

TURRET DRILL.

H.M.V.S. "CERBERUS"

Lee

No 26



This facsimile edition of the *Turret Drill Manual for HMVS Cerberus* was scanned from a copy donated by John Bunle (grandson of Christopher Thomas Jones) to *Friends of the Cerberus* (cerberus.com.au).

The original blank pages have been reproduced so that the hand written notes are opposite the appropriate pages. To view notes in context select View / Page Layout / Facing.



2006

Calibre 10 ^{inches}
Weight 18 tons
Superiorance Scot
Length, extreme 15 ft.
Length of bore 12 ft 1 in
Length of rifling 118 in
Number of grooves 7
Width 1.5 inch
Number of calibres in which one turn is
Completed. from 100 to 40.

VICTORIAN NAVAL FORCES.

TURRET DRILL, H.M.V.S. "CERBERUS."

PRELIMINARY DRILL.

The turret's crews will consist of 34 men, viz., 15 men and 1 powderman to each gun, and a captain and 2nd captain of turret.

The crews fall in two deep, a gun's crew on each side of the deck, the Nos. as far as 8 in the front rank, the others in the rear; the powderman on the left of the gun's crew, captain and 2nd captain in front, facing inboard.

Close Up.	Captain of turret on centre platform. 2nd captain in charge outside.
Inside Turret.	1, in rear, in charge of gun. 2, in rear, in line with the breech. 3, close to the port. 4, in rear of 3. 5, in rear of 4, and so on to 7.
Outside.	8 to 13, on running out and in winch handles. 14 and 15, training winch.
Number.	The gun's crew will call their numbers in succession.
Fall Out.	The turret's crews place themselves as before detailed.

Cast Loose.

Captain of turret, ship centre sight and set firing gear.

1, take off rear coupling chains, bring to firing gear, ship side sights, and sees gun uncoupled by clutch lever.

2, take off rear securing chains, and assist to bring to firing gear, and attend rear pawls.

3 and 4, out tompion, unbar and open the port, take off front coupling chains.

5 and 6, take off front securing chains.

7, off turret securing chains; 7 of right gun, the after one.

5, 6, and 7, then trice up projectile.

3 and 4, step on the loading platform, 3 outside.

4, takes the worm.

3 and 4, search the gun.

1, examine the vent.

2nd captain of turret and remaining numbers uncover turret and clear away outside.

8, unship cowls.

9, 10, 11, and 12, lower skylights and place armour covers.

(9 and 10, the foremost ones.)

13 and 14, let down stanchions.

15, take of port covers.

Shell-room party.

Receive skylights and secure armour covers.

NOTE.

2nd captain of turret superintends and reports when clear outside. Captain of turret trains for loading if required.

Load.

1, serves the vent.

2, attends elevating gear and attaches the tube.

5, receive cartridge case from powderman and pass it to 3 and 4, who take the cartridge and enter it.

1. If time size is used, No. 2 will fit it
When the projectile is tried, up to 4 will
attack a gas-check.

5, 6, and 7, haul the projectile in front of muzzle, 3 guiding it clear.

3 and 4, enter and unslung it.

5, passes slings to 6 and 7, who overhaul the tackle and hook on another projectile.

4, takes the rammer and, assisted by 3, force all home together.

3 and 4, spring the rammer; 4, returns it.

3 and 4, then step off loading platform; 1 then pricks the cartridge, and 9, 11, and 13 trice up another projectile.

Run Out.

3, attends compressor.

4, 5, and 6, trice up lifting lever; 1 of last gun out couples with clutch lever.

NOTE.

At the order "Winches run out," 2 and 7 bring to nipping lever, and Nos. run the gun out.

**Deflection,
Yards,
Bearing,
Object,
Elevate.**

Captain of turret adjusts his sights.

When the object is named, the captain of the turret trains the turret and aligns the sights; 2nd captain of turret attends turret-pointers; captain of turret gives the distance and heel to 1; 2, attends elevating gear; 1, sees the gun correctly laid.

NOTE.

If wood scale is used, 1 provides and attends it.

Ready.

2, places the tube in the vent.

1, connects the lanyard to the firing gear, sees all clear and reports ready; captain of turret, after the last gun is reported, repeats it and remove the safety pins.

