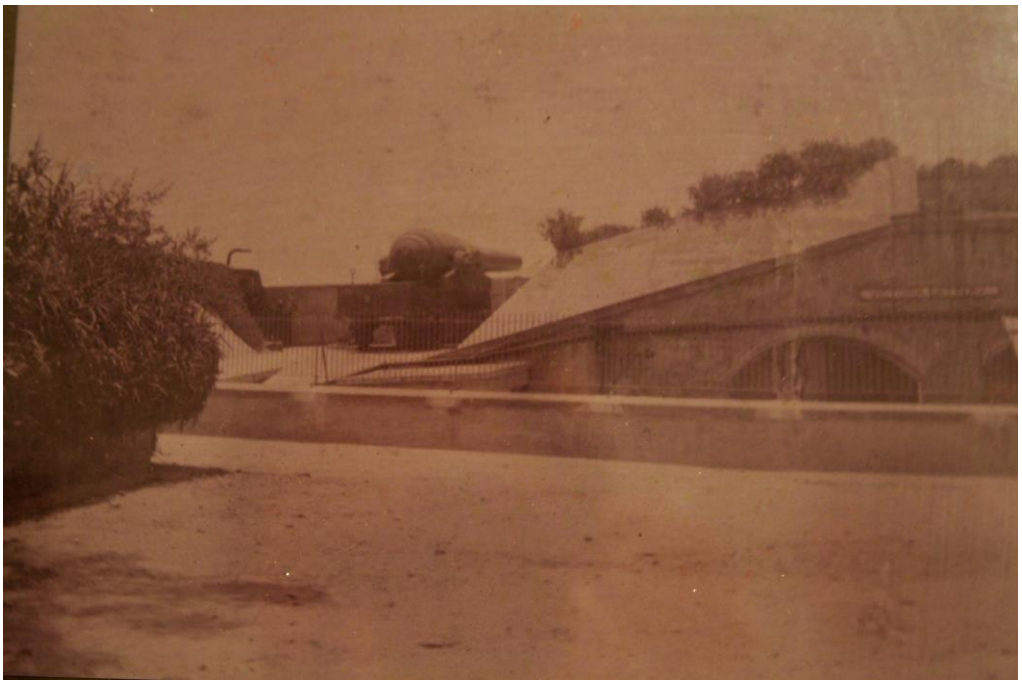
Gibraltar Fire and Rescue Service

VICTORIA BATTERY

A concise history

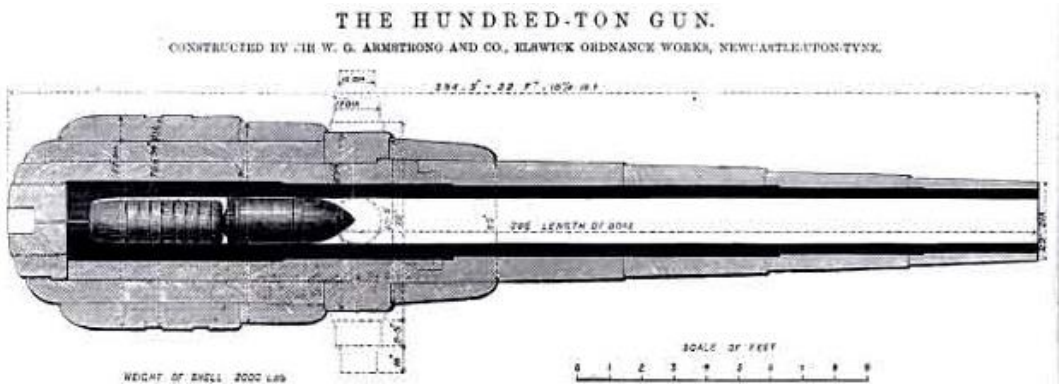
Firefighter Kenneth Busuttil
June 2015

VICTORIA BATTERY



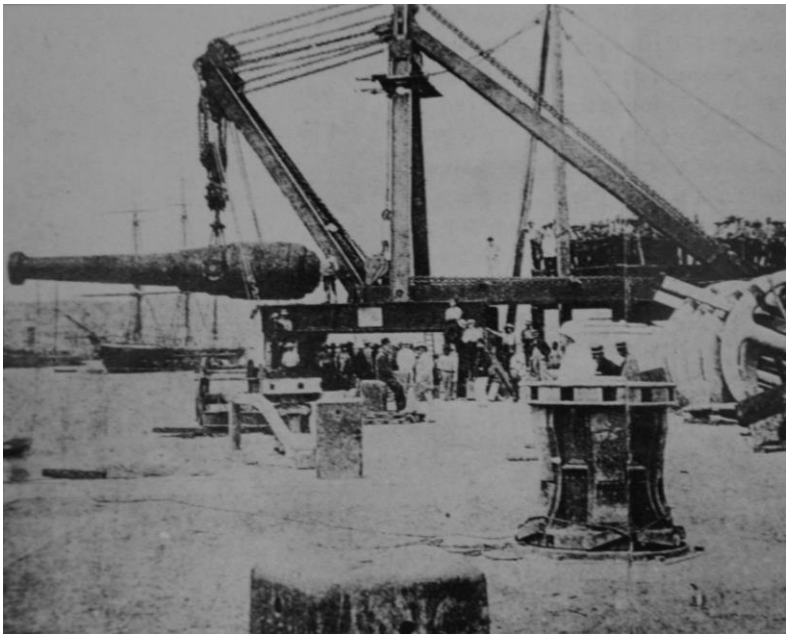
Victoria Battery in the 1880s.

The Victoria Battery 100 ton gun was part of a project to install two such guns in Gibraltar and another two in Malta. Its purpose being to counter the threat of big guns installed on naval vessels, especially that of eight identical guns, sold to the Italian Navy by the same manufacturer at an earlier date when these same designs had been rejected by the British Admiralty.



100 Ton Gun (cut section view).

The guns were known as 100ton RMLs (Rifled Muzzle Loaders),as the name implies, they were loaded via the muzzle and to this day hold the record as the largest guns ever built that were muzzle loaded.



The arrival of the 100 ton guns at the South Mole on 10th December 1882.

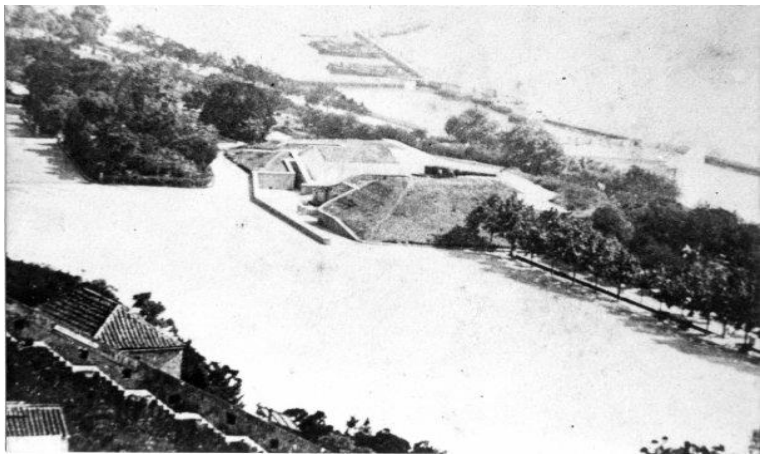
The battery in question was named after Queen Victoria, and built on the right flank of an earlier Victoria Battery that runs the length of the present Alameda Estate.

Work begun on December 1878 and was completed on September 1883, when the mammoth gun was placed on its carriage.

The gun had a bore of 17.72 inches (450mm), a weight of 102 tons hence its name. It had been designed by Sir William Armstrong, and manufactured at the Elswick Ordnance works at Newcastle upon Tyne. It could fire a 2000lb projectile with a 450lb charge of prism black powder up to a range of eight miles (13km), with a muzzle velocity of about 1,540 feet per second, and a rate of fire of one round every four to six minutes.

It required three hours to generate the necessary steam to operate the gun (acceptable due to the slow speeds of warships at the time). Contact was maintained with lookouts on the upper Rock by means of telephone link, who in theory should spot hostile vessels three hours prior to entering the Bay.

