The Landmark Trust

WEST BLOCKHOUSE

History Album



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BASIC DETAILS

Built: c.1854-7

Battery for six guns, 68-pdr SBML

Fort designated: Practice Battery 1889

Provided with new guns, 1901

West Blockhouse Battery built on top of hill 1900-03

Fort & Battery closed: 1956

Acquired by Landmark: 1969-70

Repair and conversion: 1986-7

Architects: Jones Thomas Associates

Contractors: Ernest Ireland Construction Ltd.

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<u>Summary</u>

The West Blockhouse was built in 1854-7, but the value of the deep-water anchorage at Milford Haven which it protected had been recognised long before that. Concern about invasion by the French (or indeed the Spanish) was as fierce in the16th century as the 19th, and Henry VIII had ordered two circular blockhouses to be built as early as 1539. The one nearest Dale was named the West Blockhouse, and gave its name to the point on which it stood. In 1814, during the Napoleonic Wars, the great Royal Dockyard at Pembroke Dock was established but it was to be another forty years before plans for increased protection along the coastline became a reality under Lord Palmerston's aegis, a great believer in 'gunboat diplomacy' himself. Relations with France, meanwhile, were rapidly deteriorating in the 1850s. Warfare on land and sea was about to change out of all recognition with the advent of steam and modern technologies, but in the 1850s military engineers still held fast to what they knew and buildings like the West Blockhouse show how the engineers of the day tried to prepare for the warfare of the future.

Four new forts were built at the mouth of the haven: on Thorn Island, Stack Rock Island, Dale Point and, most westerly, on West Blockhouse Point. It was intended that these forts' artillery would de-mast any enemy ships before they reached the docks (the new, steam-driven screw was still believed to be an auxiliary form of propulsion). Sadly, all plans and records for the building of the West Blockhouse have been lost and we do not know who designed it but by 1857, a battery holding six guns had been built, with accommodation behind for 41 men and one officer, all of finely dressed limestone. From plans made in 1866 we know that the soldiers were to sleep in barrack rooms on the ground and first floor, where they would also eat and while away their leisure hours. Six 68-pounder guns were also in place by 1859, standard smooth-bore issue that had been in use for twenty years, 10 feet long and weighing 95 cwt. The rails on which the wheels of the slide up, on which the gun-carriage recoiled when fired, can still be seen on the east flank of the battery.

There is no evidence that the West Blockhouse was ever garrisoned in the 19th century, as the threat of invasion faded. In fact, the blockhouse was obsolete almost as soon as it was built and would have been unlikely to withstand the latest cannon fire. In comparison with the more massive forts that followed in the 1860s, the West Blockhouse seems almost friendly, its open, exposed batteries directed as much against a landward as seaward attack. Its site and design would have made it quite effective had a land attack ever materialised, the landward side being protected by what is effectively a dry moat, crossed only by a drawbridge. The parapet which protects its roof is also higher on the landward side – but neither fort nor battery would have withstood attack or siege for long.

The West Blockhouse was to see more use in the 20th century during the two World Wars than in the 19th. In 1900, the Milford Haven defences were re-armed and a new battery built outside the blockhouse. In 1904, a very thorough survey was made of both new battery and old fort, which was invaluable as restoration work began. In WWI, West Blockhouse Battery, by now with new Breech Loading guns, was designated a Counter Bombardment Battery and finally received a garrison, of the Royal Artillery, although it never saw action. After the war, a caretaker was once more left in charge, the battery used for exercises with a skeleton staff maintaining the guns, one of whom was Cliff Gough, later Brigadier.

In 1939, the battery was once again manned in earnest and German bombardment of Pembroke Dock began in July 1940, followed by the laying of aerial mines, increasingly effective despite the laying of a boom across the mouth of the haven. In these early stages of the war, the only defence against the enemy bombers came from machine guns at the coastal batteries, although ack acks eventually arrived, together with protective gunhouses. Life at the West Blockhouse in these years must have been hectic, other duties including firing warning shots across the bows of ships failing to comply with port regulations and guiding the RAFs flying boats back to Pembroke Dock with searchlights. After the war, the fort was used for a while for Territorial Army exercises but finally closed formally in 1956. The fort remained in MOD ownership although the land around was sold.

Restoration of West Blockhouse Fort

The Landmark Trust acquired West Blockhouse Fort in 1969, and the land behind it in 1970. The fort had been vandalised, but was still basically sound. Restoration finally began in the autumn of 1986. The two greatest problems were repair of damage done by 20th-century alterations to the windows and to the roof. Metal shutters had been fitted to the windows on the seaward side and to make these fit, the stone reveals had been crudely cut back. Strips of stone had to be cut and then pieced in to fill each missing section of these reveals, a very long and laborious job. A new window was made at the same time, where a door had been cut through into the lower barrack room when it became an engine room.

The roof of the fort was not originally designed to support guns, being constructed in the same way as other mid-19th century barrack buildings, with shallow brick vaults strengthened with iron girders, and a layer of asphalt on top. When two guns were mounted on the west wing in 1901, a concrete structure was cast to support the weight, cutting through the brick vault. Girders were added to give extra strength. Besides disfiguring the interior, this was not in fact doing the roof itself any good, and so we decided to remove it altogether, and to remake the brick vault. Ideally we would then have liked to lay a stone roof, but the structure was not strong enough to support it, and so the present tiles were laid instead. Several of the granite coping stones of the parapet also had to be replaced, where they had been dislodged, or were damaged. As the original drawings were lost, we did not know details of any joinery or interior fittings that had subsequently been altered. Luckily, the very thorough 1904 survey provided most of the information needed, such as the design of the windows. We decided not to make use of the ground floor, as the accommodation on the first floor, if one barrack room was subdivided, was quite large enough and more pleasant to live in. Unfortunately, the vandals had burnt all the floor boards in the north barrack. The boards lining the walls were also mostly gone, but enough survived to show us what it had looked like and pitch pine salvaged from a warehouse in the Liverpool docks was used to renew it. The new floor is higher than the original, to be able to see out of the windows on the seaward side of the fort - a privilege (or risk) denied the garrison men. New doors were made, copying one that survived and the rooms inside are surprisingly snug and well insulated from the tempestuous winds.

Outside, building sheds and other flotsam were cleared away. One such unwanted object turned out to be part of a mounting for a 19th-century gun, and this was put back in position. Two Vavasseur mounts were also stacked at the back of the fort, and these too have been repositioned. Unfortunately the great granite coping stones of the battery parapet had mostly been thrown down the cliff when they were removed to make way for the new guns in 1901, and there seems to be no way of getting them back up again. The drawbridge had rotted beyond repair and so a new one was made to the same design, with a new handrail, and winding chains. The steps were provided with new railings and the approach straightened and tidied. Given its more peaceable use today, the last word on the fort should perhaps go to one of the men who served at the West Blockhouse in the 1930s. Charged with waking his fellows, he was remembered by Brigadier Gough, as yelling: "Come on, just have a look at the view, there are people who would pay pounds for this opportunity!"

West Blockhouse Fort

Military and Political Background

While its (Pembroke Dock's) destruction would not be so disastrous as that of Portsmouth, Plymouth or Chatham, still the consequent loss of the ships in course of construction, and the diminution of the power of the nation to reinforce its fleet, are sufficient reasons for rendering it secure, quite independent of the importance of the splendid harbour of Milford Haven; moreover, its position is so detached, and so peculiarly liable to sudden attack, that it must depend for its defences on its own resources. It is most open to attack by an enemy's fleet running up the haven, but if it was only *protected to seaward it might be attacked by land.*

Thus concluded the Royal Commission set up by Lord Palmerston in 1859 to consider the Defences of the United Kingdom. They were not the first to have realised the value of this sheltered deep-water anchorage. The earliest, admittedly rather feeble, attempt to defend the mouth of the haven was made in the reign of Henry V111, part of an ambitious national coastal defence scheme aimed at protecting the kingdom from an invasion by a combined French and Spanish force. So, in 1539-43 two circular blockhouses were built, though possibly, according to a report of 1595, they were not both completed. One of these was on Angle Point, the other near Dale: the West Blockhouse, which gave its name to the point on which it stood.

Further defences were added along the shores of the haven in a spasmodic way during the next two centuries. Impetus for a fresh appraisal came with the Seven Years War (1756-63) and the Napoleonic Wars (the French actually made a ludicrously abortive landing near Fishguard in 1797); more particularly with the establishment of the Royal Dockyard at Pembroke Dock in 1814. Even so, nothing was done on any great scale for the moment. It was to be nearly forty years before an extensive new scheme of defence progressed beyond the planning stage.

If the first West Blockhouse was built in one period of rapid development in the fields of artillery and fortification, its 19th-century replacement on West Blockhouse Point belonged to the dawn of an age during which warfare on both land and sea was to change out of all recognition. The full transformation was to take many decades and was indeed still incomplete during the First World War, but the technological advances that brought it about were already being formulated by 1850.

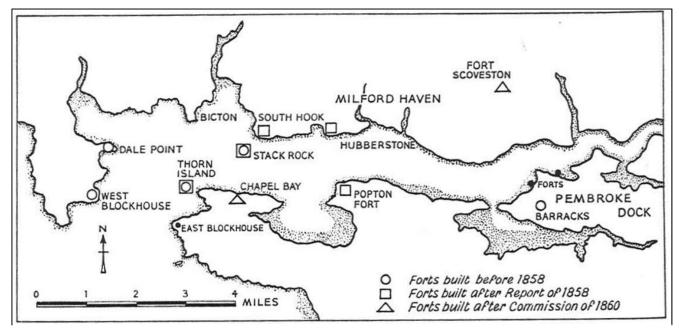
To begin with, the response of military engineers was to hold fast to what they knew, and adapt it to the new circumstances, although these constantly outran even their most farsighted predictions. At the same time, there was a lively debate as to whether Britain was not better defended by a strong navy, than by fortifications along its shores. The protagonists for extensive coastal defences won the day: their period of greatest triumph was the 1860s, but their work had begun in the 1840s and '50s.

In these decades coastal fortification was everywhere being re-examined and strengthened, under the realisation that the new screw-driven steam warships of the 1840s suddenly made a large scale invasion much more likely than before. The same years saw the building of the great harbour defences on Alderney, for example. In the buildings of this period, of which the West Blockhouse fort is an excellent example, it is fascinating to see the beginnings of a realisation that the new kind of "high technology" warfare was on the way, and should be strongly prepared for; while with hindsight we can see how mistaken they were in their analysis of how best to achieve their aims.

The 1850s were also a turning point in political terms. The years of conscious, and slightly complacent, superiority following the Battles of Trafalgar and Waterloo were beginning (again many people took a lot of convincing) to give way to a more wary, and by then more realistic, appraisal of other European nations, and particularly France. The framework of Superpower politics enabled a

friendly dialogue to be carried out between the two countries, even an alliance to be formed between them against Russia for the duration of the Crimean War (1854-56), while at the same time both were preoccupied with the strengthening of their coastal defences and, especially in the later 1850s, their naval fleets.

The relationship with France was frequently uneasy, in fact, especially in the years following Napoleon 111's coronation as Emperor in 1852, and his decision to develop an ironclad battleship, La Gloire, in 1857. Britain's foreign policy had long been based on the assumption that none of our European neighbours were to be entirely trusted, and that adequate defences there must be, but it was only now that the adequacy of what already existed was questioned. Parliament began to urge for their increase, and seldom ceased to do so (while also criticising the money spent) for the rest of the Victorian era.



A map showing the fortifications at Milford Haven, Pembrokeshire and Pembroke Dock in the 19th century

First proposal for West Blockhouse Fort

It was, then, against a background of change and resistance to (or disbelief in the need for) change, both political and technological, that the plan for a new West Blockhouse fort took shape. The 1850s in fact saw the building of four new forts at the mouth of Milford Haven: on Thorn Island near the eastern shore; on Stack Rock Island; on Dale Point; and on West Blockhouse Point. The first proposal for these was made by Lt-Colonel Victor, the Commanding Royal Engineer in Pembroke, in 1852. In his report to the Inspector General of Fortifications he proposed that any unfriendly ship approaching the mouth of the haven be challenged firstly by a battery of perhaps 3 guns of 8" calibre on West Blockhouse Point; and on passing out of range of these should immediately come within range of two further batteries, on Thorn Island and Dale Point.

Further defences up the sides of the haven were proposed, so that a line of ships, however indestructible "by nature of its materials and construction" would be unlikely to reach the dockyard undamaged. It was assumed that sails were still the main source of propulsion, with the screw as an "auxiliary". The aim was therefore to demast the ships, bring them to a halt, and hopefully set them alight as well, by using hot shot. Any ship that managed to break through and reach the Dockyard would be dealt with by further batteries there.

Inevitably these plans underwent a number of changes during the course of the next two years. The work on Thorn Island was begun without complications in 1852, to be completed in 1854. The Dale Point Battery, however, which was to be the largest, with 9 guns and a garrison of 75, went through a number of permutations, mainly aimed to reduce the cost. It seems also to have been planned as the Headquarters for all three outer forts. Plans for it were finally agreed in 1853, and the contract awarded to Messrs Henry D. Grey of Holyhead, for a sum of nearly £22,000.

It was only in the spring of 1853 that the purchase of about 8 acres "for Ordnance purposes" on West Blockhouse Point (at £100 an acre) was agreed with the owner, Mr Lloyd Philipps. A Memorandum on the defences of Pembroke made "after an inspection by the Master General" (of Ordnance) in October of that year, states that the work "for West Blockhouse Point, is the smallest work and of the least consideration of the whole of this division of works...and will be proposed for next year." From the dismissive tone used, it must still have been planned as a battery of three guns only; and it was still intended to be "a detached station of which the headquarters would be at Dale Point".

Design of the Fort

Unfortunately for any detailed study of West Blockhouse, after October 1853 there is silence; all we know is that the work was completed in 1857, and that in the intervening years the battery had been increased to 6 guns, with accommodation in the defensible barracks behind for 41 men and one officer. All records of construction, and all the original drawings for it, appear to have been lost. This is especially sad in that of the four forts of this period, West Blockhouse is in architectural terms the most successful and accomplished, making full use both of the conventions of coastal fortification and the nature of the site, so that one longs to know who was its designer.

It is always difficult to discover exactly who individual forts were designed by. Rules of design were governed by deep-rooted tradition, firstly of the Science of Fortification as developed in Europe over centuries; and more locally of a Board of Fortification. There was nearly always an element of design by committee too, reinforced by the need for all plans to be approved in detail by the Inspector-General of Fortifications. At the same time it is sometimes possible to detect a directing mind, or personality, behind particular buildings. Thus Major W.F. Drummond Jervois, who became Assistant Inspector-General of Fortifications in 1856, had a strong and over-riding influence on the overall design of the great

forts of the 1860s, although subordinate officers might have been responsible for them in detail.

All fortifications were the responsibility of the Corps of Royal Engineers, whose headquarters was at Chatham. But the procedures differed for different buildings. Major works might be commissioned directly from the office of the Inspector-General at Chatham. In other cases an officer of Engineers might be assigned to a region to oversee the construction of a specific building, or buildings (Jervois began his career overseeing the works on Alderney, including Fort Clonque). Alternatively the building of a more minor work might be left entirely to the existing C.R.E. (Commanding Royal Engineer) of a region. This last was more likely to have been the case before 1856 than after, because as soon as he became Assistant Inspector-General, Jervois enforced a more centralised, and regulated, system.

Certainly the C.R.E. in Pembroke had responsibility for erecting the early 1850s forts on Thorn Island and Dale Point, for which correspondence with the office of the Inspector- General survives. Although Headquarters had much to say, it was Colonel Victor who put forward all the proposals, drew up the specification, and oversaw construction. It is likely that the same happened with West Blockhouse if, as seems very probable, its design was already settled by 1856. Though whether it was the Colonel himself who was responsible for the design, or one of his officers, it is impossible to say without further information.

