The Aneurin Great War Project: Timeline
Part 5 - Imperial Wars, 1662-1763

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[BUT UNDER CONSTANT EXTENSION AND CORRECTION, SO CHECK AGAIN SOON]

This timeline supports the Aneurin series of interdisciplinary scientific reflections on why the Great War failed so singularly in its bid to be The War to End all Wars. It presents actual or best-guess historical event and introduces theoretical issues of cognitive science as they become relevant.

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The Timeline Items

1662 [19th May] The English Parliament passes the Act of Uniformity, which enforces Episcopalian Anglicanism as the established "Church of England". Any variant form of Christianity automatically becomes a "Nonconformism" and its followers "Nonconformists". [THREAD = THE SHAPING OF WW1 EUROPE]

1663 Following the descriptions given in the works of Kircher [<=1646] and Huygens [<=1659] the London optician John Reeves [no convenient biography] starts to sell magic lanterns capable of projecting images from prepared glass slides. [THREAD = THE HISTORY OF SCIENCE AND TECHNOLOGY]


1663 [??th August] The Austro-Turkish War, 1663-1664: This war is fought between the Holy Roman Emperor, Archduke Leopold I of Austria [1657<=1664] and the Ottoman Grand Vizier, Köprülü Pasha [Wikipedia biography] next. Here are the main events ...

The Siege of Érsekújvár, 1663; The Battle of St. Gotthard, 1664; The Treaty of Vasvár, 1664

The outcome is an Austrian victory, followed by 20 years of relative peace on this particular front. [THREAD = THE SHAPING OF WW1 EUROPE]

1663 [??th August-13th September] The Siege of Érsekújvár: This siege is fought out at part of the Austro-Turkish War [<=preceding] between a 100,000 man Ottoman army under Köprülü Pasha [preceding<=1664] and the Imperial garrison at Érsekújvár under Ádám Forgách [Wikipedia biography]. The outcome is an Ottoman victory. The siege is noteworthy in the present context for a successful assault on the Habsburg Empire's paradigmatic "Star Fort". [THREAD = THE SHAPING OF WW1 EUROPE]

1664 [1st August] The Battle of St. Gotthard: This battle is fought as part of the Austro-Turkish War [<=1663] between a Holy Imperial army under the Holy Roman Emperor, Archduke Leopold I of Austria [1663<=1668] and Raimondo Montecuccoli [Wikipedia biography] and an Ottoman Empire army pushing westward out of occupied Hungary under Köprülü Pasha [<=1663]. The outcome is a decisive victory for the Austrian Imperials, with highly disproportionate Ottoman losses. [THREAD = THE SHAPING OF WW1 EUROPE]

1664 [27th August] The Seizing of New Amsterdam: This peacetime armed seizure by a four-ship English fleet takes what is now New York City from its Dutch Governor Peter Stuyvesant [Wikipedia biography]. [THREAD = THE SHAPING OF WW1 EUROPE]

1665 Around this time the veteran Worcestershire ironmaster Dudd Dudley [<=1661] publishes "Metallum Martis" [literally "metal of Mars", therefore by alchemical tradition "iron"], a less than completely detailed treatise on how to smelt iron using coal rather than charcoal as fuel. [THREAD = THE INDUSTRIAL REVOLUTION]


1665 [close after 28th February] Lord Wentworth's Regiment [<=1656] and Russell's Regiment of Guards [<=1660] are amalgamated as the "1st Regiment of Foot Guards" [=>1686]. [THREAD = THE WW1 ARMIES]

**ASIDE - THE NUMBERING OF REGIMENTS BY SENIORITY:** The regimental numbering system will not be rigorously implemented until 1751 [=>] but it is already
important for a unit’s "seniority" in the line of battle to be recognised. Regiments are the building blocks of an army, usually belonging to a particular nobleman, recruited from a particular geographical/ethnic catchment area, and heavy with the traditions of both. They therefore take their position on the field, on the march, or in the general scrabble for scarce resources, according to how much they are favoured at the top, and that is determined, in turn, by past glories and achievements.

1665 [4th March] The Second Anglo-Dutch War, 1665-1667: This two-year trade war is fought between Charles II of England\textsuperscript{etc} (1662<=1668) and the Dutch Republic under William of Orange (III of England\textsuperscript{etc})\textsuperscript{1689} (1650<=1672), supported by Denmark and France. Command of the English fleet is initially given to the King’s younger brother James Stuart, Duke of York [1658<=1665], assisted by Prince Rupert of the Rhine [1648<=13th June]. The main events are ...

- The Seizing of New Amsterdam, 1664 \textit{(Casus belli ante)}; The Battle of Lowestoft, 1665 [disaster for the Dutch]; The Four Days Battle, 1666; The St. James' Day Battle, 1666; The Medway Raid, 1667 [even bigger disaster for the English]; The Treaty of Breda, 1667

The overall outcome is a decisive Dutch victory. The war is noteworthy in the present context (a) for the virtual destruction of the Royal Navy, (b) for the frequent shortages of gunpowder, as a result of which the Waltham Abbey "oyle mill" is turned over to gunpowder manufacture, and (c) as a case study in jingoistic war fever. [THREAD = THE SHAPING OF WW1 EUROPE]

**RESEARCH ISSUE - WAR FEVER:** As with the First Anglo-Dutch War [=1652] this war, too, made the Dutch, both as a people and as a nation, the target of a sustained hate campaign. Many members of the British establishment were "mad for war" and this faction was not averse to propagandising in general nor to circulating false reports of atrocity in particular. The dynamics of this sort of warmongering personality are still not well understood.

**ASIDE:** Around this time the Duke of York takes as servant the 15-year-old John Churchill (1st Duke of Marlborough)\textsuperscript{1702} [Wikipedia biography=1673], son of the MP for Weymouth, Winston Churchill.


1665 [13th June] The Battle of Lowestoft: This naval battle is fought as part of the Second Anglo-Dutch War [=4th March] between an English fleet under James Stuart, Duke of York [4th March<=1672], Prince Rupert of the Rhine [4th March<=1666], and Edward Montagu, 1st Earl of Sandwich [Wikipedia biography=1668], and a Dutch fleet under Jacob van Wassenaer [Wikipedia biography=killed this day]. The outcome is an English victory with heavily disproportionate Dutch losses. [THREAD = THE SHAPING OF WW1 EUROPE]

**********  THE LAST HABSBURG KING OF SPAIN  **********
**********  THE SPANISH DECLINE CONTINUES  **********
**********  LOUIS XIV FLEXES HIS MUSCLES  **********

1665 [17th September] Upon the death of Philip IV of Spain [1661<=1692 (28th October)] his crown passes to his three-year-old son Charles II of Spain [4th March<=1667] with his mother Maria Anna of Austria [1661<=1667] as Regent. At the same time Louis XIV of France [1661<=1667] raises major territorial claims in the Spanish Netherlands which will drive not just the imminent War of Devolution [=1667] but also the Franco-Dutch War [=1672],
the War of the League of Augsburg [=1688], and the War of the Spanish Succession [=1701]. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE: Maria Anna’s Regency will endure longer than anticipated because it will soon become apparent that Charles has significant special educational needs (popularly attributed to many generations of Habsburg over-close familial interbreeding). She will remain Regent until her own death in 1696, by which time Charles is 34 years old, but actual power tended to be exercised through a succession of Validos [= “favourites”]. Not surprisingly this is a period of Imperial decline, mass emigration, and economic crisis. Charles’ death - heirless - will spark the War of the Spanish Succession [=1701].

1666 [11th-14th June] The Four Days Battle: This extended naval battle is fought as part of the Second Anglo-Dutch War [=1665 (4th March)] between an English fleet under George Monck [1661<=4th August], Prince Rupert of the Rhine [1665<=4th August], and George Ayscue [=1652], and a Dutch fleet under Michiel de Ruyter [1653<=4th August]. The outcome is a Dutch victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1666 [4th August] The St. James’ Day Battle: This naval battle is fought as part of the Second Anglo-Dutch War [=1665 (4th March)] between an English fleet under George Monck [=11th June] and Prince Rupert of the Rhine [=11th June] and a Dutch fleet under Michiel de Ruyter [11th June<=1667]. The outcome is an English victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1667 The French infantry officer Jean Martinet [Wikipedia biography=>1668] takes over command of Dangeau’s Régiment du Roi [1663<=1791] and upskills them as grenadiers. So successful are grenadiers in sweeping close defenders from all but the tallest fortifications - breaches, redans, etc. - that by 1670 a further 29 regiments will have been retrofitted with grenadier companies. [THREAD = THE WW1 ARMIES]

1667 [9th-14th June] The Medway Raid: This five-day naval engagement is fought out as part of the Second Anglo-Dutch War [=1665] between a Dutch fleet under Michiel de Ruyter [1666<=1672] and the Royal Navy and coastal defence forces of the Thames and Medway estuaries. The English are caught totally unprepared, with denuded defences and no effective chain of command. Sheerness Fort falls easily on 10th June, allowing the Dutch into the Medway, where they spend the next 72 hours fighting their way upstream heading for the military dockyard at Chatham. Here they release fire-ships and destroy three of the four English battleships at anchor. When they withdraw the following day they leave the English establishment humiliated. [THREAD = THE SHAPING OF WW1 EUROPE]

**********  LOUIS XIV’S FIRST WAR  **********

1667 [24th May] The War of Devolution, 1667-1668: This war begins as a territorial dispute between Louis XIV of France [1665<=next] and the Spanish Regent Maria Anna of Austria [1665<=1668] on behalf of her five-year-old son Charles II of Spain [1665<=1670]. However it soon escalates into a Europe-wide war against France once a "Triple Alliance" of the Dutch Republic, England, and Sweden gets together on 23rd January 1668 to assist Spain. The war will be fought on two main fronts, namely the Spanish Netherlands and the Franche-Comté. Here are the main events ...

• The Invasion of the Spanish Netherlands, 1667 [casus belli]
• The Siege of Lille, 1667
• The Lightning Invasion of the Franche-Comté, 1668
• The Treaty of Aix-la-Chapelle, 1668
The overall outcome is a French victory in the field but a politically unsympathetic hearing at the peace conference [=1668 (2nd May)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1667 [24th May] **The Invasion of the Spanish Netherlands [1667]**: [Compare ditto 1672 and 1683] This invasion is the opening event in the War of Devolution [=preceeding]. It is fought between a French invasion army under **Louis XIV of France** [=preceding<=10th August] and **Turenne** [1658<==>1672] and the Spanish garrison towns of the southern Spanish Netherlands collectively under **Francisco de Moura, 3rd Marquis of Castelo Rodrigo** [Wikipedia biography]. The first city to fall is Charleroi on 2nd June ...

**STUDENT EXERCISE 1633 EXTENSION:** Charleroi is in BELGIQUE. Research its location online and dot it in on your map. We are also about to mention St. Omer, Bergues, Furnes, Mons, Namur, Ath, Tournaï, Douai, Courtrai, and Oudenarde, so do likewise for these.

... which Turenne rapidly turns to his own purposes as a forward base. At the same time **Antoine d'Aumont de Rochebaron** [Wikipedia biography] strikes eastward from the St. Omer area [=1638 (26th May)], taking Bergues on 6th June and Furnes on 12th June. A third corps under **François de Créquy** [Wikipedia biography=>1683] covers Turenne's right flank. The Spanish rapidly reinforce Mons and Namur but by concentrating their forces in their fortresses leave a fatal gap between Mons and Brussels. Turenne simply pushes through this gap, taking Ath on 16th June and setting the scene for a major double pincer movement - his own army from the west and d'Aumont's corps from the east - to cut off Southern Flanders and its capital city, Lille. Turenne duly takes Tournaï on 25th June and Douai on 7th July, while D'Aumont takes Courtrai on 18th July and Oudenarde on 31st July. The siege of Lille will begin as soon as this earlier smoke clears [=10th August]. [THREAD = THE SHAPING OF WW1 EUROPE]

1667 [31st July] **The Treaty of Breda:** This treaty brings the Second Anglo-Dutch War [=1665] to an end. Having been brought to the negotiating table by their humiliation in the Medway Raid [=9th June], the English now go for peace in local waters and recognition of their possession of New York [=1664] in exchange for territorial concessions further afield in the East Indies. The Dutch negotiations are led by their First Minister, **Jan de Witt** [Wikipedia biography=>1668]. [THREAD = THE SHAPING OF WW1 EUROPE]

1667 [10th-28th August] **The Siege of Lille:** This 18-day siege takes place as part of the War of Devolution [=24th May] between a French army under **Louis XIV of France** [24th May<=15th December] and the Spanish garrison at Lille. Cut off from the north by the Turenne-d'Aumont pincer movement [=24th May], Lille has now become the primary focus of the French offensive. The assault is organised by **Sébastien de Vauban** [1655<==>1669] and is such a textbook victory for his techniques that he sets the necessary skills down in a textbook, "La Conduite des Sièges". After the siege Vauban is put in charge of re-fortifying Lille and builds a large central citadel [details and tour booking]. [THREAD = THE SHAPING OF WW1 EUROPE]

**MINI-GLOSSARY - SIEGE WARFARE TERMINOLOGY**
- **banquette** - the firing-step behind and below a parapet;
- **bastion** - a strengthened outward bay in a curtain wall, usually at one of the main corners;
- **berm** - a level area between a parapet and the drop down to the fire-step, often used in WW1 for resting the elbows, storing ammunition, etc.;
- **bulwark** - a particularly good place to raise a fortification given the prevailing lie of the land;
- **caponnier** - a forward bay in a curtain wall allowing defensive fire along the line of said wall;
- **casemate** - a gun position sculpted into a rampart or curtain wall and, typically, roofed over to protect against plunging fire;
- **citadel** - a fortress protecting a town or city, and therefore usually large, well-positioned, and well-provisioned [e.g. Verdun Citadel];
- **counterscarp** - the down slope of a defensive ditch, seen from the attacker's side;
curtain wall - the outer main wall of a fortification; embrasure - a narrow opening in a defence work to allow the defenders to fire outward with little fear of being hit by counterfire; will usually consist, in turn, of a loop hole and a standing area behind it; enceinte - the line of the curtain wall, giving a fortification its characteristic shape when viewed from the air; escarp - the up slope of a defensive ditch, seen from the attacker's side; fascine - a tightly bound bundle of brushwood used as structural fortification where, as in a siege, there is no opportunity to lay masonry; fire-step - a ledge on the defending face of a rampart so placed as to allow defenders to fire out without exposing too much of their upper bodies to counterfire; orillon - a short extension at one or both sides of a bastion; palissade - a wooden fence either on its own or, if preparation time permits, atop an earthwork curtain wall; parados - protection at head height behind a fire-step, especially at the rear of a trench to protect against gunfire or explosions from behind; parapet - protection at head height in front of a fire-step to protect against gunfire or explosions from in front; rampart - a continuous raised defensive masonry wall or earthwork; ravelin - the naturally occurring salient at the point where two straight runs of curtain wall meet; redan - a V-shaped outward part-way along an otherwise straight length of curtain wall [alternatively a temporary earthwork erected in open country to stiffen the line of a field army]; re-entrant - a concavity in the curtain wall [c.f., salient]; revetment - masonry giving shape and support to a large mass of earth; salient - a convexity in the curtain wall [c.f., re-entrant]; sap - a forward excavation, wholly or partly underground, toward - but not necessarily directly toward - an enemy fortification; scarp - the down slope of a defensive ditch, seen from the attacker's side; sconce - an earthwork situated outside a curtain wall; standing - to be armed and on station during a period of combat alert; stockade - a defended area enclosed within a palisade; tenaille - the low area, perhaps lesser strongpoint, in front of a curtain wall between two caponiers or bastions; terreplein - a flat area (parade ground, etc.) with the curtain wall; trace Italienne - a star-shaped fort.

1667 [15th December] The Berlin Treaty: Oiled by a few thousand Francs changing hands here and there, this secret agreement between Louis XIV of France [10th August<=>1668] and the Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia [1656<=>1672], trades French support for Brandenburg-Prussia's position on the Polish succession for Brandenburg-Prussian support for the French against the Spanish Netherlands. Louis is very pleased with this outcome because he has lately been worried that Brandenburg-Prussia might otherwise have been tempted to align itself with the Triple Alliance [<=24th May]. [THREAD = THE SHAPING OF WW1 EUROPE]

1668 Jean Martinet [1667<=>1671] is promoted Inspector-General of Infantry to the French War Secretariat and sets about upgrading training throughout the infantry regiments. The Marquis of Fourille [no convenient biography] does likewise for the cavalry regiments. The emphasis is on a cycle of inspection-evaluation-remediation in which regiments are required to appoint an officer locally to enforce such good practices as pensioning off the incapable and ensuring that all remaining are capable of all the manual and procedural skills required of them. [THREAD = THE WW1 ARMIES]

RESEARCH ISSUE - THE COGNITIVE SCIENCE OF MILITARY SKILLS IN GENERAL AND OF DISCIPLINE IN PARTICULAR: The following definitions may help readers new to this study area ...

(1) The science of Humankind at work is known as "Ergonomics" [Greek ergon = "work"].

(2) Within ergonomics, the science of fitting a particular physical person into a particular physical environment is known as "anthropometry" [= "man measurement"], and the science of fitting a particular human mind into a particular perceptual and behavioural environment is known as "cognitive ergonomics".

(3) It takes time and practice to acquire a particular physical or mental skill. The process can helpfully be shown on a "learning curve", a graphical plot of ability against practice [for more on learning curves see Companion Resource (Section 3)]. Education and training is what brings about the required improvement.
EXEMPLARY (CIVILIAN): Designing a successful airliner requires ergonomics. Anthropometrics will address such matters as seat profile and positioning, leg-room, arm-reach, toilet size, ceiling height, etc., etc. Cognitive ergonomics will address such matters as cockpit instrument readability, ease of interpretation, and clarity of purpose (many an airliner has crashed as a result of confusion here - check out "mode error" here and here).

(4) All the above areas have military as well as civilian applications. "Military anthropometry" is thus the tailoring of weapons and field manoeuvres to individual body size, physical strength, and stamina, and "military cognitive ergonomics" is the tailoring of everything else a soldier might need to do to individual past experience, learning speed, reasoning ability, and memory capacity.

EXEMPLARY (17th CENTURY MILITARY): Designing a ship's cannon also requires ergonomics. Anthropometrics will address such matters as sizing the gun's working environment (in all three dimensions) and assisting its manhandling with pulley, lever, and screw-jack systems. Cognitive ergonomics will address such matters as division of labour within the guncrew (sponging, ramming, loading, running out, etc.), gun-laying, and strict adherence to gunpowder handling safety procedures even in the heat of battle.

(5) All the above areas have "forensic" aspects to them, that is to say, mistakes will inevitably be made and, once made, need to be investigated, explained, and remedied. The science here - "forensic ergonomics" - is nothing less than the science of human error in all its forms, and has been a major area of applied and theoretical psychology ever since generals started to make blunders, surgeons started to cut off wrong legs, pilots started mis-reading their instruments, train drivers started to miss red signals, artillerymen started dropping their shells on friendly troops, etc., etc. For a longer introduction to the forensic ergonomics of military blunders in particular, check out the Companion Resource.

(6) The problem with skills (and therefore with training regimes) is that psychologically speaking there is no such single thing as a skill, military or otherwise. This is because the human mind is a modular system - it has different parts doing different jobs, learning different things in different ways and at different speeds. To acquire a highly skilled behaviour requires that all these parts become coordinated, and this takes time. Amongst the most important parts are (a) a part which knows what is encyclopaedically true and what is not, (b) a part which "knows how" something is to be done, (c) a part which remembers when and where something happened, and (d) a part which maintains a repertoire of the movements and postural attitudes needed to execute particular bodily action sequences.