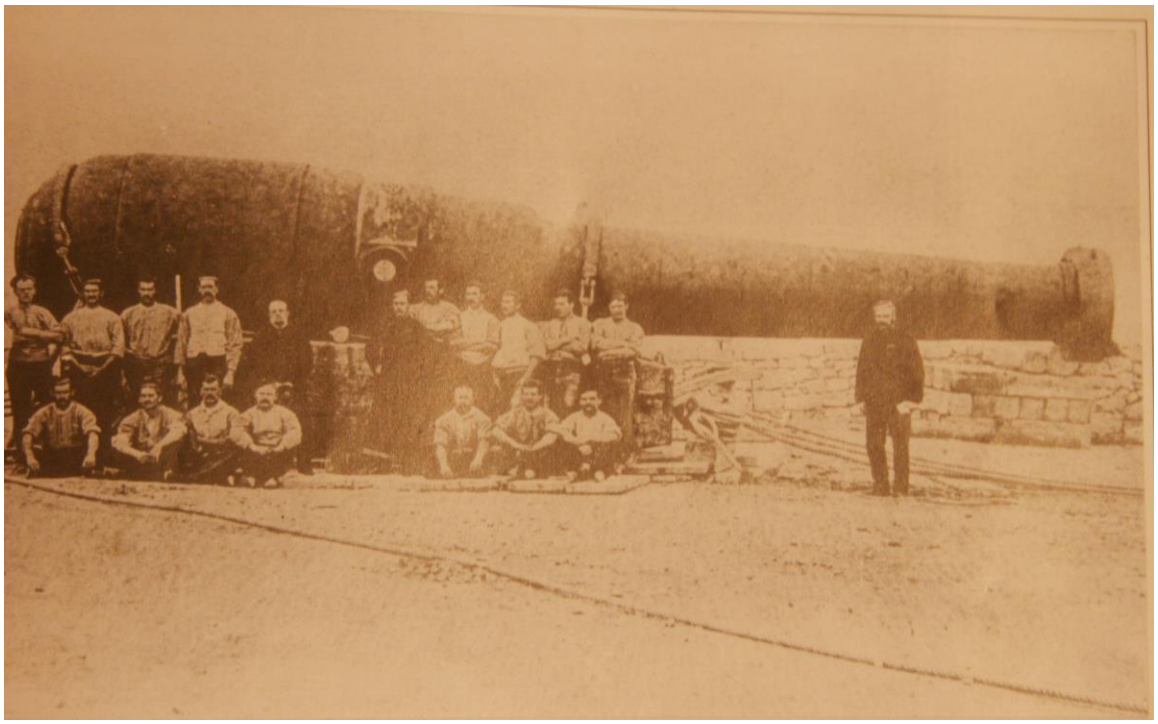
It is worthy of mention that these were the first guns to be linked to the observation posts on the upper Rock via telephone line.



Victoria Battery with its 100 ton gun, at the south flank of Grand Parade. 1880s-90s

The Victoria Battery crew of thirty five men was composed of the following:-

1. Battery Commander.
2. Master Gunner.
3. Trumpeter.
4. Storeman.
5. Lampman.
6. General Dutyman.
7. Gun detachment of nine men.
8. Ammunition detail of twelve men.
9. Position finder crew of three men.
10. Telephonist.
11. Depression range finder crew of four men.



100 ton gun at Victoria Battery with some of its crew 1880s.

The Victoria Battery gun covered a 180 degree arc of fire, and together with the Napier of Magdala 100 ton gun covered the whole of the Bay of Gibraltar.

The system in use at both Napier and Victoria batteries doubled the rate of fire of these guns. This may have been the cause that split the original barrel on the Napier of Magdala Battery in 1898. The gun barrel at Victoria Battery was then used to replace the one at Napier, due to the fact that it was sited in a better position to defend the entrance to the Bay.

The original gun barrel from Napier Battery is said to be under the present Fortress HQ building.