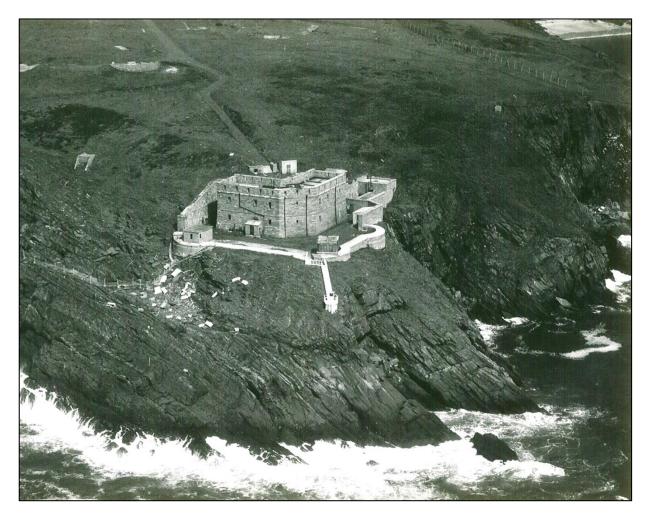
West Blockhouse is a magnificent building, commanding a wide sweep of the haven, but it was very soon revealed as an obsolete one. However impressive it was as a fortress in visual terms, as a fortress designed to resist cannon fire it was absurdly vulnerable. Even as the fort was nearing completion, Rifled Breech Loading guns were being developed, firing a projectile whose impact the walls of West Blockhouse could not have withstood. As Andrew Saunders points out in his article on the fortification of Milford Haven for *Country Life* (a copy of which

is at the end of this album), the forts of the 1850s are of particular interest exactly because of this, demonstrating as they do the theories of military architecture just before fortifications went super-size in the 1860s.

These later works left as little exposed as possible. With their use of all the complicated armoury of classical fortification, scarp and counterscarp, caponier (a covered infantry passage constructed across or into the ditch to provide "flanking musketry fire") and casemate (vaulted brick and masonry chamber built to protect guns and men from hostile fire) and above all their massive gun power, they were a response to the ever-increasing power and range of naval guns. At the same time their own guns were to be capable of challenging the new ironclad battleships. In comparison the earlier works are almost friendly, with their exposed open batteries, and more than visible barrack buildings. The defences of these were not directed at the sea, but intended to give protection against a landward attack.

The site of West Blockhouse was particularly well chosen, and the barracks skilfully designed, from this last point of view. Its position on a platform half way down the cliff allows it to be defended, on its landward side, by what is in effect a dry moat, between the rear elevation of the building, and the retaining wall behind. This can only be crossed, and the building entered, by a draw bridge. The roof is protected by a high parapet with loops through which to fire small firearms, and it is amusing to note that like its revolutionary Tudor predecessors on the River Dart, Dartmouth and Kingswear Castles, the parapet is higher on the landward side than on the seaward.

These landward defences were not intended to withstand a siege, however - for one thing the reservoir for the fort's water supply was placed in a very vulnerable position at the top of the steps. As Colonel Victor said of them, they were "intended simply to prevent the Batteries being run into and destroyed by a party of Seamen and Marines who may have succeeded in effecting a landing for that especial purpose", thereby allowing ships to sail up the haven unchallenged. It is interesting to note that in a Memorandum on a Local Defence Plan drawn up in 1939 for the Fort and Battery, envisaging a possible landing in Watwick Bay or an attack by tanks across the open ground to the North, it was concluded that with an estimated garrison of 40 (of whom 20 would be occupied with the guns) neither could be defended.



An aerial photograph taken in 1965. The two CASL emplacements are the small buildings on the bastions of the battery

Inside the Fort

There is no evidence that West Blockhouse was ever garrisoned in the 19th century. The records of the distribution of the army in the 1860s list a Garrison Battery (one company) at Pembroke Dock, together with 12 companies of the 8th Depot Battalion, but none at any other forts around the haven. Most of them, it appears, were left in the charge of a caretaker (usually a Master Gunner, sometimes a civilian), who might live in the fort with his family, or in the nearest village.

At West Blockhouse the caretaker probably lived to begin with in the fort itself, but later (by 1901 at least) a caretaker's cottage was built on land at the top of the cliff. In the 1930s a steam launch brought extra men on a weekly basis from Pembroke Dock to help with the routine maintenance of guns, and it is likely that the forts of the haven were always serviced from the sea, to save the long trip round by land. Men and provisions were landed in Watwick Bay and bought up the track to the fort.

All the same, West Blockhouse was planned for a full garrison. The earliest surviving plan dates from 1866, when the fort and adjoining coastline were surveyed by Captain Sandford, R.E., for the War Office. The Table of Accommodation notes that there was space for 1 officer, and 41 N.C.O.s and Privates of Artillery. There were three large barrack rooms for the soldiers, one on the basement or ground floor, and two on the first floor. In these the men would have had to sleep, eat their meals, and spend the intervening hours when not on guard duty or employed on practice drills of one sort or another. A typical barracks is described by an anonymous officer in *Through the Ranks to a Commission* in 1881, and those at West Blockhouse would have been based on a similar plan, standard throughout the Army:

The room I was to occupy was on the ground floor, very lofty and well ventilated, three large windows and a good fireplace. Barrack-rooms are all furnished much alike; and I may as well describe them at once, to show what my new home was like. The walls were whitewashed, and the floor bare boards; there were tables in the centre, sufficient for all the occupants of the room to sit down to at once, and wooden forms to correspond. Generally a hanging shelf over the table, on which are kept all the plates and basins, one of each being provided for each man in the room. The iron bedsteads are arranged all round, the heads against the wall, and they are made in two parts, so that during the day one half can be run in or closed up under the other, thus giving much more free space to move about in. The mattress is rolled up, pillow inside, and kept fastened with a strap, the two blankets and two sheets folded up very neatly, and placed on the top of the rolled mattress, which is stood against the head of the bedstead when closed up. The remaining half (on which the rug or counterpane is laid) serves for the men to sit on. As a rule there is a space of about three or four feet between the bedsteads, and a man next a window is generally best off.

The soldiers' kitchen was in one of the two small rooms on the first floor, next to the stair, while the other (in the north wing) was the officer's room.

On the ground floor of the north wing were store rooms, and at the end, the magazine for the shells and gunpowder. In the west wing the main floor rests on timber beams, but the ceilings in this part of the building are constructed of brick, like the roof, as protection against fire. Fierce fire precautions were enforced on anyone entering the magazine, and especially forbade the presence of any naked flame - very necessary in a building that was lit entirely by candles.

In a separate block, to the north of the main building are the privies, originally four separate ones: the largest for the soldiers, then the N.C.O.s', a single one for the officer, and one for women. It was not uncommon for soldiers to be married, and to have their families with them on active service. By the time that West Blockhouse was built they were supposed to be accommodated separately (sometimes several families in one barrack room), but it was not unusual for a whole family to live in a curtained-off corner of the main barrack, alongside the other, unmarried, soldiers.

It is sad to think that, far from being always full to bursting with men polishing their boots, the only time West Blockhouse could have seen active use, of the kind for which it was intended, was during training exercises of the local Artillery Militia, or the Volunteer Artillery. For the rest of the time it stood empty, inhabited only by a full complement of guns and ammunition (and, as some would have it, a ghost).

68 pdr. S.B.M.L. (\mathbb{A}) Mounting: Wooden 'B' Pivot Traversing Platform Calibre: 8.12 inch 206.25 m.m. Barrel Weight: 95 cwt. 4826.22 Kg Barrel Length: 10 feet 3.048 m. Charge Weight: 16 lbs. 7.25 Kg Projectile Weight: 66.25 lbs. 30.05 Kg. Range at 5 : 1,930 yds. 1764.79 m. (1.09 Miles approx.) Range at 8 : 2,540 yds. 2322.57 m. (1.44 Miles approx) ٠. . N.B. 1 Cwt = 112 lbs. 1 Mile = 1760 yds.

Drawing and details provided by Roger Thomas $^{\circ}$

Armament

In 1857, when West Blockhouse was completed, it was presumably felt that much had now been done to render the haven safe from attack. The fort's 6 guns were in position by 1859. They were 68-pounders, the standard smoothbore muzzle loading gun that had been in general use for twenty years. The majority of the class weighed 95 cwt, were 10' long and had a calibre of 8.12". 68 pounds was the weight of the shot that they fired.

The guns would have been mounted on wooden "traversing" carriages and slides. The slide, up which the gun-carriage recoiled on firing, was fitted with pairs of wheels which rested on rails or racers, so that the whole could be moved in a semi-circle to aim the gun. Original rails can still be seen on the east flank of the battery at West Blockhouse.



A 68-pounder at the National Army Museum

Later 19th Century Developments

Only a year after the completion of West Blockhouse, events had moved on a stage. In the words of the Royal Commission's Report of 1860:

These batteries sufficed to prevent an enemy making use of the anchorage at the mouth of the haven, but would not prevent the passage of war steamers up the haven to the dockyard, and in 1858 the Secretary of State for War, considering that more powerful works were necessary, both on account of the increased power of warships and of the introduction of rifled ordnance, appointed a Committee to report on the defences of Milford Haven.

And the proposals of this committee were in turn overtaken by the yet more extensive works proposed by the Royal Commission itself (for the details of which see the extract from the *Précis of correspondence relating to the Defences of Pembroke*).

The building programme set in motion by these two reports was mostly completed by the mid-1870s - by which time yet further advances had been made in the range and efficiency of guns, both coastal and naval. As in so many fields, these had been years of extraordinary inventiveness, seeing not only the introduction of rifled gun barrels (a spiralling groove runs down the barrel into which ridges on the shell fit, imparting spin, and thus greater accuracy), but also the first attempt (since the fifteenth century) at breech loading, and new types of shell and of powder. A particular miracle of engineering was the Moncreiff Disappearing Carriage, in which a system of hydraulics used the force of recoil to lower a gun fired over a high parapet to a level at which it could be loaded in safety. A number were mounted at Popton Point and Hubberston Forts.

The result of all this was that by 1875 the theories of fortification had changed again, in favour once more of open batteries, though consisting now of much larger guns mounted behind high protective parapets, what is described as "en barbette". In these circumstances it was inevitable that coastal defence should come again under review, and not for the last time. Criticisms, and new

proposals, came both from experts and from Parliament, which wanted to be sure that the large sums of money involved in updating the armament and the buildings were well spent. Officers of artillery and engineers with differing opinions submitted reports to the War Office, which from time to time appointed committees to discuss their proposals.

Everyone agreed that the more far-flung coastal defences proposed for Pembrokeshire in 1860 (most of which had never been built in any case) should be forgotten. And although there were dissenting voices, for the most part the premise of the Royal Commission, that Pembroke Dock and the haven were worth defending strongly, was accepted. The disagreements arose as to how: some spoke in favour of depending solely on submarine mines, with support from light guns; others argued that the smaller guns and restricted casemate batteries were totally inadequate, and new, heavier, barbette mounted guns must be provided on new sites. In the words of a report of the Works Committee of 1886:

The existing works are imperfect in gun power and protection, although the number of guns is excessive. The present armament should be reduced and redistributed, and a few powerful long-range guns added.

It was inevitable, too, that West Blockhouse Fort should feature in these debates. In 1871 the Defence Committee "considered a proposal of the Director of Artillery to abandon batteries at Dale Point, West Blockhouse and Thorn Island". Although it was agreed that the Dale Point battery should be abandoned, and its armament and stores withdrawn (though it is not clear that this was ever done; the fort had guns in 1876) the committee felt:

that the works at West Blockhouse and Thorn Island should still be retained, as even with their existing armament these two works were of value in guarding an advanced line of submarine mines. They further recommended that when funds can be made available these two latter works should be adapted each for 3 - 18 ton guns in casemates."

What actually happened was that in 1872 it was decided to provide them with converted Rifled Muzzle Loading guns - guns made originally as smooth-bore but then given a "rifled" lining. Heavy RML guns had been introduced in the late 1860s, but only the most important forts were given the new armament; to have thrown away all the older guns would have been immensely extravagant, and so most of them were converted according to a system invented by a Captain Palliser. The guns first proposed for West Blockhouse were 64-pounders - mostly converted from guns of 8" calibre. Shortly afterwards however, it was resolved that they should by 80-pounders - converted from a lighter version of the old 68-pounder.

In 1886 it was again proposed that West Blockhouse and Thorn Island be disarmed, and in the same year a Lt-Col Lloyd of the Royal Engineers recommended that a new battery of four 9" RML guns be sited near West Blockhouse Fort. The War Office Committee did not like the idea, feeling that "so isolated a position would necessitate a self-defensible work with a considerable garrison" - though this was exactly what was to happen only fifteen years later.

Meanwhile it was decided to leave matters alone; the six 80-pounders were to remain where they were, as they did three years later when a further decision was made: "That West Blockhouse Battery should be treated as a practice battery for the present", which is how it remained for the rest of the century.

West Blockhouse in the 20th century

In this century West Blockhouse, far from fading out of the picture, has seen active service in two World Wars. It must be said however that it was not the fort itself which served as a centre of activity in these. At this point the Fortress Record Book, which was released by the War Office in 1986, takes up the story:

During the South African War about 1900 it was decided to re-arm Milford Haven defences, replacing the old RML guns with BL (Breech Loading) guns. West Blockhouse had been dismantled but a new Battery was built outside the Fort, finished about 1903, which was armed with 2 - 9.2" BL Mark X guns on Mark V mountings, and 3 - 6" BL Mark VII guns on Mark II CP mountings. This Battery was occasion-ally used for practice, more particularly Battle practice".

A complete set of record plans of this new battery, and of the old fort, was made in 1904 (a full set of which hangs in the entrance hall). The original battery is still marked as "Practice Battery" but it too has been given four new guns, 5-inch BL on Vavassuer mounts (the smaller pivot mounts surviving on the south flank), and the parapet was lowered to accommodate them. While on the roof of the fort two 3-pounder Quick-firing (QF) guns were mounted.

During the First World War West Blockhouse Battery was designated a Counter Bombardment Battery, and garrisoned with a troop of Royal Garrison Artillery, under Fire Command St Anne's Head. A boom was stretched across the mouth of the haven in 1915, lying east of West Blockhouse Point, between Great Castle Head and Chapel Bay. The Old Fort, as it was now called, was used partly for accommodation, with the ground floor barrack room serving as a recreation room.

After the war the troops were demobilised, and once again only a caretaker left in charge. Guns were removed and replaced: in 1927 there were only two guns; by 1931 this had risen to four - to be reduced again to two by 1939. An amusing order in the Record Book states that in 1926, "during the General Strike all the Forts in the Haven were closed down and all civilians with the exception of the two at East Blockhouse, who lived in the adjoining village, were taken into

Defensible Barracks (Pembroke Dock), together with the Master Gunners". Presumably there was some fear of an attack by strikers.

The Battery continued to be used for exercises, with a skeleton staff to maintain the guns. One of these, now Brigadier Cliff Gough, describes his period of service there:

I was stationed there from August 1931 to July 1935 and at that time we were three soldiers on the permanent staff and three civilian employees who came down from Pembroke Dock on the "Duty Boat" on a Monday morning and returned home on the Duty Boat on the Friday afternoon.

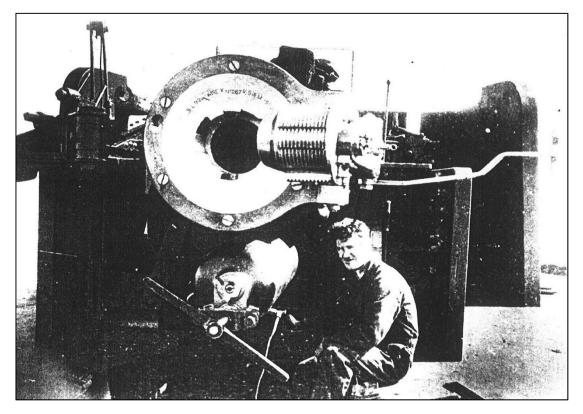
The two single soldiers, i.e. myself and one other, were technicians or Artificers as we were known. The third soldier, one by the name of Bombardier Bacon, lived in the married quarter with his wife and three children. This married quarter was located just inside the Battery gate on the left hand side and just opposite the only other building, which was the Artificer's Workshop.

