.

Claygate

The greater part of Essex is underlain by London Clay which was deposited in maritime water about one hundred and eighty meters deep during the early Tertiary period. As the water receded and became shallower, the claygate and then later Bagshot Beds were laid down. They survive as cappings to the hills across the South of the country from the Epping Ridge to the Hadleigh area.

The Claygate beds consist mainly of sandy-clays or loams up to twenty seven metres thick. Bagshots beds which cap the higher hills are sandier.

Robert Leabon Curtis JP was born in 1842 in West Ham to parents Robert Leabon Curtis and Sarah Elizabeth Curtis. He became a surveyor in his family's business. He served as Mayor of West Ham from 1889—1890. And was one of the founders of Westminster Cathedral.

His family where builders, surveyors and estate agents in Plaistow Essex where his office was. He died at his main residence Holmwood Highgate London in 1918.

He acquired the Manor of Vange Hall around 1886 *ref Kellys directory.*

Robert L. Curtis esq. of Vange Hall, is lord of the manor.

The purchase came with around 350 acres of land to the north and south of the Tilbury rail route. This included Lower Vange Farm later renamed Marsh Farm. This was the main site of the brick works and was described as a deep eight acre pit with the brick kiln still there in 1930. And the dock used for unloading some of materials used in brick making and loading the bricks. He also built about 1883 Vange Hall Cottage's 15 homes to house the brick field workers and their family's that he had recruited mainly from Kent to make his bricks.

Although Robert Leabon Curtis owned the Vange Hall Estate the farms on the estate had tenant farmers on them.

TO BUILDERS and OTHERS.—SOUND STOCK and other BRICKS can be delivered alongside at any Essex port from Vange Brickfields (near Pitsea), at current rates.—Apply at the Field or to Mr. Curtis, The Broadway, Plaistow, E.

*Essex Herald
August 1888*

When looking over the columns of an Essex newspaper last Friday morning I was struck with the heading "Better than a strike at Vange Brickfields." Underneath was an account of a very profitable meeting in which employer and employed took part with evident relish, and wished each other hearty Christmas greeting. The report was pleasant reading, all except the heading, and it was decidedly an error of judgment and in—shall I say?—characteristic bad taste. The latter in that over such an affair all possibility of dispute might well have been lost sight of in the prevalence of such goodwill among men; and the former because it was a nasty back-handed hit at the employed.

*Southend Standard and Weekly
Advertiser January 1890*

VANGE.
A terrific thunderstorm, accompanied by a tropical downfall of rain, occurred here on Wednesday evening, August 1st. So great was the rush of water off the adjacent hills that the marshes were completely flooded. Hundreds of acres of grass and corn were under water, a large amount of damage being done. It is doubtful whether the water will subside in time to prevent some of the crops from perishing. A large amount of damage was done to the bricks being made in the Vange brickfields. Two gentlemen returning from duck shooting were upset near the Corringham Brick House Farm by their horses being staggered by a flash of lightning, but they fortunately escaped with a shaking. Such a storm has never been known in this neighbourhood within the memory of man.

Essex Herald August 1888

VANGE, Near PITSEA, ESSEX.
About 2 miles from Pitsea Station and 12 miles from Southend.
VANGE HALL and MARSH FARMS, and BRICKWORKS,
With 2 HOUSES, AGRICULTURAL BUILDINGS, and COTTAGES, in all
253a. 1r. 13p.
WITH EARLY POSSESSION,
divided as follows:

VANGE HALL FARM	Acres. 78
MARSH FARM	133
BRICKWORKS (ready for immediate working)	42

TO BE SOLD BY AUCTION (on 3 Lots) at The London Auction Mart, 153 Queen Victoria Street, E.C., on MONDAY, June 6th, 1921, at 2.30 p.m., by
ALFRED SAVILL & SONS,

May 1921

The 1891 Census Alfred Perkins Curtis 20 yrs old as a visitor at Fair House Farm home of Joseph Moss

The electoral rolls shows Alfred Perkins Curtis at

1893 Hovells Farm

1895 Dock House

1896 Hovells Farm

1898-1900 Hovells Farm and Marsh House

1901-1904 Marsh House

Census for 1901 shows who was living at Marsh House

Alfred P Curtis Manager Brickfield

Francis Wiles B 1868 Hoo Kent

Winnie Wiles daughter B 1888 Milton Kent

Lewis V Wiles son B 1889 Milton Kent

Alise Wiles daughter B 1893 Vange Essex

Flossie Wiles daughter B 1893 Vange Essex

Leonard N Wiles son B 1897 Vange Essex

Charles Wiles Lodger B 1866 Murston Kent Brick Moulder

Census for 1911 shows at Empire House

Alfred Perkins Curtis Brick yard and Estate manager

Thomas Charles Pearce servant

Selina Martha Pearce servant

Alfred lived at Empire house from 1905
till his death in 1951

He served on the Vange School Board

And was a JP at Billericay Court



Empire House

Some of the workers on the Brickfields

1891 Census

Thomas C Bonse B 1849 47yrs Dover Kent [3 Vange Hall Cottages](#) (Brick Field Foreman)

Alfred Gore B 1856 35yrs Milton Kent [13 Vange Hall Cottages](#) (Engine Driver)

Frank Coleman B 1869 22yrs Sittingbourne Kent. Boarder [13 Vange Hall Cottages](#) (Brickfield Labourer)

George Rains B 1858 33 yrs Charing Heath Kent Bells Cottages (Brick Maker & Chimney sweep Sweep)

Edward Croucher B 1865 26 yrs Milton Kent Bells Cottages (Brick Maker)

George Highwood B 1843 48 yrs Faversham Kent [12 Vange Hill Cottages](#) (Brick Maker)

James Wilson B 1865 26 yrs North Lyder Middlesex [11 Vange Hall Cottages](#) (Brick Maker)

Henry Mullender B 1861 30 yrs Maidstone Kent [6 Vange Hall Cottages](#) (Brick Maker)

Robert Kemp B 1869 22 yrs Milton Kent Boarder. [6 Vange Hall Cottages](#). (Brick Maker)

John Holmes B 1849 42yrs Dover Kent Boarder [5 Vange Hall Cottages](#) (Brick Maker)

Robert Kemp B 1869 22 yrs Milton Kent Boarder (Brick Maker)

John Shelley B 1874 17yrs Runwell Essex son of James Shelley Vange Hall (Brick field labourer)