1668 [19th January] The Vienna Treaty: This secret agreement between Louis XIV of France [1667<=2nd February] and the Holy Roman Emperor, Archduke Leopold I of Austria [1664<=1672] trades promises of shares in a broken-up Spanish Empire for Imperial neutrality in France's claims on the Spanish Netherlands, the Franche-Comté, Navarre, Naples, and Sicily. [THREAD = THE SHAPING OF WWI EUROPE]

1668 [23rd January] The Anglo-Dutch Alliance: This secret agreement between Charles II of England etc (1665<=1669) and the First Minister of the Dutch Republic, Jan de Witt [1667<=1672], commits both countries to helping Spain and France resolve their differences, but with the option - should the French persistently overstep the mark - of resorting to the use of force against them. [THREAD = THE SHAPING OF WWI EUROPE]

1668 [2nd-19th February] The Lightning Invasion of the Franche-Comté: This invasion takes place as part of the War of Devolution [<=1667] between a French army under Louis XIV of France [19th January<=2nd May], d'Enghien/Condé [1658<=1672], and François de Montmorency-Bouteville, Duke of Luxembourg [Wikipedia biography>=1678], and the Spanish garrisons in the Franche-Comté under their Governor-General, Jacques-Nicolas de Courgenon, Marquis of Yenne [no convenient biography]. Free under the Vienna
Treaty from any threat of Imperial intervention, and with the Spanish generally unprepared, the offensive makes rapid progress, taking Besançon and Salin on 7th February, Dole on 14th February, and Gray on 19th February. [THREAD = THE SHAPING OF WW1 EUROPE]

********** PORTUGAL ACHIEVES INDEPENDENCE **********

1668 [13th February] **The Treaty of Lisbon**: Mediated by Edward Montagu, 1st Earl of Sandwich [<=1665] after 28 years of provincial rebellion, this treaty between Portugal and Spain sees the Spanish Regent, Maria Anna of Austria [<=1667] recognise the independent sovereignty of the House of Braganza. [THREAD = THE SHAPING OF WW1 EUROPE]

1668 [2nd May] **The Treaty of Aix-la-Chapelle**: This treaty between Louis XIV of France [2nd February<=>1670], Spain, and the Triple Alliance [<=1667] brings the War of Devolution [<=1667] to an end. In effect the Triple Alliance [<=1667] has forced Louis to abandon his plans for the time being, and to return much of the Spanish territory taken by force over the preceding 12 months, not least the entire Franche-Comté [<=2nd February]. They insist, however, on keeping all the fortresses captured in the Turenne-d'Aumont offensive [<=1667]. In the spirit of their secret treaty [<=1667 (15th December)], the **Grosser Kurfürst**, Frederick William, Elector of Brandenburg-Prussia [1667<=1670] receives 50,000 thalers from Louis for not aligning Brandenburg-Prussia with the Triple Alliance (McKay, 2001). [THREAD = THE SHAPING OF WW1 EUROPE]

1668 [16th September] **The Abdication of John II Casimir Vasa**: An ailing John II Casimir Vasa [<=1656] resigns his titles and retires to a monastery. In June 1669 he will be replaced as King of Poland and Grand Duke of Lithuania by Michal Wisniowiecki [Wikipedia biography]. [THREAD = THE SHAPING OF WW1 EUROPE]

1669 Sébastien de Vauban [1667<=1671] complements his earlier treatise on how to conduct sieges with a companion volume entitled "Instructions pour la Défence", in which he explains how to defend effectively against people such as he. [THREAD = WW1 ARTILLERY]

1669 Rogers (1975) notes as follows [in. = diameter of bore in inches; pr = "pounder" = weight of projectile] …

"A return of British ordnance of 1669 is of interest in showing both that cast iron pieces were in use and that the old names had been abandoned, leaving 'cannon' as a name applied to all guns. The types listed were: brass cannon, 8 in., 7 in., 29-pr, 12-pr, 8-pr, 6-pr, 3-pr; iron cannon, 7 in., 29-pr, 12-pr, 8-pr, 6-pr, 3-pr; brass mortars, 18½ in., 13¼ in., 9 in., 8¼ in., 6 in., 4½ in., 4¼ in.; iron mortars, 12¼ in., 4¾ in., 4¼ in." (p45).

**ASIDE**: One has to suspect that the three competing quarter-inch variants of the four inch mortars reflected more a lack of standardisation between different foundries than a deliberate design decision. [THREAD = WW1 ARTILLERY]


1670 The Danish scientist Thomas Walgenstein [no convenient biography] presents a magic lantern show to the Danish court. [THREAD = THE HISTORY OF SCIENCE AND TECHNOLOGY]

1670 **Bernard de Gomme** [<=1660] starts to rebuild the old Tudor fort at Tilbury, so that it might more effectively guard the Thames Estuary. [THREAD = WW1 ARTILLERY]
The resulting fort was of an “angular bastion” pattern and could mount some 160 guns. It was modernised to accommodate 9” rifled muzzle-loaders in 1865 and is nowadays an English Heritage museum site [website].

1670 [4th January] **The Franco-Brandenburg Treaty:** This secret treaty between Louis XIV of France [1668<=1st June] and the Grosser Kurfürst, Frederick William, Elector of Brandenburg of Prussia [1668<=1672] promises that after the death1 of Charles II of Spain [1667<=1700] the Brandenburg-Prussians will cooperate in a two-front offensive against the Spanish Netherlands, attacking westward out of the westernmost Brandenburg estate, the County of Mark [map], while the French attack northward out of Flanders. [THREAD = THE SHAPING OF WW1 EUROPE]

1ASIDE: As already noted [<=1665 (17th September [ASIDE])], Charles II of Spain was a sickly child. In the event he would confound all Europe's scheming by surviving another 30 years, and so the Brandenburg-Prussians were not bound to assist when Louis finally decides to attack the Dutch [=1672 (6th April)]. Instead Louis relies on the prince-bishoprics of Cologne and Münster to provide him with his second front.

1670 [1st June] **The Treaty of Dover:** This secret treaty between Louis XIV of France [4th January<=1672] and (his cousin) Charles II of England etc [1669<=1671] sees the English agreeing in principle to abandon their Triple Alliance with Sweden and the Dutch Republic [=1667] to support instead the French in a new war against the Dutch. In the event it will be nearly two years before Louis is ready to call upon this agreement [=1672 (6th April)] and the English involvement will not last very long [=1674 (10th February)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1671 **Leibniz Calculator:** The German philosopher-engineer Gottfried Leibniz [Wikipedia biography=>1821] demonstrates a larger handle-driven version of Pascal's [1642<=1821] Pascaline calculating machine, capable of multiplication by repeated addition, and going by the name machina arithmetica [Wikipedia image and factsheet]. [THREAD = WW1 CYBERNETICS, COMPUTATION, AND FIRE CONTROL]

********** LIGHT FLINTLOCK MUSKETS BECOME POPULAR **********
********** FUSILIERS ARE BORN **********

1671 Around this time Sébastien de Vauban [1669<=1673] recruits a regiment of Fusiliers - specialists in light flintlock musketry - to serve as escorts for his artillery train. At much the same time Jean Martinet [1668<=1672] authorises the plug bayonet to be distributed within his infantry Regiments. This is a far-reaching innovation because the plug bayonet could instantly turn a musket into a pike, allowing the separate roles of the musketeer and the pike-man to be combined. The innovation will shortly be replaced by the offset bayonet [=1678]. [THREAD = THE WW1 ARMIES]

1671 [26th August] **The Merlin Incident:** The British Royal Yacht Merlin is denied a formal salute when sailing through the Dutch fleet. Still smarting from his humiliating defeat in the Second Anglo-Dutch War [=1667], and possibly with the secret Treaty of Dover [=1670] in mind, Charles II of England etc [1670<=1681] sees herein an opportunity to pick a new fight. He therefore instructs his ambassador to the Dutch Court, one George Downing [Wikipedia biography], to demand that those responsible should be punished. The Dutch refuse to comply, and both parties prepare for war [=1672 (6th April)]. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE: De Witt had little love for the House of Orange and was at this time trying to remove the post of Stadtholder - a strange combination of elected President and hereditary royal house - from the Dutch republican constitution.

********** LOUIS XIV’S SECOND WAR **********

1672 [6th April] The Franco-Dutch War, 1672-1678: This six-year war is fought between a French-led alliance (including England, Sweden, Münster, Cologne) and the Dutch Republic (supported by the Holy Roman Empire, Spain, Denmark-Norway, and Brandenburg-Prussia). The French are led by Louis XIV of France [1670<=>7th May], the Holy Roman Empire by Archduke Leopold I of Austria [1668<=>1683], the Dutch by William of Orange (III of England etc) [1689 [preceding<=>7th May], and the Brandenburg-Prussians by the Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia [1670<=>1674]. The main military figures are d'Enghien/Condé [1668<=>1674] and Turenne [1667<=>7th May]. Here are the main events ...

THE THIRD ANGLO-DUTCH WAR, 1672-1674 [see separate indexing entry =>next]
The Invasion of the Spanish Netherlands, 1672; The Siege of Duisberg, 1672; The Siege of Groningen, 1672; The Siege of Maastricht, 1673; The French Offensive in the Palatinate, 1673; The Siege of Maastricht, 1673; The Siege of Bonn, 1673; The Siege of Besançon, 1674; The Battle of Sinzheim, 1674; The Battle of Seneffe, 1674; The Imperial Counter-Offensive in the Palatinate, 1674; The Battle of Enzheim, 1674; The Battle of Türkheim, 1675

THE SCANIAN WAR, 1674-1679 [see separate indexing entry =>1674 (??th December)]
The Battle of Salzbach, 1675; The Battle of the Gulf of Augusta, 1676; The Battle of Palermo, 1676; The Siege of Valenciennes, 1677; The Siege of Cambrai, 1677; The Siege of Ghent, 1678; The Siege of Ypres, 1678; The Treaties of Nijmegen, 1678; The Battle of St. Denis, 1678; The Treaties of Nijmegen, 1679

The overall outcome is a French victory, gaining ground in the Spanish Netherlands and acquiring the Franche-Comté at the expense of Spain. The war is noteworthy in the present context as another which helped shape Europe as it stood in 1914: not only does France fight and regularly win as a newly confident nation, but Brandenburg-Prussia is finding its feet at Swedish expense and the Dutch mastery of the sea is being eroded by the French to the benefit of the English. [THREAD = THE SHAPING OF WW1 EUROPE]

1672 [6th April] The Third Anglo-Dutch War, 1672-1674: This two-year war is fought as an adjunct to the Franco-Dutch War [=>preceding] between a Franco-British alliance and the Dutch Republic. Here are the main events ...

The Merlin Incident, 1671 [casus belli ante]; The Battle of Solebay, 1672; The Treaty of Westminster, 1674

The outcome is a significant victory for the Dutch, thanks largely to the naval reforms recently introduced by Michiel de Ruyter [1667<=>7th June]. The war is noteworthy in the present context (a) for demonstrating how sloppiness and underfunding can rapidly erode the operational effectiveness of a navy, and (b) for using a trumped-up incident [=1671 (26th August)] as a casus belli. [THREAD = THE SHAPING OF WW1 EUROPE]

RESEARCH ISSUE - TRUMPED-UP INCIDENTS: Trumped-up incidents are a good way of "picking a fight" without revealing one's true motivation. They are all the more effective if they are in some way subconsciously expected of the alleged perpetrator [in 2013, for example, it would be easy to trump up a terrorist atrocity by Muslims]. The true motivation must be carefully concealed and attention diverted to the trumped-up event by blowing it up out of all proportion.
1672 [7th May] The Invasion of the Spanish Netherlands [1672]: [Compare ditto 1667 and 1683] This is the first major event in the Franco-Dutch War [<=6th April], and is fought out between a French invasion army under Louis XIV of France [6th April<=>21st June] and Turenne [6th April<=>1673] and the Spanish garrison towns of the southern Spanish Netherlands. The main initial thrust is north-eastward through the Spanish Netherlands via Liege towards Maastricht. Instead of besieging that city, however, the French pass it by and turn westward to cross the border into the Dutch Republic heading for Amsterdam, only being stopped when the Dutch open the dykes and flood much of the countryside. Jan de Witt [<=25th February] is lynched in the resulting enemy-at-the-gates panic, and on 4th July William of Orange, (III of England etc) 1689 [6th April<=>1673] is elected Stadholder to replace him. [THREAD = THE SHAPING OF WW1 EUROPE]

1672 [7th June] The Battle of Solebay: This naval battle is fought as part of the Third Anglo-Dutch War [<=6th April] between an English/French fleet under James Stuart, Duke of York [1665<=>next] and a Dutch fleet under Michiel de Ruyter [6th April<=>1676]. The battle is indecisive, although the Dutch fight well enough to deter the English/French from blockading their ports. [THREAD = THE SHAPING OF WW1 EUROPE]

1672 [21st June] The Siege of Duisberg: This siege is fought as part of the Franco-Dutch War [<=1672] between a besieging French army under Louis XIV of France [7th May<=>1673] and the Spanish garrison at Duisberg [map]. The outcome is a French victory, but with the death in action (from friendly artillery fire) of their Inspector General of Infantry, Jean Martinet [<=1668]. [THREADS = THE SHAPING OF WW1 EUROPE and FRIENDLY FIRE]

1672 [9th July-17th August] The Siege of Groningen: This six-week siege is fought as part of the Franco-Dutch War [<=1672] between the Prince-Bishop of Münster, Christoph von Galen [Wikipedia biography] and the Dutch garrison at Groningen under Carl von Rabenhaust [Wikipedia biography]. The besiegers finally withdraw after taking unsustainably heavy casualties. [THREAD = THE SHAPING OF WW1 EUROPE]

1673 The heir to the English and Scottish thrones (and presently also Lord High Admiral), James Stuart, Duke of York [preceding<=1685], publishes "Instructions for the better Ordering of his Majesties Fleet in Sayling", in which he explains how to use a repertoire of 15 flags1 (with variant meanings according to where, how, and in which combinations hoisted) to coordinate fleet manoeuvres from a single ship. This work will later be described as the navy's "first 'signal book' proper" (Kent, 1993, p3). Here, from Corbett (1905 online) is an indicative extract ...

"Instruction V. If the admiral would have any of the fleet to make sail, or endeavour, by tacking or otherwise, to gain the wind of the enemy, he will put a red flag upon the spritsail, topmast shrouds, fore-stay, fore topmast-stay; and he who first discovers this signal shall make sail, and hoist and lower his jack and ensign, that the rest of the fleet may take notice thereof, and follow [note the "repeater station" function of the second element of this instruction - Ed.]. Instruction VI. If the admiral should have the wind of the enemy when other ships of the fleet are in the wind of the admiral, then, upon hoisting up a blue flag at the mizen yard, or mizen topmast, every ship is to bear up into his wake or grain, upon pain of severe punishment."

Interestingly, James' Instructions include not just (a) substitute sound signals for use at night or in conditions of poor visibility but also (b) clear guidelines on what to do when NO signal is available at all! [THREAD = WW1 SIGNALLING]

1ASIDE: To this day signals personnel in the Royal Navy are still informally referred to as "bunting tossers" or given the nickname "Bunts".
1673 [Spring] The French Offensive in the Palatinate: This attempt to capture the strategic fortresses of the Rhineland takes place as part of the Franco-Dutch War \(\leq 1672\) between a French army under Turenne \(1672\leq\leq1674\) and an Imperial army under Raimondo Montecuccoli \(1664\leq\leq3rd\ November\). The advances will be reversed by a counter-offensive the following year \(\geq 1674\) (29th September). [THREAD = THE SHAPING OF WW1 EUROPE]

1673 [13th-26th June] The Siege of Maastricht: This two-week siege is fought out as part of the Franco-Dutch War \(\leq 1672\) between a 45,000-man besieging French army under Louis XIV of France \(1672\leq\leq1674\) and Sébastien de Vauban \(1671\leq\leq1674\) and the 6000-man Dutch garrison at Maastricht under Jacques de Fariaux [Wikipedia biography]. The outcome is a victory for the French. Now a young captain in the 1st Guards Regiment, John Churchill (1st Duke of Marlborough)\(^{1702}\) \(1665\leq\leq1674\) is mentioned in despatches for his courage. [THREAD = THE SHAPING OF WW1 EUROPE]


1673 [30th August] The La Haye Alliance: The Dutch Republic, the Archduchy of Austria, Spain, and Lorraine form a Quadruple Alliance against France. [THREAD = THE SHAPING OF WW1 EUROPE]

1673 [3rd-12th November] The Siege of Bonn: This nine-day siege is fought out as part of the Franco-Dutch War \(\leq 1672\) between a besieging Dutch army under William of Orange (III of England etc)\(^{1689}\) \(1672\leq\leq1674\) and Raimondo Montecuccoli [Spring\(\leq\leq1674\) and the French/Münster garrison at Bonn. The outcome is a Dutch victory. [THREAD = THE SHAPING OF WW1 EUROPE]

**********  THE FUNCTION OF SALTPETRE IS EXPLAINED  **********

1674 [See firstly 1044 (OXIDATION AND OXIDANTS)] Following a series of experimental investigations of weight change during combustion, the English physician and analytical chemist John Mayow [Wikipedia biography] suggests that burning involves one particular component of air, which he calls "Spiritus Igneo-Aereus". This notion anticipates by a century the specific identification of Oxygen by Joseph Priestley \(\geq 1776\). Mayow also suggests that this same Spiritus can appear in solid form as part of Nitre - the Saltpetre used in making gunpowder. He also suggests that biological respiration involves the same fundamental processes. All three suggestions are master-strokes of experimentally grounded inductive scientific thinking. [THREAD = WW1 CHEMISTRY]

1674 [4th January] The Treaty of Westminster: This treaty between the Dutch Republic and England brings the Third Anglo-Dutch War \(\leq 1672\) to a close. The English get to keep New York City, taken by force ten years before \(\leq\) and now rivaling Boston in servicing the Eastern Seaboard colonies, and the Dutch get to keep Surinam. [THREAD = THE SHAPING OF WW1 EUROPE]

1674 [22nd May] The Siege of Besançon: This month-long siege takes place as part of the Franco-Dutch War \(\leq 1672\), and is noteworthy in the present context for the use by Sébastien de Vauban \(1673\leq\leq1676\) of a continuous artillery barrage to wear down defenders rather than cause particular damage. As at Lille \(\leq 1667\) Vauban will construct a Vauban-proof citadel after the event [now a UNESCO World Heritage site - tour bookings]. [THREAD = WW1 ARTILLERY]
1674 [16th June] The Battle of Sinzheim: This battle is fought as part of the Franco-Dutch War [<=1672] between a French army under Turenne [1673<=29th September] and an Imperial army under Aeneas de Caprara [Wikipedia biography]. The outcome is a French victory. The battle is noteworthy in the present context for attempting to maintain French control in Alsace by taking the battle to the enemy east of the Rhine in the Palatinate. John Churchill (1st Duke of Marlborough)\textsuperscript{1702} [1673<=1685] is one of the English regiments attached to Turenne’s army, and studies the maestro closely. [THREAD = THE SHAPING OF WW1 EUROPE]

**STUDENT EXERCISE 1633 EXTENSION:** Sinzheim is in ALLEMANDE. Research its location online and dot it in on your map.

********** THE TRENCH MORTAR IS BORN **********

1674 [??th June-28th October] The Siege of Grave: This four-month siege is fought out as part of the Franco-Dutch War [<=1672] between a besieging Dutch army under William of Orange (III of England etc) \[1689\] [1673<=11th August] and Menno van Coehoorn [Wikipedia biography] =>1682 and the French garrison at Grave [map]. The outcome is a Dutch victory. The battle is noteworthy in the present context for the success of the experimental deployment by van Coehoorn of a number of small portable mortars [images]. [THREAD = THE SHAPING OF WW1 EUROPE]

1674 [11th August] The Battle of Seneffe: This battle is fought as part of the Flanders Theatre operations of the Franco-Dutch War [<=1672] between a French army under d’Enghien/Condé [<=1672] and a Dutch/German/Spanish army under William of Orange (III of England etc) \[1689\] [??th June<=1677]. The outcome is indecisive, but with heavily disproportionate Dutch casualties. [THREAD = THE SHAPING OF WW1 EUROPE]


1674 [29th September-7th October] The Imperial Counter-Offensive in the Palatinate: This battle is fought as part of the Franco-Dutch War [<=1672] between the invading French armies east of the Rhine under Turenne [16th June<=14th October] and two converging Imperial/Allied armies, one under Alexandre de Bournonville [Wikipedia biography] =>14th October and Raimondo Montecuccoli [1673<=1675] and the other under the Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia [preceding<=19th December], and George von Derfflinger [Wikipedia biography] =>1675. The outcome is that the Allies advance just a touch too cautiously and Turenne succeeds in falling back into Alsace with little loss. With winter coming on, both armies then go into winter quarters, Montecuccoli in and around Colmar and Turenne in and around Haguenau. Turenne will then strike back decisively in the depths of winter [=1675 (5th January)], [THREAD = THE SHAPING OF WW1 EUROPE]

1674 [14th October] The Battle of Enzheim: This battle is fought as part of the Franco-Dutch War [<=1672] between a French army under Turenne [29th September<=29th December] and an Imperial army under Alexandre de Bournonville [29th September<=29th December]. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1674 [19th December] THE SCANIAN WAR, 1674-1679: This five-year war is fought as an adjunct to the Franco-Dutch War [<=1672] initially between Charles XI of Sweden
The Swedish Invasion of the Uckermark, 1674 \[casus belli\]; The Swedish Spring Offensive in the Havelland\[1]; 1675; The Danish-Norwegian Summer Offensive, 1675; The Battle of Fehrbellin, 1675; The Danish-Norwegian/Dutch Involvement, 1675; The Sieges of Helsingborg, 1676; The Battle of Lund, 1676; The Battle of Öland, 1676; The Siege of Stettin/Szczecin, 1677; The Allied Invasion of Rügen, 1678; The Battle of Stralsund, 1678; The Siege of Greifswald, 1678; The Treaty of Fontainbleau, 1679

The overall outcome is a return to the territorial \textit{status quo ante} but with a newly confident Brandenburg-Prussia. \[THREAD = THE SHAPING OF WW1 EUROPE\]

\[1\text{ASIDE - THE HAVELLAND: This is a district of Brandenburg along the River Havel to the west of Berlin.}\]

1674 [25th December] \textbf{The Swedish Invasion of the Uckermark:} The opening event in the Scanian War [= preceding] is when a Swedish army under an ailing \textit{Carl Gustav Wrangel} \[Wikipedia biography=>1675\] cross southward into the Uckermark and takes up winter quarters in and around the regional capital, Prenzlau/Prenzlow \[map\] \[continues 1675 (28th June) \ldots\]. \[THREAD = THE SHAPING OF WW1 EUROPE\]

\textit{ASIDE:} It is not normally good practice to commit an act of war and then to sit back and await the consequences. On this occasion, however, Sweden have attacked at the behest of \textit{Louis XIV of France} \[19th December=>1677\] in order to draw the main Brandenburg-Prussian army away from the Palatinate [=29th September]. In the meantime the Brandenburg northern front is as good as undefended. The Swedish offensive proper will begin in the Spring [=1675 (15th May)].