Behind the workshop was a corrugated iron hut which was a combined cook-house and dining room for the use of the single soldiers and the three civilians. There were a number of other wooden buildings in the battery, some of which were used as store sheds, and one wooden hut which was used as sleeping accommodation for the two single soldiers and the three civilians.

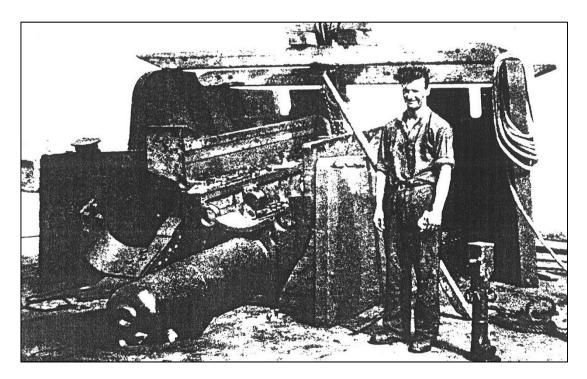
During the time I was at West Blockhouse the old Fort was completely empty. Our activities were confined entirely to the modern Battery, which had emplacements for three six inch guns and two 9.2 inch. One of the six inch emplacements was empty and one of the two 9.2 inch was minus the barrel.

Underneath each of the gun emplacements was a magazine divided into two compartments, one for 500 shells and the other for the cordite propellant charges which were made up into bags of a silken material known as "shalloon". The shells weighed about 360 lbs and the cordite charges about 60 lbs, two of which were required to make up a full charge.

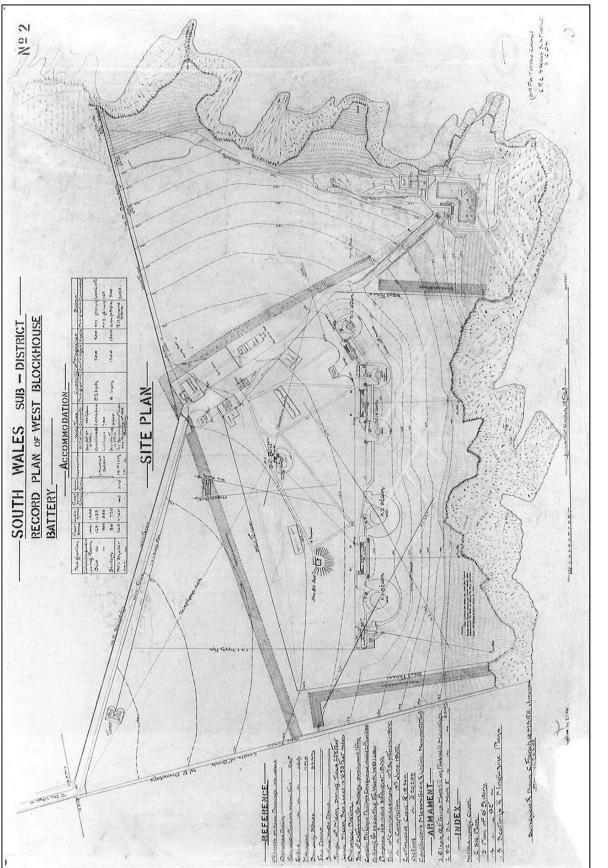
Also underground, behind the gun emplacements, were rooms which were known as "war shelters". These were intended to be used as accommodation for the gun crews in war time, but we used them for storing the gun tools and parts.



Artificer Gunner Gough services the recoil gear of a 9.2" c. 1931-5

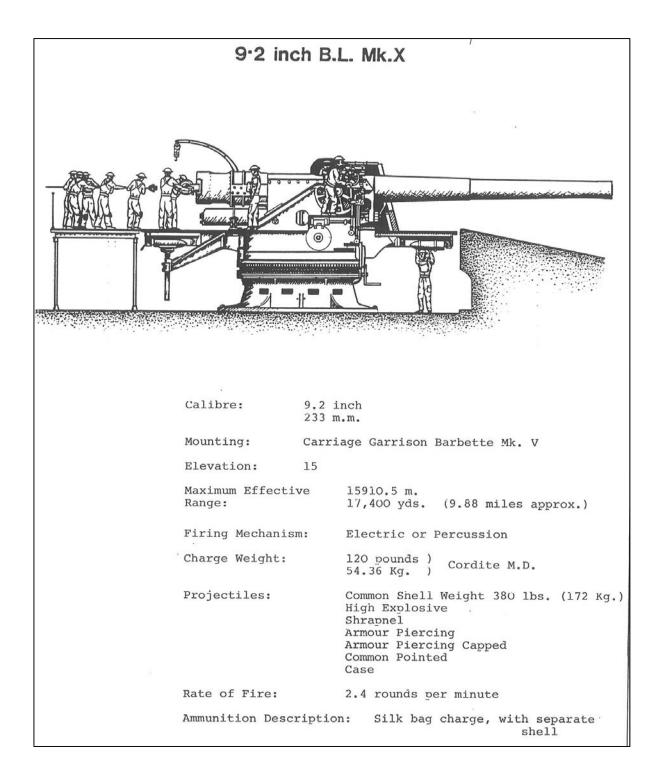


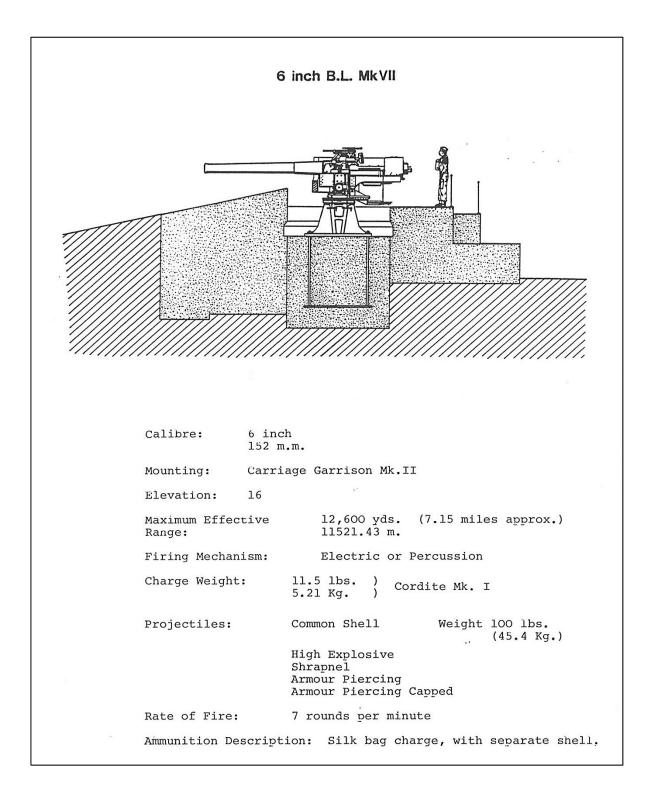
Artificer Gunner Gough re-assembling A2, 9.2" gun carriage, in readiness for a new gun barrel c. 1934

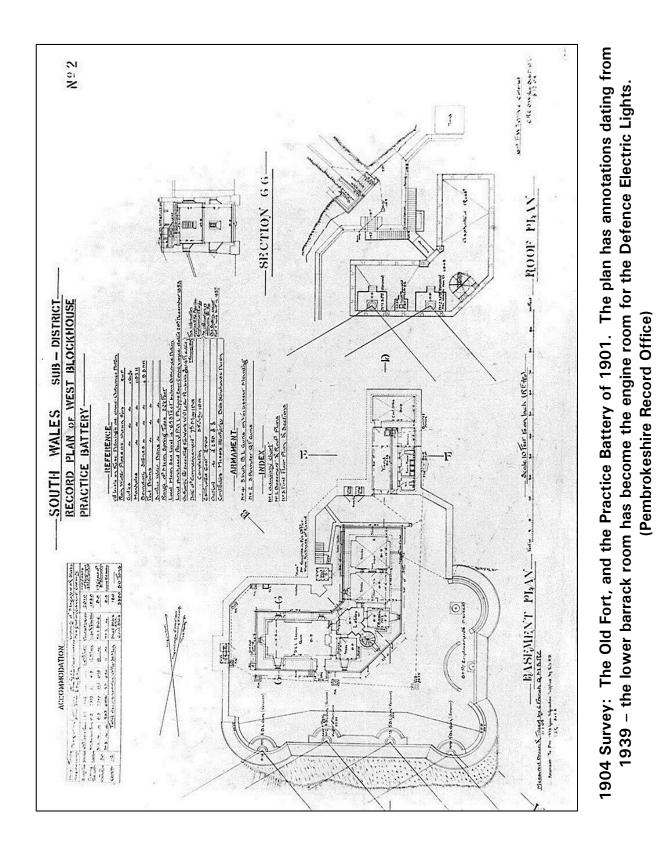


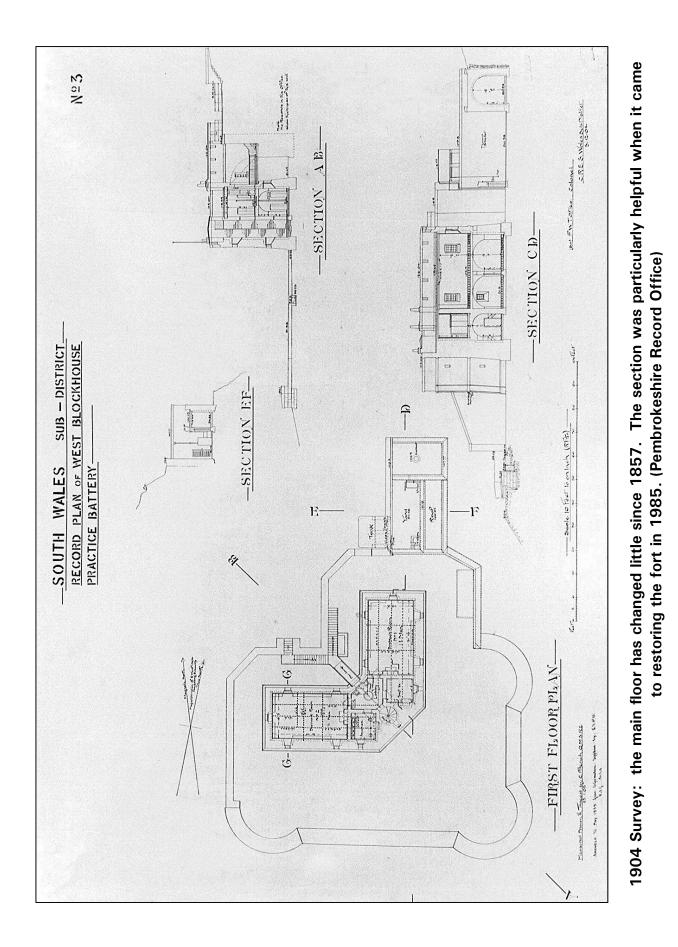


Guns of the West Blockhouse Battery Drawings and details provided by Roger Thomas [©]









5 inch E	3.L. Vavasseur MkII.
Calibre:	5 inch 127 m.m.
Mounting:	Carriage Garrison B.L. 5in. Vavasseur, MK II, Slide LBL. 5 in. Vavasseur MK II
Elevation:	25
Maximum) Range)	10,500 yds. (5.96 miles approx.) 9,601 m.
Firing Mechanis	sm: Friction Tube
Charge Weight:	4 lb 7.25 oz.) 2.02 Kg.) Cordite Mk I
Projectiles:	Common Pointed Weight 5 lb 3oz. (2.41 Kg) Case Shot
Ammunition Description: Silk Bag Charge, with separate shell.	

Four of these guns were mounted on the south flank of the Old Fort battery in 1901.

Spdr. Q.F. Mk I
Calibre: 1.85 inch 47 m.m. Mounting: Carriage Garrison Recoil Mk. I
Elevation: 25 Maximum) : 4,000 yds. (2.27 miles approx.) Range) 3,657 m.
Firing Mechanism: Percussion
Charge Weight: 7.3 oz`) 207 gm.) Cordite Mk I
Projectile: Common Pointed Weight 3.26 lb.
Rate of Five: 20-30 rounds per minute
Ammunition Description: Brass cartridge case with fixed shell

Two of these guns were mounted on the roof of the Old Fort.

Our daily routine consisted of the planned maintenance of the guns and mountings which being in an exposed position required a great deal of attention. One of the big jobs which we did during the time that I was there was to fit a new gun barrel in the 9.2 emplacement which was without one. It seems that the intention had been to dismantle this gun completely but in 1934, with the threat of war, it was decided to bring it back to a serviceable condition.

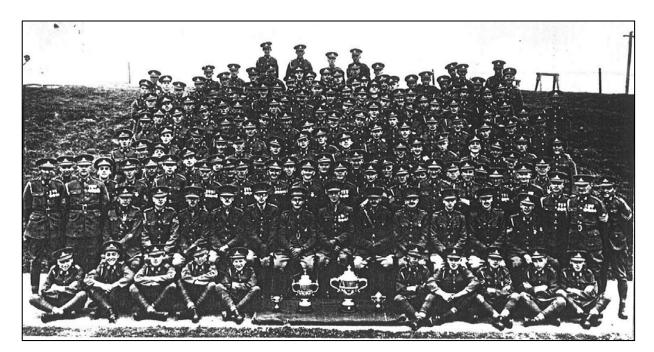
The Fort Record Book, updated at the outbreak of war in 1939, states that "the primary role of the Battery is that of Examination Service for Milford Haven, but may be called upon to use its guns in the defence of the Port.". Emplacements for three Defence Electric Lights (from 1940 known as Coast Artillery Search Lights) had been constructed, possibly during the '20s. Two of these were on the Old Fort battery (one no longer in use in 1939), and a third, which survives, just to the West along the cliff. The engines to generate electricity for these were in the ground floor barrack room of the Old Fort. Also on the ground floor were Control Rooms for the Loop and Controlled Minefield, strung across the mouth of the haven. On the first floor was Shore Defence Headquarters, with Operations Room, Exchanges, Rest Room etc.

A dress rehearsal for greater events had taken place in 1938 when a State of Emergency was declared on 25th September, lasting until 7th October - the Munich Crisis. East and West Blockhouses were fully manned by two batteries of the Pembrokeshire Heavy Regiment Royal Artillery (T.A.). The Battery was manned in earnest a year later, and the events and armament of the War are described separately by Roger Thomas, whose book on the fortification of Milford Haven is presently in preparation.

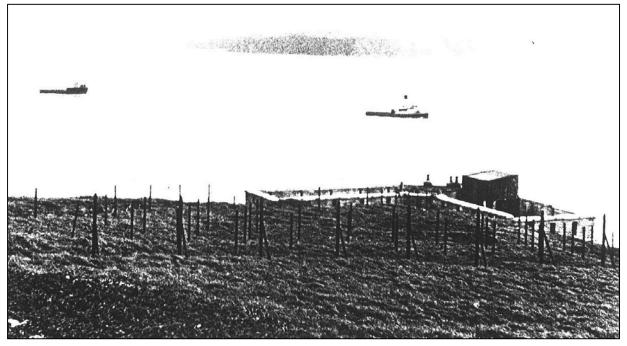
At the end of the war West Blockhouse went into limbo again, left in the charge of a caretaker. Every year it was used for Territorial Army exercises, but otherwise its useful life had ended. No betrayal of this is given in a plan of both Battery and Fort in 1949. In the main camp there is still accommodation for 6 officers, 23 sergeants and 134 Other Ranks, together with 16 marines. The buildings are mainly asbestos, only the officers' mess being of stone, with a

garden. The Old Fort contains on the first floor a lecture room in one of the former barracks, accommodation for 14 Other Ranks in the other, and for 2 sergeants in each of the two smaller rooms. On the ground floor, the third barrack room is still an engine room, with two fitters rooms in the angle, the duty watch room in the old Ordnance Storeroom, and a store in the magazine.