Fire.

At the order "Fire," captain of turret fires by pulling the lever handle, then trains the turret for loading.

Run In.

1, unhooks the tube lanyard, and, assisted by captain of turret, resets firing bar.

3, attends compressor.

2 and 7, nipping lever.

4, 5, and 6, lifting lever.

8 to 13, man running-in winches.

When the gun is in, 1 orders "Well," 4 eases gun off rollers, 2 lays for loading, 3 sets taut compressor and reports "Compressor taut."

7, then ease up nipping lever; 8, 10, and 12, unship winch handles.

Nos. close up.

NOTE.

The compressor is not to be eased until the running-in chains are taut from the winches. If the guns require to be run in separately, left gun first, as in previous drill.

Sponge.

1, serves the vent.

3 and 4, step on loading platform.

3, takes the sponge.

3 and 4, force it hard home, keeping it pressed home while a round turn is given, they then withdraw it.

3, returns it.

Out Tube.

Captain of turret puts in safety pins.

1, unhooks the tube lanyard.

2, takes the tube out of the vent.

Cease Firing, from the Ready.

Captain of turret puts in safety pins and orders out tube. The sights are put down, the deflection scale set at zero, and the Nos. close up.

Unload.

The gun is to be placed in loading position and emptied, 6 serving the worm and extractor as required, the elevating and loading Nos. assisting. When the gun is empty the Nos. close up.

7 attends it
4 " " "

1.2.7 big to find year

Secure.

The turret and guns are placed in the securing position; the securing chains, &c., are secured and everything replaced by the Nos. who cleared them away. When finished, 1 orders "Fall out."

Shifting Steps.

If the gun is out, 1 orders "Run in," and when placed, "Well"; captain of turret names the step, and 1 orders "Raise" or "Lower" the gun, and attends the valve.

2, attends the elevating gear inside jamming clamp and rear key.

5 and 6, ship pump levers and man them; 5, the front.

7, winch handle screw gear.

3, outside clamp and keys.

4, attends inside front key.

Fore Magazine.

Will stow 135 battering Charges on Port side, 153 full Charges on Starboard side, The light rooms are at each end

After Magazine.

Will stow 84 battering Charges on Starboard side, 84 full Charges on Port side

Shell rooms.

The fore shell room will hold 194 Projectiles

The After " " " " 167 "

The Shell rooms also contain "Iron & Arm" boat gear, also fuzes, fuzing implements, metal lined Cases containing fire works, and life buoy port fires.

Hydraulic Pump.

On the outside bracket of each gun carriage is attached a reservoir, which is filled within two inches of the top with fresh water; and the addition of a little Soft Soap or washing Soda will cause them to work well, and will keep the packing in good order. (See the same are close down ^{before} putting the liquid into the reservoir.)

To lower the gun.

The stop valve is loosened, which allows the liquid to pass into the reservoir through the copper pipes: from the cylinders.

To raise the gun

Shut off the stop valve, slip levers on cranks spindle, and by its means the plunger is worked to and fro

being a double action pump; at the end where the lever is forced down a vacuum is created, and the liquid is drawn up through an inlet valve into the pump. At the opposite end the lever is up, and the liquid in the pump is forced through a stop valve into a copper pipe leading into the cylinders, under the rams, thus raising them with the weight of the gun.

Lifting lever

is connected to an iron shaft passing through the brackets of the carriage, on which are two eccentrics which work in the upper part of a link, the lower part of which is connected to the lifting block over which the endless chain passes, underneath the bottom plate of the carriage are fixed two sprocket plates having 6 sprockets projecting downwards. On moving the lever which fits into the end of the shaft, the eccentrics are turned, bringing the lifting block close up, so that the sprockets fit into the links of the endless chain and holds the gun for running in or out. The lifting lever is not to be let go until the compressor is set back.

Lifting lever.

is an iron shaft passing through the brackets

of the Carriage and has two eccentrics fitted
into two gun metal rollers. By pulling the
lever on the end of the shaft the eccentrics
are turned in the rollers, and the end of the
carriage is raised up clear of the slide, also placing
the weight on the fore rollers. When running the gun
in or out the lifting lever is to be let go before
setting the Compressor fast, and at any time
if the gun is going out too fast.