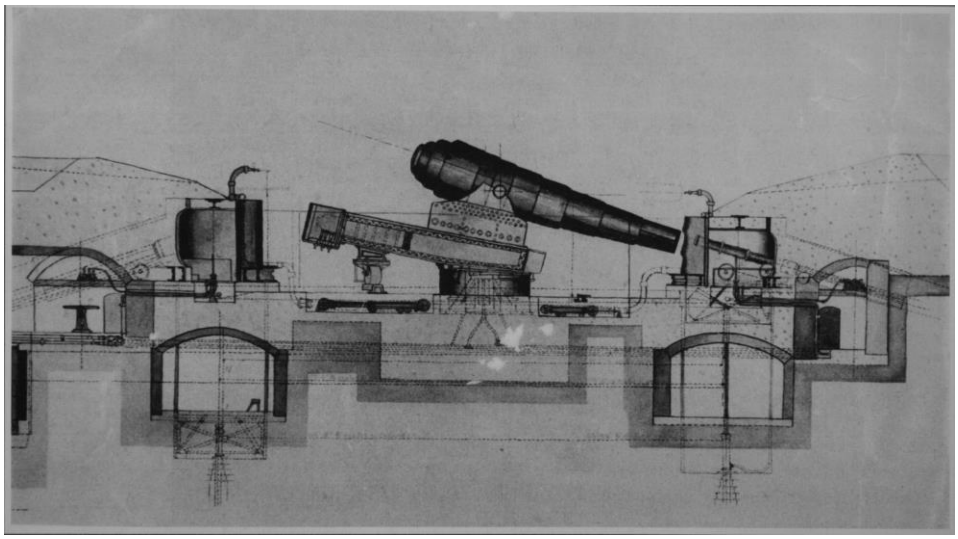
When the gun barrel was transferred to Napier Battery in 1898, the site of Victoria Battery fell into disuse. In 1937 the present City Fire Brigade Station was built on top of the right rampart of the Victoria Battery.

General arrangement of this battery was similar to the batteries on Malta, and differed somewhat from the still existent Napier Battery. The gun fired from a Barbette position (ie:- gun mounted to fire over the parapet instead of firing through embrasures). It was positioned between high cheeks of earth over a concrete apron that acted as a Glacis. Below the gun, twin underground passages beneath each rampart led to two hoists and railway trucks that carried the shells and cartridges.

The ammunition was held in separate compartments under each rampart, holding a total of eighty-seven shells and cartridges respectively.

Around the outside of the cartridge store, there was a separate lighting passage, that enabled a man to pass along and service the lighting lamps, which lit the interior, the flames were separated from the inner passages by sheets of glass. This illumination method minimized the danger of an explosion.

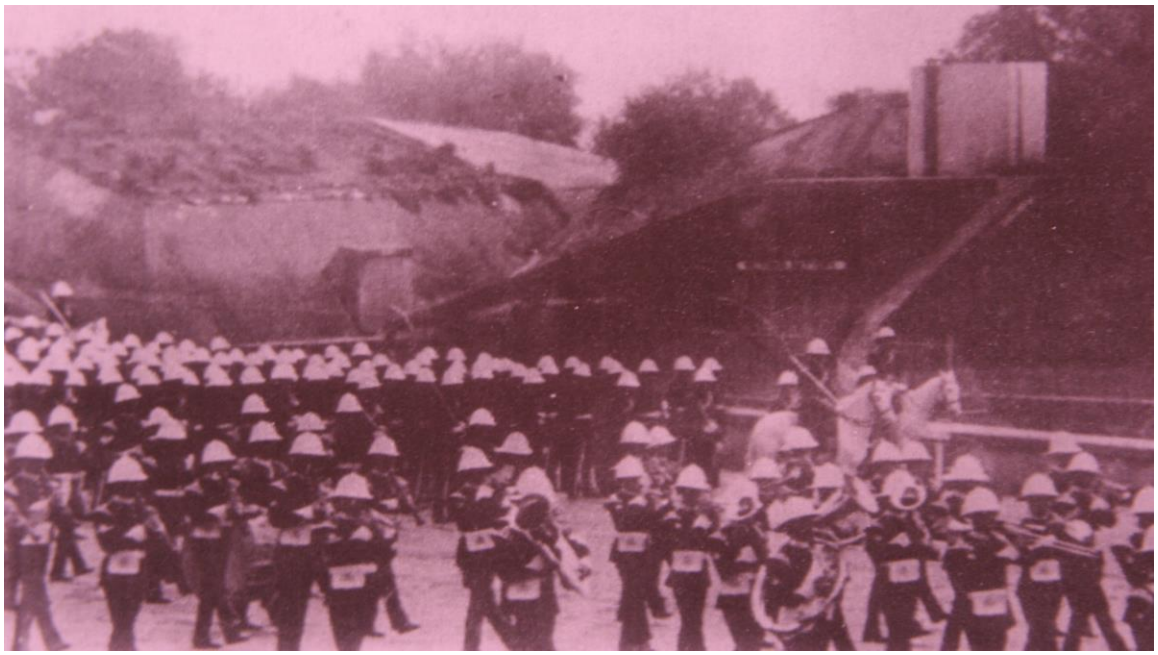
Also underground and further to the right, completely separated from the shell and cartridge passages, lay the pump chamber and boiler room for the donkey engine or the steam accumulator, which raised the steam for the hydraulic machinery.