James Hyland B 1873 18yrs Teynham Kent. Boarder 2 Clarence Cottages (Brick field labourer)

Mark Mancer B 1868 23yrs Sittingbourne Kent. 1 Clarence Cottages (Brick field labourer)

1891 con'd

David Mears B 1852 39 yrs Stoke Suffolk [15 Vange Hall Cottages](#) (Brick field labourer)

Henry Mills B 1856 35 yrs Sittingbourne Kent [14 Vange Hall Cottages](#) (Brick field labourer)

George Highwood B 1868 23 yrs son Teynham Kent [12 Vange Hall Cottages](#) (Brick field labourer)

Herbert Highwood B 1880 11 yrs son Shoeburyness Essex [12 Vange Hall Cottages](#) (Brick field labourer)

John Martin B 1865 26 yrs Ridgewell Essex [9 Vange Hall Cottages](#) (Brick field labourer)

George Dawson B 1857 34 yrs Little Thurrock Essex [8 Vange Hall Cottages](#) (Brick field labourer)

John Hall B 1840 42yrs Silver Town Essex [7 Vange Hall Cottages](#) (Brick field labourer)

John Avery B 1849 42 yrs Ohio USA [2 Vange Hall Cottages](#) (Brick Maker)

John Avery B 1878 13 yrs son Plaistow Essex (Brick field labourer)

Thomas Taylor B 1874 17yrs Laindon Hills Essex. Bells Cottages (Brick field labourer)

Thomas Dennis B 1830 61yrs Aylesford Kent. Bells Cottages (Brick field labourer)

Walter Blanks B 1860 51yrs Chelmsford Essex Painters Cottage (Brick Field Labourer)

Alfred Pledger B 1867 44yrs Stoke by Clare Suffolk [15 Vange Hall Cottages](#) (Brick Field Labourer)

Henry Burton B 1860 31yrs Faversham Kent. [1 Vange Hall Cottages](#) (Brick Maker)

John Hadlow B1863 28yrs Faversham Kent. 3 Laburnum Cottages (Brick field labourer)

Chas Wiles B 1866 25yrs Murston Kent 2 Laburnum Cottages (Brick field labourer)

James cox B 1856 35yrs Ampthill Bedfordshire. 1 Laburnum Cottages (Brick Maker)

Benjamin Ockendon B 1862 29yrs Vange Essex. 1 Ebenezer Villas (Brick Maker)

Alfred Phipps B 1860 31yrs Sittingbourne Kent. 2 Clarence Cottages
(Brick field labourer)

William Sellen B 1868 26yrs Newington Surry. Boarder 1 Clarence Cottages (Brick field labourer)

1891 con'd

Edward Ockendon B 1866 25yrs Vange Essex. 2 Mountfitchet Cottages (Brick field labourer)

John Batty B 1865 26 yrs Isle Sheppy Kent. 1 Mountfitchet Cottages (Barge Loader)

1901 Census

John Avery B1849 52 yrs Ohio USA (Working Foreman)

Harry Boswell B 1865 36yrs Leamington Warwickshire. Bells Cottages. (Brick field labourer)

David Mears B 1852 49yrs Stoke by Clare Suffolk. [15 Vange Hall Cottages](#). (Brick field labourer)

Henry Hills B 1856 45yrs Sittingbourne Kent. [14 Vange Hall Cottages](#). (Brick Sorter)

Henry Hills jr son B 1885 16yrs Teynham Kent. (Brick field worker)

John Martin B 1865 36yrs Ashen Kent 13 Vange Hall Cottages. (Brick Maker)

Henry Mullender B 1861 40yrs Maidstone Kent. [12 Vange Hall Cottages](#) (Brick Maker)

Garfield Mullender B 1883 18yrs Sittingbourne Kent. [12 Vange Hall Cottages](#) (Brick field Labourer)

Harry Mullender B 1887 14yrs Vange Essex. [12 Vange Hall Cottages](#) (Brick field Labourer)

Gilbert W Howard B 1886 15yrs Teynham Kent. [11 Vange Hall Cottages](#) (Brick Sorter)

William Claggett B 1865 36yrs Gillingham Kent. [8 Vange Hall Cottages](#). (Brick field Worker)

William Claggett son B 1886 15yrs Teynham Kent. [8 Vange Hall Cottages](#) .. (Brick field Worker)

Frederick Wood B 1879 22yrs Basildon Essex. 7 Vange Hall Cottages. (Brick field Labourer)

Edwin Ockendon B 1866 35yrs Fobbing Essex. [6 Vange Hall Cottages](#). (Brick Field labourer)

Albert Gore B 1880 21yrs Sittingbourne Kent. Boarder above (Stationary Engine driver).

1901 Cont'd

Frederick C Mears B 1875 26yrs Stoke Suffolk. [5 Vange Hall Cottages](#). (Brick Maker)

Thomas Rouse B1844 57yrs Capel Seferue Kent. [3 Vange Hall Cottages](#). (Brick field foreman)

Thomas C Rouse B 1885 16yrs Murston Kent. (Stationary engine driver)

Benjamin Ockendon B 1862 39yrs Vange Essex. [2 Vange Hall Cottages](#). (Brick Maker)

Henry Burton B1861 40yrs Dover Kent. [1 Vange Hall Cottages](#). (Brick Sorter)

Frederick Purkiss B1854 22yrs Fobbing Essex. 1 Laburnum Cottages. (Brick Maker)

William Purkiss son B 1879 22yrs Corringham Essex. (Brick Maker)

Alfred Pledger B 1865 36yrs 2 Ebenezer Villas (Brick field labourer)

Arthur William Pledger son B 1885 16yrs Sittingbourne Kent Brick field labourer)

George Highwood Jivas B 1868 33yrs Teynham Kent. 1 Ebenezer Villas. (Brick field labourer)

Frederick Wiles B 1863 38yrs Sittingbourne Kent. 1 Charlotte Villas. (Brick field labourer)

George Highwood Tinson B 1843 38yrs Faversham Kent. 2 Charlotte Villas. Brick field labourer)

John Avery B 1849 52yrs Ohio USA. (working foreman)

1911 Census

John Avery B 1850 61yrs Ohio USA. Kent Veiw Villas. (Brick Field Manager)

John Thomas Avery son B 1879 32yrs Plaistow Essex. (Brick Maker)

Frederick Avery B 1882 Plaistow Essex. 6 Wellington Cottages (Brick Maker)

Lawrance P B Bracey B 1898 13 yrs Vange Essex. Vange Hills Estate. (Asst Brick Maker)

Edward Howard B 1888 23yrs Fobbing Essex. John's Villas. (Carman horse drawn vehicle)

Charles Clarke son b 1896 15yrs Vange Essex. Paynters Hill (Brick Maker)

Walter Banks B 1860 Chelmsford Essex. Paynters Hill Cottage. (Brick field labourer).

