

Coalhouse Fort East Tilbury

The very first fortifications built on the site were in 1402, at this time there were constant tensions between England and France, with English armies fighting across France the French would raid and pillage the south of England almost at will. The King at the time was Henry IV and he had plenty of troubles on this side of the channel without having to worry about the French, he had to face off against some very troublesome barons and Welsh rebels. King Henry IV faced off against the combined forces of the Welsh rebel Owain Glyn Dwr and the Earl of Northumberland's son Henry (Hotspur) Percy at the battle of Shrewsbury on the 21st July 1403 and won a decisive victory, even killing Hotspur in the process. This meant he could focus almost all of his efforts on the war with France, which for the period 1403-06 was the worst it had been for decades, in August 1403 a Breton Fleet commanded by Sieur du Chastel attacked Plymouth, however they were held up first by cannon and then by a wooden boom across the water, strategically placed, being unable to move, the Bretons suffered as direct a bombardment as can be given by 15th century artillery until night fall when the ships company boarded smaller row boats and slipped into the city, burning parts and taking a lot of loot with them. It was not until the next day that reinforcements arrived to drive the Bretons out. These kind of attacks went on throughout this period with the only effective solution to these raiders being well placed cannon which is in a well defended place, easily supported by a larger local garrison, this system was put to good use in some places, but in others it was not.

During the period 1400-1500 the French along with Castillian or Breton Allies attacked places like Dartmouth, Blackpool, Portland, Poole, Southampton, St. Aubins Bay on Jersey, Sandwich, Rye, Winchelsea, and the Isle of Wight, in fact the French still have official control of the seas right up to some of the beaches on the Isle of Wight. The first fortifications at Coalhouse were simply earthworks with wooden palisades and wooden towers for archers to shoot down on any enemy foolish enough to attack. The archers would have been able to fire on any ships in the nearby Thames, for this they used two special types of arrows which did not travel as far as the usual bullet headed bodkin arrows used to kill men on the battlefield, instead they were armed with fire arrows, a spade headed arrow with hole cut into the spade for some flammable material (wool perhaps) to be passed through, soaked in pig fat it would burn into whatever it hit. The other type of arrows had a large sickle type of head designed for cutting through sails thus reducing the speed of the ships, if lucky they would also cut through any ropes and could even disable a ship though most ships of this period were galleys and barques which had rows of oars and plenty of slaves to row for them, most of these rowers were Islamic prisoners taken in the constant battles in the Mediterranean between North African Pirates and their European counterparts.

The next significant stage in Coalhouse's site development was done by another King Henry, this time Henry VIII in 1540, redevelopment was needed now that France and Spain were at odds against the King of England who just seven years previously had renounced his catholic faith and created himself as not only head of state, but also the head of the Church of England. The nature of fortifications had changed considerably between 1450 and 1540, they were no longer impervious to a besieging army, where as during Henry IV's reign they were used to hold up an enemy attack whilst reinforcements could be gathered close by. In Henry VIII's reign they needed a new job, in 1453 the last part of the Roman Empire, Constantinople, was blown away by guns of the invading Turkish Sultan Muhammed II and it was around this time too that English armies in France were taking a pounding from artillery, this meant that Fortifications had to deal with this rise in Artillery power, the solution was to mount the same kind of guns inside these new forts, thus creating an artillery duel between both attacker and defender, holding up the invading army for the defenders to organise a relieving force. Coastal artillery now needed to mount bigger guns to deal with the threat of the enemy guns mounted on ships, most vessels had bow chasers (forward firing) guns which were stationed on large war galleys, yet when the Mary Rose set sail it was a ship like no other, with gun ports on its flanks it outclassed everything else the world had as soon as its keel touched the water. This was to no avail however as in July 1545 with the French

up to no good in the channel, King Henry sent out the fleet, headed by his flagship the Great Harry. Whilst watching from Southsea castle with a large entourage Henry gasped in shocked disbelief along with everyone else at what he saw. The Mary Rose crept ahead of the main fleet, gun ports open and pennants flying, it turned to give a full broadside at the French, the turn, with too many fully armoured men on the upper decks caused the massive vessel to overturn more than it normally would have done, this should have been no problem, however with the gun ports opened water rushed into the lower decks and the vessel capsized in seconds, few survived. Henry is reported to have said "Oh my gentlemen, Oh my gallant men" before turning to comfort Lady Carew, wife of Lord Carew, Vice Admiral of the Fleet. By 1545 however Coalhouse had been turned into a gun fort with a substantial amount of firepower, a fifteen gun blockhouse built on what is now flooded land protected the Thames approach to London along with other forts at Tilbury, Higham, Milton and Gravesend. Coalhouse was given extra firepower in 1547 with the total number of defensive cannon rising to 27, making it a major defensive fortification protecting the capital. Just the previous year however Henry had made peace with both France and Spain by the Treaty of Camp, ceding all of France save for a few ports such as Boulogne. 1547 was the year Henry died and his son Edward took over as regent in name only, his protector was Lord Somerset who once again waged war on France. Edwards short reign gave way in the end to his sister Mary, whose catholic rule may have brought instability to England but it also brought peace to France and Spain. Mary's rule also had massive repercussions for England's protection as she disbanded large parts of the armed forces and got rid of a lot of forts, including the soldiers stationed at Coalhouse and all of the new cannon. After Mary came Elizabeth and although the Spanish Armada in 1588 threatened the country and Tilbury played a major part in the defences it would seem East Tilbury did not.

