

Early Days of The Ball Valve

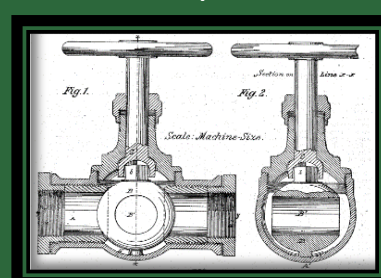
First Appearance

Excavation of Pompeii, which was destroyed around 79 AD, shows evidence of a tapered plug valve that bore a startling resemblance to the modern ball valve

79 AD

First Patent

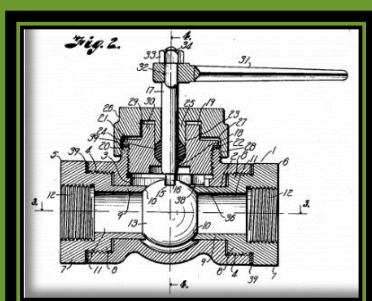
John Warren & John Chapman were assigned a patent for a spherical valve design to alleviate jamming due to steam-related heat expansion



1871

Manufacturability

Benjamin Hoffman develops an improved design of ball valves that was more manufacturable



1933

Teflon Discovered

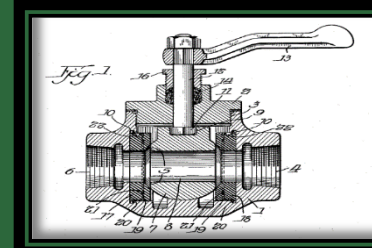
Dr. Roy Plunkett accidentally discovers Teflon, which will play an important role in the development of ball valves



1938

Missed Opportunity

In 1945 the Crane Valve Co. receives a patent for a ball valve with graphite impregnated seat rings, but did not pursue manufacturing them



1945

Nuclear Submarines

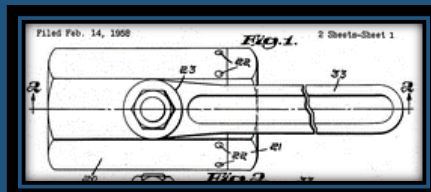
The US Navy turns to Walter Freeman to develop ball valves for their new fleet of nuclear submarines



1957

The 666 Patent

Walter Freeman receives the "666" patent for a ball valve with a flexible valve seat that his company, Jamesbury, would manufacture using Teflon



1960

Patent Infringement

The Jamesbury Co. files a patent infringement lawsuit against the US Navy ... And the "little guy" wins



1963

The 666 Lawsuit

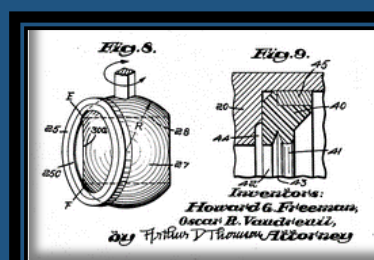
Freeman's previous employer Rockford claimed that he developed the product while employed by them



1966

Jamesbury Wins

Rockford loses the 666 lawsuit in Federal Appeals Court



1971

Ball valves have had a long and interesting history, but are still vital to today's industry!