1911 cont'd

Henry Burton B 1860 51yrs Hastings Kent. (Brick Maker)

Alfred Pledger B 1867 44yrs Stoke Suffolk. 15 Vange Hall Cottages. (Brick field labourer)

Albert Alfred Gore B 1879 32yrs Sittingbourne Kent. Victoria Road. (Brick Maker)

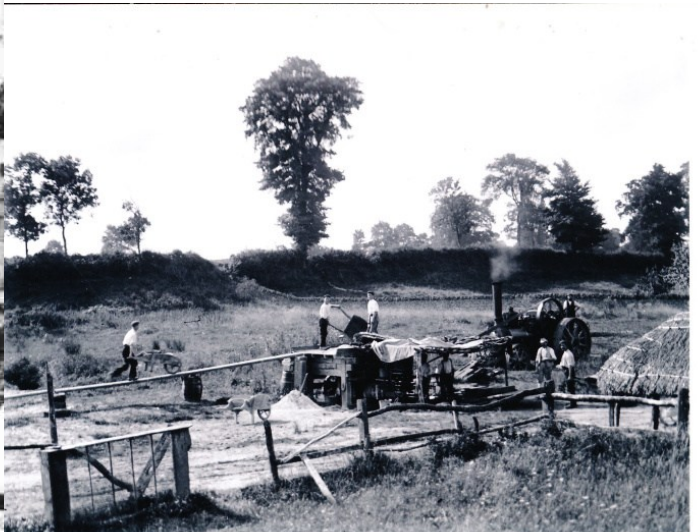
Charles Doe B 1879 32yrs Vange Essex. Hawthorne Cottage. (Brick Maker)

Arthur Doe son B 1890 25yrs Corringham Essex. Vange Hall ? (Brick field labourer)

Leanard William Doe son B 1896 15yrs Vange Essex. Vange Hall ? (Brick Maker)



*Photo's of other
Brick Work's*



Miss Dorothy P E Gardner of Gardeners farm recorded in 1985.

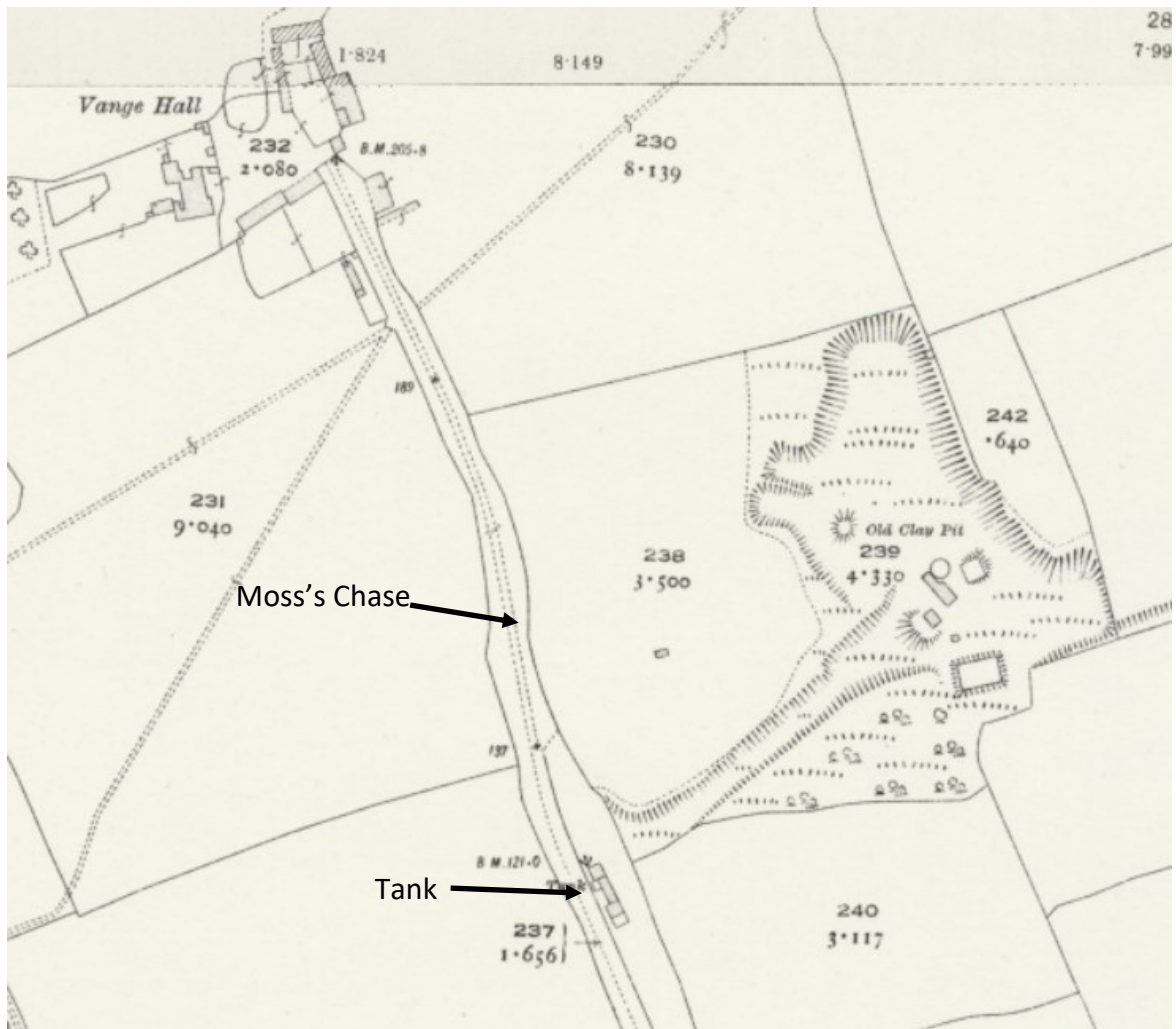
“When I was a child this brickfield was in full swing and my father (John Francis Gardner) had lots of horses and carts, and they used to cart the bricks, for building all the houses all the way round.