Elizabeth came and went, James I (VI in Scotland) and his son Charles also reigned without any substantial building work at Coalhouse taking place. Charles I rule was of course to end in him being beheaded by Cromwell and his army who controlled parliament after the civil wars of the 1640's. Cromwell's reign was short and bloody, his son ruled for an even shorter time before being ousted for Charles II to come to the throne, this gave stability and prosperousness to Britain which it had not seen for nearly fifty years. This prosperity was born on the back of a strong Navy which escorted a strong merchant fleet to bring trade to all corners of England, several European countries did not like this, one of them being the Netherlands. During the late 1600's there were three wars fought between the British and the Dutch, these Anglo-Dutch wars were almost exclusively fought where it mattered to both sides, out at sea. The Dutch had in their possession a true naval genius, the equivalent of Britains Nelson of 100 years later. Admiral de Ruyter won many battles against Britain, but the Dutch had a small fleet and inadequate provisions to maintain and build more vessels, so any ships lost or even badly damaged could not be replaced, British ships however were being built like never before, naval tactics started to change during this period too, gone were the galleys and short range broadsides, from now on a ship could engage another at long distance and sink that vessel. Though the vast majority of times ships came close enough for boarding engagements to be fought. During this time of technical and tactical revolution the Dutch came up with a cunning plan to cut off Britains fleet by destroying its harbours and docks, in 1667 they attacked and nearly destroyed Chatham Docks, this led to the British to start building coastal fortifications, one of the places chosen was nearby Tilbury Fort, building started in 1670 to the orders of Sir Bernard de Gomme, the Dutch however did not come back. Sir Bernard de Gomme was a multi talented man, he had fought on King Charles I side in the First English Civil War as part of Prince Rupert's Cavalry Regiment, he even drew a map of the Battle of Edgehill which survives to this day, when Charles I was beheaded in 1649 Sir Bernard became good friends with both the future King Charles II and James I whilst in exile in France.

Coalhouse was not garrisoned again until 1799, this time defending from any attacks by France and their mercurial leader Napoleon Bonaparte. In 1799 the War of the Second Coalition was being waged, Napoleon had been stuck in Egypt after Nelsons victory at the Battle of the Nile (Also called Aboukir Bay) and so the land war fought in Europe was mainly done by Austrian and Russian armies fighting against French commanders Bonaparte-less. In August 1799 British troops

commanded by the Duke of York landed in Holland to take on the French, unfortunately due to heavy fog they could not find them and so marched up and down hills, this gave us the nursery rhyme, The Grand Old Duke of York, he had ten thousand men... after a brief skirmish the British were sent packing back to their ships, better days would of course come for the British army overseas, but back in England fortifications were built to stop a French attack on London via the Thames, at Coalhouse four 24 pounder cannon (so called because the cannon balls weighed 24 pounds) were installed in a small fortification, with a range of 2 ½ miles it is doubtful these cannon could hold up a fully gunned French man of war with their 74 guns. Forts were also built at Shornemead, Lower Hope and the existing forts at New Tavern (Gravesend) and Tilbury were up-gunned to counter the French threat.

In 1815 the French were beaten at Waterloo, Napoleon was defeated and so the Lower Thames defences were never given cause to fire their guns in anger and were quickly disarmed. Forty years later and another Napoleon, this time Napoleon III of France, wishing to imitate his uncles legends started to act aggressively towards Britain, despite Britain and France being allies in the Crimean war the need was felt for East Tilbury to be re-armed with seventeen 32 pounders. Four years later in 1859 the French launched the Gloire and a year after Britain launched HMS Warrior, both were mainly steam powered ships (though both had sails still) and had iron sided hulls, giving the name Iron Clads. The creation of the Gloire came as a massive shock to the British Government who immediately put forward a Royal Commission which was passed in 1860, this Royal Commission made it possible for a massive amounts of fortifications to be built not only to defend the capital but also places such as the Isle of Wight and the Solent. The fort which stands today started life in 1861 as a part of a two layered defence network for the Capital and Woolwich Arsenal. The first line of forts at Coalhouse, Shornemead and Cliffe were seconded by forts at Tilbury and Gravesend. Any hostile vessel travelling up river would be hit from three forts at once, this meant the enemy ship would have to split its firepower to deal with all three. In the later part of its construction Colonel (Later General) Charles Gordon oversaw the building which included the adoption of the armoured casemate defence, these had five foot thick roofs of brick and concrete with granite fronts and iron shields. By 1874 it was complete, armed with three 9 inch (Diameter of the shell being fired) Rifled Muzzle Loading guns, (RML's) a rifled shot means there are spiralling grooves cut into the inside of the barrel, when the shell is fired these grooves causes the shell to spin, this stops it on leaving the mouth of the gun to career off wildly and so gives much better accuracy in shooting, these were placed in the open battery and 11 inch RML's in the casemates. In 1877 four 12.5 inch RML's were added to the fort, each of these monsters weighed in at 38 tonnes. The intended complement (number of soldiers) was supposed to be 6 officers and 180 other ranks, though with the troubles in Africa and India the British Army could not sustain this level and the numbers were never up to scratch.

