# GRENADE RIFLE No. 4

This grenade is a three-fathers one, it was originally  known as the Hales Naval grenade Mk I and when the workup stage was finished it was designated Grenade .303 short rifle No.4 Mk 1 and when used in the SMLE rifle it was known as the Grenade .303 long rifle No. 10 Mk I.

It was the idea of Lt. Clarke Hall RN to attack balloons and dirigibles his reasoning being that the effects of an HE grenade on the fabric of either would be catastrophic to say the least. Not requiring any fragmentation effect the grenade was provided with a brass body without any fragmentation patterning. As can be imagined the resistance provided by the thin fabric of a balloon or dirigible proved to be insufficient to operate the fuze mechanism of the early modes so modifications were made to the grenade. A wind vane arming similar to the Hales “J” type was fitted and a ball race was applied to the striker mechanism to speed up its action. These modifications proved successful and the name changed to the Naval grenade Mk I. Some changes to the shape of the body improved the air flow over the wind vane and it is about this time that the final name No. 4 came into being.

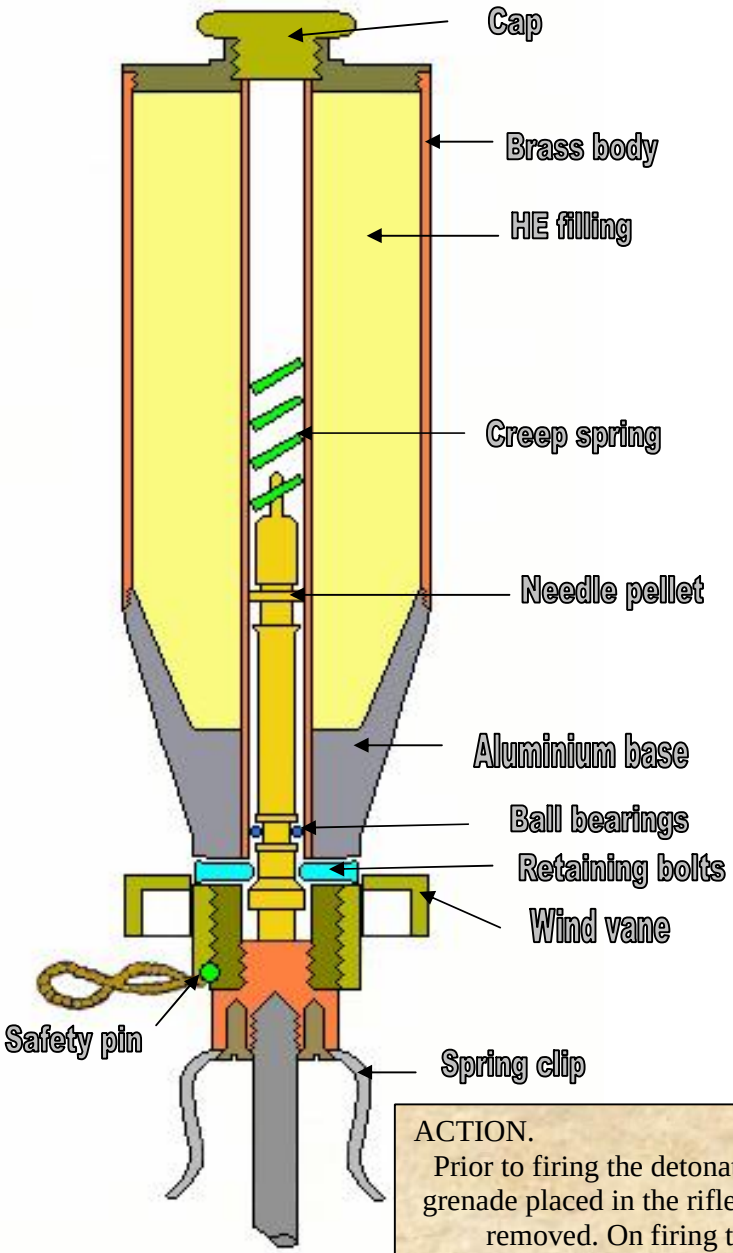
The arrival of Small Arms calibre incendiary and explosive projectiles fired from machine guns fitted to the aircraft rendered the method of firing rifle grenades from unfixed weapons by the shoulder a dubious business at best. The grenade was applied to the bombing concept by being launched from a “Grenade dropping gear” attached to the aircraft and operated by the pilot. Special arrangements were made to ensure that the wind vanes wouldn’t rotate until the grenade was launched.  It was fitted with a simple set of tail fins when used in this fashion.

It was introduced in February 1915 and declared obsolete in October 1918. It was filled with 196.6 grammes of Trotyl in two pellets. It differed from the No. 3 in not having a releasing socket so it could only be fired from rifle fitted with a safety spike that prevented movement of the wind-vane until it was fired.

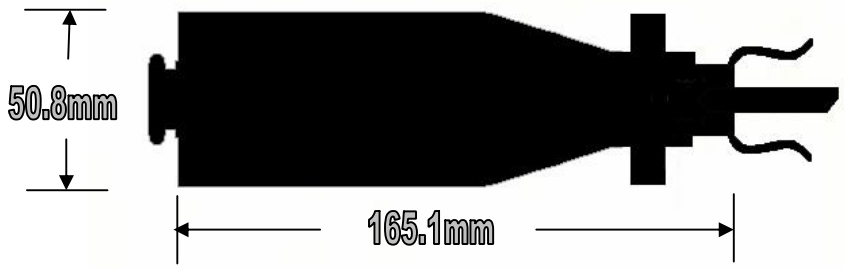

COTTON POWDER COMPANY

HALES PATTERN

.303




ACTION.
Prior to firing the detonator is inserted, the grenade placed in the rifle and the safety pin removed. On firing the wind vane commences to rotate this action clears the retaining bolts which fall away. This action permits the needle pellet to move forward on impact. The needle pellet strikes the percussion cap which explodes the detonator and thence the main filling.



# Detonator rifle grenade