1674 [29th December] \textbf{The Battle of Mulhausen:} This battle is fought as part of the Franco-Dutch War [=1672] between a French army under \textit{Turenne} \[14th October=>1675\] and an Imperial army under \textit{Alexandre de Bournonville} \[14th October=>1675\]. The outcome is a French victory. \[THREAD = THE SHAPING OF WW1 EUROPE\]

********** \textbf{THE PRUSSIANS TAKE TO THE SEAS} **********

1675 Around this time the Dutch maritime entrepreneur \textit{Benjamin Raule} \[Wikipedia biography\] is engaged by the Brandenburg-Prussians to create them a \textit{Kriegsmarine} [= war navy]. \[THREAD = THE SHAPING OF WW1 EUROPE\]

1675 [5th January] \textbf{The Battle of Türkheim:} Following the disciplined fighting retreat by the French the previous autumn, this battle is fought as part of the Alsace Theatre operations of the Franco-Dutch War [=1672] between a French army under \textit{Turenne} \[1674<=27th July\] and a larger Imperial army under the \textit{Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia} \[1674<=28th June\] and \textit{Alexandre de Bournonville} [=1674]. The outcome is a decisive French victory thanks to adventurous manoeuvring on Turenne’s part in the depths of winter, and the Imperials are driven back across the Rhine. \[THREAD = THE SHAPING OF WW1 EUROPE\]

\textbf{STUDENT EXERCISE 1633 EXTENSION:} Türkheim is in 68 HAUT-RHIN. Research its location online and dot it in on your map.
1675 [15th May] **The Swedish Spring-Offensive:** (Continues from 1674 (25th December)) This campaign is fought as part of the Scanian War (<=1674) between an invading Swedish army under Carl Gustav Wrangel (1674<=next) and (his brother) Waldemar Wrangel [no convenient biography=>next] and the armies and fortresses of Brandenburg. [THREAD = THE SHAPING OF WW1 EUROPE]

1675 [15th May] **The Battle of Löcknitz:** This battle is fought as part of the Scanian War (<=1674) between the Swedish invasion army under the Wrangel brothers [<=preceding] and the small Brandenburg-Prussian fortress garrison at Löcknitz (a few miles west of Szczecin/Stettin). The outcome is a quick Swedish victory followed by a push south-westward up the Oder valley into the Havelland region of Brandenburg as far south as Oranienburg and Spandau on the outskirts of Berlin. [THREAD = THE SHAPING OF WW1 EUROPE]

********** "PRUSSIA'S BAPTISM OF FIRE" **********

1675 [28th-29th June] **The Battle of Fehrbellin:** The Brandenburg defenders have been skirmishing to date with the various Swedish columns when suddenly the Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia [5th January<=2nd September] and George von Derfflinger [1674<=1677] achieve local tactical advantage over the column led by Waldemar Wrangel [no convenient biography]. The outcome is a convincing Brandenburg-Prussian victory. The battle is noteworthy in the present context for raising Brandenburg-Prussia's profile on the world stage. [THREAD = THE SHAPING OF WW1 EUROPE]

**ASIDE - MUSIC AND MILITARISM:** This battle is one of a handful selected (sometimes many years after the event) to be specifically commemorated in martial music - check out Richard Henrion's (1893) *Fehrbelliner Reitersmarsch* [view on YouTube].

**ASIDE - MILITARISM AND TAXATION:** McKay (2001) suggests that one of the reasons the Brandenburgers won at Fehrbellin was that the Grosser Kurfürst was well aware how much a wartime army depended upon peacetime preparations, and collected taxes accordingly. Such taxation was not always popular for sure, but the benefits were there to see. And the key to the effective collection of taxes was the Generalkriegskommissariat [= "General War Commissariat"], who collected taxes as civilians and then spent the money as military commissioners.

********** TURENNE'S LAST BATTLE **********

1675 [27th July] **The Battle of Salzbach:** This battle is fought as part of the Franco-Dutch War (<=1672) between a French army under Turenne [5th January<=dies this day] and an Imperial army under Raimondo Montecuccoli (<=1674). The outcome is a French victory, soured by the death in action of Marshal Turenne. [THREAD = THE SHAPING OF WW1 EUROPE]

1675 [2nd September] **The Danish-Norwegian Campaigns: Christian V of Denmark-Norway** (1674<=1676) formally joins the Scanian War (<=1674) against on Sweden and, supported by Brandenburg-Prussians, launches two substantial offensives, the one through Mecklenburg toward Swedish Pomerania, and the other, under Gustav von Baudissin [no convenient biography], toward Bremen-Verden¹. The former is noteworthy in the present context for consolidating Brandenburg-Prussian ambitions on the presently Swedish south-western Baltic coast; the latter for offering it access to a major North Sea port. [THREAD = THE SHAPING OF WW1 EUROPE]

¹**ASIDE - BREMEN-VERDEN:** Prior to the Treaty of Westphalia (<=1648), the Prince-Archbishopric of Bremen [map] and the Prince-Bishopric of Verden, were Protestant states within the Lower Saxon Reichskreis of the Holy Roman Empire. The Treaty of Westphalia then restructured them as a duchy and a principality, respectively, and awarded them to Sweden as war gains.
1676 [22nd April] **The Battle of the Gulf of Augusta:** This naval battle is fought as part of the Franco-Dutch War [=1672] between a French fleet under Abraham Duquesne, Marquis of Bouchet [Wikipedia biography] and a Dutch/Spanish fleet under Michiel de Ruyter [1672<=] dies this day]. The outcome is a French victory and the death in action of de Ruyter. [THREAD = THE SHAPING OF WW1 EUROPE]

1676 [1st June] **The Battle of Öland:** This naval battle is fought as part of the Scanian War [=1674] between a Swedish fleet under Lorent Creutz [Wikipedia biography] and a Danish-Norwegian/Dutch fleet under Cornelis Tromp [Wikipedia biography]. The outcome is a heavy Swedish defeat thanks to indiscipline in maintaining their line of battle. [THREAD = THE SHAPING OF WW1 EUROPE]

1676 [2nd June] **The Battle of Palermo:** This naval battle is fought as part of the Franco-Dutch War [=1672] between a French fleet under Louis de Vivonne [Wikipedia biography] and a Dutch/Spanish fleet under Jan den Haen [no convenient biography] and Don Diego de Ibarra [no convenient biography]. The outcome is convincing French victory. The battle is noteworthy in the present context for securing French naval superiority in the Mediterranean until the end of the war. [THREAD = THE SHAPING OF WW1 EUROPE]

1676 [29th June-3rd July/14th-30th December] **The Sieges of Helsingborg:** This pair of sieges is fought out as part of the Danish Theatre operations of the Scanian War [=1674]. The first siege begins on 29th June when a 15,000-man Danish-Norwegian army is landed at Rää, three miles south of Helsingborg [map], and soon occupies the fortress itself. The second siege begins on 14th December when Charles XI of Sweden [1674<=] takes the fortress back from the Danes. The city will be formally confirmed as Swedish by the Treaty of Fontainbleau [=1679]. [THREAD = THE SHAPING OF WW1 EUROPE]

1676 [??th November-17th March 1677] **The Siege of Valenciennes:** This three-week siege is fought out as part of the Franco-Dutch War [=1672] between a besieging French army under Sébastien de Vauban [1674<=] and the Spanish garrison at Valenciennes. The outcome is a French victory. The siege is noteworthy in the present context for the final surprise daylight attack in which French grenadiers figured prominently. [THREAD = THE SHAPING OF WW1 EUROPE]

**STUDENT EXERCISE 1633 EXTENSION:** Valenciennes is in 59 NORD. Research its location online and dot it in on your map.

**ASIDE - VALENCIENNES IN WW1:** Valenciennes was occupied by the German 1st Army on 25th August 1914, and remained behind German lines for the remainder of the war.

****** "ONE OF THE BLOODIEST BATTLES IN HISTORY" ******

1676 [4th December] **The Battle of Lund:** This battle is fought as part of the Scanian War [=1674] between a Swedish army under Charles XI of Sweden [29th June<=] and a Danish-Norwegian/Dutch Republic army under Christian V of Denmark-Norway [1675<=] in the presence of Carl von Arensdorff [Wikipedia biography] and Friedrich von Arensdorff [Wikipedia biography]. The outcome is a decisive Swedish victory. The battle is noteworthy in the present context for being one of the (proportionately) deadliest in history, with a reported 9000 (45%) deaths amongst the 20,000 combatants on the day1. [THREAD = THE SHAPING OF WW1 EUROPE]

1 **ASIDE:** By comparison, on the infamous first day of the Battle of the Somme [=1916 (1st July)] some 25,000 men (10%) will die out of a quarter of a million combatants.
1677 [28th March-17th April] **The Siege of Cambrai**: This three-week siege is fought out as part of the Franco-Dutch War [<=1672] between a besieging French army under Louis XIV of France [1674<=1678] and Sébastien de Vauban [1676<=1678] and the Spanish garrison at Cambrai under the ageing and "often dizzy" Dom Pedro de Zavala [no convenient biography]. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1677 [14th July] **The Battle of Landskrona**: This battle is fought as part of the Scanian War [<=1674] between a Swedish army under Charles XI of Sweden [<=1676] and a Danish-Norwegian army under Christian V of Denmark-Norway [1676=>1691]. The outcome is a convincing Swedish victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1677 [14th July-6th January 1678] **The Siege of Stettin/Szczecin**: This six-month siege is fought out as the focus of the Pomeranian Theatre operations of the Scanian War [<=1674] between a besieging Brandenburg-Prussian army under the Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia [1675<=1678] and George von Derfflinger [1675<=1678] and the Swedish garrison at Stettin/Szczecin. The outcome is a hard-fought Brandenburg-Prussian victory, threatening Sweden's other Pomeranian strongpoints along the Baltic coast [1678 (September-October)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1677 [4th November] The marriage takes place of William of Orange (III of England etc) and (his cousin) Mary Stuart (II of England etc) [Wikipedia biography=>1688]. [THREAD = THE SHAPING OF WW1 EUROPE]

1678 The English diarist John Evelyn [Wikipedia biography] records the first description of British Grenadiers, describing them as "a new sort of soldier with a pouch full of hand grenades and a fierce expression". [THREAD = THE WW1 ARMIES]

********** THE OFFSET BAYONET IS BORN **********

1678 Around this time the French infantry commander Jacques de Chastenet-Puysegur [no convenient biography] replaces the plug bayonet [<=1671] with an offset bayonet, that is to say, one which does not obstruct the barrel when fitted so that the weapon can still be fired. [THREAD = THE WW1 ARMIES]

1678 [4th-12th March] **The Siege of Ghent**: This eight-day siege is fought out as part of the Flanders Theatre operations of the Franco-Dutch War [<=1672] between a French army under Louis XIV of France [1677<=next] and the Dutch/Spanish garrison at Ghent under Francisco de Pardo [no convenient biography=>18th March]. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1678 [18th-25th March] **The Siege of Ypres**: This seven-day siege is fought out as part of the Flanders Theatre operations of the Franco-Dutch War [<=1672] between a French army under Louis XIV of France [preceding<=.??th November] and Sébastien de Vauban [1677<=.??th November] and the Dutch/Spanish garrison at Ypres under Francisco de Pardo [<=4th March]. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

**STUDENT EXERCISE 1633 EXTENSION**: Ypres is in BELGIQUE. Research its location online and dot it in on your map.

1678 [10th August/19th September] **The Treaties of Nijmegen, 1678**: These two treaties start the complex diplomatic process of bringing the Franco-Dutch War [<=1672] to an end. The first treaty (10th August) is between France and the Dutch Republic, and the second (19th September) is between France and Spain. Together they cede the southern, French-speaking, parts of Spanish Flanders to France, much along the line of the
modern border between France and Belgium. The negotiations then continue between the other participants in the war [=1679 (26th January)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1678 [14th-15th August] **The Battle of St.-Denis:** This battle is fought as part of the France-Dutch War [=1672] between a French army under François de Montmorency-Bouteville, Duke of Luxembourg [1668<=1690] and a Dutch Republic army under William of Orange (III of England etc) [1667<=1688]. The outcome is a hard-fought draw. [THREAD = THE SHAPING OF WW1 EUROPE]


1678 [22nd-24th September] **The Allied Invasion of Rügen:** This seaborne invasion takes place as part of the Scanian War [=1674] between an invading Danish-Norwegian/Brandenburg-Prussian army under the **Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia** [1677<=next] and George von Derfflinger [=1677] and the Swedish defenders of Rügen under **Otto Wilhelm von Königsmarck** [Wikipedia biography=>next]. The outcome is a Swedish defeat, with von Königsmarck and a few of his troops escaping by sea. [THREAD = THE SHAPING OF WW1 EUROPE]

1678 [23rd September] **Charles Erskine, 5th Earl of Mar** [Wikipedia biography] is asked to raise a regiment from north-eastern Scotland, and obliges with the **Earl of Mar's Regiment of Foot** [=1695 or go straight to 1751 (21st (Royal North British Fusiliers) Regiment of Foot)]. [THREAD = THE WW1 ARMIES]

1678 [10th-11th October] **The Battle of Stralsund:** This battle is fought as part of the Scanian War [=1674] between a besieging Brandenburg-Prussian army under the **Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia** [preceding<=next] and a defending Swedish army under **Otto Wilhelm von Königsmarck** [=preceding]. The outcome is a Brandenburg-Prussian victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1678 [15th November] **The Battle of Greifswald:** This battle is fought as part of the Scanian War [=1674] between a besieging Brandenburg-Prussian army under the **Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia** [preceding<=1688] and the Swedish garrison at Greifswald. The outcome is a Brandenburg victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1678 [18th March<=1683] Sébastien de Vauban is appointed Commissioner-General of Fortifications to **Louis XIV of France** [18th March<=1681] and will spend the next 40 years turning France into one giant fortress. Altogether he will construct or improve the defences of some 300 cities, including Antibes, Arras, Besançon, Briançon, Colmar, Douai, Lille, Metz, Namur, Sedan, Verdun, and Ypres. [THREAD = WW1 ARTILLERY]

1679 [26th January-2nd October] **The Treaties of Nijmegen, 1679:** These four treaties continue the process of winding up the Franco-Dutch War [=1672]. The first two (26th January) are between France and the Holy Roman Empire and Sweden and the Holy Roman Empire, the third (19th March) is between Sweden and Münster, and the fourth (2nd October) is between Sweden and the Dutch Republic. [THREAD = THE SHAPING OF WW1 EUROPE]

1679 [29th June] **The Treaty of St.-Germain-en-Laye:** This treaty between France and Brandenburg-Prussia requires the latter to restore most of its conquests in Pomerania to Sweden. [THREAD = THE SHAPING OF WW1 EUROPE]
ASIDE: Needless to say, this requirement did not go down well with the Brandenburg-Prussians, who had just struggled for five years to acquire said territories. But with the Holy Roman Empire having already made peace with France by the Treaty of Nijmegen [<=26th January] Brandenburg-Prussia lacked the resources to continue the war on her own.

1679 [2nd September] The Treaty of Fontainbleau: This French-brokered treaty between Sweden and Denmark-Norway brings the element of the Scanian War [<=1674] to a close. Both sides withdraw to the status quo ante. [THREAD = THE SHAPING OF WW1 EUROPE]

1680 [13th July] Charles FitzCharles, 1st Earl of Plymouth [Wikipedia biography] establishes the Second Tangier Regiment [=>1702 or go straight to 1751 (4th (The King's Own) Regiment of Foot)], [THREAD = THE WW1 ARMIES]

1681 Some time this year a son is born to Thomas Allgood [<=1660] and his wife Ann and named Edward Allgood [Welsh_National_Library_biology=>1732]. [THREAD = THE INDUSTRIAL REVOLUTION]

1681 [4th March] Charles II of England etc [1671<=1685] signs a Royal Charter awarding the colonial territory of Pennsylvania to the Quaker entrepreneur William Penn [Jnr] [Wikipedia biography], son of Admiral William Penn [<=1654] (after whom the territory has been named). In the coming years he will turn the colony into a Puritan haven for oppressed Protestants from across Europe. [THREAD = THE SHAPING OF WW1 EUROPE]

1681 [30th September] The Occupation of Strasbourg: This point-of-a-gun uncontested surrender sees the hitherto free Imperial city of Strasbourg handed over to a French army under Louis XIV of France [1678<=1683]. [THREAD = THE SHAPING OF WW1 EUROPE]

1682 Around this time one Thomas Cooke [no convenient biography] is put in charge of the Hanbury ironworks at Pontymoel/Pontypool [1660<=1704], where he makes many improvements for the more efficient production of drawn wire and sheet iron. [THREAD = THE INDUSTRIAL REVOLUTION]

1ASIDE - THE ROLLING MILL: The rolling mill is becoming essential equipment at ironworks around this time. The difference between a blacksmith's forge and an ironworks is firstly one of scale, and then one of power. The blacksmith can do just about anything using hammer, shears, punches, bending profiles, etc. The ironworks does likewise but its tools are larger and therefore need to be artificially powered. The main power sources are the waterwheel, the windmill, the treadmill, and the capstan. The furnaces are ventilated by power bellows (blast furnaces being notoriously expensive in this respect). The flattening and/or shaping of heavy metal billets is eased by the invention of the trip hammer [technical details], where power is gradually applied to lift a giant hammer against gravity, until the hammer is ready to be "tripped", that is to say, released to drop back onto its target. The production of iron plate in volume is eased by the invention of the rolling mill, whereby a hot metal billet is passed between two cylindrical rollers, weighted or otherwise forced together [technical details]. Everything is hot, dirty, and exhausting, and will remain so until the invention of the steam-powered Newcomen Engine in 1714 [=>] ushers in the Industrial Revolution proper.

1682 Drawing on his experiences in the Franco-Dutch War [<=1672], Menno van Coehoorn [1674<=1692] publishes "Versterchinge de Vijfhoeks met alle syne Buytenwerken" [= "Strengthening of Five-Star Fortifications with Additional Workings"], a technical treatise which earns him several fortification upgrade commissions over the coming years. [THREAD = WW1 ARTILLERY]

1682 [5th-6th August] The Bombardment of Algiers: This naval bombardment takes place as part of France's war against Muslim pirates based in North Africa between a fleet under
Abraham Duquesne [<=1676] and the garrison/port facilities at Algiers. The action is noteworthy in the present context for the opportunity it presents to the French ship designer Bernard d'Eliçagaray [Wikipedia biography] to test five galiotes à bombe, small shallow-draught barges equipped with one or two heavy mortars. These vessels become known generically as bombardes, and their success will be widely copied, appearing in the Royal Navy as volcano-named "bomb ketches", and in the US Navy as "gunboats". [THREAD = THE WWI SURFACE NAVIES]

1683 [14th July] The Great Turkish War, 1683-1699: Having been at peace with Austria since the Treaty of Vasvár [<=1664], this war is fought between a newly expansionist Ottoman Empire under Kara Ibrahim Pasha [no convenient biography=>next] and the Holy Roman Empire under Archduke Leopold I of Austria [1672<=1st September]. Leopold begins the war with 38,400 men under arms, but this will double by the end of the year (McKay, 2001). Here are the main events ...