Victoria Battery, side elevation showing the dual loading mechanism.

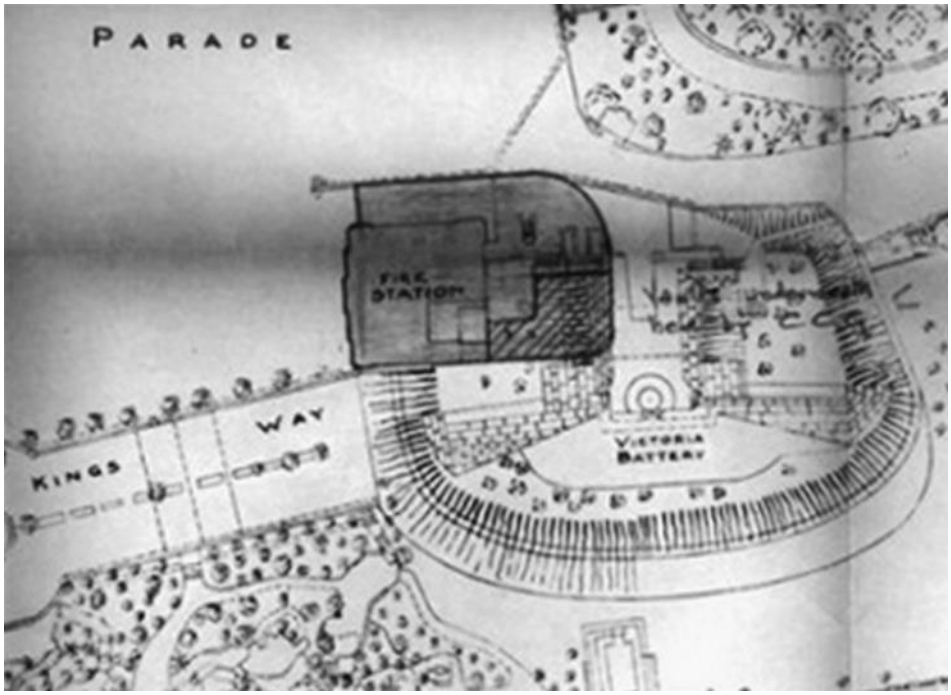
The donkey engine or steam accumulator was in effect a pit, with a steam engine that raised a piston. (The pit proper still exists within the present mechanical section workshop). The raised piston would in effect project a head of water through a system of pipes that connected directly to the hydraulic machinery that operated the guns. In order to create sufficient head of steam to operate the gun, three hours were required.

The hydraulic machinery in turn generated the power that both moved the gun and operated the devices, which loaded the cartridge and shell and rammed them home ready for firing. Without this power the gun could not be fired.



Staffordshire Regiment Parade in front of Victoria Battery late 1800s.

A barbed wire fence encircled the battery. At the foot of a concrete apron, which occupied an area of four thousand square feet, a concrete channel led off all surface rainwater into an underground tank with a capacity for 23,000 litres of water for use in generating the steam, which in turn would work the hydraulic system.



Victoria Battery with Fire Station plans 1934.

The underground workings were encased in concrete and upon this bed stood the baseplate and pivot on which the gun carriage traversed through a 180-degree arc.

