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(54) **Title:** PRESSURE RELIEF SYSTEM FOR GUN FIRED CANNON CARTRIDGES

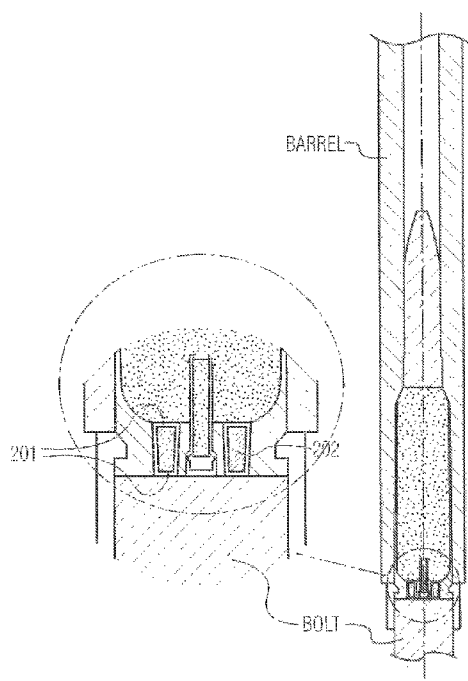


FIG. 16

(57) **Abstract:** A high velocity munition comprises a projectile, mounted on a cartridge case, that can be fired from an automatic cannon or weapon. During storage or transport: an IM venting device included in the cartridge case prevents the propellant charge from firing the projectile, leaving the cartridge damaged, but intact, upon premature ignition. The IM vent exhaust channel is filled with a solid fusible material that melts at a lower temperature than, the ignition temperatures of the igniter (or primer) and the propellant charge of the projectile. At least one non-fusible, ruptureable member is included in the XM vent channel and positioned to provide structural integrity to the fusible material in the channel. Alternatively or in addition to the fusible material, a shape memory alloy ring surrounds the igniter (or primer) and separates from the cartridge when the cartridge reaches a temperature that causes auto-ignition.



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