The Battle of Vienna, 1683; The Reconquest of Hungary, 1686; The Siege of Athens, 1687

The eventual overall outcome is that the Habsburgs lose Hungary and Moravia to the Turks, and are proportionately less able to commit troops in the west against French ambitions. [THREAD =THE SHAPING OF WW1 EUROPE]

1683 [14th July-12th September] The Siege/Battle of Vienna: This two-month siege is the opening event in the Great Turkish War [<=preceding] and is fought out between a massive [up to 300,000 men in some reports] Ottoman army under their Grand Vizier, Kara Ibrahim Pasha [<=preceding] and the Imperial armies in and around Vienna under (garrison) Ernst Rüdiger, Graf von Starhemberg [Wikipedia biography], and (field) Jan III Sobieski [Wikipedia biography]. Both the garrison and the relieving field armies fight with determination and skill. They also outgun the Ottomans, whose most effective siege tactic is undermining the city's bastions. The siege is decided on 12th September with 20,000 of Sobieski's elite cavalry mounting history's largest ever cavalry charge against the Ottoman siege lines causing them to flee in considerable disorder and with great loss of life. [THREAD =THE SHAPING OF WW1 EUROPE]

**********  LOUIS XIV'S THIRD WAR  **********

1683 [1st September] The War of the Reunions: This war is fought between Louis XIV of France [1681<=1685] and the Spanish, supported by the Holy Roman Empire under Archduke Leopold I of Austria [14th July=>1689]. Here are the main events ...

The Invasion of the Spanish Netherlands, 1683; The Siege of Courtrai, 1683; The Siege of Luxembourg, 1684; The Treaty of Ratisbon/Regensburg, 1684

The overall outcome of the war is a French victory. [THREAD =THE SHAPING OF WW1 EUROPE]

1683 [1st September] The Invasion of the Spanish Netherlands [1683]: [Compare ditto 1667 and 1672] This invasion is the first major event in the War of the Reunions [<=preceding], and is fought out between French armies under François de Créquy [<=1667], Louis-François, Duke of Boufflers [Wikipedia biography], Louis de Crevant, Duke of Humières [Wikipedia biography], and Sébastien de Vauban [1678<=1684]. Humières takes Courtrai on 6th November, Dixmude on 10th November, and Oudenarde in the New Year, and Vauban takes Luxembourg on 7th June 1684. [THREAD =THE SHAPING OF WW1 EUROPE]
1684 The British physician **Thomas Willis** [Wikipedia biography] publishes a paper entitled "On the Pathology of the Brain" in which he argues that a diagnosis of "hysteria" is tantamount to a diagnosis of "don't really know"; it is a diagnosis at the limit of medicine's present ability to classify disease. Thus ...

"[when] at any time a sickness happens in a woman's body, of an unusual manner or more occult original, so that its causes lie hid [...] we declare it to be something hysterical ... which oftentimes is only the subterfuge of ignorance" (cited in Showalter, 1997, p16).

This position is noteworthy in the present context because the hysteria debate in the 17th century debate has much in common with the shellshock debate in WW1 [Continued at 1878 (Charles Lasègue)]. [THREAD = WW1 MILITARY MEDICINE AND COGNITIVE SCIENCE]

1684 The British foundry-master **Maximilian Western** [no convenient biography] establishes a brass foundry at Moorfields, London, where he specialises in large castings such as bells and cannons. [THREAD = WW1 ARTILLERY]

1684 Around this time **Sir John Hepburn's Regiment** [=1678] is retitled Royal Regiment of Foot [=1692]. [THREAD = THE WW1 ARMIES]

1684 [1st April] The Irish nobleman **Arthur Forbes, 1st Viscount Granard** establishes the "Earl of Granard's Regiment of Foot" [=1751 (The Royal Irish) Regiment of Foot]]. [THREAD = THE WW1 ARMIES]

1684 [27th April-7th June] **The Siege of Luxembourg**: This six-week siege is fought out as part of the War of the Reunions [=1683] between a besieging French army under Sébastien de Vauban [1683<=1688] and the Spanish garrison at Luxembourg under the Prince de Chimay [no convenient biography]. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1684 [15th August] **The Treaty of Ratisbon/Regensburg**: This treaty between France, Spain, and the Holy Roman Empire brings the War of the Reunions [=1683] to an end. It awards Strasbourg and Luxembourg to France but returns Courtrai and Dixmude to Spain. [THREAD = THE SHAPING OF WW1 EUROPE]

******* THE ENGLISH GET A STANDING ARMY *******


1685 [6th July] **The Battle of Sedgemoor**: [Continued from 6th February] This battle is fought to decide the Monmouth Rebellion [=6th February] between a crown army under John Churchill (1st Duke of Marlborough) [1674<=1688] and the recently landed rebel army under James Scott, 1st Duke of Monmouth [=6th February]. The outcome is a crushing crown victory, with the taking of Monmouth as prisoner-of-war. He will be executed for high treason on 15th July. **The rebellion is noteworthy for prompting James to establish a standing army.** In the remaining four years of his reign, James' increasingly loud Catholic sympathies will progressively alienate the Protestant
establishment to the point that they start looking around for replacement King amongst the Protestant royal houses of Europe. [THREAD = THE SHAPING OF WW1 EUROPE]

1685 [26th May] The Palatinate Succession [1685]: [Compare ditto 1618] Upon the death of Charles II, Elector of the Palatinate [Wikipedia biography] his throne passes to his cousin Philip William of Neuburg [Wikipedia biography=>1690] only to be counter-claimed by his younger sister Elizabeth Charlotte [Wikipedia biography=>1688]. This counter-claim is stage-managed by the latter's brother-in-law Louis XIV of France [1683<=1688], and supported by the threat of force. War proper will begin in 1688 and continue until after Philip William's death in 1690. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE STANDING ARMY IS PUT TOGETHER THIS MONTH **********
********** THE ENGLISH GET THEIR OWN FUSILIERS **********

1685 [11th June] Following the French success with specialist fusiliers [<=1670] George Legge, 1st Baron Dartmouth [Wikipedia biography=>1688], establishes the "Royal Regiment of Fusileers" [=>1695 (Battle of Namur)], whose primary duty is to escort the artillery train. [THREAD = THE WW1 ARMIES]


1686 Franz Anton, Count of Hohenzollern-Haigerloch [Wikipedia biography], Elector of Brandenburg, adopts a new heraldic device, namely a black and red spread eagle [image]. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE BATTALION IS INVENTED **********

1686 The Scottish Regiment of Foot Guards [=>1692] is transferred from the Scottish establishment to the English. [THREAD = THE WW1 ARMIES]

ASIDE: Because the English army already has two Guards Regiments - the First [1665<=1695] and the Coldstream [1661<=1689] - the newcomers, despite claiming a history back to 1642 are ranked third in line, not first.
ASIDE - BRIGADES, REGIMENTS, BATTALIONS, AND COMPANIES: The Scottish Regiment of Foot Guards was one of the first to offer to deploy its available companies in subsidiary units of command known as "battalions" [see, for example, 1692 (Battle of Steenkerque)]. This enables the full regimental personality - its headquarters city, its training grounds and barracks, its trophy rooms, honours, and traditions, etc. - to be inherited by more than one (and, in WW1, many) battalions, according to the economic resources of their particular catchment area. It will gradually become commonplace to see Brigades composed of a mix of undivided single-Battalion Regiments and this or that Battalion of multi-Battalion Regiments. This will remain the case until 1881 Childers Reforms [=>] requires that all Regiments maintain at least two Battalions.

1686 [9th July] The League of Augsburg (the "First Grand Alliance"): [Compare Second Grand Alliance] The Holy Roman Emperor, Archduke Leopold I of Austria [1683<=>1688] establishes a pan-European alliance against France with Spain, Sweden, Saxony, and the Palatinate as initial signatories. The League will be re-branded as the "Grand Alliance" after the unified north-German states of the Treaty of Magdeburg join in 1688 [=>1688 (22nd October)], Williamite England, Scotland, the Dutch Republic, and Lorraine join in 1689, and Bavaria and Savoy join in 1690. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE OFFSET BAYONET HAS TEETHING TROUBLES **********

1688 Around this time Jacques de Chastenet-Puysegur [<=1678] has his regiment demonstrate their skills with the offset bayonet to Louis XIV of France [1685<=>27th September]. The demonstration does not go well, for many of the bayonets do not fit tightly enough to the muskets, thus ...

"During the year of 1688, one proposed to the King to discard pikes and give pike-men muskets. He made a demonstration of bayonets with sockets on the muskets of a regiment. The bayonets had not been made with the muskets, which were of different sizes, and did not fit firmly. In the presence of his majesty, several bayonets were made to fall off while withdrawing and others when the bullet was leaving the muzzle, so they were rejected. Shortly afterwards, nations with which we were at war discarded pikes for muskets with bayonets, while we were obliged to use pikes."

A spring-loaded retaining clip soon solves the problem but it will still be another 15 years before the bayonet is approved for general use in the French army. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE - THE OFFSET BAYONET IN WW1: Although some new weapons create recognised specialisms this was not the case for the bayonet. The musket gave rise to specialist musketeers, the fusil gave rise to fusiliers, and the grenade to grenadiers, but the bayonet simply became general issue as a weapon of last resort. Specialist marksmen, however, seem to have frowned upon them. The WW1 poet David Jones - a fusilier himself - complained in his war memoir "In Parenthesis" that the extra weight of the fitted bayonet was enough to "clumsy" a perfectly good rifle (Jones, 1937, p156). The Australians used them as can-openers and for the no-mercy dark doings of trench raids.

1688 [29th April] Upon the death of the Grosser Kurfürst, Frederick William, Elector of Brandenburg-Prussia [<=1678] his titles pass to his son as Frederick III1 [Wikipedia biography] [=>1701]. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE - FREDERICK WILLIAM'S MILITARY LEGACY: McKay (2001) notes as follows ...

"Unlike the mercenary troops of Frederick William's early years, with their shifting loyalties from one colonel and ruler to another, now soldiers usually spent their whole careers in the Hohenzollern army. In this way they were more like the regular professional troops of the eighteenth- and nineteenth-century armies [...] In the early years the colonels were independent contractors: they had invested their energies and
their own cash, as well as the Elector's, in raising regiments, and they expected a financial return" (p177).

"In the Holy Roman Empire Brandenburg-Prussia was now clearly the leading north-German state and beginning to draw ahead from Saxony and Bavaria. It was already being seen in Vienna as a threat to the Emperor's own influence" (Op. cit., 2001, p262).

**CAUTION - FREDERICK III:** At this moment in time Brandenburg is a Reich within the Holy Roman Empire, and Frederick is its IIIrd elector of that name. Prussia is a recognised duchy outside the Empire, and therefore has a duke - coincidentally the same Frederick - rather than an elector. However in 1701 Prussia will be upgraded from a duchy to a kingdom, with Frederick as its first king. We therefore show him as Frederick III, Elector of Brandenburg and 1st Duke of Prussia until the upgrade and as Frederick I of Prussia after it. Online researchers should also take care to avoid confusing this Frederick III (or I) with the several other Fredericks III and I in European history!

1688 [3rd June] Upon the death of Maximilian Henry of Bavaria¹, Archbishop-Elector of Cologne [Wikipedia biography], Louis XIV of France [1688<=27th September] raises a claim in the name of William Egon of Fürstenberg [Wikipedia biography] to the archbishopric of Cologne - which includes not just four strategic Rhine crossings (Cologne, Bonn, Rheinberg, and Kaiserswerth) but also the bishopric of Liège on the Meuse between Spanish Flanders and Luxembourg [continues 26th August ...]. A rival claim is then made by Joseph Clemens of Bavaria [Wikipedia biography] to 26th August]. [THREAD = THE SHAPING OF WW1 EUROPE]

¹ASIDE: Not to be confused with Maximilian II Emanuel, Elector of Bavaria [Wikipedia biography]!

******* AN HISTORIC INVITATION *******

1688 [30th June] The "Immortal Seven": A conspiracy of seven English aristocrats led by William Cavendish, 4th Earl of Devonshire [Wikipedia biography] and dubbed the "Immortal Seven" by later commentators sends an invitation on behalf of all English Protestants to William of Orange (III of England etc) [1678<=27th September] asking him to come with an army and depose James II of England etc [1685<=5th November] by force of arms [continues 5th November ...]. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE - WHIGS VERSUS TORIES: Around this time English politicians started to style themselves as either "Whigs" (Parliamentarian-minded, Pro-Williamite, Protestant liberals) or "Tories" (Royalist-minded, pro-Jacobite, often Catholic, traditionalists), and, moreover, to organise themselves along Political Party lines. The Whigs will be the dominant force until 1783 [=], at which point William Pitt the Younger stages a Tory come-back. Both words derive in fact from insults from the other side, a Whig being a rough demanding cattleman and a Tory being a heartless outlaw [no change there, then - Ed.].


1688 [26th August] [Continues from 3rd June] Pope Innocent XI [Wikipedia biography] adjudicates between the rival claimants for the Archbishopric of Cologne, and decides in favour of Joseph Clemens of Bavaria [<=3rd June]. [THREAD = THE SHAPING OF WW1 EUROPE]

********** LOUIS XIV'S FOURTH WAR **********

1688 [27th September] The War of the League of Augsburg, 1688-1697: [A.k.a. (1) The War of the Grand Alliance; a.k.a. (2) The War of the Palatine Succession; a.k.a. (3) The Nine Years War] This war is fought between a "Grand Alliance" led by William of Orange (III of England etc)1689 [30th June<=5th November] of the Dutch Republic and including England, the Holy Roman Empire, Spain, and Sweden, and France under Louis XIV of France [3rd June<=22nd October], supported by Irish and Scottish Jacobites. The north German states will join forces with the alliance a month later [=22nd October (Treaty of Magdeburg)], followed by the largest south German state - Bavaria - on 4th May 1690. Unlike Louis' earlier wars, however, this one sees French ambitions expanding eastward across the Rhine into the Palatinate, in pursuit of Elizabeth Charlotte's claim to that throne [=1685 (26th May)]. The main events are ... 

KING WILLIAM'S WAR, 1688-1697 [see separate indexing entry <=13th August]: The French Offensive in the Palatinate, 1688; THE JACOBITE WAR IN IRELAND, 1689-1691 [see separate indexing entry >=1689]; The Imperial Counter-Offensive in the Palatinate, 1689; The Siege of Mayence/Mainz, 1689; The Siege of Kaiserswerth, 1689; The Siege of Bonn, 1689; The Battle of Walcourt, 1689; The Battle of Fleursur, 1690; The Battle of Staffarda, 1690; The Siege of Mons, 1691; The Battle of Leuze, 1691; The Battle of Steenkerque, 1692; The Siege of Namur, 1692; The Battles of Barfleur and La Hogue, 1692; The Battle of Landen/Neerwinden, 1693; The Siege of Charleroi, 1693; The Treaty of Turin, 1697 [France and Savoy]; The Treaty of Ryswick, 1697 [other states]

The overall outcome is a return to the status quo ante [=1697 (Treaty of Ryswick)]. The war is noteworthy in the present context for drawing the national boundary between France and Germany more firmly along the Rhine, that is to say, with Lorraine reverting to an independent duchy, Alsace being recognised as essentially French, and the Palatinate being recognised as essentially German. In terms of military innovation the war will see the flintlock musket and offset bayonet become the infantry weapon of choice - heavy calibres for musketeers and lighter for fusiliers; also the arrival of the howitzer and the trench mortar. It also sees significant expansion of the Royal Navy. Also the development by the French of a network of regional supply depots. [THREADS = THE SHAPING OF WW1 EUROPE and WW1 LOGISTICS]

1688 [27th September-29th October] The French Offensive in the Palatinate: This offensive is the opening event in the War of the League of Augsburg (⊃preceeding). It begins with a month long siege of Philippsburg, fought out between a French army under Jacques-Henri de Dufort, Duke of Duras [Wikipedia biography] and Sébastien de Vauban [1684<=1691], and the Imperial garrison at Philippsburg under Maximilian von Starhemberg [Wikipedia biography]. The outcome is a French victory, after which Ezéchiel de Melac [Wikipedia biography]=1702), having been instructed by the French Secretary for War, François-Michel le Tellier, Marquis de Louvois [=1673] to "brûlez" [= burn] the Palatinate, sets out on an eight-month spree of destruction, town by town. Mannheim falls on 11th November, then Frankenthal, Worms, Bingen, Kaiserslautern, Heidelberg, Speyer, and Mayence/Mainz. Unfortunately for the French this scorched-earth policy simply brings the northern German states together with a new and unified sense of identity and purpose [continues 22nd October ...]. [THREAD = THE SHAPING OF WW1 EUROPE]
1688 [22nd October] The Treaty of Magdeburg: Concerned that Louis XIV of France has been too successful in his occupation of the Rhineland, the systematic destruction of its economy, and the dispersal of its indigenous population, representatives of the northern German states of Brandenburg-Prussia, Saxony, Hannover, and Hesse-Kassel meet at Magdeburg and agree to join forces in a counter-offensive. In a coordinated move the Holy Roman Emperor, Archduke Leopold I of Austria, authorises Maximilian II Emanuel, Elector of Bavaria to switch his Imperial service army from the Ottoman front to strengthen the southern Rhineland.

1688 [5th November/13th February 1689] The Glorious Revolution: Having been assured by the "Immortal Seven" of a generally warm welcome, William of Orange lands a 15,000-man army under the refugee French Protestant Frederick Schomberg at Brixham, Devonshire. John Churchill and other senior Protestants switch allegiance to William, and there is a mass Protestant desertion from the national army. James II realises that he cannot put up a fight, and is captured on 11th December and permitted safe passage into exile at the Court of Louis XIV of France. At the same time her husband (and leader of the insurgency), William of Orange, becomes William III of England.

1689 The English artilleryman Thomas Binning publishes a treatise entitled "A Light to the Art of Gunnery", in which he explains the broader skills and structures needed to deploy artillery profitably. For example...

"Before the train marched off it was preceded by companies of pioneers, each man being equipped with a shovel, scoop, pickaxe, crowbar, or handspike. The function of these companies was to make the road suitable for guns. After them follow the six Sakers or Demi-Culverings with their Provision of ball in wagons and their powder in wagons; and behind these came men to remount the guns if they overturned. Next came the six demi-cannons and the two cannons, each followed by wagons containing their ammunition. The end of the column was brought up by the 'Carriage of Ladies' Sponges, and Rammers, Match, Crowes, and Handspikes, and Budg-barrels [= leather-lidded half barrels used to bring gunpowder to the guns from..."
Rogers will also note Binning's description of the "highly dangerous" method of lighting the fuse of a mortar bomb before trying to fire it, thus ...

"Now he that would load a Mortar-Peece may elevate her Muzzle to what degree he will for his own convenience; the Peece made clean, you put the Powder in the Chamber, and upon the Powder a Wad of Rope-yarn, Hay, or what you can provide; then you put a Turf of Earth cut on purpose, that is large, wider than the vacant Cylinder upon the Wad, which fills the Chamber, and then you put the Granado or other Fire-Work above that Turf [...] When you would discharge a Mortar Peece, first you must set fire to the Feusee of the Granado or Fire-Work, and you must see it burn well before you give fire at the Touch-hole" (Rogers, 1975, pp47-48; bold emphasis added).

**ASIDE**: Rogers' concern is that from the moment you light the fuse of the projectile it will remain a threat to yourself and those around you until it has passed over the heads of your own lines. If within this time window the mortar should misfire (due to poor priming, incoming fire, barrel split, or whatever) then the projectile will explode *in situ*. For an indication of what this might mean in practice, check out the *HMS Thunderer* turret explosion [=1879 (2nd January)].

1689 The Surveyor General of Ordnance, **Sir Jonas Moore** [=1669] publishes "Modern Fortification: Elements of Military Architecture", in which he sets down 20 years of experience in that industry. [THREAD = WW1 ARTILLERY]

1689 [8th March] Having handed over his earlier creation [=1685] to another Colonel, **Henry Howard, 7th Duke of Norfolk** establishes another "Duke of Norfolk's Regiment of Foot" [=1751 (22nd Regiment of Foot)]. On the same day **Sir Edward Dering** establishes "Sir Edward Dering's Regiment of Foot" [=1751 (24th Regiment of Foot)] and **Viscount Castleton** establishes "Viscount Castleton's Regiment of Foot" [=1751 (30th Regiment of Foot)] and

[THREAD = THE WW1 ARMIES]

1689 [12th March] **THE JACOBITE WAR IN IRELAND, 1689-1691**: [Continues from 1688 (5th November)] This war is fought as an adjunct to the broader War of the League of Augsburg [=1688 (27th September)] between **James II of England** etc [Deposed/Reclaiming] [=1688<=>1690] lands with an army at Kinsale, Ireland, to begin a campaign of re-conquest. The main events are ...

The Ballyholme Bay Williamite Landings, 1689; The Battle of the Boyne, 1690; The Cork-Kinsale Campaign, 1690; The Battle of Aughrim, 1691; The Siege and Treaty of Limerick, 1691; [The Treaty of Ryswick, 1697 ]

The overall outcome is victory for the English crown. [THREAD = THE SHAPING OF WW1 EUROPE]

**ASIDE**: Although not strictly anything to do with this particular war, we show the Treaty of Ryswick [=1697] because one of its provisions is that France should cease fomenting Jacobite grievances against England for its own military purposes, that is to say, as a ready diversion of English resources away from other theatres of operation.