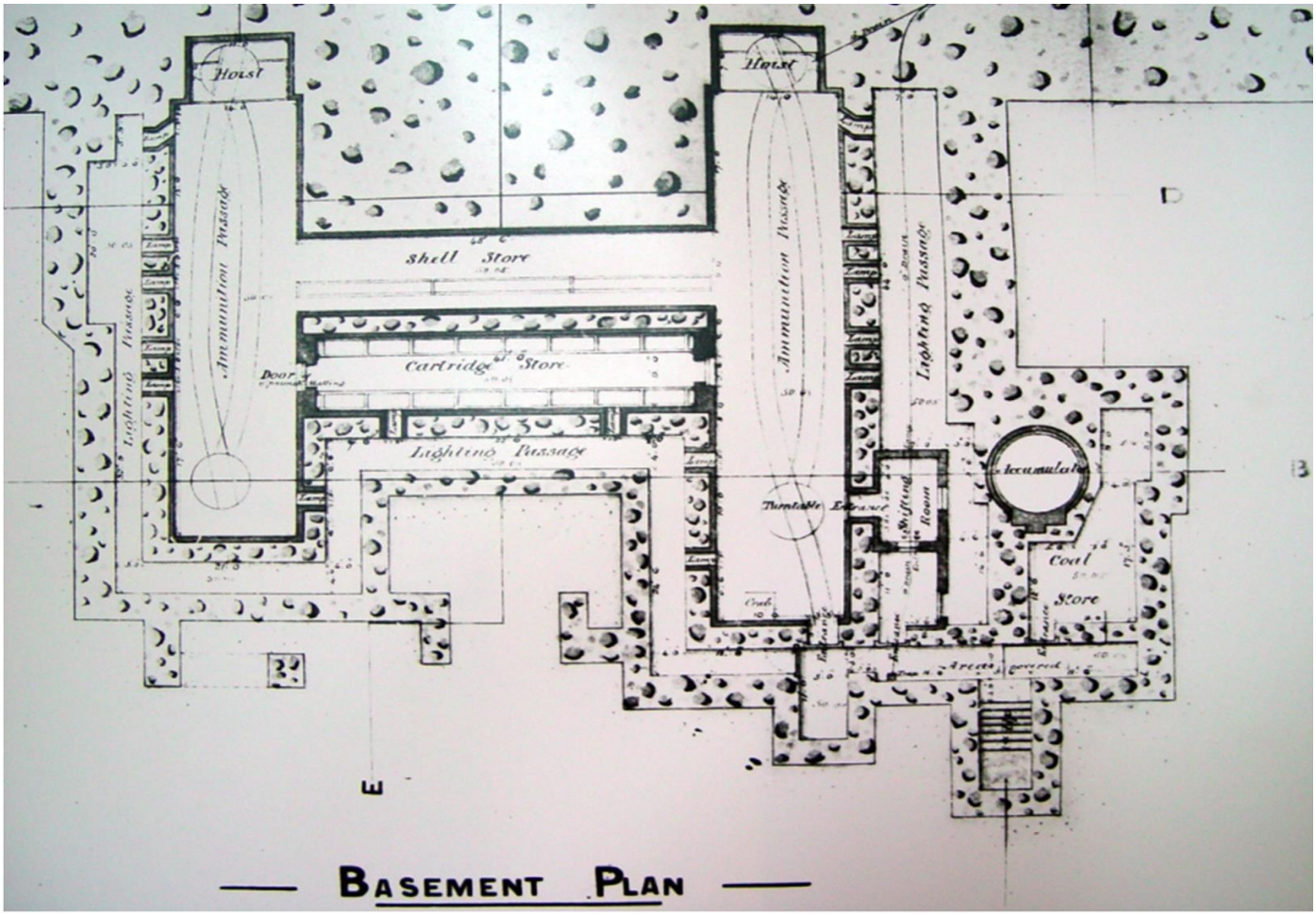
Victoria Battery in 1886.