Their used to be little train run, that would pull buggies to load and unload the barges.

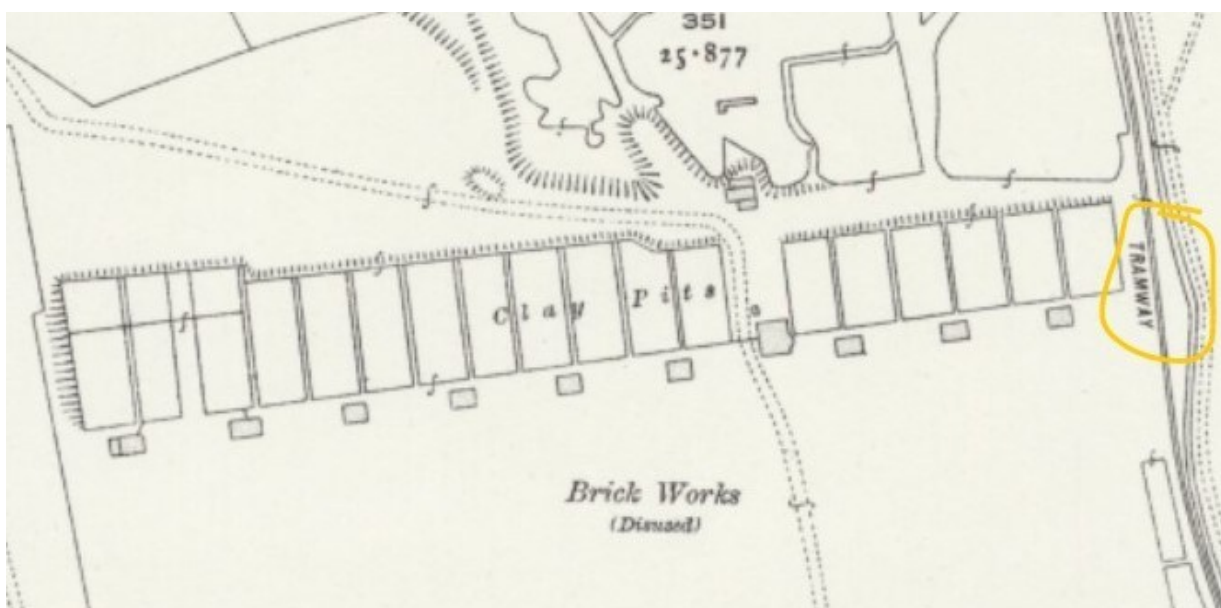
When the brickfields closed I was given to understand there was a political argument between Mr Curtis and the workmen which took place in them days.”



John Francis Gardner bought in 1894 a farm called Lower Vange Hall Farm from R L Curtis. Of which the farm house was called Marsh House. This remained when a new house was built near the farm buildings and railway line.



From *Brick in Essex* by Pat Ryan Established in the 1880's and advertised in directories from 1890—1922. It was shown as Disused on the OS map revised in 1919 –1920



“Jesse Payne from her history of Basildon for a article in Topsail Magazine. There was a substantial brickworks about a quarter of a mile west of Merricks farm where I was born.

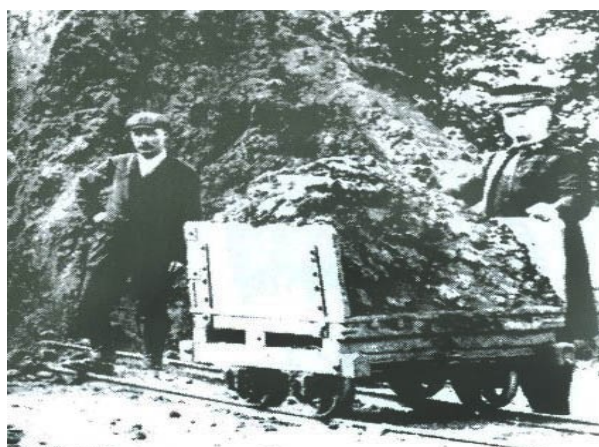
In 1880's brick making became a thriving industry in Vange , Mr Robert Leabon Curtis bought Vange Hall and approximately 350 acres of land North and South of the railway Line. Seven million bricks were manufactured here each year.

The earth used was excavated from the marsh and also from the top of Sandhills field, north of the high Road. The excellent quality earth was washed into a slurry and pumped down by heavy three—throw pumps though four inch cast iron pipes into the wash backs in the brick yards where chalk was mixed with sand and ashes and moulded into stock bricks.”

In an article by Jesse in the 1948 “Essex Review” she writes Robert Leabon Curtis sunk an artesian well about half way up Vange Hall Chase (Moss Chase) to a depth of 800 feet for a supply of water for the brick makers and engines, but on the Southend Water Company sinking deeper wells in the neighbourhood his well failed, and arrangements were made from this company.

“The track ran up to Vange hall which was “farmed” by the Moss family when I was growing up so it was known locally as Moss’s chase leading to Moss’s farm. The track was laid with a flint bed. My dad said that it had originally been a rail bed for taking sand and clay from the pits at the top down Brickfield road to the brickworks. I don’t know what type of trucks were used one assumes they were horse drawn”. ?