*********** **THE WELSH GET THEIR OWN FUSILIERS** ***********

1689 [16th March] **Henry Herbert, 4th Baron of Chirbury** [Wikipedia biography] [=1692] forms a regiment of volunteers from Shrewsbury and the Welsh Marches. The new unit is
named "Lord Herbert's Regiment of Foot" [1691 or go straight to 1751 (23rd Regiment of Foot)], with Chirbury as its Colonel, and first sees action at the Battles of the Boyne [1690] and Aughrim [1691] (where Herbert is killed). [THREAD = THE WW1 ARMIES]

1689 [18th March] David Leslie, 3rd Earl of Leven [Wikipedia biography] forms a regiment of volunteers from Edinburgh and about. The new unit is named "Leven's Regiment of Foot" [1695 or go straight to 1751 (25th Regiment of Foot)]. One of its first honours is the Battle of Aughrim [1691]. [THREAD = THE WW1 ARMIES]

1689 [1st May] Edward Lloyd [no convenient biography] is appointed Colonel of Viscount Clare's Regiment of Foot [previously Dutch establishment] and Thomas Tollemache [Wikipedia biography] is appointed Colonel of the Second (Coldstream) Regiment of Foot Guards [1686]. [THREAD = THE WW1 ARMIES]

1689 [24th May] The English Parliament passes the Act of Toleration, declaring it lawful for certain favoured fringe Protestant religions (Baptists, Congregationalists, etc.) to worship (albeit not totally without penalty) outside the established Anglican system. [THREAD = THE SHAPING OF WW1 EUROPE]

1689 [14th May] The Earl of Angus establishes the "Earl of Angus's Regiment of Foot" [1751 (26th Regiment of Foot)]. [THREAD = THE WW1 ARMIES]

1689 [25th May-12th October] The Imperial Counter-Offensive in the Palatinate: Having been planning an offensive ever since the Treaty of Magdeburg [1688 (22nd October)], the Imperials now have three armies ready. These are (1) a 30,000-man army under Frederick III, Elector of Brandenburg-Prussia [1688] charged with clearing the French out of the Archbishopric of Cologne, (2) a 40,000-man army ready to besiege Mainz under Charles V of Lorraine [Wikipedia biography] and (3) a 30,000-man army based at Heilbronn under Maximilian II Emanuel, Elector of Bavaria [1688] charged with securing the Rhine between Strasbourg and Freiburg/Fribourg. [THREAD = THE SHAPING OF WW1 EUROPE]

1ASIDE: Search for Karl V von Lotharingen to acquire German sources.

1689 [26th June] Zachariah Tiffin establishes "Zachariah Tiffin's Regiment of Foot" [1751 (27th Regiment of Foot)]. [THREAD = THE WW1 ARMIES]

1689 [26th April-26th June] The Siege of Kaiserswerth [1689]: [Compare ditto =>1702] This nine-week siege is fought out as part of the North Rhine operations of the War of the League of Augsburg [1688] between a besieging Grand Alliance army under Godert de Ginkel, 1st Earl of Athlone [Wikipedia biography] and the French garrison at Kaiserswerth under Louis-François, Duke of Boufflers [1683] and Camille d'Hostun, Duke of Tallard [Wikipedia biography]. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1689 [22nd July-8th September] The Siege of Mayence/Mainz: This seven-week siege is fought out as part of the Palatinate operations of the War of the League of Augsburg [1688] between a Grand Alliance army under Charles V of Lorraine [25th May] and Maximilian II Emanuel, Elector of Bavaria [25th May], and Prince Eugene [1701 (9th July)], and the French garrison at Mayence/Mainz under Nicolas Chalon du Blé, Marquis d'Huxelles [Wikipedia biography]. The outcome is a French surrender. [THREAD = THE SHAPING OF WW1 EUROPE]
1689 [24th July-10th October] **The Siege of Bonn:** This 11-week siege is fought out as part of the North Rhine operations of the War of the League of Augsburg [<=1688] between a besieging Grand Alliance army under Frederick III, Elector of Brandenburg-Prussia [25th May<=1701] and the French garrison at Bonn under Alexis Bidal d'Asfeld [Wikipedia biography]. The outcome is a French surrender, with the death of d'Asfeld from wounds sustained. [THREAD = THE SHAPING OF WW1 EUROPE]

1689 [13th August] **The Ballyholme Bay Williamite Landings:** This amphibious landing takes place at the beginning of the Jacobite War in Ireland [<=1689 (12th March)], establishing a Williamite army under Frederick Schomberg, 1st Duke of Schomberg [1688<=1690]. The Danes play a particularly well-documented part in the campaign which follows, thanks to the surviving journals of their Commander-in-Chief, Ferdinand William, Duke of Württemburg-Neuenstadt [Wikipedia biography=1691]. [THREAD = THE SHAPING OF WW1 EUROPE]

1689 [25th August] **The Battle of Walcourt:** This battle is fought as part of the War of the League of Augsburg [<=1688] between a French army under Louis de Crevant, Duke of Humières [<=1683] and a Grand Alliance army under Prince George Frederick of Waldeck [Wikipedia biography=1690] which includes an English brigade under John Churchill (1st Duke of Marlborough) [1688<=1690]. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1689 [28th September] **William Babington** [no convenient biography] is appointed Colonel of Sir Walter Vane’s Regiment of Foot [previously Dutch establishment<=1751 (6th Regiment of Foot)]. [THREAD = THE WW1 ARMIES]

1690 The English philosopher John Locke [Wikipedia biography] publishes "An Essay Concerning Human Understanding", a treatise on the fundamental nature of knowledge and the mental processes by which it is acquired. This leads him to address one on mental philosophy's basic questions, namely what the human brain contains at birth. His answer is that it contains very little, acquiring all its knowledge of the world from subsequent empirical experience of it. The human brain at birth is, as he puts it, a tabula rasa [= "blank slate"]. This position will in due course be termed 'British Empiricism'. Locke also ventured a formal definition of the human self as a system somehow capable of being "concerned for itself" [more on this (scroll to <Self>)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1690 [8th April] Upon the death of Charles V of Lorraine [<=1689] Maximilian II Emanuel, Elector of Bavaria [1689<=1692] takes over as Grand Alliance Commander-in-Chief in Germany and Austria [THREAD = THE SHAPING OF WW1 EUROPE]

1690 [1st July] **The Battle of Fleurus:** This battle is fought as part of the War of the League of Augsburg [<=1688] between a French army under François de Montmorency-Bouteville, Duke of Luxembourg [1688<=1691] and Louis-François, Duke of Boufflers [1689<=1691] and a coalition of Dutch Republican, Spanish, and Holy Roman Empire troops under Prince George Frederick of Waldeck [1689<=1691]. The outcome is a decisive French victory with heavily disproportionate coalition casualties. The battle is noteworthy in the present context for a friendly fire incident involving two French regiments failing to identify each other. [THREADS = THE SHAPING OF WW1 EUROPE and FRIENDLY FIRE]

********** A MUCH CELEBRATED PROTESTANT VICTORY **********

1690 [11th July] **The Battle of the Boyne:** This battle is fought as part of the Jacobite War in Ireland [<=1689 (12th March)] between a Jacobite army under James II of England etc.
[Deposed/Reclaiming] (1689<=1715) and an English crown army under William III of England\textsuperscript{4} (1689<=1692) and Frederick Schomberg, 1st Duke of Schomberg (1689<=dies this day). The outcome is a Williamite victory, the uncontested occupation of Dublin, and the end of James' realistic hopes of regaining his former crown - he will return to exile in France, and will die there in 1701. The Protestant Orange Order in modern Northern Ireland still celebrate this battle as a major historic victory \cite[THREAD = THE SHAPING OF WW1 EUROPE]{image}.

1690 [??th August-??th October] **The Cork-Kinsale Campaign:** This campaign is fought as part of the Jacobite War in Ireland (<=1689 (12th March)] between an English crown army under John Churchill (1st Duke of Marlborough)\textsuperscript{1702} (1689<=1701) and Jacobite strongholds in the southeast of Ireland. The outcome is the retaking of the ports of Cork and Kinsale. [THREAD = THE SHAPING OF WW1 EUROPE]

1690 [18th August] **The Battle of Staffarda:** This battle is fought as part of the War of the League of Augsburg (<=1688) between a French army under Nicolas Catinat \cite[Wikipedia biography]=>1693 and a somewhat larger Grand Alliance army under Victor Amadeus II, Duke of Savoy \cite[Wikipedia biography]=>1693, recently recruited to the Grand Alliance cause. The outcome is an against-the-odds victory for the French, leaving them in full control of Savoy [nowadays a region of France] and threatening Piedmont [over the Alps in modern Italy]. [THREAD = THE SHAPING OF WW1 EUROPE]

1690 [2nd September] Upon the death of Philip William of Neuburg, Elector of the Palatinate (<=1685) his titles pass to his son John William \cite[Wikipedia biography]. [THREAD = THE SHAPING OF WW1 EUROPE]

***** AMERICA'S "SPIRIT OF LYING" CALLED OUT *****

1690 [25th September] **The News as State Deception [Early Milestones (Boston, 1690)]:** [New sub-thread] On 25th September 1690 a Boston businessman named Benjamin Harris \cite[Wikipedia biography] publishes Volume 1, Number 1, of America's first newspaper, under the title *Publick Occurrence*. There will be no second issue "because the Governor and Council suppressed it" (Lippmann, 1920/2010 re-released, p3).

[A GLIMPSE INTO THE FUTURE]

This from 1920 concerning WW1 propaganda (but it could just as easily be today)

**CAMEO - THE CONSTRUCTION OF POLITICAL TRUTHS:** The problem, as Lippmann explains it, is that Harris wanted something done about "the Spirit of Lying which prevails amongst us", and the "many False Reports, maliciously made". 230 years later \cite[see Timeline 1st January 1920] things had clearly not improved, thus ...

"Everywhere today men are conscious that somehow they must deal with questions more intricate than any that church or school had prepared them to understand. [...] Increasingly they are baffled because the facts are not available; and they are wondering whether government by consent can survive in a time when the manufacturer of consent is an unregulated private enterprise. For in an exact sense the present crisis of western democracy is a crisis in journalism" (op. cit., p4).

[Sub-thread continues at 1878 as <WW1 Jingoism> ...]

[THREAD = THE DEATH OF DEMOCRACY] [THREAD = THE BATTLE FOR HEARTS AND MINDS] [THREAD = THE COGNITIVE SCIENCE OF POLITICAL PROPAGANDA]
1691 Edward Russell, 1st Earl of Orford [Wikipedia biography] issues the Royal Navy with a major update of the Duke of York's "Fighting Instructions" [1688<=1703]. The work devotes many paragraphs to the manoeuvres likely to help you "double" your enemy while at the same time preventing him from "doubling" you. [THREAD = THE WW1 SURFACE NAVIES]

KEY NAVAL TERMINOLOGY - "DOUBLING": To "double" an enemy ship in a sea battle is to engage it from both sides at the same time, thereby getting all the benefits of a "cross-fire". This is easiest to do, of course, if you have local superiority of numbers, but nevertheless requires considerable skill and tactical coordination on the part of the commanders involved, both individually and as a line of squadron.

1691 [15th March-10th April] The Siege of Mons: This month-long siege is fought out as part of the Flanders operations of the War of the League of Augsburg [=1688] between a besieging French army under Louis XIV of France [1688<=1700], Louis-François, Duke of Boufflers [1690<=1692], and Sébastien de Vauban [1688<=12th July], and a Grand Alliance garrison at Mons under Francisco de Agurto, Marquis of Gastañaga [Wikipedia biography]. The outcome is a victory for the French. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE HOWITZER IS BORN **********

1691 [12th July] The Battle of Aughrim: This battle is fought as part of the Jacobite War in Ireland [=1689 (12th March)] between a (Catholic) Jacobite army under Charles Chalmont, Marquis of St. Ruth [Wikipedia biography=dies this day] and a (Protestant) Williamite army under Godert de Ginkell, 1st Earl of Athlone [1689<=next]. The outcome is a clear - albeit perhaps lucky - victory for the Williamites. The battle is noteworthy in the present context for the following ...

"Writing to [Christian V of Denmark-Norway [=1677]] on 23 August 1691, [Ferdinand William, Duke of Württemberg-Neuenstadt [=1689]] said that they had much better artillery than in the previous year with 1000 rounds for each gun. In addition to the heavy guns there were 10 mortars and 4 howitzers. The howitzer was a new weapon which had suddenly become important in a curious way. It was basically a mortar with an easily adjustable elevation; but it became more valuable as an anti-personnel weapon owing to the discovery by [Sébastien de Vauban [=1688]] at the end of the seventeenth century of the effective use of the ricochet. The howitzer, which was normally used like the mortar to fire fused shells at a high angle, could be set to a low elevation to fire against troops in the open. The shell would strike the ground short of its target and would then bounce and roll along the ground to explode in the opposing ranks" (Rogers, 1975, p52).

Howitzers will come and go in popularity over the ensuing centuries as circumstances dictate, with the ultimate example of their form being the German 420mm "Big Bertha" [=1904]. [THREAD = WW1 ARTILLERY]

1691 [19th September] The Battle of Leuze: This battle is fought out as part of the War of the League of Augsburg [=1688] between a French cavalry column under François de Montmorency-Bouteville, Duke of Luxembourg [1690<=1692] and a significantly larger Grand Alliance cavalry column under Prince George Frederick of Waldeck [=1690]. The outcome is an against-the-odds French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1691 [12th July-3rd October] The Siege and Treaty of Limerick: Following his success at the Battle of Aughrim [=preceding] Godert de Ginkell, 1st Earl of Athlone [=preceding<=1702] shifts the focus of his campaign onto the Jacobite stronghold at Limerick. Here he besieges the Jacobite garrison under Patrick Sarsfield [Wikipedia biography]. The outcome is a treaty-negotiated surrender. Under the terms of the treaty the surviving Jacobite
army is shipped across to France, where it is assimilated into the French army as the "Irish Brigade" [more on these]; they, their sons, and their grandsons then return from time to assist a succession of Jacobite uprisings. [THREAD = THE SHAPING OF WW1 EUROPE]


1692 Sir John Morgan [National Library of Wales biography] becomes Colonel of Lord Herbert's Regiment of Foot [1689<=1693], following the death of Henry Herbert, 4th Baron of Chirbury [<=1689] at the Battle of Aughrim [<= 1691]. [THREAD = THE WW1 ARMIES]

1692 [February-May 1693] Belief Systems [XI - Superstition, Witchcraft, and Magic (The Salem Trials)]: [Continued from 1651] In this 15-month-long period 20 convicted witches, mostly women, are executed in various towns across Massachusetts in what is nowadays commonly regarded as an epidemic of mass hysteria [Wikipedia factsheet] [sub-thread continues at 1708 ...]. [THREAD = THE BATTLE FOR HEARTS AND MINDS]

********** TRENCH MUD IS INVENTED **********

1692 [25th May-30th June] The Siege of Namur [1692]: [Compare ditto =>1695] This five-week siege is fought out as part of the Sambre-Meuse operations of the War of the League of Augsburg [<=1688] between a besieging French army under Sébastien de Vauban [1691<=1693], and Louis-François, Duke of Boufflers [1691<=1695], and the Grand Alliance garrison at Namur under the Duke of Barbançon [no convenient biography] and Menno van Coehoorn [1682<=1695]. The outcome is a French victory. The siege is noteworthy in the present context for having been plagued by rainy weather, which turned the besieging entrenchments into a morass. [THREAD = THE WW1 ARMIES]

STUDENT EXERCISE 1633 EXTENSION: Namur has already been located on your map - see 1667 (24th May).

ASIDE - NAMUR IN WW1: The Meuse valley provides a narrow but otherwise easy route from Germany through Belgium into France. Namur itself had therefore been heavily protected by a ring of forts on the heights above the river [=1874 (de Brialmont)], and identified by the German military planners as an obstacle to be crushed [=1894 (Schlieffen Plan)]. In August 1914 the Meuse valley was the axis of advance (Liege-to-Soissons) of the German Second Army, and the task of taking Namur was allocated to Max von Gallwitz's Guards Reserve Corps. Aided by history's heaviest ever siege howitzers [=1904] they made short work of the fortifications, engaging them on 20th August and overrunning them on 23rd [=1914 (20th August)].

1692 [29th May-4th June] The Battles of Barfleur and La Hogue: This six-day succession of naval battles is fought out in the seas around the Cherbourg Peninsula as part of the War of the League of Augsburg [<=1688] between a French fleet under Anne Hilarion de Tourville [Wikipedia biography] and a significantly larger Grand Alliance fleet under Edward Russell, 1st Earl of Orford [1691<=1703]. The outcome is a marginal Grand Alliance victory from which the French navy soon recovers. [THREAD = THE SHAPING OF WW1 EUROPE]

1692 [1st August] The Royal Regiment of Foot [<=1684] is retitled Lord Orkney's Royal Regiment of Foot [=>1751 (1st (Royal) Regiment of Foot)]. [THREAD = THE WW1 ARMIES]

1692 [3rd August] The Battle of Steenkerque: This battle is fought out as part of the Sambre-Meuse operations of the War of the League of Augsburg [<=1688] between a Grand Alliance army under William III of England etc [1690<=1693] and a French army under François de Montmorency Bouteville, Duke of Luxembourg [1691<=1693]. The
outcome is a tactical draw, but a strategic victory for the French in that the Alliance is dissuaded by this feat of arms from attempting to recapture Namur at the present time. The battle is noteworthy in the present context for the fact that the **Scottish Regiment of Foot Guards** fields itself as two battalions. [THREAD = THE SHAPING OF WW1 EUROPE]

1692 [28th October] A son is born to **Maximillian II Emanuel, Elector of Bavaria** and his half-Spanish Queen **Maria Antonia of Austria** and named **Joseph Ferdinand, Prince of Asturias**. [ASIDE: Maria Antonia was a daughter of the Holy Roman Emperor, **Archduke Leopold I of Austria** and, on her mother's side, a grand-daughter of **Philip IV of Spain**.]

1693 Richard Ingoldsby becomes Colonel of **Lord Herbert's Regiment of Foot**. [THREAD = THE WW1 ARMIES]

1693 [29th July] **The Battle of Landen/Neerwinden**: This battle is fought as part of the Flanders operations of the War of the League of Augsburg between a French army under **François de Montmorency-Bouteville, Duke of Luxembourg** and a significantly smaller Grand Alliance army under **William III of England** and the outcome is a convincing French victory with heavily disproportionate Alliance casualties. [THREAD = THE SHAPING OF WW1 EUROPE]

1693 [8th September-12th October] **The Siege of Charleroi**: This five-week siege is fought out as part of the War of the League of Augsburg between a besieging French army under **François de Montmorency-Bouteville, Duke of Luxembourg** and **Sébastien de Vauban** and the Grand Alliance garrison at Charleroi. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE BAYONET CHARGE IS BORN **********

1693 [4th October] **The Battle of Marsaglia**: This battle is fought as part of the War of the League of Augsburg between a French army under **Nicolas Catinat** and a Grand Alliance army under **Victor Amadeus II, Duke of Savoy**. The outcome is a decisive French victory with heavily disproportionate Allied casualties. The battle is noteworthy in the present context (a) as a victory for French tactical discipline, and (b) as possibly the first bayonet charge in history. [THREAD = THE SHAPING OF WW1 EUROPE]

1694 **Belief Systems [XII - Superstition, Witchcraft, and Magic (Ozanam)]:** [Continued from 1692 (February)] The French mathematician **Jacques Ozanam** publishes a compendium of everyday parlour tricks under the title "Récréations Mathématiques et Physiques" [full text online] [sub-thread continues at 1760?? (Schröpfer) ...]. [THREAD = THE BATTLE FOR HEARTS AND MINDS]

1694 [16th February] **Sir John Gibson** establishes "Sir John Gibson's Regiment of Foot" and **Thomas Farrington** establishes "Thomas Farrington's Regiment of Foot". [THREAD = THE WW1 ARMIES]

1694 [27th April] Upon the death of **John George IV, Elector of Saxony** his titles pass to his younger brother **Frederick Augustus II (the Strong) [of Poland-Lithuania]**. [THREAD = THE WW1 ARMIES]
1694 [10th June] The Board of General Officers: William III of England etc [1693<=28th December] convenes a committee of senior officers to adjudicate on issues of relative seniority between the different regiments. [THREAD = THE WW1 ARMIES]


********** THE SCOTS GET THEIR OWN FUSILIERS **********

1695 The Earl of Mar's Regiment of Foot [<=1678] is re-equipped and retitled as the "Scots Fusilier Regiment of Foot" [=>1713]. [THREAD = THE WW1 ARMIES]

1695 [2nd July-1st September] The Siege/Battle of Namur [1695]: [Compare ditto <=1692] This two-month siege and final assault are fought as part of the War of the League of Augsburg [<=1688] between a besieging Grand Alliance army under William III of England etc [1694<=1697]1, Maximilian II Emanuel, Elector of Bavaria [1692<=1704], and (by now acclaimed as the "Dutch Vauban") Menno van Coehoorn [<=1692], and a large French garrison in and around Namur under the now Governor of French Flanders, Louis-François, Duke of Boufflers [1692<=1702], and François de Neufville, Duke of Villeroi [Wikipedia biography]. The outcome is a Grand Alliance victory. The battle is noteworthy in the present context for the loss of 500 men of Leven's Regiment of Foot [1689<=1751 (25th Regiment of Foot)] in the exploding of a French mine2. [THREAD = THE SHAPING OF WW1 EUROPE]

1 ASIDE: 14 of William's regiments will go on to claim NAMUR 1695 as a battle-honour, including the 2nd (Coldstream) Regiment of Foot Guards [1689<=1743], the 1st Regiment of Foot Guards [1686<=1743], the Scottish Regiment of Foot Guards [1692<=1743], the Royal Regiment of Fusiliers [1685<=1751 (7th Regiment of Foot)], Lord Herbert's Regiment of Foot [1692<=1702], and Leven's Regiment of Foot [links above].