In 1891 another Battery was added to the Fort, this gave the fort another chance to upgrade its guns and so it received four 6 inch Breech Loaders and two 10 inch Breech Loaders, this made every other gun that Coalhouse had obsolete, for as well as being on disappearing mountings they also used smokeless powder. Guns on a disappearing mount use hydraulics to raise the gun up over the edge of a forts wall, then the guns recoil when fired brings the gun back down out of sight to where the gunners can safely re-load without being hit by enemy fire. In 1893 yet another Battery was installed, this time using four 6 pounder quick firing guns, these were mainly for both minefield defence and to fight off any enemy troops should they land men somewhere else to attack the fort from the rear. In 1903 pretty much everything changed once again at Coalhouse, the casemates lost their guns, the disappearing mountings were gone too, as was the 6 inch guns of the wing battery, these were replaced by searchlights, but as the threat from aircraft was not yet realised these must have been designed to simply dazzled any attacking infantry, illuminating them for accurate rifle and machine gun fire from the loopholes. Earth was banked up against the outer walls, giving better protection and reducing the forts profile. The 10 inch and 12 pounder guns were by this time obsolete as would be the 12.5 inch guns in 1907. Concrete strengthening was brought in for the east facing as the roof were made larger to accommodate newer 6 inch guns (not on disappearing mountings this time).

By the outbreak of the Great War in 1914 Coalhouse was now much further down the line in defences for the capital with large fortifications further towards the sea. Coalhouse was garrisoned and used as an examination battery with the men from the 2nd Company London Electrical Engineers and the 2nd Company Royal Garrison Artillery garrisoning the forts in the area. In conjunction with Cliffe and Shornemead there were remote control mines laid across the river between these forts. It was at this time that fortification design and use became a question of debate all around the world, it was not a British man or a French man who came up with the solution, but a Belgian named Henri Alexis Brialmont, he died in 1903 but his idea for fortification use was used in World War One, he proposed that forts be supportive of one another in rings and chains along vital communication routes or around major cities, for instance if Coalhouse came under infantry attack then the forts of Cliffe and Shornemead should fire on the area of Coalhouse Fort, these tactics worked to varying degrees in World War One, the Belgian forts were cracked open by massive German guns but the French forts around Verdun in early 1916 used these tactics much better. As for the Remotely Controlled mines these were laid in the river and should an enemy vessel pass over it then someone in the fort would press a button or touch the two live wires together to detonate the mines. Mines accounted for more shipping than anything else in World War One, if laid properly they could even halt an invasion, such as happened in March 1915 when the British and French lost many ships in the Dardanelles.