Six years later, in 1956, the fort and battery were formally closed, and all remaining cartridges taken from the magazines and burned. The battery and the land around it was sold to a Mr Sidney Littler, but the Old Fort remained the property of the Ministry of Defence.



The Pembroke Heavy Brigade at Summer Camp, Weymouth 1938. In September they were to man the West Blockhouse Battery, for the duration of the Munich Crisis.



The Old Fort during the Munich Crisis, 1938. (Note the RAF floating dock being towed to its war station)



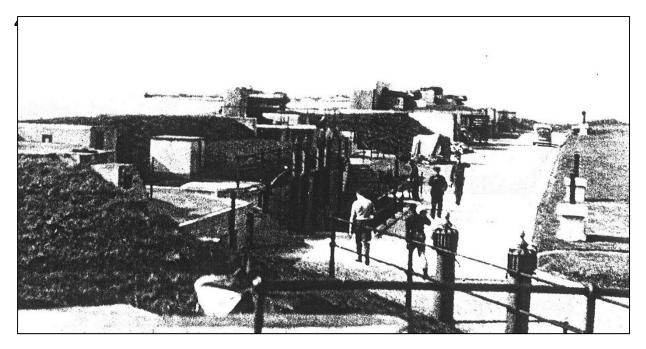
Manning a 6" gun during the Munich Crisis 1938



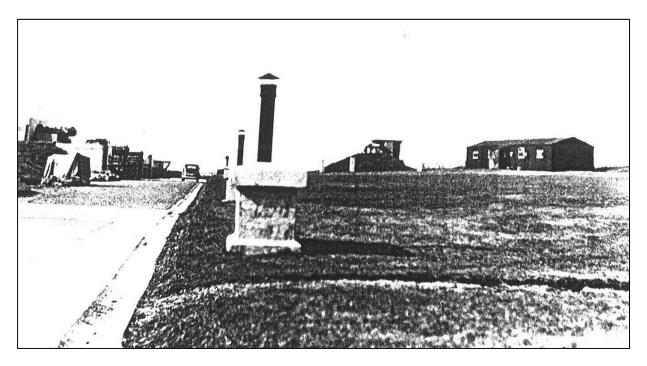
Members of the Pembroke Heavy Brigade playing cricket at West Blockhouse, September 1938 (note the sandbag weapons pit surrounding the empty BL (6") emplacement



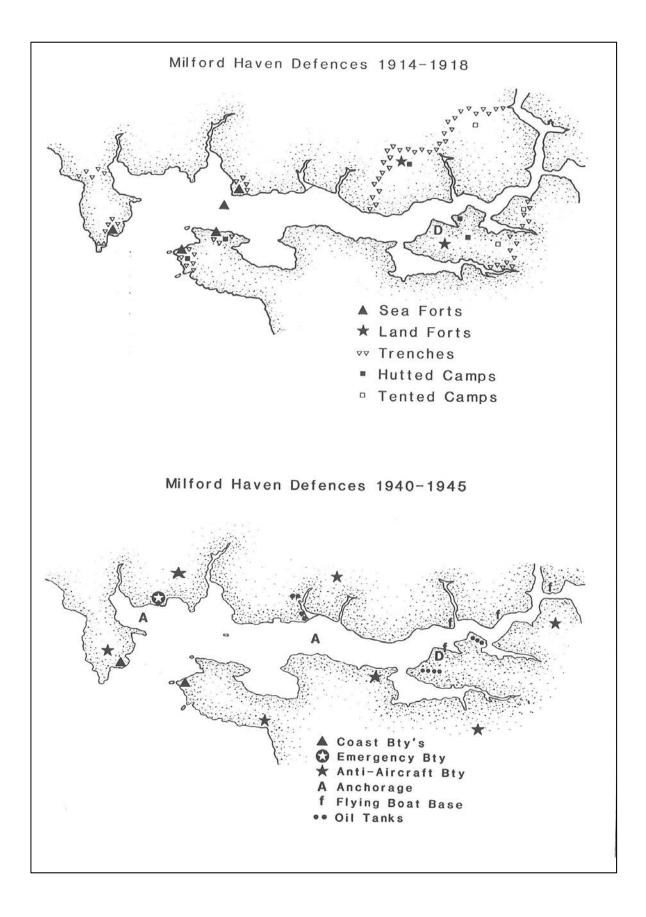
"Sky larking" on the signalling staff beside the Battery Observation Post, 1939. (Note the dismantled 9.2" gun carriage in A2 emplacement)



West Blockhouse Battery, 1938; the nearest gun is a 6" with two 9.2" guns beyond



The rear of the 9.2" replacements, 1938, with the Battery Observation Post behind. The chimneys are for the war shelters below ground.



West Blockhouse Fort 1939-45 by Roger Thomas

On the outbreak of the Second World War, Milford Haven was defended by two Coast Artillery Batteries; East Blockhouse, armed with 9.2" MK.X guns, and West Blockhouse, armed with two 6" MK.VII guns. The former acted as the "Counter Bombardment Battery", intended to deal with armoured ships at long range, and the latter operated as the "Examination Battery".

Any ship wishing to enter the port, first had to anchor in the Examination Anchorage, in the area of water known as the "Heads", under the muzzles of the guns at West Blockhouse. Once there, the ship would be boarded by a Naval Officer known as the Assistant Examination Officer (A.X.O.) who would ensure that the ship was what it claimed to be. If the ship failed to stop, disobeyed the orders of the A.X.O., or behaved in a suspicious manner whilst he was aboard, it was the duty of the Examination Battery to place a "Bring To" round across the bow of the ship. If the ship ignored this shot, the guns would then engage the vessel with "live" ammunition, and sink it, if necessary.

Warships had to be identified at long range, by the Port War Signal Station at St. Ann's Head, and until their identity was known the guns would be put in a state of readiness, in case the vessels were hostile. Submarines were treated with even greater respect, and were only allowed to enter the Haven provided that they were escorted by a vessel of the Mobile Harbour Defence. Ships wishing to leave the harbour were also subject to the Port Regulations, and if any were sufficiently foolhardy to try and leave without permission, they too would find a shot placed across their bows.

In addition to the guns, the entrance to Milford Haven was further protected by a Type E2 anti-torpedo baffle or "Boom Defence", laid between Watwick Point and East Blockhouse, together with a magnetic "Loop", which would detect any submarine attempting to enter the harbour submerged.

The defences were commanded in 1939 by Colonel Foster, whose Head Quarters was located in the old High Lighthouse at St. Ann's Head, and it was from here that the Fire Commander (F.C.) controlled the guns at both batteries. The guns could also be controlled locally be the Battery Commander, located in his Battery Observation Post (B.O.P.) to the rear of the gun emplacements, or directly by the gun detachments, using the Auto-sights on the mountings themselves.

The early phase of the conflict has generally become known as the "Phoney War", due to the relative inactivity of the enemy. It was during this respite that the local Territorials of 184 Coast Battery settled into their wartime routine at West Blockhouse. The men considered themselves to be quite lucky, as the majority of them slept on the floor in the relative comfort of the old Fort while new accommodation huts were being built, and after a few months they were all issued with beds. There was very little spare time available to the men, what with manning the two guns, and providing "lookouts" for both the B.O.P. and for the H.Q. However, when they could, being locals, one or two of the men would slip home for a few hours during the evening.

Throughout the early phase of the war, the Germans felt so far away in Europe, that it seemed most unlikely that the guns would have to fire in anger. Indeed the Battery Commander considered that an attack by the I.R.A. was more likely. This optimism soon evaporated during the summer of 1940 when the Germans launched their Blitzkrieg against the Low Countries and France.

Subsequent to the withdrawal of the British Expeditionary Force from Dunkirk, the coast gunners suddenly found themselves standing on the British Front-line. Pembrokeshire, due to its position in the far west, was considered as an unlikely location for a major German assault; nevertheless, an armed raid to destroy the port's facilities was not discounted, so pillboxes, road blocks, and concrete obstacles mushroomed in the county to counter the threat.

Around the same time, "Emergency Batteries" were being built up and down the country, covering almost every harbour. Milford Haven acquired its own when two ex-Naval, 6" MK XII guns were emplaced on the headland at Soldier's Rock, near St. Ishmael's.

The men manning this battery were not as fortunate as their counterparts at West Blockhouse, because they had to sleep under canvas. Entries made in 2nd Lieutenant White's diary give some indication as to the hardships the men had to endure: "9th October 1940. Tents blown down. It has been very windy with rain for some days. 20th January 1941. Rain, rain, rain and wind, cookhouse down and the canteen roof is off."

While construction work got off the ground at Soldier's Rock, a local Defence Scheme was introduced at West Blockhouse, to provide the Battery with a degree of protection from landward attack. The defences consisted of an outer barbed wire entanglement, a minefield, various inner barbed wire entanglements, slit trenches, and two Blacker Bombard spigot mortars. In addition, the defenders were also issued with an ex-World War One French 75 mm. Field gun. However good these preparations looked on paper, the scheme was flawed, since it was anticipated that only twenty men would be available to man the defences. A further twenty men may have been available if the 6" guns were not manned. The Fortress Record Book gloomily sums up the situation: "The manpower available is insufficient to carry out both the primary and secondary tasks, therefore the camp cannot be defended." Nevertheless, a token guard was mounted with a small group of men patrolling the perimeter, and the cliffs between Calm Rock and St. Ann's Head.

The war finally arrived on Pembrokeshire's doorstep on the 10th July 1940, when a single German bomber carried out an attack on Pembroke Dock, giving a foretaste of the heavy bombing that was to come. The Luftwaffe gained a major success one month later, when a Junkers Ju88 attacked the Llanreath Oil Depot,

starting a massive fire that raged for three weeks, destroying 142,00 tons of oil, and claiming the lives of five firemen from Cardiff. This raid highlighted the need for adequate anti-aircraft defences at Milford Haven, but due to pressing needs elsewhere, it was a long time before large numbers of Ack-Ack guns arrived in the area. In the meantime, the only opposition that enemy bombers had to face was provided by machine guns at the Coast Batteries.

German aerial minelaying was stepped up dramatically during the autumn of 1940, and it claimed its first victim on the 21st November, when the 6,426 ton cargo vessel, the *Dakotian* sank in Dale Roads. This success was rapidly followed by the sinking of a further four vessels before the year was out. An idea can be gained of the intensity of these attacks, by reading the War Diary of West Blockhouse; the following entries can be found for January 1941:

12th Jan 3 mines exploded off West Blockhouse at 11.20, 12.40 and 19.20 Hrs.

13th Jan.	Bombs dropped by enemy aircraft off Dale Roads at 22.05 Hrs.							
14th Jan.	Mine explodes inside the Boom at 10.35 Hrs.							
16th Jan.	Mine explodes off West Blockhouse 11.35 Hrs.							
17th Jan.	Two Mines explode " 09.25 and 09.35 Hrs.							
19th Jan.	One Mine explodes " 12.05 Hrs.							
20th Jan.	Three Mines explode " "							
21st Jan.	Three Mines explode off West Blockhouse, one inside the boom,							
one outside the boom, and one astern of the S.S. Morray Coast, no damage.								
23rd Jan.	Four mines explode, one disables a Minesweeper, three							
exploded off West Blockhouse, and one inside the boom.								
24th Jan.	One mine explodes off West Blockhouse. Anti submarine Boat							
165 disable	d.							

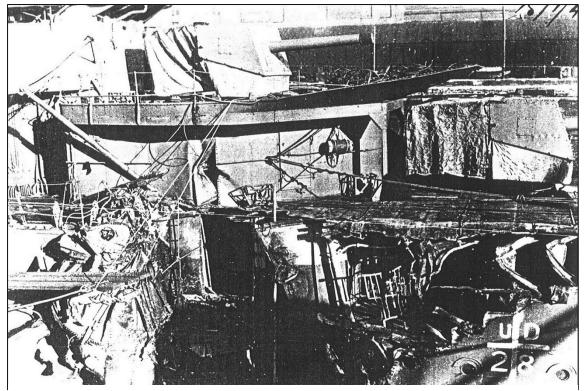
Up until the aerial offensive began, the guns at West Blockhouse stood out in the open, providing no protection for the detachments from straffing. However, the arrival of the Luftwaffe spurred the army into constructing protective gunhouses, which enveloped the guns and their detachments.

1941 was to witness an ever-increasing list of ships lost to enemy action within Milford Haven, many within full view of West Blockhouse. The bombing of the garrison town of Pembroke Dock reached a climax on the night of 12th May 1941, when heavy casualties and damage were inflicted. As a direct result of all of these raids, the anti-aircraft defences of the area became progressively more formidable. Eventually, seven Heavy A.A. Batteries were established armed with 28-3.7" Mk II guns, which were supplemented by at least a further nine 40 mm. Bofors, and two 3" 20cwt light anti-aircraft guns. One of the Heavy Batteries was located three quarters of a mile to the North West of West Blockhouse, and one of the Bofors guns was located within the fort's perimeter.

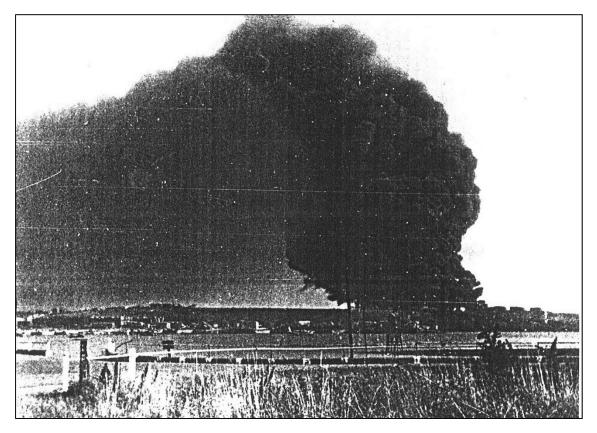
1941 was to witness a change in the manning of West Blockhouse, with a large proportion of the local men of 184 Coast Battery being posted to Liverpool, and being replaced by the men of 131 Coast Battery. The newcomers soon settled down to the routine of the Milford Haven defences. One duty that was unfamiliar to them was the use of the Coast Artillery Searchlights, to assist the R.A.F.'s flying boats back to base at Pembroke Dock.

Generally it is believed that the Coast Gunners, apart from those stationed at Dover, had a very quiet life. This couldn't be further from the truth, as men based in an Examination Battery will attest. Life at West blockhouse was certainly quite hectic; indeed hardly a month went by without the guns being called to fire "Bring To" rounds across the bows of ships who were failing to comply with Port Regulations. A typical incident occurred on the 8th April 1943:

The coaster *Bowstring* displayed no signals when approaching the port, orders from AXO to stop her, inquiries from the Fire Commander and the Port War Signal Station were to no avail. Finally orders received from AXO via Marines, "Stop". "Bring To" round fired from West Blockhouse failed to stop the coaster. Soldier's Rock ordered to fire "Bring To", and complied. "Bring To" round fired, bearing 175, range 2,300 yards.