2 ASIDE - TUNNELLING IN WW1: We shall be dealing with this facet of WW1 history in due course [=1914 (21st December)].

1696 [26th August] The Treaty of Turin: This treaty between Savoy and France arranges for Savoy to break with the Grand Alliance and ally itself instead with France. [THREAD = THE SHAPING OF WW1 EUROPE]

1697 Sponsored and guided technically by Admiral Anne Hilarion de Tourville [<=1692], the French priest-academic Paul Hoste [Wikipedia biography] publishes "L'Art des Armées Navales" [= "The Art of Naval Armies"], a treatise on tactical fleet manoeuvring for French consumption. Like Edward Russell, 1st Earl of Orford in England [<=1691], Hoste has much to say on the issue of "doubling", thus ...

"The whole system of tactics that he [i.e., Hoste] develops is based, like Russell's, on the single line ahead and the independent action of squadrons. The passages in which he elaborates the central battle idea of concentration by doubling are as follows: 'The fleet which is the more numerous will try to extend on the enemy in such a manner as to leave its rearmost ships astern [...] 'To prevent being doubled,' he proceeds, 'you must absolutely prevent the enemy from leaving ships astern of you, and to that end you may adopt several devices when you are much inferior in number ...'" (Corbett, op. cit. [<=1673], p91). [THREAD = THE WW1 SURFACE NAVIES (FRANCE)]


********** THE FRENCH-GERMAN BORDER REDRAWN **********
1697 [20th September] **The Treaty of Ryswick**: This treaty between France and the Augsburg League brings the War of the League of Augsburg [<=1688] to a formal close. All territories seized by France since 1679 are returned to their original owners, except Strasbourg [<=1681] and Alsace, which the French are permitted to retain. Spain re-occupies Mons, Luxembourg, and Courtrai. France also formally recognises the legitimacy of **William III of England** etc [1695<=1701] and abandons its claims on the Palatinate. [THREAD = THE SHAPING OF WW1 EUROPE]

**ASIDE**: By allowing France to keep Strasbourg and Alsace, Europe is establishing the Rhine as the main border between France and Germany, in which position it remains - thanks to two world wars - to the present day.

1698 [2nd July] The British military engineer **Thomas Savery** [Wikipedia biography] patents a "fire pump", a primitive form of steam power which uses the vacuum created when steam condenses inside a closed tank to suck water up a pipe lowered into a flooded sump or shaft. [THREAD = THE INDUSTRIAL REVOLUTION]

1698 [8th-9th September] **The Battle of Podhajce**: This battle is fought as part of the Great Turkish War between a Polish-Lithuanian army under **Frederick Augustus II (the Strong) of Poland-Lithuania**, Elector of Saxony [1697<=1702] and a Tatar Horde army. The outcome is a Polish-Lithuanian victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1699 **Arnold van Keppel, 1st Earl of Albemarle** [Wikipedia biography] is made Colonel of **His Majesty's Own Troop of Horse Guards** [=1751]. [THREAD = THE WW1 ARMIES]

1700 [22nd February] **The Great Northern War, 1700-1721**: This war is fought between the Swedish Empire under **Charles XII of Sweden** [Wikipedia biography] and the Tsarist Russian Empire under **Peter I (the Great) of Russia** [Wikipedia biography] and others from time to time. The war will unfold in a number of distinct phases, namely (1) opening moves, 1700-1701, (2) the Swedish invasion of Poland-Lithuania and Saxony, 1701-1706 (3) the Swedish invasion of Russia, 1702-1709, (4) the Ottoman Campaigns, 1709-1714, (5) The Pomeranian Campaigns, 1710-1716, (6) the Norwegian Campaigns, 1716-1718, and (7) the Finnish Campaigns, 1710-1721. Here are the main events ...

The Siege of Tönning, 1700; The Peace of Travendal, 1700 [Denmark-Norway defeated]; The First Battle of Narva, 1700; The Battle of Riga, 1701; The Battle of Klissa/Kliszów, 1702; The Battle of Pultusk, 1703; The Second Battle of Narva, 1704; The Battle of Fraustadt, 1706; The Battle of Poltava, 1709; The Treaty of Thorn/Torun, 1709; The Sieges of Stralsund, 1711; The Battle of Strelcow, 1715; The First Treaty of Stockholm, 1719; The Second Treaty of Stockholm, 1720

The overall outcome is a victory for the Russian Coalition, a growing recognition of Tsarist Russia as a major player on the world stage, and the consequent decline in the fortunes of the Swedish Empire and the Polish-Lithuanian Commonwealth. [THREAD = THE SHAPING OF WW1 EUROPE]

1700 [22nd March-18th August] **The Siege of Tönning**: This five-month siege is fought out as part of the Holstein-Gottorp operations of the Great Northern War [<=22nd February] between a besieging Danish-Norwegian army under **Frederick IV of Denmark-Norway** [Wikipedia biography] and the Swedish/Holstein-Gottorp garrison at Tönning, about 40 miles north of the Elbe Estuary. The siege will be abandoned when Denmark-
1700 [18th August] **The Peace of Travendal**: This treaty between Denmark-Norway and Sweden brings the Holstein-Gottorp operations of the Great Northern War to an end. [THREAD = THE SHAPING OF WW1 EUROPE]

1700 [1st November] Upon the death without offspring or clearly defined heir of Charles II of Spain the throne passes to the 16-year-old French nobleman Philip, Duke of Anjou [Wikipedia biography], grandson of Louis XIV of France and Maria Theresa of Spain [Wikipedia biography], as Philip V of Spain [previously Philip, Duke of Anjou]. This event raises concerns across Europe that France - having been flexing her muscles for the past fifty years - will now double its size and resources at a stroke. Privy Councillors across Europe therefore get to work checking genealogies and treaties for possible alternative claims to the Spanish throne. One of the strongest of these alternative claims is that of the 15-year-old (Archduke) Charles VI of Austria [Wikipedia biography], son of the Holy Roman Emperor Archduke Leopold I of Austria [1692] [continues 1701 (9th July ...)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1700 [30th November] The First Battle of Narva: This battle is fought as part of the Livonian operations of the Great Northern War between a Swedish field army under Charles XII of Sweden [22nd February] and a Russian army under Peter I (the Great) of Russia. The Russians have been besieging the Swedish Livonian fortress-port of Narva [modern Estonia] when Charles arrives with a relief force. Despite their being heavily outnumbered the outcome is a decisive Swedish victory with massively disproportionate Russian casualties. The battle is noteworthy in the present context for a successful "needle manoeuvre" [1715 (Battle of Strehlow)], a concentration of Swedish cavalry onto a single point on the enemy line in order to punch through it and spread out behind the regiments on either side. [THREAD = THE SHAPING OF WW1 EUROPE]

1700 [18th January] Having been ruled together for the past ten generations, the Hohenzollern dukedoms of Brandenburg and Prussia enact a formal Act of Union. Under the terms of the Act, the Elector of Brandenburg, Frederick III, becomes Frederick I of Prussia [1689] [continues 1701]. He retains the Brandenburg "spread eagle" coat of arms, but now more completely in black, with only minimal gold and red trimmings. [THREAD = THE SHAPING OF WW1 EUROPE]

1701 The English politician-economist Charles Davenant [Wikipedia biography] publishes a pamphlet entitled "Essay on the Balance of Power", in which he coins the phrase "balance of power" as one of the causes of war. [THREAD = THEORIES OF WAR]


1701 [12th June] The Act of Settlement: Faced with the problem that William III of England has no clear heir, this Act of the English (only!) Parliament states the principles of the English succession to be followed upon his death. The senior surviving Protestant Stuart turns out to be Sophia, Electress of Hanover.

********** LOUIS XIV’S FIFTH WAR **********

1701 [9th July] The War of the Spanish Succession, 1701-1714: [Continued from 1700 (1st November)] This war is fought initially between France and the Holy Roman Empire over their respective candidates for the throne of Philip V of Spain [1700<=>1712]. It begins with an Imperial offensive in northern Italy but within weeks William III of England etc [12th June<=>16th September] has helped to re-establish the pan-European Grand Alliance [1688<=>7th September]. The war begins with a campaign on the French-Austrian front in northern Italy, with the English not actually declaring war until 14th May 1702. Here are the main events ...

The Battle of Carpi, 1701; The Battle of Chiari, 1701; The Treaty of the Second Grand Alliance, 1701; QUEEN ANNE'S WAR, 1702-1713 [See separate entry=>1702]; The Battle of Cremona, 1702; The Siege of Liège, 1702; The Siege of Kaiserswerth, 1702; The Battle of Nijmegen, 1702; The Siege of Landau, 1702; The Battle of Luzzara, 1702; The Siege of Breisach, 1703; The Battle of Speyer, 1703; The Battle of Schellenburg/Donauwörth, 1704; The Battle of Blenheim, 1704; The Battle of Elzheim, 1705; The Battle of Cassano, 1706; The Battle of Ramilies, 1706; The Siege of Turin, 1706; The Battle of Castiglione, 1706; The Battle of Stolhoven, 1707; The Siege of Béthune, 1707; The Battle of Toulon, 1707; The Battle of Oudenarde, 1708; The Siege of Lille, 1708; The Siege of Tournaï, 1708; The Battle of Malplaquet, 1709; The Siege of Bouchain, 1711; The Treaty of Utrecht, 1713

The main commanders are ...

- Prince Eugene of Savoy [Wikipedia biography] [henceforth just "Prince Eugene"]
- John Churchill [1st Duke of Marlborough] [1690<=>1701] [henceforth just "Marlborough"]

The overall outcome is that Philip formally renounces his rights to the French crown [=>1712 (10th July)], thus allaying fears elsewhere in Europe of a French-Spanish superpower. The war is noteworthy in the present context for the 400,000 ordinary folk who died defending the balance of power. [THREAD = THE SHAPING OF WW1 EUROPE]

1701 [9th July] The Battle of Carpi: This battle is the opening encounter in the War of the Spanish Succession [=>preceding], and is fought between an Imperial army under Prince Eugene [precedings=>1st September] and a French army under Nicolas Catinat [<=1693]. The outcome is an Imperial victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1701 [1st September] The Battle of Chiari: This battle is fought as part of the Milan Campaign of the War of the Spanish Succession [<=9th July] between an Imperial army under Prince Eugene [9th July<=1702] and a French/Spanish army under François de Neufville, Duke of Villeroi [1695<=1702]. The outcome is an Imperial victory. The battle is noteworthy in the present context as an example of how to create a killing field in front of well-prepared defences. Prince Eugene had guessed from the available intelligence that Villeroi had been tasked with driving him back into Austria, and that he would therefore have to attack sooner rather than later. He had therefore dug his troops in in
front of the fortress of Chiari and patiently awaited that attack. When it eventually comes the French suffer ten casualties for every Imperial casualty, and decide to go back on the defensive for the rest of the campaign. We shall be returning in detail to the science of field fortification in due course, not least with the Battles of Plevna [=1877 (20th July)], Loos [=1915 (25th September), and the Somme [=1916 (1st July)]. [THREAD = THE SHAPING OF WW1 EUROPE]


1701 [16th September] Upon the death of James II of England etc [Deposed] [=1690] his claims to the English, Scottish, and Irish thrones pass to his son James Francis Edward Stuart [Wikipedia biography] as James III of England etc [Claimed] [=1708], referred to popularly as "the King over the Water", or "the Old Pretender". This claim is treasonous in the eyes of William III of England etc [9th July<=1702] and his successors, and will be (successfully) resisted with force as and when necessary. [THREAD = THE SHAPING OF WW1 EUROPE]

1702 A consortium of Quaker businessmen led by Abraham Darby I [Wikipedia biography] [=1709] establishes the Baptist Mills Brass Works, Bristol [coordinates], using copper ore from Cornwall and Devonshire and zinc ore - calamine - from Somerset. [THREAD = THE INDUSTRIAL REVOLUTION]

1702 [1st January] Mobilisation for War: At this point in time the establishment of the English army is as follows: HOUSEHOLD CAVALRY (five troops and one regiment), FOOT GUARDS (two regiments), CAVALRY (seven cavalry and five dragoon regiments), and INFANTRY (22 regiments). [THREAD = THE WW1 ARMIES]

1702 [1st February] The Battle of Cremona: This battle is fought as part of the Milan Campaign of the War of the Spanish Succession [=9th July] between an Imperial army under Prince Eugene [1701<=15th August] and the French garrison in and around Cremona under François de Neufville, Duke of Villeroi [1701<=1705]. The outcome is indecisive. Prince Eugene's initial move is a surprise night attack, and this is highly successful, taking many prisoners, including General Villeroi himself. However the Imperials are then unable to take the central citadel and Prince Eugene decides to withdraw. [THREAD = THE SHAPING OF WW1 EUROPE]

****** SCOTLAND AND ENGLAND CONSIDER UNION ******

1702 [8th March] Upon the death of William III of England etc [<=1701] his thrones pass to his sister-in-law Anne Stuart [Wikipedia biography], Protestant daughter of James II of England etc; died 1701 [<=1690], as Queen Anne [=>1714]. One of her first acts is to put in place a Royal Commission to design a workable union of England and Scotland. One of the biggest constitutional barriers to progress is that by the Act of Settlement [<=1701] such a union is going to require the Scots to accept the House of Hanover over the Stuarts (continues 1706 [16th April] ...). [THREAD = THE SHAPING OF WW1 EUROPE]


1702 [16th April-15th June] The Siege of Kaiserswerth [1702]: [Compare ditto <=1689] This nine-week siege is fought out as part of the North Rhine operations of the War of the Spanish Succession [<=1701] between a besieging Grand Alliance army under Walrad von Nassau-Usingen [Wikipedia biography], Leopold I of Anhalt-Dessau ¹ [Wikipedia biography =>1705], and Godert de Ginkel, 1st Earl of Athlone [1691<=10th June], the French garrison at Kaiserswerth, and a French field army under Louis-François, Duke of Boufflers [1695<=10th June] and Camille d'Hostun, Duke of Tallard [1689<=1704]. The outcome is an eventual Alliance victory by negotiated surrender. [THREAD = THE SHAPING OF WW1 EUROPE]

¹ASIDE - ANHALT-DESSAU: Anhalt is the name of a mediaeval duchy some 40 miles south-west of Magdeburg. Dessau likewise, south-east of Magdeburg. The principality of Anhalt-Dessau was created in 1396 as a state within the Holy Roman Empire. Leopold I was ruler of said principality in 1702.

ASIDE - WAR AND GOOD TUNES: The story goes that when serving in Italy in 1705 Leopold I adopted a catchy Italian folk tune for the slow march of his personal regiment. This march is now known as Der Dessauer [hear it now] (it also featured with an English lyric in Dick Powell's 1957 U-boat movie "The Enemy Below" (20th Century Fox)).

1702 [10th June] The Battle of Nijmegen: This battle is fought outside the fortified city of Nijmegen as part of the Dutch Theatre operations of the War of the Spanish Succession [<=1701] between a Grand Alliance army under Godert de Ginkel, 1st Earl of Athlone [<=16th April], and a significantly larger French army under Louis-François, Duke of Boufflers [16th April<=1708]. The outcome is an Alliance retreat into the city. [THREAD = THE SHAPING OF WW1 EUROPE]

1702 [24th April-10th September] The Siege of Landau: This five-month siege is fought out as part of the Palatinate operations of the War of the Spanish Succession [<=1701] between a besieging Grand Alliance army under Ludwig ("Turkish Louis") Wilhelm von Baden-Baden [Wikipedia biography =>1703], and a French garrison under Ézéchiel de Melac [<=1688]. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1702 [19th July] The Battle of Klisow/Kliszów: This battle is fought as part of the Polish-Lithuanian operations of the Great Northern War [<=22nd February] between a Swedish army under Charles XII of Sweden [1700<=1703] and an appreciably larger Saxon/Polish-Lithuanian army under Frederick Augustus II (the Strong) of Poland-Lithuania, Elector of Saxony [1697<=1706]. The outcome is an against-the-odds victory for Sweden. [THREAD = THE SHAPING OF WW1 EUROPE]
1702 [15th August] The Battle of Luzzara: This battle is fought as part of the Italian Front operations of the War of the Spanish Succession [<=1701] between a French army under Louis-Joseph, Duke of Vendôme [Wikipedia biography] and an Imperial army under Prince Eugene [1st February<=1704]. The result is a marginal and expensive Imperial victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1702 [15th December] Lord Herbert's Regiment of Foot [<=1695] is retitled as the "Welch Regiment of Fusiliers" [=1751]. [THREAD = THE WW1 ARMIES (WALES)]

ASIDE - THE WELCH REGIMENT OF FUSILIERS IN WW1: Subject to a number of consolidations and re-brandings still to be chronicled [follow the => pointer above], the Welsh Fusiliers will appear in WW1 as the (eventually) three regular, 15 territorial, 15 New Army, and seven garrison battalions of the Royal Welch Fusiliers [regimental museum]. In 1914 the 2nd Battalion was part of the initial landings of the B.E.F. [=1914 (11th August); follow pointers from there to later relevant actions].

1703 Sir George Rooke [Wikipedia biography] issues the "Permanent Instructions", containing the latest improvements to the "Fighting Instructions" [1691<=1715] of Edward Russell, 1st Earl of Orford [<=1692], Corbett (op. cit. [=1673]), reproduces the key articles, if interested. With occasional minor upgrades, Rooke's instructions will remain in use until 1783 [=], although they will be supplemented by a separate Signals Book in 1715 [=]. [THREAD = THE WW1 SURFACE NAVIES]

1703 [21st April] The Battle of Pultusk: This battle is fought as part of the Polish-Lithuanian operations of the Great Northern War [<=22nd February] between a Swedish army under Charles XII of Sweden [1702<=1709] and a Saxon army under Adam von Steinau [Wikipedia biography]. The outcome is a Swedish victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1703 [15th August-7th September] The Siege of Breisach: This three-week siege is fought out as part of the Palatinate operations of the War of the Spanish Succession [<=1701] between a besieging French army under the Dauphin, Louis, Duke of Burgundy [Wikipedia biography] and Camille d'Hostun, Duke of Tallard [1502<=1700] and the Grand Alliance garrison at Breisach (instructed by Ludwig ("Turkish Louis") Wilhelm von Baden-Baden [1702-1704] to fight to the last man) under Johann Philipp von Arco [Wikipedia biography]. The outcome is that the French take the "untakeable" fortress town after only 13 days of trying, resulting in the execution of von Arco for treasonous dereliction of duty on 18th February 1704. [THREAD = THE SHAPING OF WW1 EUROPE]

1703 [15th November] The Battle of Speyer: This battle is fought as part of the Palatinate operations of the War of the Spanish Succession [<=1701] between a Grand Alliance army under Prince Frederick of Hesse-Kassel (Frederick I of Sweden) [Wikipedia biography] and John Ernst of Nassau-Weilberg [Wikipedia biography], and a French army under Camille d'Hostun, Duke of Tallard [15th August<=1704]. The outcome is a thumping French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1704 [??th January] John Hanbury1 [Wikipedia biography] inherits the family ironworks at Pontymoel/Pontypool [1682<=1725] and Llanelly Hill2 [coordinates], and specialises in the production of "Pontypool plates", thin sheets of "Japanned" - lacquered - black iron used for light iron pressings such as toys, containers, and kitchen utensils. [THREAD = THE INDUSTRIAL REVOLUTION]

1ASIDE: It should not be thought that Hanbury was just a lowly furnaceman because he was not. Rather he is a good example of a new phenomenon in social history, namely the
industrialist-politician. Hanbury was a Member of Parliament from December 1701 until his death in 1734. He thus had a voice in the political decision-making which might or might not benefit him personally in his business dealings. We shall be returning to the issues here in detail when dealing with profiteering by arms companies in the 19th and 20th centuries (Simon Cameron) and follow the onward links.

2 ASIDE: Not to be confused with the much larger town of Llanelli, some 50 miles further west. Llanelly Hill was one of the first modern era ironworks in what is now known as Clydach Gorge. It was probably first established in the late 16th century and then progressively expanded throughout the 17th. Clydach Gorge is nowadays one of Britain’s most historically important open-air industrial heritage museums (virtual tour).