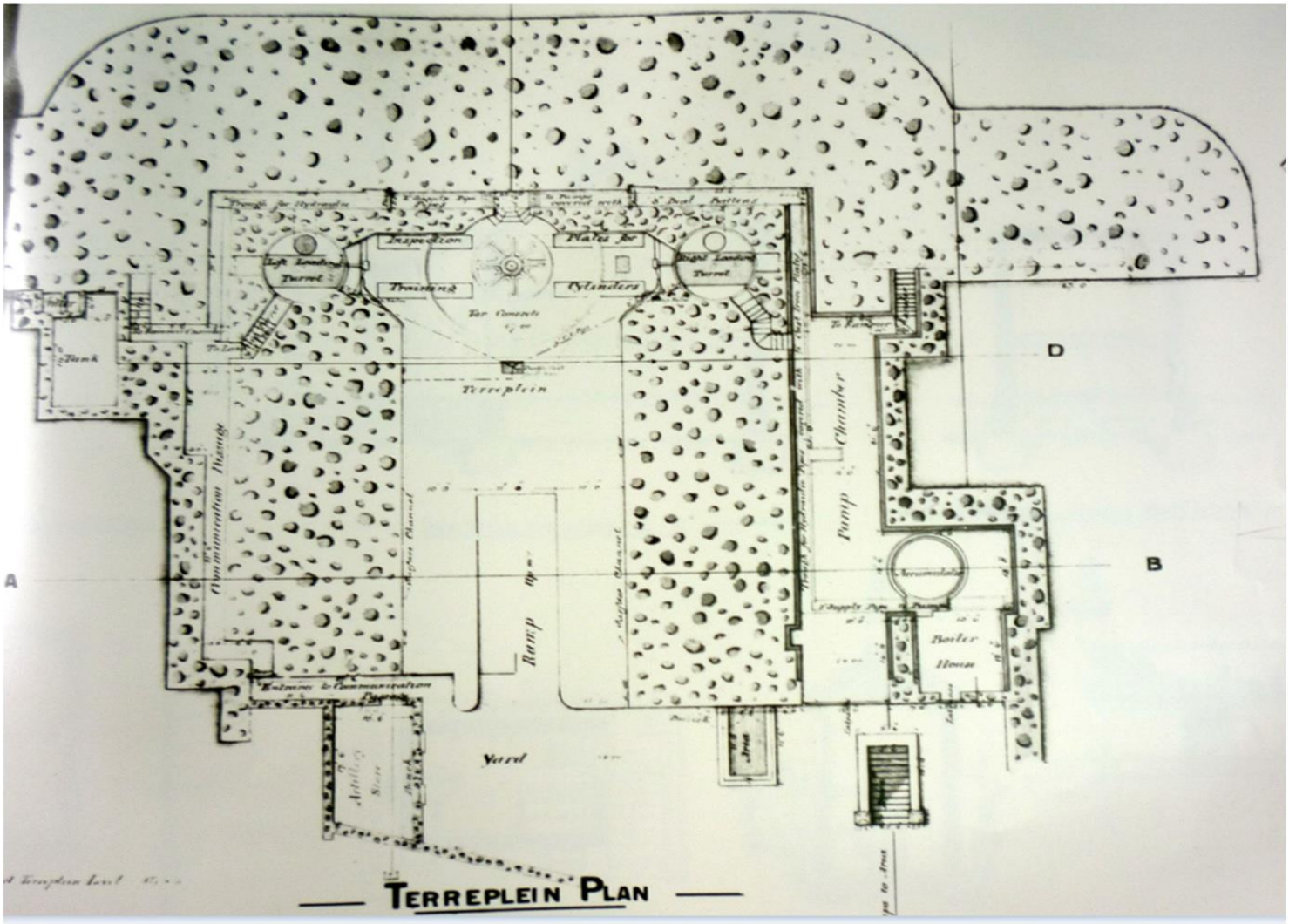
FOOTNOTE.

The site of Victoria Battery fell into disuse with the transfer of the gun barrel to Napier Battery after 1898.
In 1937, part of the right flank was partly demolished for the construction of a building to house the local Fire Brigade. The rest of the battery ramparts were destroyed during the construction of the present Alameda Estate between 1949 and1951.

Hence today Picton House lies on top of the left flank, while Victoria House (the battery's namesake) over the Glacis, concrete apron and the underground water tanks, while the Fire Station over the northern flank.

The elaborate underground works still exist, due to the fact that the Fire Station was built prior to Alameda Estate. Fire Service personnel use the basement today for training purposes.


Hoist
Hoist
Shell Store
Cartridge Store
Door
Lighting Passage
Ammunition Passage
Ammunition Passage
Lighting Passage
Accumulator
Coal Store
E
BASEMENT PLAN


Inspection
Trunnions
Cylinders
Terreplein
Ramp up
Yard
Pump Chamber
Boiler House
D
B
A
TERREPLEIN PLAN