HMS Wessex struck by magnetic mine in Milford Haven , 15/01/1940



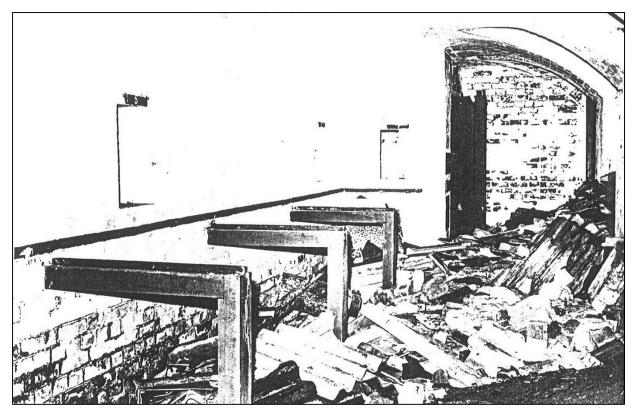
The Llanreath Oil Depot, Pembroke Dock, ablaze August 1940

The War Diary for 1943 also recounts a tragic incident which was enacted just outside the Haven, during the evening of the 25th, and the early hours of the 26th April:

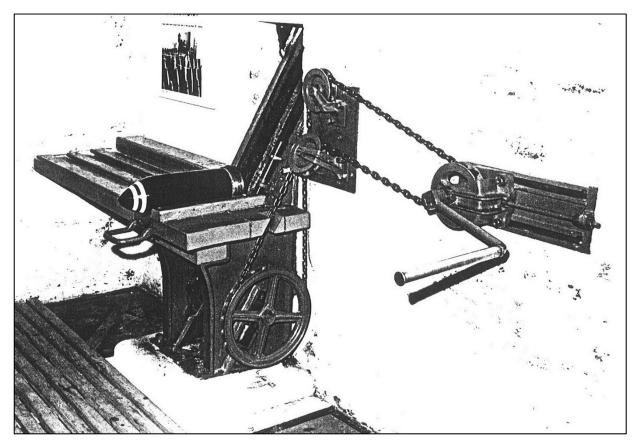
St. Ann's Fire Command H.Q., 17.05 Hrs, Tank Landing Crafts 115 and 116 observed to be in difficulties in entering Haven. U14 standing by. Sea rough, wind blowing gale force. 18.30 Hrs. one T.L.C. reported sunk, bearing 140, approximate range 6,400 yds from West Blockhouse.

All possible assistance given to the Navy by all Batteries in the Fire Command. 18.35 Hrs. Lifeboat launched from U14. 26th April 01.00 Hrs. All Coast Artillery Searchlights, and the Anti-Aircraft Searchlight at St. Ann's Head exposed to assist the rescue work. The second T.L.C. reported capsized with no trace of survivors. Two of the final total survivors were rescued by East Blockhouse Battery personnel after a cliff search. 06.25 Hrs West Blockhouse lights doused. No further survivors. Approximately 79 Marine and Royal Navy personnel drowned.

The war diaries are not all doom and gloom, and a number of the entries are quite humorous or embarrassing. For example, on the 4th September 1943, West Blockhouse was ordered to fire a "Bring To" round across the bows of M.M. *John Marshall*. The order was obeyed by the gunners, only to receive a cancellation of the request - after the gun was fired! Red faces were also the order of the day on 7th January 1944, when the guns at West Blockhouse opened Fire on Sheep Island as a "Confer Target". Eventually the AXO informed the Battery of its mistake, and the guns ceased fire, after ten rounds had been discharged. Hits were observed to have ricocheted over Angle Airfield; no doubt much to the consternation of the airmen of the Coastal Command Development Unit based there! Fortunately the gunners were able to redeem their reputation seven days later, when the searchlights were used to help guide a Sunderland flying boat safely into the haven, after it had landed in fog near Sheep Island.



Interior of the shell store of B3, 6 inch magazine



A restored 6" shell hoist at Tynemouth Castle, similar to the other used at West Blockhouse Battery

One significant event which occurred during 1943 was the arrival of a "gun laying" radar set. The transmitter was located at St. Ann's Head, while the receiver was located in the most westerly of the abandoned 9.2" gun emplacements at West Blockhouse. In theory, this device enabled the gunners to engage targets more accurately than before, in bad weather and at night.

By the winter of 1943, the Fortunes of War were beginning to favour the Allies, and as a result a number of gun batteries around the country were stood down to release the gunners for more pressing tasks.

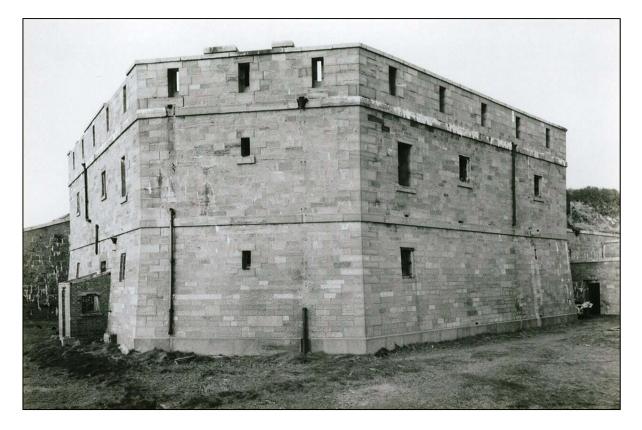
Locally, West Blockhouse was unaffected, East Blockhouse and Soldier's Rock, however, were reduced to searchlight batteries only.

Throughout the war, Milford Haven was a major convoy assembly point, regulated by the Wrens of Naval Control, based at South Hook Fort, which was part of H.M.S. *Skirmisher*. From the early months of 1944, additional ships arrived as part of the build up for the invasion of Europe. The county was bulging at the seams, with an ever growing population of American troops, some of whom were billeted at East Blockhouse. The ongoing build up of troops and materials brought with it the added constraint of unit censorship, on the 22nd April. This censorship was established to prevent any inadvertent disclosure of information about the armada of ships that was growing larger by the day. Shipping movements increased dramatically, reaching a peak in May, when a staggering total of 259 Merchant and 597 Warships entered the Haven. By now, the war had swung so resoundingly in favour of the Allies that the Germans had been unable to intervene with the armada at Milford Haven; in fact no enemy aircraft had ventured over the county since the 28th March.

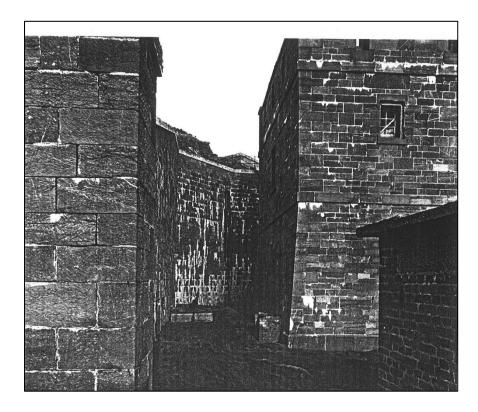
Once Operation Overlord had been carried out, and the Allies had gained a firm foothold on the continent, the coast defences began to be run down; secondary armament like the 75 mm. Field gun was returned to Woolwich, and the 2" Unrotated Rocket Projectors were no longer manned. By the 18th December 1944, the battery at West Blockhouse ceased to operate, apart from one searchlight. The following January, H.Q. 532 Coast Regiment R.A. was redesignated 620 Regiment Royal Artillery (Pembrokeshire) Territorial Army, and was once more made responsible for the part-time manning of West Blockhouse Fort.

The Fort was to feature in one final incident before the war drew to a close. On the 9th February 1945, a 60 ton floating crane parted its tow, and drifted onto the rocks between Calm Rock and Mill Bay. Eight days later, West Blockhouse was manned for the one and only time by American troops, when two officers and twenty five men of the 14/72nd Engineering Maintenance Company made it their base for the salvage of the crane.

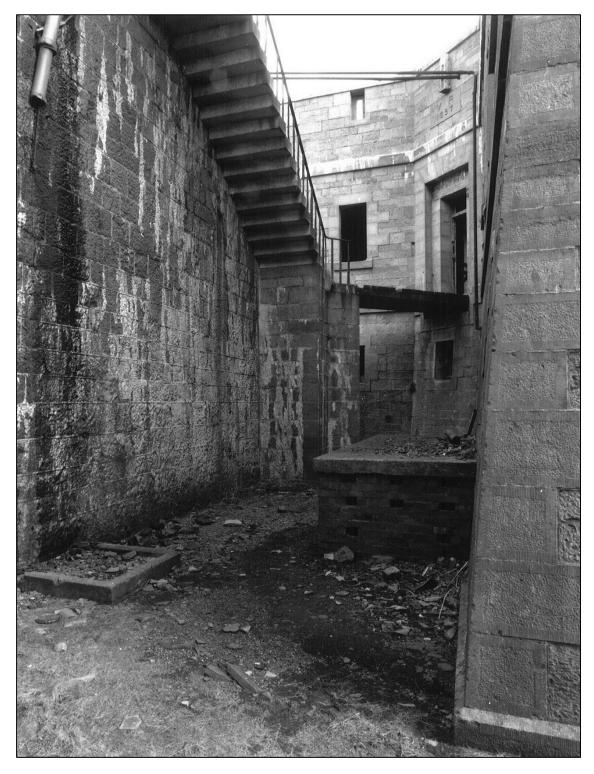
Roger Thomas kindly gave us copies of the many photographs he has collected from different sources; and of his own maps and drawings of guns.



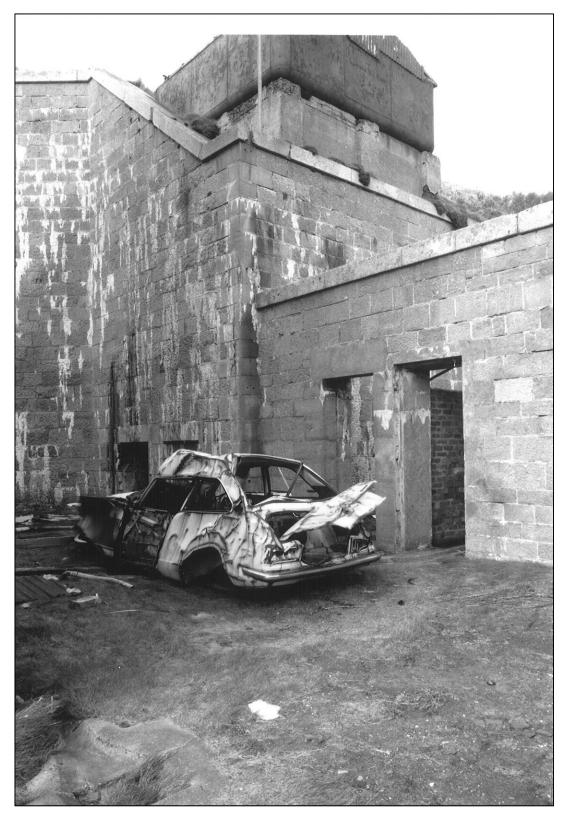
West Blockhouse in 1986, photographed for the National Monuments Record for Wales, just before building work started. The porch on the left shelters a door made to give access to the engine room for the Coast Artillery Search Lights.



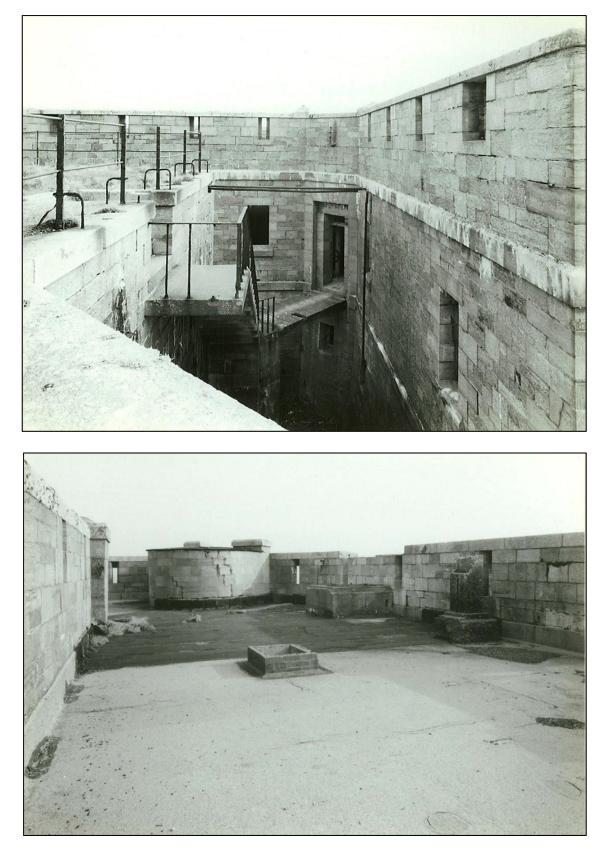
The mutilated condition of the window surrounds can be seen in this photograph. (NMR)



1986 (NMR)



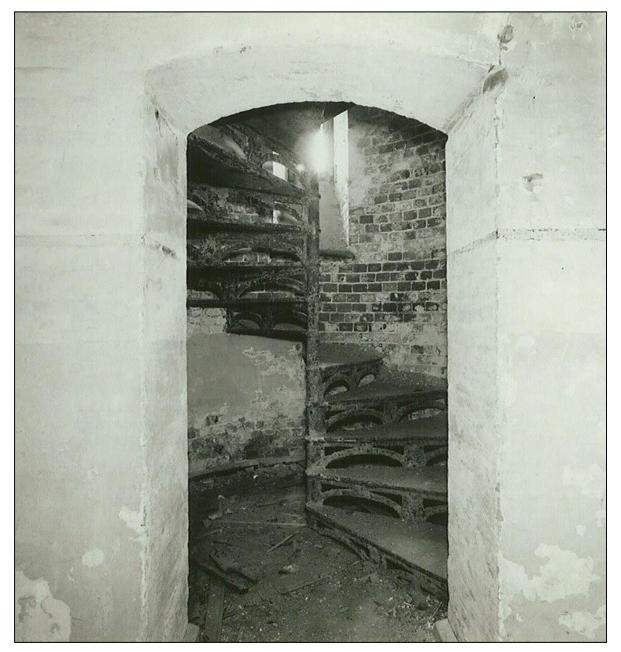
1986 (NMR)



The concrete mount for the 3 pounder Q.F. gun is against the parapet on the right (NMR)



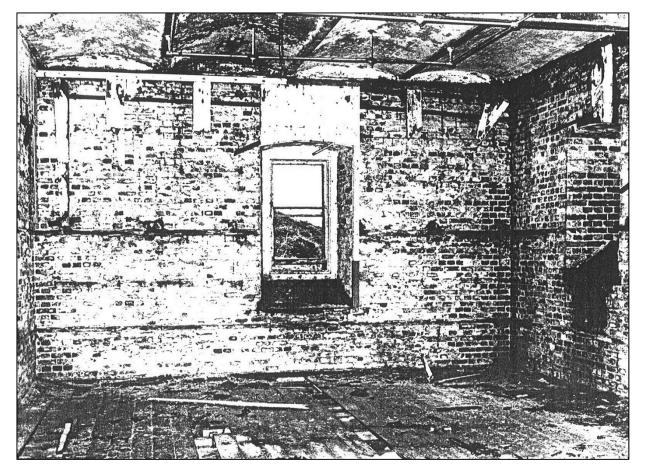
1986 (NMR)



1986 (NMR)



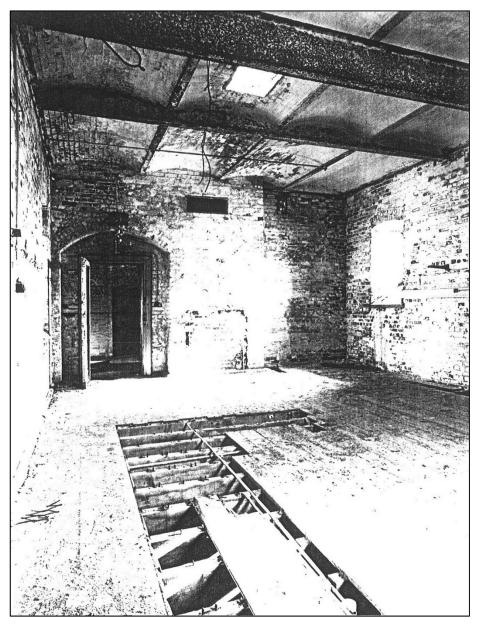
The north barrack, now the living room, with the charred remains of the floorboards.(NMR)



The north barrack in 1984, when it still had its floor, and bits of the timber lining its walls. The north window was placed low enough to see out of, as were those looking into the hall, while those looking out to sea were just too high. The new floor was inserted at a higher level. (Photo Roger Thomas)



The west barrack, now subdivided into bedrooms and bathrooms. The concrete structure supporting the mount of one of the roof guns can be seen on the left, with a girder to give further strength. (NMR)



The west barrack, looking east (NMR)

Précis of Correspondence relating to the Defences of Pembroke, prior to January, 1893.