Courtesy of Geoffrey Baxter



Jubilee truck in use at the Salvation army Brickfield Hadleigh 1915

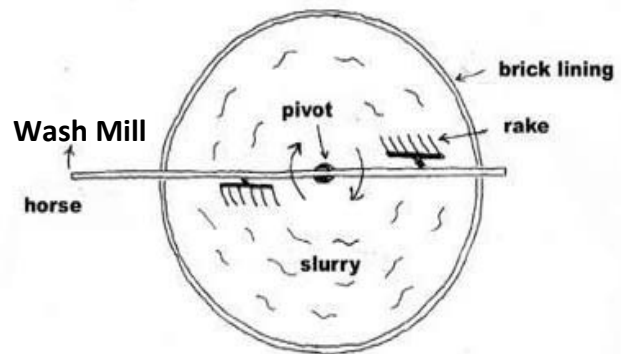
Thanks to Benfleet Archives

From here on is the unknown

This is what is mentioned by Teynham Village Website and Benfleet Archives

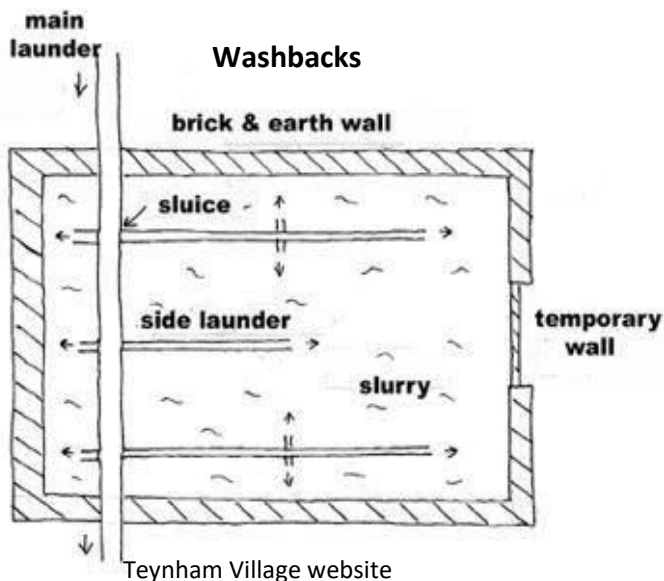
The clay was dug by the brickmaking gang during the winter and they were paid per thousand bricks; a volume of clay measuring 44 ft long, 8 ft wide, and 6 ft deep (abt. 14m x 2.4m x 2m) contained approximately 33,000 bricks. Hard times were had when the earth pits were frozen over, sometimes six weeks at a time.

This device was usually a sunken circular brick-lined pit about 4ft deep and up to 15ft wide. In later years, some brickfields used open-topped metal tanks for this. A vertical pivot in the middle supported a horizontal beam that was turned by a horse in the early days until they were replaced by mechanical means. To each side of the beam was attached a device similar to a large rake which, as it rotated, broke up the clay placed in the washmill and mixed it into slurry with the water that had also been added. At this stage, the correct proportion of chalk was added and the rakes crushed the chalk which was incorporated into the slurry. combustible material in the bricks during firing. As soon as slurry was the right consistency, a sluice built into the washmill wall was opened and the slurry was allowed to flow into pipes or wooden launders.



Teynham Village website

The slurry was then laundered to features called Washbacks, which were settling ponds. These were square enclosures surrounded by brick walls up to 6ft high which were banked with soil on the outside to provide extra strength. There was a small gap left in the front wall which was boarded until the slurry had dried. A brickfield normally had at least 3 washbacks in line and an amount of slurry was placed into each in turn. About 2 days were allowed for the water to drain out before more slurry was added, this process being repeated until the washback was full. The mixture was then allowed to dry until it had reached the right consistency for brickmaking. Since many of the subsequent operations were carried out in the open, brickmaking was dependant on the weather and the



Teynham Village website

season lasted from April to October. Men were laid off during the winter, apart from a few who were involved in clay digging.

Breeze

The practice of mixing 'Spanish' or sea coal ashes with brick earth and burning the resulting bricks with 'Breeze', that is small ashes and cinders was forbidden in 1725 by act of parliament.

The act was amended four years later and the mixing of breeze with coal burning bricks in clamps was also permitted.

Where in the Autumn a layer of clay or brick earth, followed by a layer of breeze then

An alternative method was to wash the clay and chalk in a wash mill, and pass it through a grid and into settling ponds or wash backs from which the excess water could be drained. When the layer was firm enough a layer of breeze was spread over the top and left to weather. In spring it was mixed, and tempered either by treading or putting through a pug mill. The bricks were moulded and dried in the usual way.

Barges would have brought Breeze (coal dust and ashes from the London power stations as well as London refuse possible to power the brick kilns?

During the great gale of Friday night, the barge "Three Friends" owned by Alfred Moss of Vange laden with breeze from London and bound for Vange wharfe. Was anchored off Canvey Island, capsized and sunk in deep water.

Chelmsford Chronicle August 1900

Hand-berths (*Berth - a bench where the bricks are moulded.*) would make on average 40,000 bricks a week, working a 10 hour day; 50,000 bricks a week was considered good. But every gang tried to make a million bricks in a season, usually April to October, for prestige. If they succeeded they had a new pair of boots bought by the firm or paid equivalent money. It required a lot of luck as well as hard work to make a million bricks. An early start to the season, a good supply of clay, good weather throughout the summer plus excellent teamwork in the gang all contributed and had its reward.



A brickmaking gang comprised of six men who worked strictly as a team, headed by the moulder, who was the man that actually made the bricks. He was assisted by a 'flatie', whose job it was to cut off just enough clay to make one brick and roll it in sand, which was dug from the sandhills fields at Vange Hall . It was then passed to the moulder who pressed it into the mould and then ran a small piece of wood, called a 'striker', over the top to level off the clay on top of the mould. To do this constantly they had to acquire a perfect rhythm. So strenuous were these tasks that the moulder and the 'off-bearer', who normally shifted the newly-formed bricks away from the bench, took hourly turns at moulding.

Hack and Hack Barrow

The "Barrow Loader" stacked the green bricks onto a long, flat wooden barrow. This took 30 bricks, 15 to a side, and weighed 210 lbs when full. Since the green brick still contained a lot of moisture, it weighed a lot more than the completed product. The "Pusher Out" took the loaded barrows and wheeled these to the "Hacks" to dry out, each gang having their own hack to enable the brickworks to calculate the payment. A hack consisted of 1,000 bricks stacked 7 courses high on wooden planks, with wooden end boards and caps to keep the bricks dry.



After about 5 weeks, the dried bricks (now known as "white bricks") were up to 2 lbs lighter and were ready for firing. Only the larger concerns had proper kilns and the traditional method of firing was by making a "cowl", sometimes known as a "clamp". Gangs of 4-5 men called "Crowders" would load the white bricks onto crowding barrows, which held 70 at a time, and took them to where the cowl was to be built. A cowl had 750-800 bricks which were laid on edge, 5-6" apart, to form channels, into which the fuel was placed. Ascending rows narrowed towards the top for stability, up to a maximum of height of 32 bricks. The outside was covered with a layer of rejected bricks to retain the heat. The fuel was lit from either end through gaps left at the bottom of the cowl and left to burn for 4-5 weeks.