In 1939 the country was at war with Germany again, this time Hitler's German forces invaded Poland, then in 1940 they attacked Denmark and Norway, followed by Holland, Belgium and France. Each fell after the other with the British troops sent to Norway and France lucky to be brought home in two massive evacuations. The country was reeling but was never beaten, the channel which had stood against invasion for centuries once more saved the country from foreign domination, Hitler's head of his Air force (Luftwaffe) was Herman Goering, so fat he could not fit inside a cockpit of a German fighter, he was also a heroin addicted transvestite. He made Hitler a promise that he would bring Britain to its knees with sustained bombing, he was over confident, his bombers had attacked cities like Rotterdam (after the Dutch surrendered) and caused great damage and many casualties. With the Luftwaffe poised to strike Britain the re-armament of Coalhouse begun again, this time they received two 5.5 inch guns in steel housings on top of the fort, as well as a 40mm Bofors anti-aircraft gun. Nearby Bowater farm became a large anti-aircraft site, with four 3.7 guns, replaced by 4.5 guns and then replaced once more by 5.5 guns. Coalhouse was used as the headquarters for the area and held members of the 356 Coastal Battery until 1944 when specially trained home guard units took over. In 1940 with the threat of invasion looming massive amounts of small scale fortifications were built all around the coast, from Northumberland to Wales. The Luftwaffe planned to destroy the Royal Airforce in the air by luring them out over the channel. They did this by attacking shipping in the channel, the Germans called this stage the Canal Kampf (Channel War), however the Royal Airforce rarely rose to the bait, the Germans then directly assaulted British Airfields all around Britain, mainly in the south east, the British had two exceptional fighters at this stage of the war, the Spitfire and the Hurricane, the Spitfire was on paper the better of the two, but the Hurricane could withstand more damage. The German's had Messerschmidt Bf109-E4's they dubbed Emile's, and a twin engined fighter the Me 110, the 109 was faster in a dive and climb than anything the British had, whilst the Spitfire could turn sharper due to its elliptical wing shape, this meant that should a 109 get on the tail of a Spitfire the British pilot could turn quicker than the German plane, but should a Spitfire get on the back of the 109 then the German pilot could dive down out of range quicker. The plan on both sides was for these two aircraft to mingle in massive dogfights whilst the Hurricanes took on the slow bombers of the Luftwaffe, these were principally the Heinkel He-III, the Dornier Do-17 (Flying pencil from its slender shape) and the Junkers Ju-88A-4. These were not heavy bombers like the Lancaster or Fortress the Americans and British used later in the war, they carried too few bombs to be of any real difference, they were also poorly armed and only the Ju-88 had enough speed to out distance British fighters. In the weeks that followed both sides were locked in a desperate game of attrition, German fighters only had enough fuel for 20 minutes over the channel, bombers attacking Northern England and Scotland had no fighter protection at all, flying from bases in

Denmark and Norway they were slaughtered. In the south the British lost almost as many aircraft and pilots as the Germans, however since the Germans outnumbered the Royal Airforce by three to one the Germans could afford the losses, the British could not. Something was needed to swing the Germans away from attacking airfields. The Germans blundered into this by bombing London by accident, the following night British bombs fell on Berlin itself, Goering had promised the German people that should an enemy bomb fall on German soil then they could call him an Arse. Hitler was furious and ordered the destruction of every British city, the focus was switched from Airfields to cities, the RAF had been saved but it was a cost the British people would have to suffer. The Germans came by night, dropping hundreds of small incendiary bombs packed with Magnesium Oxide which burned vigorously, they used a basic type of radar direction finding to target the cities, one radar station in France would shoot a beam of sound over a city in England, another beam fired from Holland or Denmark would cross the first beam at the exact point the bombs had to fall, a German navigator in the lead bomber listened to his headset, he heard a continuous note of sound, when it changed pitch it was time to drop the bombs, this method led to many mistakes and so the Germans attacking London used their eyes instead of their ears. Seeing the moonlight reflect off the glistening rivers they would use these to find their targets, Coalhouse and the forts along the Thames were in a perfect place to fire at the oncoming German bombers, however many Germans got through and Britain felt the heat of Germany's blitz in the winter of 1940-41. In the summer of 1941 Germany attacked Soviet Russia and the Battle of Britain was officially over, Britain had never been close to being brought to its knees, the whole country had gathered around Winston Churchill and stood firm in the face of an almost unstoppable German juggernaut. The fort then saw use by protecting vessels who were passing by on their convoy duties to destinations around the world. Members of the Womans Royal Naval Service (Wrens) operated the degaussing controlling station, this meant that it neutralised the ships hulls, which gave off a magnetic field, as all sides in WW2 used magnetic mines it meant in theory that the mine would not detonate when a ship which had been deguassed passed by.

From the end of the war in 1945 to 1962 the fort was operated by the Royal Air Force, its guns taken away in the 1950's it slowly fell into decline. Thurrock District Council acquired the fort from the Ministry of Defence for development as a riverside amenity, but it fell into further decay, with its once proud metal rusting and its concrete leaching effervescent crystals it needed a group of people to come in and sort out the junk from the jewels, in 1982 a group of people banded together under the name of the Coalhouse Fort Project, some of these people as children would play hide and seek in the fort, and now they took it upon themselves to conserve and restore it to its former magnificence, a big job indeed and one which is still going on. The fort is registered charity No 289952 and all donations are welcome, they have opened the fort on regular occasions ever since 1982 and are more than happy to help with any questions anyone has about the fort, today there are two aviation museums as well as old vehicles from the 1940's to more recent times, the aviation museums hold parts of aircraft which have crashed in the area during World War Two, there are also profiles of some of the men who operated the aircraft. At Hallowe'en the fort dims its lights and people from all over the country come to the special event, for the fort is very haunted. So if you have an avid interest in History or like things that go bump in the night then head along to Coalhouse on one of the days which it is open to the public and I assure you, you will not be disappointed. Thank you for your time.

Christopher John Linton.