The Royal Commission of 1859, appointed to consider the Defences of 7 the United Kingdom, submitted their report. Dealing with Pembroke, they stated as follows:---

The dockyard of Pembroke, though not a fitting-out yard, has such capabilities as a great building yard, to which purpose it is almost exclusively applied, that a larger proportion of ships can be constructed in it than in any other of our naval establishments.

While its destruction would not be so disastrous as that of Portsmouth, Plymouth or Chatham, still the consequent loss of the ships in course of construction, and the diminution of the power of the nation to reinforce its fleet are sufficient reasons for rendering it secure, quite independent of the importance of the splendid harbour of Milford Haven; moreover, its position is so detached, and so peculiarly liable to sudden attack, that it must depend for its defences on its own resources.

It is most open to attack by an enemy's fleet running up the haven, but if it was only protected to seaward it might be attacked by land. There are several good landing places on the Pembrokeshire coast, 5 to 12 miles distant from the dockyard, and a body of troops or seamen disembarked at any of these places could destroy the dockyard by coup de main.

SEA DEFENCES.

The defence of Pembroke has received the attention of different Governments from time to time.

Many years ago, a heavy and well-planned battery, called Pater Fort, was constructed just outside the yard, bearing down the haven.

About 15 years ago, a *defensible barrack* was erected on the hill immediately behind the yard, in order to give some defence against attack by land, and about the same date, two towers were built to flank the wall of the yard.

Subsequently batteries were established at the entrance to the haven on Thorne Island, Dale Point, and West Blockhouse Point, and a 3-gun tower was placed on Stack Rock.

These batteries sufficed to prevent an enemy making use of the anchorage at the mouth of the haven, but would not prevent the passage of war steamers up the haven to the dockyard, and in 1858, the Secretary of State for War, considering that more powerful works were necessary, both on account of the increased power of war ships and of the introduction of rifled ordnance, appointed a Committee to report on the defences of Milford Haven.

This Committee made the following recommendations :---

- 1. To place a powerful casemated battery of two tiers, besides guns on the roof, round the 3-gun tower on Stack Rock.
- 2. To place batteries on either side of the haven—one at South Hook Point, another at Chapel Bay, distant 800 yards and 1,400 yards respectively from Stack Rock—to support the Stack Rock and give a cross fire on the haven.

(B223)-308wo

- 3. At 3,500 yards, higher up the harbour, viz., at 7,000 yards from the dockyard, to place heavy batteries at either side of the haven at Signal Staff Point, and at Popton Point—where the channel is about 800 yards wide, to bear down and across the haven, the distance between the works being about 1,600 yards.
- 4. Between these two latter works to place a floating barrier, to prevent steamers running past the batteries and to keep them under the fire of all five works.

These recommendations were approved, at a total estimated cost of 190,000*l*., of which 25,000*l*. has been voted in the current year.

The works are in progress, and should be completed. They seem well devised to secure the dockyard from destruction, either by long range bombardment from sea, or by the passage of a hostile fleet up the haven.

LAND DEFENCES.

The land defences must be considered under two heads, viz., to prevent bombardment and to prevent actual capture.

To the southward of Pembroke there are at least four places at which an enemy might land with guns and matériel sufficient for bombardment, viz. :--

> Tenby, 12 miles distant. Lydstep Bay, 9 miles distant. Freshwater Bay, East, 5 miles distant. ,, West, 8 ,,

To the northward he might land at Broad Haven, St. Bride's Bay, 9 miles distant, or, as in 1797, at Fishguard Bay, 20 miles distant.

SOUTHERN DEFENCES.

The ridge, 215 feet high, between Pennaar Pill and East Llanvin Pill, covers the dockyard from the southward, but for several miles in the direction of Tenby there is a valley, down which the dockyard can be viewed and consequently bombarded by an enemy without his advancing more than 8 miles from Tenby. The dockyard can also be viewed from the south-west, where the ridge ceases.

Any plan that could be proposed to effectually prevent bombardment from cither of these directions would be so extensive and costly, as to be altogether out of proportion to the object. It is, therefore, recommended that self-defensible batteries should be placed at the four landing places already mentioned, in order to prevent a hostile landing. These batteries to be sufficiently strong and formidable to delay an enemy to such an extent as to give time for a portion of the garrison from Pembroke to arrive for the defence of the bay attacked.

NORTHERN DEFENCES.

St. Bride's Bay and Fishguard Bay, at which an enemy might attempt to land for the purpose of bombarding the dockyard from the north, are too distant from Pembroke and from one another to be conveniently held in a similar way. Moreover, the ground on the north side of the haven so completely screens the dockyard from view, that the best protection here against bombardment would be a line of small detached works with the flanks resting on the haven, at average distance of 3,500 yards from the point to be protected. Six small works, at about 1,400 yards interval, should be constructed; that on the left near Vowton; that on the right near Burton; with intervening works near Walterston, on Lower Scoveston Hill, near Honeyborough, and near Barnlake. These works to be of sufficient strength to oblige an enemy to land heavy guns for their attack, and so render it improbable that he would make the attempt.

	Wor	·k.		·		No. of guns.	Barrack accommodation.	Cost.	
Bays south of Milford Haven-						2) 2)		£	
Tenby			••	••		15	. 150	••	
Caldy Island	••	••	••	••		10	100 '	••	
Lydstep	••	••	••	••		6	50	•• •	
Freshwater, East	••		••	••		6	50		
"West	••		••	••		6	50	••	
					-	43	400	100,000	
Euceinte on south side	of the	Ilaver							
Pennaar Farm		••	••	••		15	150	••	
Bush Corner	••	••	••	••		20	300	•• `	
Ferry Hill				••		15	200	••	1
Advanced work	••	••	••	••		6	• ••	••	
Intermediate work	••	••	••	••	••	6	••	•• (10)	*
					~	62	650	250,000	
North side of Haven-	÷				Ī			. *	
Scoveston	••	••		••		20	300		
Walterston		••	••	••		6	50	••	
Iloneyborough	••	••	••	••	••	6	50	••	
Barnlake	••	••	••	••		6	50	••	
Vowton	••	••	••	••		10	100	••	
Burton		••	••	••		10	100	••	
					ſ	58	650	250,000	•
	4 544	d, Peml	make	••		163	1,700	600,000	•

The total war garrison for land and sea defences was placed at 7,000 to 8,000 men of all arms.

The Defence Committee concurred in the recommendations of the Royal . 9.4.60 Commission.

The combined Defence and Fortification Committees approved of a design 2.2.61 for a work near Scoveston, on north side of Milford Haven.

The Defence Committee approved of plans for a battery with proposed ^{31.7.62} Coastguard buildings at Angle, Chapel Bay. This project was part of the approved sea defences of Milford Haven. It provided for a battery for six guns.

LOCATIONS OF THE MILFORD HAVEN FORTS (compiled by Roger Thomas)

BRUNT FARM Heavy anti-aircraft gun battery, SM811 041, No public access WEST BLOCKHOUSE Fort and battery SM817 036, Public access on Coast Path DALE FORT SM823 051, No public access, Field Centre SOLDIER'S ROCK BATTERY SM834 063, Public access on Coast Path **GREAT CASTLE HEAD** Anti-aircraft battery, SM846 064, Demolished BICTON FARM Heavy anti-aircraft battery SM846 079, No public access **SOUTH HOOK FORT** SM870 055, Public access on Coast Path to battery only HUBBERSTON FORT SM890 055, No public access THORNTON Heavy anti-aircraft battery, SM909 072, No public access SCOVESTON FORT SM944 066, No public access BATEMAN'S HILL Heavy anti-aircraft gun battery SN013 049, Demolished WINDMILL HILL Heavy anti-aircraft gun battery SM979 005, No public access NORTH EAST GUN TOWER Pembroke Dock, SM964 038, Public access only to exterior SOUTH WEST GUN TOWER Pembroke Dock, SM955 036, Public access only to exterior DEFENSIBLE BARRACKS Pembroke Dock, SM961 031, Access to Golf Club members only

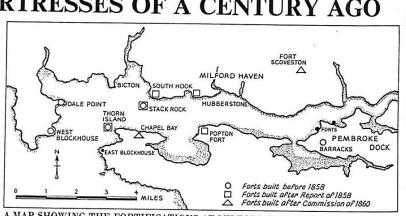
WEST PENNAR Heavy anti-aircraft gun battery, SM933 031, Demolished POPTON FORT SM894 038, Oil pollution unit. Access to exterior on Coast Path GRAVEL BAY Heavy anti-aircraft gun battery, SM882 018, No public access STACK ROCK Fort and gun tower SM864 049, No public access CHAPEL BAY Submarine mining establishment, SM862 035, No public access CHAPEL BAY FORT SM859 036, No public access, adjacent to Coast Path THORN ISLAND FORT SM846 038, No public access, adjacent to Coast Path EAST BLOCKHOUSE BATTERY SM843 027, M.O.D Coast Path passes through battery EAST OR ANGLE BLOCKHOUSE SM841 028, M.O.D Adjacent to Coast Path Unsafe to enter.

ST CATHERINE'S FORT Tenby. SN139 003, Occasionally open to the public
GUNFORT Tenby SN135 002, Public gardens
HAKIN POINT BATTERY SM899 054, Demolished
ST CATHERINE'S BATTERY SM908 056, Demolished
PATER BATTERY Pembroke Dock, SM957 039, Partially demolished. M.O.D. No access

1040 COUNTRY LIFE-MAY 4, 1961 HARBOUR FORTRESSES OF A CENTURY AGO By ANDREW SAUNDERS

ILFORD HAVEN in Pembrokeshire is one of the few defended ports in the British Isles where the construction of British Isles where the construction of fortifications was virtually left to the last 150 years. This is surprising because, besides providing a very large land-locked harbour, the Haven was for a long time the chief point of embarkation for Ireland. Militarily its im-portance was great. If seized by an enemy it would have provided a useful base for privateer-ing or for launching an invasion on either Ire-land or England.

<text><text><text>



A MAP SHOWING THE FORTIFICATIONS AT MILFORD HAVEN, PEMBROKESHIRE, AND PEMBROKE DOCK IN THE 19th CENTURY

Stack Rock, six guns on Thorn Island and 12 guns near Chapel Bay. As two-thirds of the late-18th-century Pater Fort had been surrendered to the Admiralty when the Naval yard was formed, that needed strengthening. Further-more, he proposed a chain of forts across the peninsula east of Pembroke Dock to protect it from landward attack. Nothing was done at the time that the time that the time that the time time the tim the time, but the scheme was discussed again in 1829 and work began at Pater Fort in the following year. An army garrison in addition to the detachment of marines was declared necessary and 11 years later the Defensible Barracks, or New and 11 years later the Defensible Barracks, or New Fort, were completed. Two towers flanking the dockyard wall were begun in 1849 and finished eight years later. Meanwhile lengthy negotia-tions over the purchase of land at Dale Point and Thorn Island had been taking place. Work began at Stack Rock in 1850 and at Thorn Island in 1852. Four years later Dale Fort was completed, as was West Blockhouse Fort soon afterwards. afterwards.

afterwards. This somewhat piecemeal development came to an end with the publication in 1858 of the report of the Parliamentary Committee on the sea defences of Milford Haven and Pem-broke Dock. Most of the forts already built

were sited at the entrance, but the report i were sited at the entrance, but the report pro-posed two further lines of defence behind it. The first was to include a strengthened Stack Rock, Chapel Bay and South Hook; the second, Signal Staff Point (Hubberstone) and Popton Point with a floating battery between them. It was thought imperative that steamships should be brought to a standstill at the entrance to the Haven Dire if the autor defension should be brought to a standstill at the entrance to the Haven. Even if the outer defences were silenced the inner lines, 7,000 yards from the dockyard, would prevent bombardment "even by rifled guns of the largest range." Land defences were also proposed. The plan was approved by the Government; the works were quickly contracted for and were in progress in 1859.

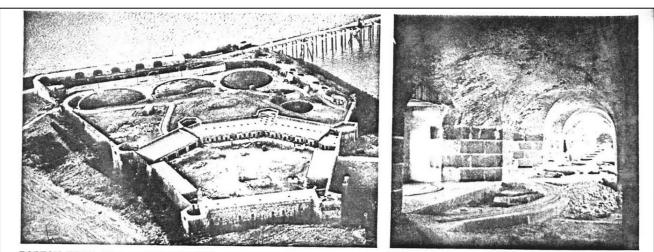
1859. When the Report of the Defences of the United Kingdom was published in 1860 the Commissioners had little to add when they came to consider Milford Haven. They approved the work that had been proposed and was partially under construction. More attention was given to the possible threat of landward attack and a line of forts was recommended between Pennar Pill and East Llanian Pill, east of the Dockyard,

and the second 198.6 ST. H 100

Ine of forts was recommended between Penar Pill and East Llanian Pill, east of the Dockyard, on sites already purchased. In addition a ring of small works was proposed north of the Dockyard with self-defensible batteries at possible landing places between Freshwater West and Tenby. Nine years later another Parla-mentary. Committee presented a mentary Committee presented a progress report which described the state of the forts in some detail. All the sea batteries were prac-tically ready except for that of Chapel Bay. The small works on Chapel Bay. The small works on the south coast had been sanctioned but not begun. Of the land de-fences only Fort Scoveston in the northern line had been sanctioned and constructed. With the com-pletion of these fortifications in the early 1870s little more was at-tempted. Later alteration was slight and largely took the form of remodelling gun mountings in open batteries to allow for the sub-stitution of heavier and more modern artillery. Belonging to the mid 19th century, the Milford Haven forts illustrate the changes in military engineering. Here and there can be seen the influence of the bastion system of defence, but generally

system of defence, but generally the polygonal system is dominant. Springing from the ideas of Montalembert late in the 18th century, it separated the main armament of a fort from that required purely for self-defence. Instead of com-plicated defence in depth with each part flanking another, the fort was surrounded by a single ditch into which projected bomb-proof galleries or *caponiers*

HUBBERSTONE FORT AT MILFORD HAVEN. It has casemate and open batteries on the cliff edge and a defensible barracks well to the rear. The two are connected by lengths of ditch and curtain wall



POPTON FORT, WHICH RETAINS THE TRADITIONAL BASTION FORM. It was built as a result of an 1858 Parliamentary Committee report. (Right) THE INTERIOR OF THE CASEMATE BATTERY OF THE FORT

providing all-round fire. The heavier guns, meanwhile, could concentrate on targets over the whole front. A further departure from 18thcentury techniques was the abandonment of the continuous *enceinte*. Rings of isolated forts capable of covering one another were placed round the point to be defended in order to keep the enemy beyond bombarding distance. Such developments were accelerated by the rapid improvements in artillery, particularly by the introduction of the rifled gun, whose range, accuracy and fire power were to revolutionise siege warfare.

Eleven of the 12 forts at Milford Haven were constructed within 20 years. Despite the closeness in date, three distinct phases in design and detail can be seen, phases which correspond to the three main periods of construction those built before the Parliamentary Committee of 1858, those built after it and those built after the 1860 Commission.

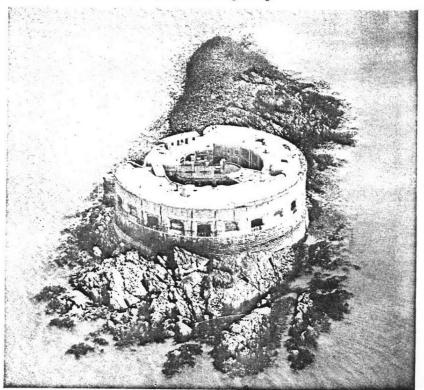
The earliest forts were small and, although carefully constructed, were insufficient to withstand heavy bombardment. West Blockhouse and Dale Point have platforms for guns *en barbette* near the water's edge, with barracks behind them. Thorn Island and Stack Rock were initially quite small forts, Thorn Island having a casemated battery for nine guns and Stack Rock being a three-gun tower, trefoil in plan. None of these was strong enough to meet the conditions of the IS60s. West Blockhouse and Dale were left largely for nuisance value, but the other two were substantially remodelled. The two gun towers protecting Pembroke Dock closely resemble the Martello Towers built nearly 50 years before. In contrast to the coastal batteries is the Defensible Barracks on the hill above the dockyard. The barrack blocks have considerable architectural style, with pediments and well-proportioned doors and windows. They are set round an internal square with arched alleys at the angles giving access to the bastions at each corner and the *terre-plein*. The whole is enclosed by a deep revetted moat.

revetted moat. The forts built at Milford as a result of the 1858 report had many similar features to those built in England after the 1860 Royal Commission. But they suffered by having the large expanses of exposed masonry that were shortly to prove, in the American Civil War, a liability in works of permanent fortification. Limestone ashlar is commonly used, while internally, brick is used for piers and vaulting. The forts are massive with both casemate and open batteries on the cliff edge and a large defensible barracks well to the rear, connected with one another by lengths of ditch and curtain wall.