Once the cowl was fired, a man called a "Skintler" removed alternate bricks from the top of the outside layer and replaced these at an angle to allow air to circulate. During the course of firing, all of the outside bricks were eventually criss-crossed to allow sufficient draught to keep the fire burning. At the centre of the cowl, the temperature reached 900 degrees Centigrade but this decreased towards the edges. When the firing was complete, a gang of 4 "Sorters" dismantled the cowl and sorted the bricks into 6 grades, their condition depending on their location in the cowl and how effectively the cowl had been fired :-

- First Stocks – yellow, used for facings
- Second Stocks - straw coloured, used for facings
- Third Stocks - orange, used for interior walls
- Roughts - brown and distorted, used for footings
- Burrs - black and fused into lumps, used for hardcore
- Chuffs - red and half-baked, rejected.



Brick from Vange

Photo's of Vange bricks with courtesy of Denise Rowling of
Laindon & District Community Archive

The brickmaking gangs were paid by piece work, in the 1850's a gang earned 4/3d per 1000 bricks, this rate remained static or was even reduced as over production and cheap foreign imports affected the sale of hand-made bricks. By 1900 the rate had risen to just 4/6d per 1000 bricks but this was only after a strike. In October 1901 the rate per 1000 bricks was reduced one penny, in 1906 the rate was again reduced by a penny, giving a piece rate of 4/4d, just one penny above the rate set in the 1850's; the cost of hand-made bricks had become uneconomical.

If a brickmaking gang worked an eight and a half-hour day, six days a week and produced on average of 900 bricks per hour, 45,900 bricks in a working week, at a piece rate of 4/3p per 1000 bricks they would earn £9 a week. To achieve this level of payment a gang would have moved 136 tons of material per week; not all gangs achieved this level of output.

The work rate was affected by weather conditions, in heavy rain work stopped, in dry hot conditions the Temperer had to continually add water to the admixture to keep it pliable, this could slow down the rate of production. Water had to be collected from the local source usually a pond.

When taken into account that a brick making season only lasted for twenty-five weeks a gang would earn less than £4/10s (£4.50p) per week for a year period. The Master Moulder would distribute the weekly income to the gang members, each receiving a rate in order of seniority and age. With a piece rate of 4/3d per thousand bricks the distribution was thus, the Moulder, Pusher-out and Off-bearer each received 10½d, the Temperer received 8½d, the Flattie had 4d and the Barrow-loader received 3d and approximately 4d was retained by the "Brick-master".

The Brick-master retained one penny in every shilling earned by the gang, this was paid out at the end of the season. The "Pence Money", as it was called, required the workers to remain for the whole season. If for any reason a member of the gang left his place of employment the pence money was forfeit. The workers were in this way tied to their employer and peer pressure would undoubtedly have ensured that gang members remained at their post. Pence-money was vital in providing a small sum of money to assist a brickmakers family through the period of the year when there was

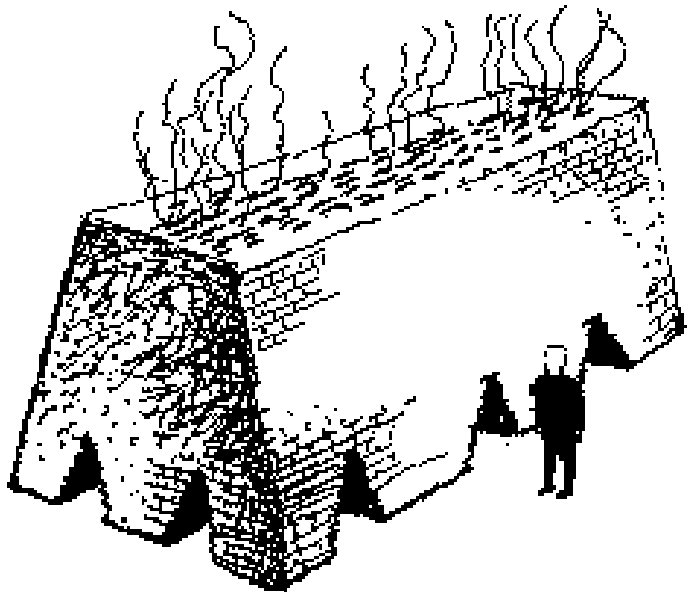
The cost of making Stock bricks in 1875 is estimated at £1 per 1000 bricks. In the early 1880's the Stock trade was at its peak, it is estimated that the Stock producers in North Kent and Essex were producing 450 million bricks a year. However by the 1890's competition from the Fletton and Cowley (Oxford) manufacturers was seriously affecting the Stock trade. Cheap imports from Belgium were also available, priced at 4/6d per 1000. This strong competition from other brick manufacturers left the Stock producers with no choice, they had to reduce their costs in order to sell bricks. The smaller companies were worst hit by such price fluctuations and often ceased to trade, simply due to economy of scale.

The delivered price of Stock bricks to London was reduced from 28/- to 26/- per thousand in 1899, in October 1901 the price was reduced to 24/- per thousand. The 1901 price reduction coincided with the piece rate cuts made to the brickmaking gangs.

This pattern of work for the gang, each man with his own job, was evolved by generations of men and women working in the brickfields. When there were enough dried green bricks, now called white bricks, which were now 2 lbs (abt 1kg) lighter after the natural drying process, the crowders would start to build the cowl (*Cowls - stacks of bricks at the firing stage*), or clamp. *They used a crowding barrow, which held seventy white bricks''*. *A gang of crowders would comprise normally of four to five men.*

The building of the cowl was a complete work of art, learnt by long experience at the job. The width of the cowl was governed by the width of the cowl cloths, which were large tarpaulins placed over the cowl. Sometimes the crowders would try to get a few more bricks in making them a little too wide with gaps between the cloths.

To build a cowl, rows of bricks on edge 5 - 6 in (130 to 150mm) apart were laid down on the ground to form channels into which the large coke, sifted from the 'rough stuff', was laid. Further bricks were then laid on edge across these. As the cowl increased in height, the sides were battened to give a slope so as to prevent the bricks from toppling when they eventually reached their maximum height. It required four men on the side of the cowl. The bricks were thrown up five at a time from the man at the bottom, to the second man a quarter of the way up, who in turn threw them to the third man, who then threw them to the fourth man at the top, a height of 32 bricks or about 12ft (abt 4m). The outside of the cowl was covered with one course of finished bricks and the top was covered with two courses to make it waterproof. When the cowl had reached some 10 to 12 ft (abt 3 - 4m) in length it was then fired



A man called a "Skintler" removed alternate bricks from the top of the outside layer and replaced these at an angle to allow air to circulate. During the course of firing, all of the outside bricks were eventual criss-crossed to allow sufficient draught to keep the fire burning. At the centre of the cowl, the temperature reached 900 degrees Centigrade but this decreased towards the edges.

it was then fired at the bottom of the already completed end, so that the cowl was actually burning while the crowders were still building the remainder. When the building of the cowl was complete it was then fired at the other end so that the two ends burnt towards the centre. The complete firing would take some four to five weeks, depending on the wind and weather. If there was a back draught, this would slow the process down considerably, but on the other hand, if a following wind prevailed the crowders were kept busy to get the cowl built before it had burnt right through. During the burning process the bricks gave off a sulphur smell, which on a frosty day would hang about the area. If the bricks were stacked too tight in the cowl, the smell and fumes (or reek) could not escape, and the bricks would not bake or fire properly.

