

**Children's Answers are in Bold.** Further information is for interest and discussion.

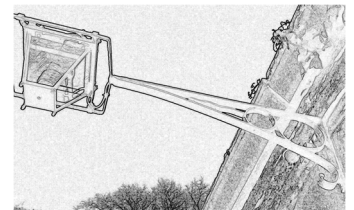
Forts were built around each of the major harbours and dockyards in Southern England in the 19<sup>th</sup> Century in response to a period of increasing threat from France following Napoleon Bonaparte's nephew Napoleon III declaring himself Emperor of France in 1852. Crownhill Fort is the largest of the forts, built between 1863 and 1872, and commands one of Plymouth's highest points. It is well-hidden and from even a short distance away appears as just a wooded hilltop. There are however four fighting levels with placements for 32 cannons and 6 mortars, nearly half a mile of tunnels, and accommodation for 300 soldiers and 6 officers. The fort continued in use as a military site until 1986 and has since been in the care of The Landmark Trust.

## 1 THE GUN SHEDS

The light guns on carriages were used **to add to the artillery at poorly armed forts. The Land-Service Mortars** were out of date by 1872. The other similar sheds were stables for the horses that pulled the gun carriages. The 8" Howitzers that replaced the Mortars were heavy artillery guns that fired an 8" (approximately 20cm) diameter shell.

## 2 LIGHTING

**Gas, Oil, and Candle** lighting were all used in various parts of the Fort. None of these lights would have been particularly bright so at night the Fort would have been quite a gloomy place. Electric lighting was a much later addition. The light brackets are of a simple design and made of iron.



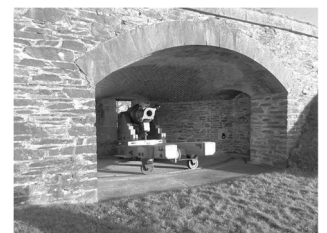
## 3 TREE

The Tree is an **Oak** tree. The nut that grows on the tree is an **Acorn**. This tree has been growing on the roof of the gun emplacement for many years. It self-seeded from another tree and has been left in place as it is not damaging the building below.

## 4 DOUBLE HAXO CASEMATE

The gun was invented by **William Armstrong**. He was the first man to have **electric lighting** in his home. The sheepskin on the long pole was used **to sponge out the gun after it had been fired**. The sponge was dipped in water and used to extinguish any embers that might have been still alight inside the barrel. Other tools for clearing and preparing the guns to fire are on the rack to your left.

A casemate is a fortified gun emplacement or armoured structure from which guns are fired. Gun crews on the flanks of forts were particularly vulnerable to shells bursting overhead and behind the parapets. To give them some protection guns were often mounted inside arched casemates, called Haxo casemates. This particular example is a Double Haxo casemate having positions for two guns.



## 5 MONCRIEFF GUN

The gun **disappears**. It helped the gunners **by protecting them when they were loading and aiming the gun**. It fired a shell **110lb** in weight (50 kgs).

In the 1850s a Captain Moncrieff brought to the attention of his commanding officer an ingenious design for a novel way of mounting a gun. Moncrieff had observed that during a bombardment in the Crimea the British guns were firing through embrasures which exposed both the gun and the crew to enemy fire. He thought that by dispensing with embrasures he could protect the gun and the gun crew from direct fire. He set about designing a gun which, by means of a simple fulcrum, could be raised for firing over the parapet and then having fired could be lowered behind the parapet where it would be protected and invisible to the enemy.



## 6 C-PIVOT GUN

This gun is dated **1811**. It is a **cannon**.

By mounting a cannon on a pivot, a much wider arc of fire could be obtained than was possible with conventional carriage-mounted cannons. Unlike the latter, however, pivot guns were fixed in one place and could not easily be moved outside of their horizontal arc; they could therefore only really be used in fixed positions such as in a fort. On the plate on the gun you will also see the makers name – 'Carron'. The Carron Company was an ironworks established in 1759 on the banks of the River Carron near in Falkirk, Scotland.

The company was at the forefront of the Industrial Revolution in the United Kingdom and prospered through its development and production of a new short-range and short-barreled naval cannon. The company was one of the largest iron works in Europe through the 19th century.

## 7 MAGAZINE

Originally **gunpowder** would be stored here. Later, shells would be kept here. The glass window was **to keep the oil lamp separated from the gunpowder**. Magazine is the name for an item or place within which ammunition or other explosive material is stored. The squares on the rear wall would have had symbols painted on them to identify which type of ammunition was stored there. Corresponding symbols would be painted on gun carriages. With a large proportion of the men unable to read or write a symbol was preferable to written signage.

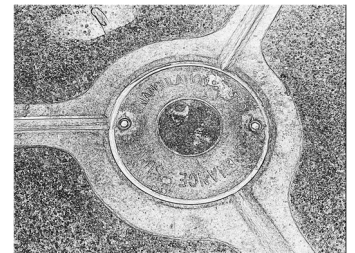


## 8 TRIANGULATION PILLAR – HAZARD, DO NOT CLIMB UP TO THIS OBJECT

It was used for **map making**. They are generally located on the highest piece of ground in an area **to give a clear view** (a direct line of sight from one to the next).

Triangulation pillars are commonly known as Trigpoints. They are concrete pillars, about 4' tall, which were used throughout the UK by the Ordnance Survey to assist the drawing of maps.

A metal plate on top of the pillar provides a mounting for an instrument to measure the distance, bearing and relative height of the next pillar and key landmarks to aid mapmaking. This pillar is 136 metres (449 feet) above sea level,



## 9 2-inch FIELD GUN

**Gunpowder** is used to make the gun fire. **Fuses** would have been stored in the boxes.

The Tampion goes into the end of the barrel **to keep water and dirt out** when the gun is not being used.

The well on the top of the barrel is a flash pan (hence the phrase 'a flash in the pan' originally denoting a misfire) and the tube below it is the vent.

This gun is a 2" light gun having a 2-inch (50mm) bore barrel.

## 10 1890 BARRACK ROOM

A mangle was used to **squeeze the water out of clothing and bedding after washing**.

Each man had a **bed, blanket, mattress, jacket, boots, belt, satchel, bowl and plate**. The satchel would have held cartridges for their rifles.



## 11 1944 BARRACK ROOM

These soldiers belonged to the **Royal Artillery**.

The badge is that for an Anti-Aircraft Regiment.

The last time Crownhill Fort was armed was during the Second World War when anti-aircraft guns were positioned here to protect Plymouth.