1704 [2nd July] The Battle of Schellenberg/Donauwörth: This battle is fought as part of the Bavarian Campaign of the War of the Spanish Succession between a Grand Alliance army under Marlborough [Wikipedia biography] and Ludwig ("Turkish Louis") Wilhelm von Baden-Baden [Wikipedia biography] and a significantly smaller French/Bavarian army under Johann Baptist von Arco [Wikipedia biography] and Alessandro de Maffei [Wikipedia biography]. The outcome is a with-the-odds Alliance victory with disproportionate French/Bavarian casualties. [THREAD = THE SHAPING OF WW1 EUROPE]

1704 [1st-3rd August] The Battle of Gibraltar: This seaborne assault is fought as part of the Iberian operations of the War of the Spanish Succession between a Grand Alliance invasion force under Prince George of Hesse-Darmstadt [Wikipedia biography], Sir George Rooke [<=1703], and George Byng, 1st Viscount Torrington [Wikipedia biography], and the Spanish garrison at Gibraltar under Diego de Salinas [Wikipedia biography]. The outcome is a Grand Alliance victory, followed by an Alliance occupation. [THREAD = THE SHAPING OF WW1 EUROPE]

1704 [9th August] The Second Battle of Narva: This battle is fought as part of the Livonian operations of the Great Northern War between a Tsarist Russian army under Peter I (the Great) of Russia [1700<=>1709] and the Swedish defenders of Narva under Henning af Rantzien [Wikipedia biography]. The outcome is a Russian victory. [THREAD = THE SHAPING OF WW1 EUROPE]

********** HISTORICALLY SIGNIFICANT BATTLE **********

1704 [13th August] The Battle of Blenheim: This battle is fought as part of the Bavarian Campaign of the War of the Spanish Succession between a Grand Alliance army under Marlborough [2nd July<=1705] and Prince Eugene [1703<=1705] and a French/Bavarian army under Camille d'Hostun, Duke of Tallard [<=1703] and Maximilian II Emanuel, Elector of Bavaria [1695<=1706]. The French/Bavarians have been threatening Vienna itself, whilst the Grand Alliance has just successfully combined Prince Eugene's and Marlborough's armies, the latter having been forced to march the 250 miles from Cologne to the Danube. The outcome is an historic Grand Alliance victory, with heavily disproportionate French/Bavarian casualties and the taking of Tallard as prisoner-of-war. An Irish military engineer named Holcroft Blood [no convenient biography], Veteran of Namur [<=1695] and Schellenberg [<=2nd July], commands the English artillery train and is complimented on his use of anti-personnel rounds against the French infantry. The battle is noteworthy in the present context not just for bringing Bavaria back into the Alliance camp, but also for demonstrating the need for an army's artillery train to provide for both siege and field applications. [THREAD = THE SHAPING OF WW1 EUROPE]

1705 [18th July] **The Battle of Elixheim:** This battle is fought as part of the Flanders operations of the War of the Spanish Succession [<=1701] between a Grand Alliance army under **Marlborough** [1704<=1706] and a French army under **François de Neufville, Duke of Villeroi** [1702<=1706]. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1705 [16th August] **The Battle of Cassano:** This battle is fought as part of the Italian Front operations of the War of the Spanish Succession [<=1701] between a 22,000-man French army under **Louis-Joseph, Duke of Vendôme** [1702<=1708] and a slightly larger Grand Alliance army under (overall command) **Prince Eugene** [1704<=1706] and (the Prussian contingent) **Leopold I of Anhalt-Dessau** [1702<=1706]. The result is a Grand Alliance victory, delaying French operations in Piedmont until the following year. [THREAD = THE SHAPING OF WW1 EUROPE]

********** A WELL-FOUGHT BATTLE **********

1706 [13th February] **The Battle of Fraustadt:** This battle is fought as part of the Polish-Lithuanian operations of the Great Northern War [<=22nd February] between a Swedish army under **Carl Gustaf Rehnskiöld** [Wikipedia biography] and a Saxon/Russian army twice its size under **Johann von der Schulenburg** [Wikipedia biography]. The outcome is a very much-against-the-odds victory for the Swedes, with massively disproportionate Saxon/Russian casualties. The battle is noteworthy in the present context for demonstrating the value of cavalry in outmanoeuvring and demoralising infantry, and of the need, therefore, for commanders on the receiving end to prevent them doing so. [THREAD = THE SHAPING OF WW1 EUROPE]

1706 [23rd May-18th September] **The Siege of Turin:** This four-month siege is fought out as part of the Italian Front operations of the War of the Spanish Succession [<=1701] between a besieging French army under **Philip II, Duke of Orléans** [Wikipedia biography] and a French/Bavarian army under **François de Neufville, Duke of Villeroi** [<=1705] and **Maximilian II Emanuel, Elector of Bavaria** [1695<=1726]. The outcome is a decisive Grand Alliance victory with heavily disproportionate French/Bavarian casualties. [THREAD = THE SHAPING OF WW1 EUROPE]

1706 [23rd July] **The Acts of Union between England and Scotland:** [Continued from 1702 (8th March)] After four years of painful diplomacy a mutually acceptable set of terms is passed to the English and Scottish parliaments for final ratification [continues 1707 (1st May)] ...]. [THREAD = THE SHAPING OF WW1 EUROPE]

1706 [26th May-18th September] **The Siege of Turin:** This four-month siege is fought out as part of the Italian Front operations of the War of the Spanish Succession [<=1701] between a besieging French army under **Philip II, Duke of Orléans** [Wikipedia biography] and **Louis d'Aubusson de la Feuillade** [Wikipedia biography] and the Grand Alliance garrison at Turin. The siege is abandoned by the French when a relieving Grand Alliance army under **Prince Eugene** [1705<=1707] and **Leopold I of Anhalt-Dessau** [1705<=1709] arrives in the region. The battle is noteworthy in the present context for Feuillade's failure to take technical advice from the renowned master of siege tactics **Sébastien de Vauban** [<=1693], now in his 74th year, namely that Feuillade should not attack where the defenders had had time to put precautionary countermines in place. [THREAD = THE SHAPING OF WW1 EUROPE]

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1**ASIDE - PRECAUTIONARY COUNTERMINING AND THE TALE OF PIETRO MICCA:** Because it takes time to build tunnels, the defenders of Turin had been working on theirs well before the French army arrived outside their walls. This allowed them to disrupt the advancing French trenches from beneath. One of the Piedmontese tunnellers, **Pietro**
Micca [Wikipedia biography], famously blew a mine in the faces of advancing French grenadiers, sacrificing his own life to prevent the loss of the Milan Citadel.

**ASIDE - TUNNELLING IN WW1:** We shall be dealing with this facet of WW1 history in due course [=1914 (21st December)].

1706 [1st September] **The Treaty of Altranstädt:** This treaty between Sweden and Frederick Augustus II (the Strong) of Poland-Lithuania, Elector of Saxony [1702<=1709] requires the latter to relinquish his Polish-Lithuanian titles to Stanisław Leszczyński [Wikipedia biography=>1733]. This treaty is noteworthy for driving Frederick Augustus to ally himself with the Russians against the Swedes, thus in the fullness of time making things worse for the Swedes rather than better. [THREAD = THE SHAPING OF WW1 EUROPE]

1706 [8th September] **The Battle of Castiglione:** This battle is fought as part of the Italian Front operations of the War of the Spanish Succession [=1701] between a French army under Jacques de Grancey-Médavy [Wikipedia biography] and a Grand Alliance army under Prince Frederick of Hesse-Kassel (Frederick I of Sweden) [1703<=1720]. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

********** SCOTLAND AND ENGLAND UNITE **********
********** AS "GREAT BRITAIN AND IRELAND" **********

1707 [1st May] **The Union of Scotland and England:** [Continued from 1706 (23rd July)] The legislation put into place in 1706 now finally comes into force. Rumours abound that political support for the union has been bought by bribery 1, and that "for every Scot in favour there is 99 against". [THREAD = THE SHAPING OF WW1 EUROPE]

1**RULE #4 APPLIES:** Of course it had been. But it is another thing to prove it.

********** THE BRITISH ARMY IS BORN **********
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1707 [22nd May] **The Battle of Stollhofen:** This battle is fought as part of the Palatinate operations of the War of the Spanish Succession [=1701] between a French army under Claude de Villars [Wikipedia biography=>1709] and a Grand Alliance army under Christian Ernest of Brandenburg-Bayreuth [Wikipedia biography]. The outcome is a French victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1**ASIDE – BRANDENBURG-ANSBACH, BRANDENBURG-BAYREUTH, AND ANSBACH-BAYREUTH:** Since 1398 Brandenburg-Ansbach and Brandenburg-Bayreuth have both been independent principalities within the Holy Roman Empire. They will now be inherited by Charles Alexander of Hohenzollern [Wikipedia biography], Ansbach in 1757 and Bayreuth in 1769, and he will sell them to Prussia in 1791. The term "Ansbach-Bayreuth" may sometimes be seen.

1707 [14th July-18th August] **The Siege of Béthune:** This battle is fought as part of the Flanders operations of the War of the Spanish Succession [=1701] between a besieging Grand Alliance army under Christian Ernest of Brandenburg-Bayreuth [Wikipedia biography] and the French garrison at Béthune under Antoine le Prestre, Count of Puy-Vauban [no convenient biography]. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]
ASIDE - BÉTHUNE IN WW1: In WW1 Béthune was unlucky enough to be located on the planned axis of advance of the German First Army, but after said axis was forcibly deflected by the Battles of Mons [23rd August] and Le Cateau [26th August] it remains a mere five miles behind the British lines. It then spends the remainder of the war as a major British headquarters town. Fifteen miles to the southeast, on the German side of the lines, is the town of Loos-en-Gohelle, the site of the Battle of Loos [25th September].

1707 [17th July] The Battle of Toulon: This naval battle is fought as part of the Italian Front operations of the War of the Spanish Succession [1701] between a French fleet under René de Froulay de Tessé [Wikipedia biography] and a British fleet under Sir Cloudesley Shovel [Wikipedia biography]. The result is considerable damage inflicted upon the French fleet, but a strategic victory for the French who - further inland - manage to push back a Grand Alliance land army under Victor Amadeus II of Savoy [1693] and Prince Eugene [1706-1708]. [THREAD = THE SHAPING OF WW1 EUROPE]

1708 [23rd March] The Jacobite Uprising [1708]: In pursuit of his claim to the crown of Great Britain and Ireland, James III of Great Britain and Ireland [Claimed] [1701-1715] attempts a landing in Scotland but is driven off by a British fleet under George Byng, 1st Viscount Torrington [1704]. [THREAD = THE SHAPING OF WW1 EUROPE]

1708 [11th July] The Battle of Oudenarde: This battle is fought as part of the War of the Spanish Succession [1701] between a 90,000-man Grand Alliance army under Prince Eugene [1707-12th August] and Marlborough [1706-12th August] and a marginally larger French army under Louis, Duke of Burgundy [Wikipedia biography] and Louis Joseph, Duke of Vendôme [1705]. The French are attempting to take control of the Scheldt Valley and the Grand Alliance have gathered their forces at Oudenarde to thwart them. Thanks to a number of dubious command decisions on the part of the Duke of Burgundy [check them out] the outcome is a French defeat with heavily disproportionate casualties. [THREAD = THE SHAPING OF WW1 EUROPE]

1708 [1st August] The Dampier Expedition, 1708-1711: An ageing William Dampier [Wikipedia biography] - hero of the 1688-1691 and 1699-1701 explorations of Australia - organises one last adventure, this time aboard the privateers Duke and Duchess, commanded by one Woods Rogers [Wikipedia biography]. The expedition is privately funded (with the expectation of profitable Spanish prizes) by, amongst others, Thomas Goldney II [no convenient biography] [1713], a Bristol businessman. The expedition sails from Bristol on 1st August and, after an eventful passage down to and then around Cape Horn, arrive at Juan Fernandez Island off the coast of Chile exactly six months later. Here they take on fresh water and rescue a shipwrecked sailor named Alexander Selkirk [Wikipedia biography]. They then spend the rest of the year accumulating riches at Spanish expense before setting off across the Pacific to complete their circumnavigation, arriving back in London on 14th October 1711 where the investors start to cash in on their investment and the mariners write their memoirs. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE: Rogers' tale is published in 1712 as "A Cruising Voyage Round the World". Selkirk's tale is fictionalised by Daniel Defoe in his 1719 novel "Robinson Crusoe". Both works are best-sellers.

1708 [12th August-10th December] The Siege of Lille: This siege is fought out as part of the War of the Spanish Succession [1701] between a besieging Grand Alliance army under Prince Eugene [11th July-1709] and Marlborough [11th July-1709] and the French garrison...
at Lille under Louis-François, Duke of Boufflers [1702<=>1709]. The outcome is a dearly bought strategic victory for the Grand Alliance. [THREAD = THE SHAPING OF WW1 EUROPE]

1708 [6th October] The industrialist John Hanbury [1704<=>1725] extends his iron-making empire by acquiring the foundry at Melin-y-Cwrt, near Neath [heritage website=>1798]. [THREAD = THE INDUSTRIAL REVOLUTION (WALES)]

1708 [8th December] A son is born to Leopold of Lorraine [Wikipedia biography=>1729] and his consort Elizabeth Charlotte of Orléans [Wikipedia biography] and named Francis (I of Lorraine)1729 [Wikipedia biography=>1729]. [THREAD = THE INDUSTRIAL REVOLUTION (WALES)]

1709 The satirist Edward Ward [Wikipedia biography] publishes a pamphlet entitled "The Army Described in All its True Colours", in which he teases the military for their pomposity and arrogance. For example he describes an Ensign (the youngest and lowliest of pre-commissioned officers) as "... usually a young gentleman [...] caught abed with one of his mother's chambermaids" (quoted in Turner, 1956, p61). Ward also uses the word "subaltern" to refer to junior officers of slightly greater experience. [THREAD = THE WW1 ARMIES]

ASIDE - SUBALTERNS IN WW1: The subalterns of WW1 were the First- and Second-Lieutenants onto whom the entire burden of day-to-day platoon command devolved. If they survived - the attrition rate was very, very, high - these people were literate enough and socially well-positioned enough to provide the enduring prose, verse, and painted accounts of the horrors of war. We shall be tracing their contribution to the war effort itself, as well as to war literature and art, in detail in due course [e.g., =>1928 (Max Plowman)].

**********  A NEW ROLE FOR COAL  **********

1709 Having relocated upriver from the Baptist Mills Brass Works [1702<=>1738], Abraham Darby I [1702<=>1738] starts to fuel his blast furnace at Coalbrookdale [=>1717], Shropshire, with coke instead of charcoal. [THREAD = THE INDUSTRIAL REVOLUTION]

ASIDE: Prior to this innovation coal-smelted pig iron has been difficult to work into wrought iron because of the impurities - primarily sulphurous tars and co-sedimentary silicates - in the coal. Because the resulting iron was flaky or fragile it did not sell well, and because it did not sell well there was a premium on methods for getting rid of the impurities. Darby's method was to burn off the impurities off-line and in advance, just as green wood has traditionally been slow roasted to produce charcoal. The addition of crushed limestone helps create an easily separable slag containing those impurities which cannot be driven off as flue gasses. Not surprisingly, there will henceforth be a powerful economic driver in favour of smelters located by coal and limestone seams rather than by wooded streams with handy quays.

1709 [8th July-3rd October] The Siege of Tournai: This 12-week siege is fought out as part of the Flanders operations of the War of the Spanish Succession [<=1701] between a besieging Grand Alliance army under Marlborough [1708<=>11th September] and the French garrison at Tournai under Louis-Charles d'Hautefort, Marquis of Surville [no convenient biography]. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]

********** HISTORICALLY SIGNIFICANT BATTLE  **********

1709 [8th July] The Battle of Poltava: This battle is fought as part of the Ukraine operations of the Great Northern War [<=1700] between a Swedish army under Charles XII of Sweden [1703<=>1710] and Carl Gustaf Rehnskiöld [<=1706] and a Russian army more than twice its size under Peter I (the Great) of Russia [1704<=>9th October]. The outcome is a crushing Russian victory with extensive Swedish casualties on the day and many
more on the ensuing retreat. **The battle is often cited as the beginning of the end for Sweden as an imperial power.** [THREAD = THE SHAPING OF WW1 EUROPE]

********** AN EXPENSIVE VICTORY **********

1709 [11th September] **The Battle of Malplaquet:** This war is fought as part of the War of the Spanish Succession [<=1701] between a 86,000-man Grand Alliance army [Habsburg Austria, The Dutch Republic, Great Britain, and Prussia] under Prince Eugene [1708<=>1712], Marlborough [8th July<=>1711], and Leopold I of Anhalt-Dessau [1706<=>1715], and a 75,000-man French army under Claude de Villars [1707<=>1711] and Louis-François, Duke of Boufflers [<=1708]. The Grand Alliance are advancing on Mons and de Villars has been instructed by Louis XIV of France [1700<=>1715] to stop them. The outcome is an expensive Grand Alliance victory. The combined casualties are 32,000 killed and wounded, split 2:1 between Grand Alliance and French. [THREAD = THE SHAPING OF WW1 EUROPE]

**STUDENT EXERCISE 1633 EXTENSION:** Malplaquet is in 59 NORD. Research its location online and dot it in on your map.

**ASIDE - PRESENTING DEATHS AS VICTORY:** Malplaquet was a bloodbath from which neither side obtained any enduring strategic advantage, and away from which both armies marched with their heads held bloodied but high. Both sides therefore spin-doctored the facts to suit their own reputations. We shall be returning in detail to the science of political and military spin-doctoring in due course.

1709 [28th June/ 9th October/ 22nd October] **The Treaties of Dresden, Thorn/Torun, and Copenhagen:** These treaties establish a three-way military alliance between Peter I (the Great) of Russia [8th July<=>1710], a re-instated Frederick Augustus II (the Strong) of Poland-Lithuania [<=1706], and Frederick IV of Denmark-Norway [<=1700], in order to liberate Poland-Lithuania from Swedish occupation. Weakened by their disastrous Russian Campaign [<=9th July], the Swedes pull out of Poland to consolidate their hold on Pomerania. [THREAD = THE SHAPING OF WW1 EUROPE]

1710 Drawing on his 30 years of field experience with the Danish, Prussian, French, and British Armies, the Danish artillery officer Albert Borgard [Wikipedia biography] devises a state-of-the-art gun-sight [no online image available]. [THREAD = WW1 ARTILLERY]

1710 By about this time it is becoming standard practice for ships to be steered indirectly by wheel-pulleys-rudder rather than directly by tiller-rudder. Magnification of effect can now be obtained by gearing down the pulley system for greater torque, rather than by simply having an ever-longer tiller. This will remain the standard technology until the invention of servo-assisted steering systems in the mid-19th century [more on this]. [THREAD = THE WW1 SURFACE NAVIES]

1710 [25th April-26th June] **The Siege of Douai:** This nine-week siege is fought out as part of the Flanders operations of the War of the Spanish Succession [<=1701] between a besieging Grand Alliance army under Prince Eugene [1709<=>1712] and the French garrison at Douai. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1710 [20th November] **The Russo-Turkish War, 1710-1711:** This war is fought between the Russian Empire under Peter I (the Great) of Russia [1709<=>1721] and a Swedish-Ottoman alliance under Charles XII of Sweden [1709<=>1715] and the Grand Vizier, Baltaci Mehmet Pasha [Wikipedia biography]. The outcome is a decisive Ottoman victory, but one which benefits the Swedes merely by diverting Russian forces and thereby delaying the inevitable. [THREAD = THE SHAPING OF WW1 EUROPE]
1711 [17th April] Upon the death of the Holy Roman Emperor, Archduke Joseph I of Austria [<=1705], his titles pass after due process to his younger brother, Archduke Charles VI of Austria [Wikipedia biography][1716]. [THREAD = THE SHAPING OF WW1 EUROPE]

1711 [9th August-12th September] The Siege of Bouchain: This five-week siege is fought out as part of the Flanders operations of the War of the Spanish Succession [<=1701] between a besieging Grand Alliance army under Marlborough [<=1709], the French garrison at Bouchain under De Ravignan [no convenient biography], and a supporting French field army under Claude de Villars [1709< <=1712]. The outcome is a Grand Alliance victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1711 [7th September-24th December 1715] The Sieges of Stralsund: This four-year series of five distinct sieges is fought out as part of the Great Northern War [<=1700] between a succession of besieging Danish-Norwegian, Saxon, Tsarist Russian, and Prussian armies and the Swedish garrison at Stralsund. Having been forced out of Poland by the new Russian-led alliance [<=1710] the fortress-port of Stralsund is the key to the Swedes retaining a foothold in Pomerania. The town eventually falls a month after the Battle of Strelsow [>=1715]. [THREAD = THE SHAPING OF WW1 EUROPE]

**********  "JOHN BULL" IS BORN  **********

1712 In a political allegory entitled "Law is a Bottomless Pit" the British satirist John Arbuthnot [Wikipedia biography] introduces the caricature "John Bull" [Wikipedia factsheet] to represent (specifically) England (Scotland is shown as "Sister Peg of Thistledown"). [THREAD = THE BATTLE FOR HEARTS AND MINDS]

1712 [9th August] Albert Borgard [1710< =>1721] is appointed "Chief Firemaster" to the Board of Ordnance [1597< =>1717] and takes it upon himself to rationalise the types of cannon to be provisioned. The following medium-to-heavy calibres (and corresponding projectile weights) are approved: 3" (4-pdr), 3½" (6-pdr), 4" (9-pdr), 4½" (12-pdr), 5" (18-pdr), 5½" (24-pdr), 6" (32-pdr), and 7" (42-pdr). He also introduces the "Borgard pattern" of barrel reinforcement. [THREAD = WW1 ARTILLERY]

**ASIDE - BORGARD REINFORCEMENT:** Borgard's system of reinforcement allowed for two "reinforces" - thickenings of the casting - of the barrel. The "first reinforce" is the thicker of the two and is positioned at the combustion chamber end, where internal pressures are highest at the moment of discharge. The "second reinforce" is thinner than the first and extends past the mid-point of the barrel's length. Both reinforces are shorter than the practice established during the previous century, saving cost and weight but potentially increasing the risk of barrel failure in action. Trollope (2010 online) provides photographs of two of the brass cannons recovered in 2008/9 from the 1744 wreck of HMS Victory [1737] [1713] by the Odyssey Marine Expedition [1744 (ASIDE)], one of which, a 42-pdr date-stamped "1726", is probably to the Borgard pattern.