When the cowl had burnt through and cooled down somewhat, a brick- sorting gang would strip the cowl and start to sort and grade the bricks. A sorting gang consisted of four men who would sort the bricks into five or six different grades. As the sides of the cowl were sloped or battened during the construction, it was dismantled in much the same way. This made it safer for the sorters and lessened the danger of bricks toppling across a man's legs. A staging or platform would sometimes be used during the dismantling and building of a cowl. This platform was made of timber and measured 8 ft by 4 ft (abt 2.4 - 1.2m) and only had two legs, the other side being supported on the bricks, while the legs reached the ground. This helped to facilitate the handling of the bricks.

The best bricks, or first grade, were a good yellow in colour and all uniform in size. These were the Stock bricks sometimes called yellow facings. Next were second grade, which were a mild straw colour and not quite up to top grade. Then there was the third grade called a soft place brick, which was a light orange colour. This could be used for interior walls or hidden work. The next were fourth grade or roughs. These were a hard distorted brick of an orange-brown colour, and were mainly used to build back walls and footings. Fifth grade bricks were burrs. These were over burnt bricks, dark brown and black in colour and were usually fused together in lumps which were broken up for hardcore. Then there were chuffs which were half- baked bricks, useless for building and were either reburnt or dumped.

- First Stocks – yellow, used for facings
- Second Stocks - straw coloured, used for facings
- Third Stocks - orange, used for interior walls
- Roughs - brown and distorted, used for footings
- Burrs - black and fused into lumps, used for hardcore
- Chuffs - red and half-baked, rejected.



KENT AND ESSEX BRICKMASTERS' AND FLINT MERCHANTS' PROTECTION ASSOCIATION.																						
<i>Vange</i>	Brickfield.																					
SUMMER SEASON, 1904.																						
Res.	<table border="0"> <tr> <td>Moulding (subject as under) -</td> <td>per Thousand.</td> <td><i>6/7</i></td> </tr> <tr> <td>Sorting -</td> <td>per Thousand.</td> <td></td> </tr> <tr> <td>Crowding (subject as under) -</td> <td>per Thousand.</td> <td></td> </tr> <tr> <td>Sorting -</td> <td>per Thousand.</td> <td></td> </tr> <tr> <td>Loading into Trucks -</td> <td>per Thousand.</td> <td></td> </tr> <tr> <td>Loading into Barge from Trucks -</td> <td>per Thousand.</td> <td></td> </tr> <tr> <td>Loading into Barge from Barrows -</td> <td>per Thousand.</td> <td></td> </tr> </table>	Moulding (subject as under) -	per Thousand.	<i>6/7</i>	Sorting -	per Thousand.		Crowding (subject as under) -	per Thousand.		Sorting -	per Thousand.		Loading into Trucks -	per Thousand.		Loading into Barge from Trucks -	per Thousand.		Loading into Barge from Barrows -	per Thousand.	
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<p>The sum of <i>6/7</i> per Thousand on Moulding, and <i>6/7</i> per Thousand on Crowding, will be paid week by week, and the balance of <i>6/7</i> per Thousand on the completion of the Moulding Season and when the Bricks have been got into the Clamp.</p> <p>Should the Moulder or Moulder-Setter for any reason leave his berth or be dismissed for non-performance of his duties to the Employer's satisfaction before the Moulding Season ceases, the sum of <i>6/7</i> per Thousand on Moulding and <i>6/7</i> per Thousand on Crowding will not be paid.</p> <p>Should the necessity arise, the Employer reserves to himself the right to cease Moulding at any time; should he exercise this right, then the sum of <i>6/7</i> per Thousand on Moulding and <i>6/7</i> per Thousand on Crowding will be paid when the Bricks have been got into the Clamps.</p> <p>The Fields will be closed on WHIT-MONDAY and WHIT-TUESDAY, the <i>23rd</i> and <i>24th</i> MAY, and on the 1st and 2nd AUGUST, those days being the MONDAY and TUESDAY in AUGUST Bank Holiday Week.</p> <p>Special attention is called to the provisions of the Factory and Truck Acts which affect the Men working in this Field. It is the wish and intention of the Employer that these provisions should be strictly carried out by the Workmen. Special attention is called to—</p> <ol style="list-style-type: none"> 1. The Age of Boys; 2. The Half-timers attending School; and 3. The Boys and Young Persons being passed by the Doctor. <p>Should any of these provisions not be adhered to and the Employer fined, the Workmen responsible for such omission will be held liable.</p> <p>The Employer incurs no liability for loss of time through the breaking-down of Machinery, or any other cause.</p>																						

KENT AND ESSEX	
Brickmasters' and Flint Merchants' Protection Association.	
.....	
<i>Vange</i>	Field.
<i>Albert Wicker</i>	
Res	
To make Bricks at	<i>6/7</i> per M.,
according to the Regulations of the	
Brickfield.	

The Kent and Essex Brickmasters' Association Card, 1904. (EP) Robert L. Curtis was 'the proprietor of Vange Brick Fields' in 1906, the same year that the Land Company sales catalogue claimed: 'Builders with a little capital would do well in this locality, as there is good demand for small cheap houses, bungalows &c., with good parcels of land attached. Bricks are obtainable at low prices from brickfields close to our estates. Building Materials can be brought down by water to Vange Wharf.'

Barges working at the brickfields Vange Hall Dock owned by

Robert Leabons Curtis were

BASSILDON built in 1874 at Brentford 31 ton Sprintsail owned by Robert Leabons Curtis.

Would carry 44 thousand bricks. Later sold to Ambrose Ellis of Stanford-Le-Hope.