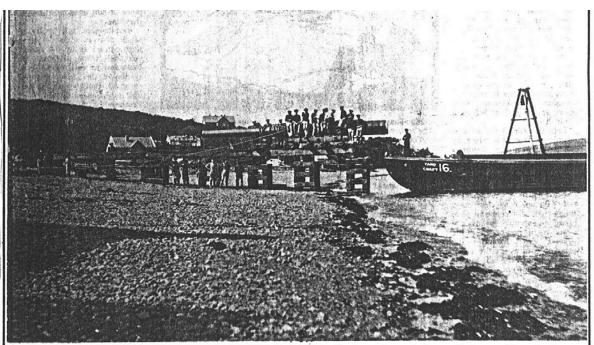
well to the rear, connected with one another by lengths of ditch and curtain wall. Popton, South Hook and Hubberstone share this pattern. Their distinguishing features appear in the arrangements for self-defence. Popton retains the traditional bastion form, while the other two provide varieties of *caponier* and counterscarp gallery. The batteries cross their fire over the Haven in two lines of defence. South Hook's opposite number, Chapel Bay, is totally different, not having been begun until the 1870s. Its low profile—open batteries with barracks and magazines below—shows the changes in design which had appeared since the 1860s. Unfortunately, it has been greatly altered by later gun positions. On Stack Rock the existing tower was completely enclosed by a casemated battery, originally with two tiers and another battery on the *lerre-plein*. Towers of several storeys continued to be built as at Garrison Point, Sheerness, and the sea forts off Spithead, but they were suscentible torified guns

Garnson Foin, Sneerness, and the sea onto on Spithead, but they were susceptible torified guns. The one fort of the 1860 Commission land defence scheme to be implemented is particularly interesting. Such defence is vital for coastal fortification, which is otherwise open to attack from the rear by landing parties. Fort Scoveston is a good example of polygonal fortification and can be paralleled by Portsdown Hill, Portsmouth. It is hexagonal, surrounded by a deep ditch, which is flanked by one double and four single *caponiers* equipped for cannon as well as for musketry. On the counterscarp of the ditch is a covered-way and the escarp has a *chemin des rondes*. There was sufficient space on the ramparts for 32 guns, protected from enfilade and reverse fire. A large traverse divides the internal parade, with the magazines and bomb-proof barracks largely under the ramparts.

The changes taking place in fortifications during the middle years of the last century are illustrated effectively at Milford Haven. Military engineering never from that time kept pace with the advance in the design of weapons and forts quickly became obsolete. Here they remain as evidence of the belated recognition of the value, strategic and commercial, of the Haven. For the archaeologist they are some of the last examples of defensive military architecture and engineering.



STACK ROCK, STANDING GUARD OVER MILFORD HAVEN. A casemated battery encloses the original three-gun tower



This photograph loaned by 'Telegraph' reader Mrs. Thomas, of Dale, shows another variation on the theme of how the Army transported giant gun barrels to the West Blockhouse battery.

The booming saga of a big gun barrel!

BY VERNON SCOTT

The "How they got the 9.2 inch gun barrel from Pembroke Dock to West Blockhouse" saga, which has been featured in the Western Telegraph for the last two weeks, booms on!

booms on! In our last issue, we published a photograph supposedly showing the enormous barrel being hauled up Dale beach in 1934 after it had been ferried down the Haven from Pembroke Dock in the hulk of an old sailing ship specially purchased for the operation. But 70-year-old Mr. Jack Holt, of 14 Prendergast Hill, Haverfordwest, assures us that

But 70-year-old Mr. Jack Holt, of 14 Prendergast Hill, Haverfordwest, assures us that the photograph was taken long before 1934 and that in fact, it shows a similar exercise carried out by the Royal Artillery at the turn of the century.

shows a similar exercise carried out by the Royal Artillery at the turn of the century. To support his claim Mr. Holt has a tape recording made by his wife's uncle, Mr. Edwin Thomas, of Moor Hall, Camrose, who died in 1982 at the age of 93. During the recording, Mr. Thomas looked back over his long and interesting life and at

During the recording, Mr. Thomas looked back over his long and interesting life and at one stage referred to the day, around about the turn of the century, when his brothers John and Benji drove two traction engines from Moor Hall to Dale to meet a huge gun which had been brought down by sea from Pembroke Dockyard and unloaded on the beach. Mr. Holt said on Friday: "There is no doubt in my mind that the photograph in last week's *Telegraph* was the one taken to record that occasion.

UNIFORMS

"Examine the photograph closely and you will see two traction engines and that the soldiers are wearing uniforms which seem very much out of place for the 1930s."

Brigadier Cliff Gough, of St. Florence -- whose appeal in the Telegraph earlier this month, for a photograph of the 1934 operation, first set the gun barrel saga rolling -- immediately realised when he saw last week's photograph that it was not of 1934 vintage! He told the Telegraph: "I was on Dale beach that day nearly 51 years ago when the gun barrel was brought ashore, and we rolled it up the shingle sideways not head on. It was then taken in tow by a very large traction engine with a canopy on top."

canopy on top." The Brigadier now believes that this engine could have been driven by a Pembroke man, for among a number of people who have been in touch with him since we first published the gun barrel story, is Mr. Bill James, of 'Carisbrooke', Victoria, Roch. In a letter, Mr. James said Brigadier Gough's appeal brought back happy memories for him because his late father, Mr. Tommy James of Rocky Park, Pembroke — who was affectionately known as "Tommy Steam" — used to drive a steam traction engine which was used for towing the East and West Blockhouse gun barrels.

Mr. James wrote: "Originally the engine belonged to J. and A. Stephens, East Back Works, Pembroke, where my father worked all his life before retirement. He died two weeks after his 90th birthday. After the death of Messrs. Stephens the works were taken over by Messrs. T. W. Colley and Son. The engine used was a very large Ransome traction engine with 7 foot 6 inch rear wheels, and it operated a threshing machine at many farms around Pembroke."

Brigadier Gough is preparing an article on the 1934 operation at Dale for the REME Regimental Journal.

REME Regimental Journal. And last week a Western Telegraph reader from Dale loaned us yet another photograph (above) showing Yard Craft No. 16, presumably from Pembroke Dockyards, unloading a big gun at Dale by means of a derrick and wooden jetty.

The photograph shows the landing, or possibly the removal, of a gun barrel (9.2 inch) from Dale Beach, c. 1920.



The photograph referred to at the beginning of the article opposite, showing the landing of 9.2 inch gun barrel on Dale beach c.1903 (Roger Thomas Collection). No photographs have yet been found of the 1934 landing.

WESTERN TELEGRAPH, Wednesday, January 6th, 1988

St. Ann's Head today is best known for its lighthouse and Coastguard station, but during the last war it was occupied by the Army. Its position afforded fine views of both sea and sky and was thus invaluable for the early detection of enemy attack. Eighty-one-year-old Major Frederick White, of Hove in Sussex, was stationed there for 18 months between 1940 and 1942. Now retired for 20 years as a senior solicitor with the British Railways Board, he recently returned to St. Ann's and penned this account of his war service in Pembrokeshire.

Officer's memories o the Haven at war

St. Ann's Head was the headquarters of 532 Coast Regiment (Royal Artillery) under the command of Lieutenant-Colonel Foster, a Territorial and a partner in a firm of estate agents in Haverfordwest.

It was also the HQ of the Fire Commander (F.C.), responsi-ble for early warning and the control of the fire of the three **Coast Batteries.**

The F.C. post was the ex-isting, disused lighthouse, the lantern of which was replaced by a longer and less substantial 'box' than that there now.

There were, of course Coast-guard personnel, but the Station had not the importance it now has.

Besides Col. Foster there were some four or five other officers engaged on Regimental and F.C. duties.

COMMANDED A number of other ranks brought the total of Army per-sonnel to not more than 20.

There was a minefield laid on the Dale side of the present perimeter, on which our black dog, Rover, blew himself up. There was no other landward defence and no anti-aircraft defence whatsoever.

The two permanent batteries

BY MAJOR FREDERICK WHITE

at East and West Blockhouses were supported by a temporary six-inch naval gun battery in-

side the Haven at Soldier's Rock (Watch Point). This was 367 Coast Battery R.A. The Officer Commanding was Captain Brinsden and the battery was divided into three 'watches' — A, B and C — each commanded by a Lieute-nant and 2nd Lieutenant nant and 2nd Lieutenant. There was a Sergeant Major

(Mr. Gale), three sergeants and other ranks. The Battery, set up in June 1940, was partly tented and partly hutted. Work to make the site more habitable was being carried out by a local firm headed, I believe, by a Mr. Price. The work was completed some time after I left.

The troops were made wel-come at St. Ishmaels and the ladies of the village arranged a number of functions for their benefit. The Battery responded by laying on a children's party. Butterhill Farm was another

place where we were all made welcome and Lieutenants Davies and Hichens had their wives accommodated there from time to time.

The Haven was a convoy assembly point and also housed an RAF flying base for Sunder-lands and Catalinas. DANGEROUS

Because of this, the Haven was the object of frequent minelaying by enemy aircraft. The raids were at night and

mostly on moonlit nights. The mines could be seen drifting down supported by blue nylon parachutes. They were very dangerous. Many missed the water and exploded on the rocks below the F.C. post and the Batteries. Some

drifted inland. To cope with the mpne-laying, and for other purposes, there were a number of trawlers. Some were, I believe, from Grimsby, and were known as 'the football boats', being named after well known football teams, such as Leeds United. There was also a larger trawler the Hugh Walpole. More particularly there were three Dutch minesweepers known as B.D.V.s with special secret minesweeping equipment. There were also two ex-amination vessels — X.V.s.

Unknown vessels wishing to enter the Haven were chal-lenged from the Coastguard post by a 'give recognition' signal in Morse Code.

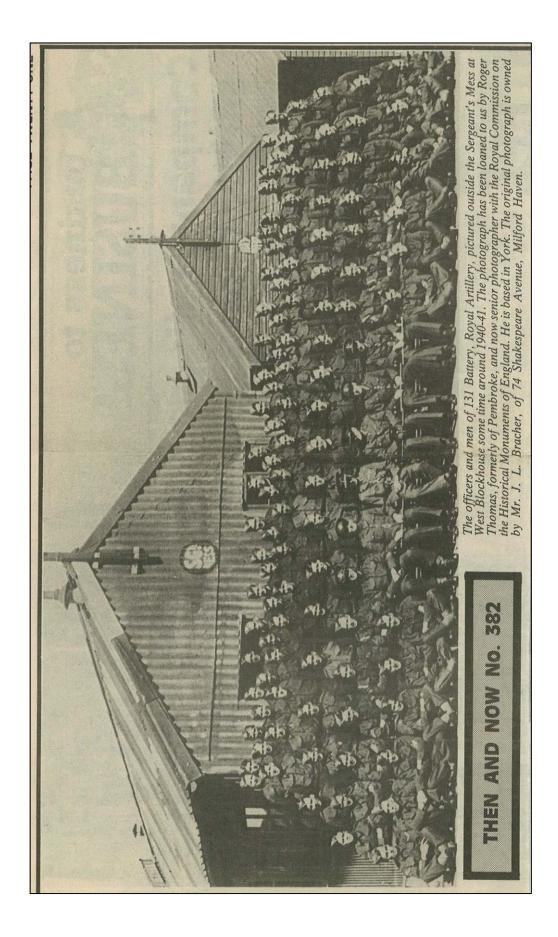
In the discretion of the F.C. a vessel failing to give the appropriate signal was 'brought to'. 'SHOT'

This, on the order of the F.C., was achieved by the examination gun at West Blockhouse firing a warning shot across the bows. The 'shot' was a sand-filled practice shell — i.e. not fused — fired at half charge. On some three occasions I

had to institute this action, one being in respect of a Royal Navy motor launch (M.L.) which we had not seen before.

Sometime in May, 1941, a Sunderland returning to base at night missed its bearings and ran aground causing damage to the craft and injury to the crew.

Consequently, it was arranged that, subject to Naval agreement, the Coast artillery searchlights (CASLs) at West and East Blockhouses would be exposed on agreed bearings on



the request of the RAF and at the order of the F.C. As might be expected, the Navy were a little 'sticky' when consulted. On one occasion I remember a Sunderland was cruising just above the lighthouse like a blind bat until L could bear it no longer and 'anticipated' Naval permission and had the CASLs exposed. It was grand to see this graceful 'bird' gliding safe-ly home.

ly home. The following rather sketchy in Milford

this graceful of gluing sate-ity home. The following rather sketchy faccount of my stay in Milford faven is based on my incom-plete diaries, supplemented by urther remarks. Of course out of the sage could be filled by others: **1940** Monday, September 16th: Ar-rived for preliminary training the Coast Artillery School, Shoeburyness, as 2 and Lieute-hant. After various duites at West Blockhouse appointed Officer Commanding 'A' Watch at Soldier's Rock. September 22nd: According to the German invasion. Actually the only incident was one of our motor launches arriving with full recognition. Signas. October 30th: Pants of many put on by the ladies of the village. October 4th: Rain and wind. October 14th: Tents blows down. October 14th: Raters: from shysing in Haven. These in fact were fulle shots from ships at energy aircraft proceeding in sum at Soldier's Rock. November 1st: These in fact energy aircraft proceeding in sum at Soldier's Rock as blad a go. It ionly served to give away the ion synthese of ships and away. The serve first of ships and away the ionly served to give away the ionly serve

attended a four inch and six inch Naval gun instructor's course at the Coast Artillery School which had been moved from Shoeburyness to Liandud-mo due to raids. Two bombs fell within the School precinct when I had been there pre-viously. November 6th: Dance at St. Ishmaels. December 1st: Resumed duty at Soldier's Rock. December 1st: Resumed duty at Soldier's Rock these consisted of four of trea artistes and were often pretty awful. December 20th: The Battery are a party for the children of St. Ishmaels. December 25th: As is the cus-tom in the Army, the officers waited at table on the trops on Cristmas Day. The Coloned daughter. 2014 Banuary 12t: The ladies of St.

1941 January Ist: The ladies of St. Ishmaels gave a tea for the Battery and I gave a vote of thanks

Battery and I gave a vote of thanks. January 3rd: Competition be-tween the three Watches for gun drill etc. The Colonel ad-judged 'A' Watch the winners! January 5th - 18th: I ran a course for NCOs at West Blockhouse. January 1th, 13th and 16th: Mine dropping operations by enemy aircraft. January 20th: Terrible day. Rain, rain, rain. Canteen roof off.

off.

February 2nd: Snow. February 4th: ENSA sing-song. February 5th: Mines detonated

February 5th: Mines defonated in Haven. February 18th - 27th: Comman-ded Fishguard Battery while Captain Deacon on leave. March 10th: Big mine laid. March 11th: Now stationed at St. Ann's Head performing F.C. and Regimental duties with visits to Soldier's Rock and West Blackhouse. One mine, three explosions.