FOBBING built in 1891 at London 39 ton Sprintsail owned by Robert Leabon Curtis.

Captain John Jennings and mate William Holden.

PITSEA built in 1887 at London 40 ton Sprintsail owned by Wm J Howlett, Charlton Kent.

Captain John Riley and mate Robert Riley

VANGE - VANG built in 1887 Blackwell 40 ton Sprintsail owned by Robert leabon Curtis.

Captain James Nunn and mate Alfred Nunn

Fobbing, Pitsea and Vange—VANG would carry 35—40 thousand bricks.

HENRY built in 1827 London 39 ton spritsail Owned by Richard Salmon, Dartford.

Captain Thomas Ellis and mate Charles Taruiss



Photo courtesy of Mersea Museum /
Hervey Benham / Nautical Photo Agency

Barge loader's would typically load
between 40-50,000 bricks a day.

MALDON. MALDON SHIPPING RETURN. JULY 31st, 1888.			
ARRIVED.			
SHIP.	COMMANDER.	PORT.	CARGO.
Surprise	West	London	Light
Vange	Nunn	Faversham	Bricks
Thomas and Ann	Daniels	Mersea	Light

SAILED.			
SHIP.	COMMANDER.	PORT.	CARGO.
Holbe How	Williams	Ben	Light
Redburn	Keeble	London	Hay & straw
Plover	Moule	Newcastle	Iron
Louisa	Wright	Pea	Light
Jessie	West	London	Hay & straw
Devi Lane	Darnon	Ben	Light
Thomas and Ann	Daniels	London	Hay & straw
Vange	Nunn	Haven Hole	Light
Thomas	Daniels	London	Hay & straw

London household waste provides fuel for brickmaking

The disposal of London's household refuse was another growing problem; it was collected by private contractors and stored in great mounds. The "King's Cross" mound was said to be one hundred feet high and spread across five acres. It must have been a stinking, festering health hazard. One of the necessary raw materials for the manufacture of Stock bricks is combustible waste material. This by-product of urbanisation was delivered to riverside wharves, loaded onto barges and transported to the brickfields and deposited, the barges were then loaded with bricks for the return journey. The disposal of waste material continued to be a problem for the growing urban society in Victorian Britain, to have it collected and delivered to the countryside for re-cycling was a suitable marriage of needs. London disposed of its waste and the demand for this raw material at coastal brickfields was satisfied.

The basic fuel for brickmaking was 'rough stuff' or London mixture, as it was usually called. This material was the coke and ash from the house refuse bins in London. The refuse was taken to various wharfs in London. Barges would then take up a freight of bricks and collect a freight of 'rough stuff' from these wharves. It was a comparatively light cargo for a barge as it was comprised mostly of coke and paper and if the wind was right it meant a fast run back for more bricks. There was however the ever present danger of spontaneous combustion and carbon dioxide fumes from the coke which the crews had to keep a watchful eye on. If the flame of their oil lamps began to get low it was time for them to go to the safety of the deck.

VANGE.
FOUND DEAD.—News reached Vange on Saturday that the son of an old and respected parishioner named Mr. Warren had been found dead on a barge in the river Thames. The deceased was a bargeman, and is supposed to have been suffocated from the fumes arising from a cargo.

*Barking, West Ham & Ilford
Advertiser Saturday 5th No-*

Found Dead—News reached Vange on Saturday that the son of an old and respected parishioner named Mr Warren had been found dead on a barge in the river Thames.

The deceased was a bargeman, and is supposed to have been suffocated from the fumes arising from a cargo.

On their way to the brickfields the barges were usually also accompanied by swarms of flies.

The 'rough stuff' was unloaded in a day by a gang of men, carted to a site and tipped in huge mounds to smoulder, smell and breed rats. There it was left for about a year for the vegetable matter to rot away, before being sifted and graded. Young boys would be employed at 2/6d (12.5p) a week in the 1900s to pick out the hardcore off the barrows. The boys used to set traps in the 'rough stuff' to catch starlings and sparrows which would be taken home to make a pie.



Nevendon Road Brick Works Barrow Loaders



Nevendon Road Brick Works

From Cyril Stiles



The beginning of the decline of the local brick industry started in 1881 when a dark, shaly clay was discovered at Fletton near Peterborough. Some 5% of its weight was tar oil and it was found that bricks made from this material needed very little fuel since they were almost self-firing. By 1908, there was a great deal of competition anyway amongst brickmakers as more concrete was being used in buildings and the Fletton brickmakers combined to drop the price to 8/6d per 1,000 (in 1903 the local price had been 29/-). They could do this because their self-firing bricks could be produced very cheaply in great numbers and they were able to undercut the local product, even with the costs of transport. As a result, the smaller and less efficient local brickworks began to close and a temporary building boom a few years later was tragically cut short by the 1st World War. After the war, trade began to pick up again as result of a Government-aided building programme but, by 1929, a slump had set in to the whole industry. Many brickworks closed at this time, never to reopen.

VANGE BOOKLETS

All Saints Church Hall 1931 £2.10

Barges at Vange Wharf £2.10

Cashes Well No5 £2.10

John (Paddy) Hemingway £1.50

The Barge Inn 1832 – 2015 £2.50

The Bull Public House 1878— 1961 £1.50

The Vange Crystal Well £1.50

Vange Board School 1876 £5.80

Vange Fire Station 1934 – 1962 £3.90

Vange Hall Brick Works 1886—1921 £3.30

Vange Reservoir & Southend Water Company £2.00

Vange Swimming Pool 1933-1952 £2.00

The Shops of Vange London Road & High Road £5.00

The 1st Pitsea and Vange Scouts 1913—1970 £4.50

3rd Battalion Essex Home Guard. Vange and Pitsea. £2.80

Royal Observer Corps, Monitoring Post, Vange, Essex. £2.10

BASILDON BOOKLET

Locarno Mecca Dancing £6.00 1961 - 1971

PITSEA BOOKLETS

W. J. Wager Dairies £1.50

Tuskite Works Pitsea Hall Lane £1.50

Broadway Cinema 1930—1970 £3.00

Pitsea United 1909—1971 £8.70

The Old Pitsea Market 1924—1969 £2.60



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Basildon Heritage

The Green Centre

Wat Tyler Country Park

Pitsea Hall Lane

Pitsea, Basildon

Essex.

SS16 4UH.

Monday & Wednesday's 10am—12pm

Saturdays 10am—3pm