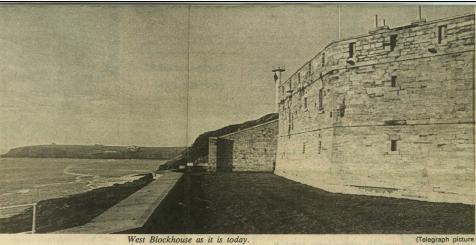
West Blockhouse as it is to March 15th: Mines up off Head, probably detonated by a B.D.V. March 18th: ENSA Concert Party at West Blockhouse. For a larger site this was a much better show. April 1st: S.S. Adellen bombed and on fire. I actually saw a German plane bombing the ship. A number missed but at heast one hit and started a fire. I was impotent with rage. It was broad daylight and we had nothing to throw at it. The aircraft could have bombed the F.C. and Regimental HQ with impunity. April 2nd: S.S. Adellen fire out, Towed into Have. April 4th: Mine laid. One explo-sion off Head. April 4th: Mine laid. One explo-sion off Head. April 4th a minelayer. April 23rd: Heavy mine laid — three went up below the Head.

One exploded in a field just outside the perimeter on Dale side.

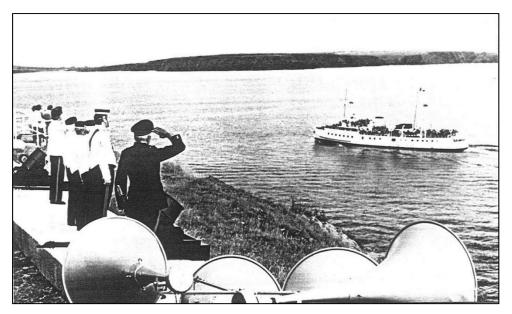
side. April 28th: I was an umpire at an area defence exercise at Soldier's Rock, but it was overan area defence exercise at Soldier's Rock, but it was over-shadowed by one of the Dutch BDVs being blown up by a mine for which it was sweeping. There was a shadder in the ground and by the time I had run to the gun site there was only a series of ripples and no trace of the vessel. Later a seeman's cap came ashore. May 31st; 'Soldier's-Röck Sports. Trying to set an exam-ple I finished last in the half-mile race. June 2nd: For the first time we exposed the CASLs for an in-coming Sunderland. June 2th: Tennis at Butterhill. June 7th: Exposed CASLs for Sunderland.

(Telegraph picture July 8th: Exposed lights for Sunderland. July 12th: Sports at West Blockhouse. July 27th, 28th and 29th: Umpire at Fishguard for area exercise. There followed a fair-ly quiet time during August. September 18th: Mine Iaid. A 'dud' landed in field near F.C. post on Dale side. September 22nd: The unex-ploded mine was defused and removed by a Naval party. October 13th - February 14th:

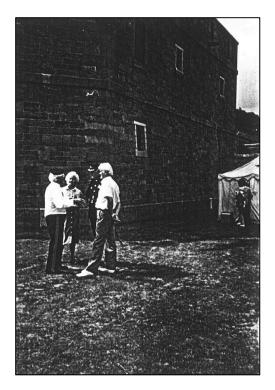
1941-42 October 13th - February 14th: Attended the 6th War Gunnery course at Llandudno. February 27th, 28th: F.C. at St. Ann's Head for the last time. Posted to Severn Fixed De-fences, then (Northern) West-ern Command. Later promoted to Major and posted overseas to 12 Corps and 13 Corps in Germany.



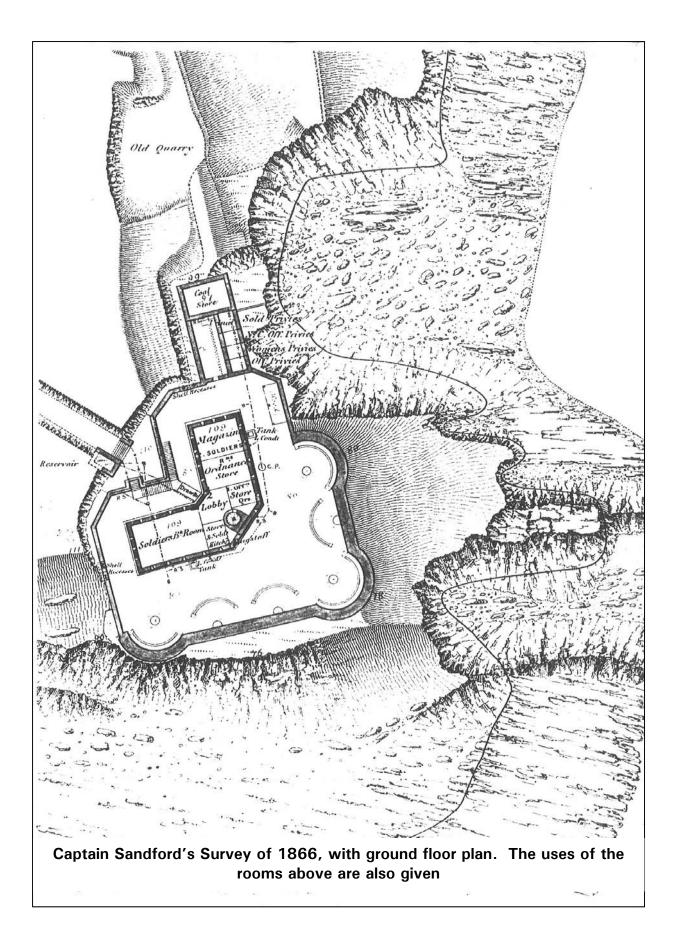
The last occasion on which a gun was fired at West Blockhouse. From Brig Cliff Gough:



Pembroke Dock Volunteer Artillery firing a salute at West Blockhouse on Sunday 26th June, 1988 on the occasion of the Jubilee Cruise of MV Balmoral for the Dyfed Wildlife Trust



Brigadier Cliff Gough (left) talking to Mrs Nora Evans and her brother Kenneth Bacon, who were small children at West Blockhouse when they last met Brigadier Gough in 1935. The officer in uniform is Lt. Col. H.K. Ogden, the Officer Commanding the Pembroke Dock Volunteer Artillery

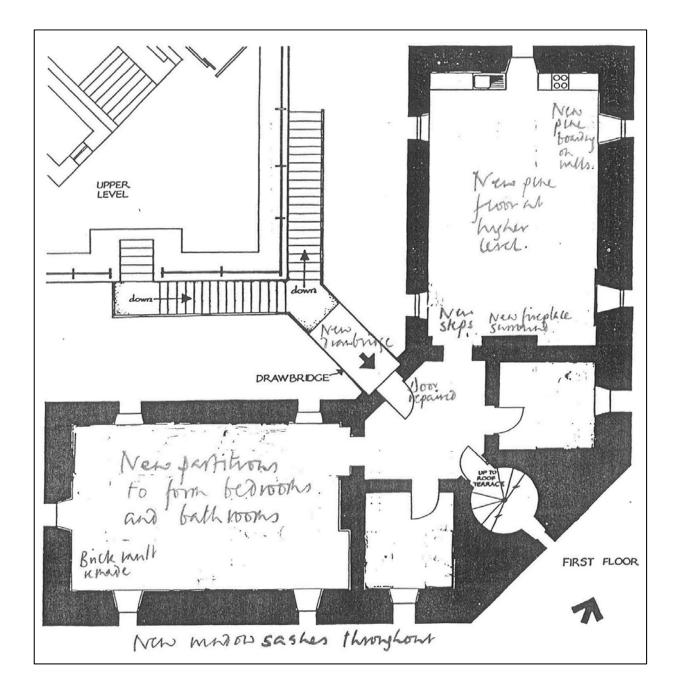


Restoration of West Blockhouse

The Landmark T rust bought West Blockhouse Fort in 1969, and the land behind it on which the Battery and the main camp had stood in 1970. Its condition was messy, but not seriously decayed. Since its abandonment it had of course been prey to vandals who were able to enter the building without being observed, but it had suffered quite as badly before that at the hands of the military, who over the years, and to suit new requirements, had mutilated the original structure in several minor, but ultimately damaging ways. The destruction of so solidlyconstructed a building was, however, a task well beyond the most determined efforts of either vandals or military. Basically it was still sound, and could have survived quite a lot of further ill treatment.

In 1970 the first of several difficult phases of work was being carried out at Fort Clonque. It was felt that Landmark's resources for this sort of building were fully stretched, and therefore that West Blockhouse must wait a few years. After one or two false starts, work finally began in the autumn of 1986, with the contractors, Ernest Ireland Construction Ltd, working under the supervision of Andrew Thomas of Jones Thomas Associates. A grant was made for the repairs by the Historic Buildings Council for Wales, whose architects were most helpful in giving advice.

The two greatest problems involved the repair of damage done by 20th-century alterations to the windows and to the roof. The windows on the seaward side had at some stage been supplied with metal shutters. To make these fit closely the stone reveals, which like the walls are of limestone, had been cut back, in a very unsightly way. For each window, therefore, strips of stone had to be cut and then pieced in to fill the missing section, a very long and laborious job. A new window was made at the same time, where a door had been cut through into the lower barrack room when it became an engine room.



The roof of the fort had not originally been designed to support guns. It is constructed in the same way as other mid-19th century barrack buildings, with shallow brick vaults strengthened with iron girders, and on top a layer of asphalt. When two guns were mounted on the west wing in 1901, a concrete structure was cast to support the weight, cutting through the brick vault. Girders were added to give extra strength. Besides disfiguring the interior, this was not in fact doing the roof itself any good, and so we decided to remove it altogether, and to remake the brick vault. Ideally we would then have liked to lay a stone roof, but the structure was not strong enough to support it, and so the present tiles were laid instead. Several of the granite coping stones of the parapet also had to be replaced, where they had been dislodged, or were damaged.

Another problem faced in the restoration of the fort was the loss of the original drawings, so that details, particularly of joinery and interior fittings which had subsequently been altered, were unknown. Luckily the very thorough survey of the building made in 1904, including sections as well as plans, provided most of the information needed, such as the design of the windows.

In drawing up a scheme for the re-use of the building it was decided not to make use of the ground floor. The accommodation on the first floor, if one barrack room was subdivided, was quite large enough, and in any case more pleasant. Unfortunately, one thing the vandals had succeeded in doing while the building lay empty was to tear up the floor boards of the north barrack and set light to them. The boards lining the walls had also mostly been destroyed, but enough survived to show us what it had looked like - although the bits that remained were painted in a horrible MOD green which we did not feel obliged to copy.

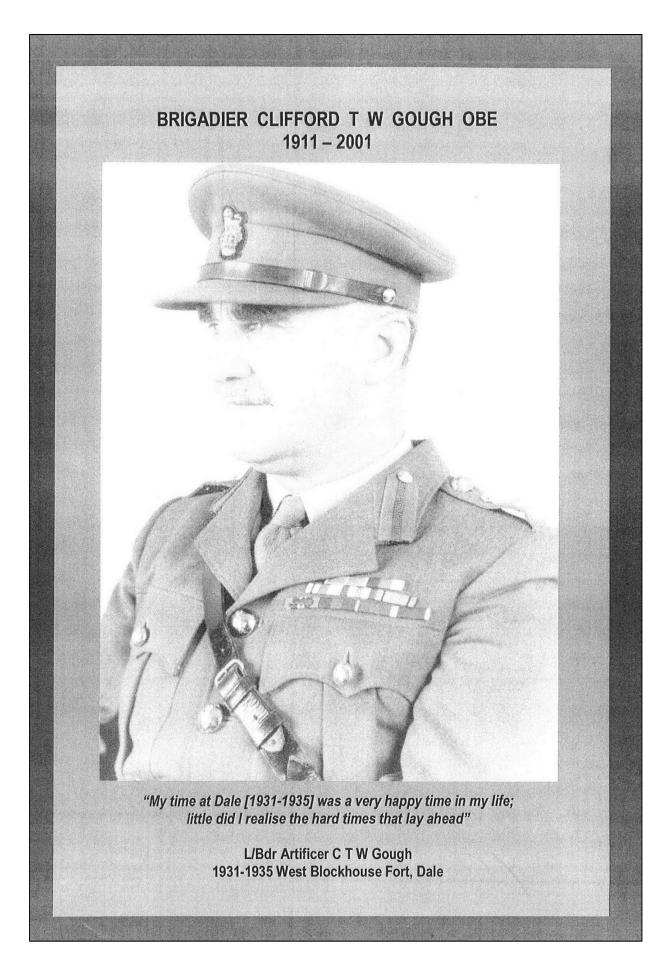
To renew all this, pitch pine salvaged from a warehouse in the Liverpool docks was used. The new floor was laid rather higher than the original, so that it would be possible to see out of the windows on the seaward side of the fort - a privilege (or a risk) denied the garrison. New doors were made, copying one that

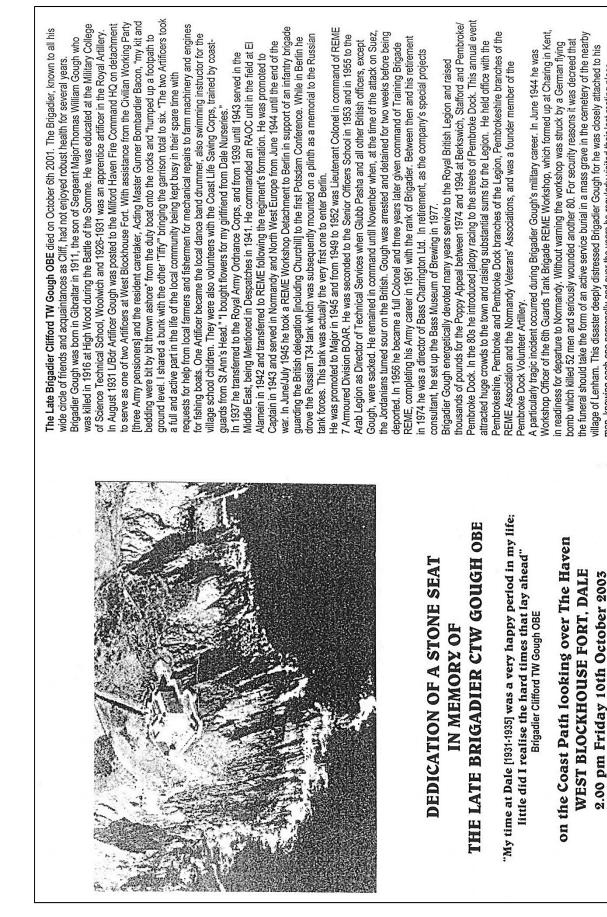
survived. The windows, in their deep embrasures, are copied from those in the 1904 survey. They are made of varnished teak, to withstand the weather, and are made as draught-proof as possible. The rooms inside are therefore surprisingly snug, and well insulated from the tempestuous winds - the art of comfortable living in uncomfortable surroundings being one that the Victorians brought nearly to perfection.

Meanwhile around the outside of the building sheds and other flotsam had been cleared away. One such unwanted object turned out to be part of a mounting for a 19th-century gun, and this was put back in position. Two Vavasseur mounts were also stacked at the back of the fort, and these too have been repositioned. Unfortunately the great coping stones of the battery parapet had mostly been thrown down the cliff when they were removed to make way for the new guns in 1901, and there seems to be no way of getting them back up again. Both army and navy have so far refused the challenge.

The drawbridge had rotted beyond repair and so a new one was made to the same design, with a new handrail, and winding chains. The steps were provided with new railings and the approach straightened and tidied. Beyond that we have not yet ventured. One day we would like to repair at least the Search Light emplacement to the west of the fort, and ideally the gun emplacements of the hilltop battery as well, but these must wait until funds are available.

There are many superlatives that can be used in describing a place such as West Blockhouse, and its extra-ordinary, even forbidding, setting, but it is more fitting to leave the last word to one of the men who served there. He is remembered by Brigadier Gough, stationed at West Blockhouse in the '30s, waking the others with the shout: "Come on, just have a look at the view, there are people who will pay pounds to have the opportunity".





men, knowing each one personally and over the years he regularly visited their last resting place. The Brigadier was awarded the MBE for war service in 1944-45 and was gazetted in the list of final

awards in 1946. In 1949 he also received the OBE for services in training.