1712 Drawing on his experiences with the Grand Alliance armies in the War of the Spanish Succession [<=1701], August Christoph von Wackerbarth [Wikipedia biography][1716], Chief Field Engineer in the Saxon army, separates out his engineering companies into Germany's first self-contained Corps of Engineers. [THREAD = WW1 MILITARY ENGINEERING]

1712 [10th July] As a pre-condition of ending the War of the Spanish Succession [<=1701], Philip V of Spain [1701< =>1713] formally renounces his rights to the French throne. [THREAD = THE SHAPING OF WW1 EUROPE]
1712 [24th July] **The Battle of Denain:** This battle is fought as part of the Flanders operations of the War of the Spanish Succession [<=1701] between a French army under Claude de Villars [Wikipedia biography] and a Grand Alliance army under Arnold van Keppel, 1st Earl of Albemarle [Wikipedia biography] and Prince Eugene [<=1710]. The outcome is a decisive French victory with disproportionate Grand Alliance casualties. [THREAD = THE SHAPING OF WW1 EUROPE]

1713 Following the union of England and Scotland [<=1707] the Scots Fusilier Regiment of Foot [<=1695] is retitled as the Royal North British Fusilier Regiment of Foot [1751] (21st Regiment of Foot). At much the same time the Prince of Wales, George Ludwig (I of Great Britain and Ireland)1714 and Elector of Hanover [== Brunswick-Lüneburg] retitles the Welsh Regiment of Fusiliers [<=1702] as "The Prince of Wales' Own Royal Regiment of Fusiliers" [1743]. [THREAD = THE WW1 ARMIES]

1 aside: The formal title of the Imperial Electorate based on the city of Hanover was Brunswick-Lüneburg. However most histories use the term "of Hanover" for convenience, and we shall be following this practice.

********** THE PRUSSIANS GET A "SOLDIER KING" **********

1713 [25th February] Upon the death of Frederick I of Prussia [<=1701], his titles pass to his son Frederick William I [Wikipedia biography] [1718]. [THREAD = THE SHAPING OF WW1 EUROPE]

1713 [11th April] **The Treaty of Utrecht:** After more than a year of diplomacy and negotiation between representatives of the Grand Alliance nations and France, and after the formal renunciation of his claim to the French throne by Philip V of Spain [<=1720], this treaty brings the War of the Spanish Succession [<=1701] to an end. The main provisions of the peace are (a) that Philip is recognised as King of Spain, (b) that Spain cedes Gibraltar1 and Minorca to Great Britain and Sicily to Savoy, and (c) that France cedes Newfoundland2 to Great Britain. [THREAD = THE SHAPING OF WW1 EUROPE]

1 aside - Gibraltar in WW1: The Gibraltar garrison commanded the Straights of Gibraltar throughout WW1 and was a priceless repair and refuelling point for transits to the Mediterranean and (via the Suez Canal) the Far East.

2 aside - Newfoundland in WW1: The Newfoundlanders will suffer 90% casualties on the First Day of the Somme at the Battle of Beaumont-Hamel [1916 (1st July)] and the field on which they fell is nowadays one of the most heavily visited Somme living history memorials [visit the website].

1713 [14th April] **Thomas Golding II** [<=1708] uses some of the profits from the Dampier Expedition to invest in the Coalbrookdale Ironworks [1717]. [THREAD = THE INDUSTRIAL REVOLUTION]

1714 **John Armstrong** [Wikipedia biography] is appointed Chief Engineer to the British Army. [THREAD = THE WW1 ARMIES]

1714 Drawing on Thomas Savery's earlier patents [<=1698], the British inventor Thomas Newcomen [Wikipedia biography] builds a "condensing" steam engine, that is to say, one in which the vacuum created by the condensation of steam within a vertically mounted cylinder draws down on a piston connected to one end of a pivoted beam, thus providing a strong lifting force to the other end of the beam [Wikipedia animation]. This "beam engine" or "Newcomen engine" arrangement is ideal for operating both lift pumps in mines and bellows in furnaces, and in the remaining 15 years of his life Newcomen will instal around 75 such engines across Britain. [THREAD = THE INDUSTRIAL REVOLUTION]
1714 [28th May] Upon the death of Sophia, Electress of Hanover [<=1701], her German titles pass to her son George Ludwig, Elector of Hanover [1713<=1st August] along with her right to the crowns of Great Britain and Ireland under the Act of Settlement [<=1701]. Speaking only German, George duly becomes Britain's Prince of Wales. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE HOUSE OF HANOVER **********

1714 [1st August] Upon the death of Anne of Great Britain and Ireland [<=1702] and as set down in the Act of Settlement [<=1701] the crown of Great Britain and Ireland passes to the Prince of Wales, George Ludwig, Elector of Hanover [<=28th May], as George I of Great Britain and Ireland, Elector of Hanover [=>1715]. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE: The standard German spelling of Hannover, as capital of modern Saxony, uses two "ns".

1715 The Swiss master-founder Johann Moritz [no convenient biography] demonstrates that better metallurgical results can be obtained by solid-casting cannons instead of casting them around a barrel former, even though the solid-casting method requires days of careful boring-out after the initial casting. [THREAD = WW1 ARTILLERY]

1715 The Earl of Peterborough's Regiment of Horse [<=1685] is retitled The Princess of Wales's Own Regiment of Horse [=>1727]. [THREAD = THE WW1 ARMIES]

1715 One Jonathan Greenwood [no convenient biography] prepares and circulates a Signal Book to accompany the extant version of the "Fighting Instructions" [1703<=1777]. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE: Greenwood's volume seems to have been a vade mecum intended for junior signals officers and ratings. It supports merely the safe transmission and reception of signals, not what they are trying to say. It is available in facsimile at http://www.amazon.co.uk/sailing-fighting-instructions-observed-Britain, if interested.

********** SAXONY GETS A NORTH SEA PORT **********

1715 George I of Great Britain and Ireland, Elector of Hanover [1714<=1716] buys the principality of Bremen-Verden [<=1675] from Denmark-Norway. [THREAD = THE SHAPING OF WW1 EUROPE]


1715 [6th September] The Jacobite Uprising [1715-1716]: [Compare ditto 1708] In pursuit of his claim to the crown of Great Britain and Ireland, James III of Great Britain and Ireland [Claimed] [1708<=1720] lands with an army and joins forces with Jacobite sympathisers led by John Erskine, 22nd Earl of Mar [Wikipedia biography]. The uprising makes progress to start with but is unable to command the political middle ground, leaving its ringleaders open to arrest. Realising their failure James and Mar flee to France in February 1716. [THREAD = THE SHAPING OF WW1 EUROPE]
1715 [16th November] The Battle of Stresow: This battle is fought as part of the Pomeranian operations of the Great Northern War [<=1700] between a Swedish army under Charles XII of Sweden [1710<=1718] and a recently landed Prussian/Danish-Norwegian/Saxon invasion army under Leopold I of Anhalt-Dessau [1709<=1726]. Despite being heavily outnumbered the Swedes try a repeat of their "needle manoeuvre" [<=1700 (Battle of Narva)], but this time it lets them down. The outcome is with-the-odds Swedish defeat, followed by the loss of the island of Rügen and the tightening of the siege of Stralsund [<=1711 (7th September)], which duly surrenders on 24th December. [THREAD = THE SHAPING OF WW1 EUROPE]

1716 Peter von Montargues [Wikipedia biography], Chief Field Engineer in the Prussian army, follows the example given by August Christoph von Wackerbarth [=1712] and separates out his engineering companies into a self-contained preussische Ingenieurkorps [= "Prussian Engineer Corps"]. [THREAD = WW1 MILITARY ENGINEERING]

1716 [early May] The British foundry-man Mathew Bagley [no convenient biography] is killed in a casting explosion at his Moorfields [=1684] works in London¹. His contracts are taken over by the brand-new Royal Arsenal Brass Foundry [=1770], Woolwich, under the management of German-born Andrew Schalch [Wikipedia biography>=1722]. Schalch uses the barrel reinforcement profiles devised by Albert Borgart [1712<=1721] and the boring-out technique pioneered by Johann Moritz [=1715]. The works will compete with private foundries to produce the guns needed for both the Seven Years War [=1756] and the American War of Independence [=1775 (19th April)]. [THREAD = WW1 ARTILLERY]

¹ASIDE: The explosion was a violent blowback from a damp mould, showering the 20 or so workers and spectators present with gobs of molten metal. The lethal event is vividly described in the contemporary report reproduced in Trollope (op. cit. [=1710])

********** THE ROYAL ARTILLERY IS BORN **********

1716 [26th May] At the recommendation of the army’s Chief Engineer John Armstrong [1714<=1721] the Engineering service splits off its artillery functions from its infrastructure functions. George I of Great Britain and Ireland, Elector of Hanover [1715<=1727] signs a Royal Warrant forming two regular companies of field artillery to be known as the "Royal Artillery". [THREAD = WW1 ARTILLERY]

1716 [late July] The Austro-Turkish War, 1716-1718: This war is fought between the Austrian Empire under the Holy Roman Emperor, Archduke Charles VI of Austria [1711<=1717] and the Ottoman Empire, and sees the Austrians make a number of significant strategic gains in Serbia and the Banat Province of Hungary. [THREAD = THE SHAPING OF WW1 EUROPE]


1717 John Lane [Wikipedia biography=>1724] establishes Llangyfelach Copperworks [coordinates=1724]. Subsequent expansion of the industry will turn Swansea into the copper capital of the world. [THREAD = THE INDUSTRIAL REVOLUTION]

ASIDE: The market for copper consists at this time primarily of household pots and pans and bronze/brass for weapons. It will expand considerably in the 1750s once the Royal Navy starts to use copper sheathing on the hulls of its warships to reduce damage from shipworm.
1717 The Prussian artillery officer Lieutenant-Colonel Ernst von Holtzmann [no convenient biography] designs a light but stable and strong field carriage for the Prussian 3-pounder [technical drawing]. [THREAD = WW1 ARTILLERY]

********** THE ROYAL ENGINEERS ARE BORN **********

1717 The Board of Ordnance [<=1712] establishes a Corps of Engineers to help professionalise British military engineering in such areas as fortification design and the building of roads, bridges, and docks; also, when necessary, their demolition. [THREAD = WW1 MILITARY ENGINEERING]

1717 [4th January] The Triple Alliance: This treaty aligns the Dutch Republic, France, and Britain against Spain [continues 1718 (2nd August) ...]. [THREAD = THE SHAPING OF WW1 EUROPE]


1717 [13th May] A daughter is born to the Holy Roman Emperor, Charles VI of Austria [1716<>1718] and his consort Elizabeth Christine of Brunswick-Wolfenbüttel [Wikipedia biography] and named Maria-Theresa [Wikipedia biography<=1736]. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIJE: In the event Maria-Theresa will be the older of only two surviving daughters, and the lack of a male heir will figure large in the diplomatic disagreements leading to the War of the Austrian Succession (=>1739).


1718 [2nd August] The War of the Quadruple Alliance, 1718-1720: [Continued from 1717 (4th January)] The Holy Roman Emperor, Archduke Charles VI of Austria [1717<>1733] now joins the Triple Alliance against Spain, making it a Quadruple Alliance. The Spanish suffer a number of military reverses and accept conditions under the Treaty of the Hague [=>1720]. [THREAD = THE SHAPING OF WW1 EUROPE]

1718 [30th November] Upon the death of Charles XII of Sweden [<=1715] his titles pass to his sister Ulrika Eleonora [Wikipedia biography=1720], Frederick William I of Prussia [1713<>1720] takes the opportunity to make peace overtures, leading to the First Treaty of Stockholm a year later [=>1719]. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE RIFLE IS INVENTED **********

1719 Around this time, local American gunsmiths such as Pennsylvania's Robert Baker [Crossed Brush Studio biography] and Martin Meylin [no convenient biography] independently set up workshops to produce "long rifles" [image], that is to say flintlock muzzle-loading muskets with an internal spiral groove. [=>1740] [THREAD = WW1 SMALL ARMS]

**SPIN STABILISATION - STEP 1**: Readers who have never seen a gyroscope defying gravity should check one out now - click here. Note how the spin stabilises the spinning object against random yawing and pitching.

**SPIN STABILISATION - STEP 2**: Projectiles such as tennis balls, stones, soccer balls, all have to move through the gases making up the atmosphere. Readers who are unfamiliar with soccer balls "turning" in mid-air should check one out now - click here or lots more here. [The theory's summarised here, courtesy of NASA, if interested, OR THERE'S AN APPLET HERE WHICH LETS YOU SEE THE EFFECT OF DIFFERENT STRIKE PARAMETERS ON THE FLIGHT OF THE BALL!!]
KEY BALLISTICS VOCABULARY - "RIFLES" AND "RIFLING": When a spherical projectile is fired from a rifled gun it begins its trajectory spinning rapidly around an axis parallel with that of the barrel from which it was fired. As it moves forwards away from the gun it starts (a) to fall under the influence of gravity, and (b) to slow down under the influence of air viscosity. As with any falling object the vertical component of the overall movement is a steady acceleration under gravity.


1719 [9th November] **The First Treaty of Stockholm**: This treaty between the Electorate of Hanover and the Swedish Empire brings the Hanoverian involvement in the Great Northern War [=1700] to an end, and confirms Hanoverian rights of conquests to Bremen–Verden [=1715<=1801]. [THREAD = THE SHAPING OF WW1 EUROPE]

1719 [9th August] Commanded by **George Shelvocke** [Wikipedia biography], the British privateer **HMS Speedwell** departs Santa Catarina anchorage, off the coast of Brazil, en route for Chile via Cape Horn. The weather gradually deteriorates, prompting one of the ship’s officers, **Simon Hatley** [Wikipedia biography], to shoot an albatross, believing it to be the cause of their bad luck. Perversely the weather gets even worse and the ship is wrecked on Selkirk Island and the crew marooned for five months until rescued. Upon the survivors’ eventual return to Britain, Shelvocke publishes his memoirs and they become something of a best-seller. [THREAD = POST-TRAUMATIC STRESS DISORDER]

1720 By now the French have established a network of five Écoles de l'Artillerie [="Artillery Schools"] at Metz, La Fère (just south of St. Quentin), Strasbourg, Perpignan, and Valence. [THREAD = WW1 ARTILLERY]

1720 [21st January] **The Second Treaty of Stockholm**: This treaty between Sweden and **Frederick William I of Prussia** [=1718<=1726] brings Prussian involvement in the Great Northern War [=1700] to an end, and confirms Prussian rights of conquest in Pomerania. [THREAD = THE SHAPING OF WW1 EUROPE]

1720 [17th February] **The Treaty of the Hague**: This treaty between Spain and the Alliance brings the War of the Quadruple Alliance [=1718] to a close. The principle provisions are (a) that **Philip V of Spain** [=1713<=1746] should abandon all his claims in Italy, and (b) that the Savoyards should exchange Sicily for Sardinia [=1713]. [THREAD = THE SHAPING OF WW1 EUROPE]

1720 [24th March] **Ulrika Eleonora of Sweden** [=1718] abdicates her throne in favour of her husband **Prince Frederick of Hesse-Kassel** [=1706], who thereby becomes **Frederick I of Sweden** [=1721]. [THREAD = THE SHAPING OF WW1 EUROPE]

1720 [31st December] A son is born to **James III of Great Britain and Ireland [Claimed]** [=1715<=1743] and his consort **Maria Sobieska** [Wikipedia biography] and named **Charles Edward Stuart** [Wikipedia biography]. [THREAD = THE SHAPING OF WW1 EUROPE]

1721 **John Armstrong** [=1716<=1722] is appointed Surveyor-General of Ordnance and starts experimenting (not always successfully) with alternatives to the barrel reinforcement template proposed by **Albert Borgard** [=1712<=1722]. [THREAD = WW1 ARTILLERY]

********** BRITISH PRIME MINISTERS ARE INVENTED **********

Meetings leads to his being gradually acknowledged as "Prime Minister", a position he will occupy until 1742. [THREAD = THE SHAPING OF WW1 EUROPE]

1721 [10th September] The Treaty of Nystad: This treaty between Peter I (the Great) of Russia (1710<=1725) and Frederick I of Sweden (<=1720) concedes to Russia the Swedish territories of Estonia, Livonia, Ingria, and part of Karelian Finland. [THREAD = THE SHAPING OF WW1 EUROPE]

1722 Andrew Schalch (1716<=1727) casts the first of a 100-gun order for high-specification brass cannon destined for a prestige new ship-of-the-line1. Until 1727 he follows the barrel reinforcement template proposed by Albert Borgard (<=1721), switching then to the alternative template proposed by John Armstrong (<=1721). [THREAD = WW1 ARTILLERY]

1ASIDE: It will be another 15 years before the guns are mounted (=>1737 (HMS Victory)). For further detail of the contract see Trollope (op. cit. [=1712]).

1722 The British Army adopts the "Brown Bess" musket [YouTube re-enactment], a .75" calibre flintlock musket. [THREAD = WW1 SMALL ARMS]

1723 [15th February] Louis XV of France (1715<=1729) assumes power in his own name and his Regency Council is dissolved. Louis Henri, Duke of Bourbon [Wikipedia biography =>1726] becomes his First Minister. [THREAD = THE SHAPING OF WW1 EUROPE]

1724 John Lane (1717<=1726) employs a Shropshire entrepreneur named Robert Morris [no convenient biography=>1726] at his Llangyfelach Copperworks (1717<=1726). [THREAD = THE SHAPING OF WW1 EUROPE]

1725 Automation, Control, and Artificial Intelligence [XI - Industrial Automation (Bouchon)]: (Continued from 1589 (The Brazen Head)) The French master-weaver Basile Bouchon [Wikipedia biography=>1728] uses a punched paper tape to pre-program the lifting of the warp threads on a loom [sub-thread continues at 1728 (Falcon) ...]. [THREAD = WW1 CYBERNETICS, COMPUTATION, AND FIRE CONTROL]

********** TINPLATE BECOMES POPULAR **********

1725 John Hanbury (1708<=1728) now starts to produce fer blanc, white iron, at his Pontypool ironworks (=>1765). This is sheet iron dipped into molten tin to give it a permanent shine and prevent rusting. [THREAD = THE INDUSTRIAL REVOLUTION]

1725 [8th February] Upon the death of Peter I (the Great) of Russia (1721<=1741) his titles pass to his second wife as Catherine I of Russia [Wikipedia biography=>1727]. [THREAD = THE SHAPING OF WW1 EUROPE]

1725 [10th May] Major General George Wade [Wikipedia biography] is appointed Commander-in-Chief of North Britain and raises a number of independent companies of "Highland Watch" police-militias to keep order [continues 1740 (the Black Watch) ...]. [THREAD = THE WW1 ARMIES]

1726 Frederick William I of Prussia (1720<=1740), reorganises his army, bringing together into elite units the tallest soldiers available and giving the Potsdam Grenadiers pride of place on the battlefield. He is also a stickler for drill in its own right, appointing Leopold I of Anhalt-Dessau (1715<=1745) to oversee the necessary training. Frederick William also rationalises his artillery to allow only 3-pdr, 6-pdr, 12-pdr, and 24-pdr cannon, all of which are sufficiently mobile for use in battles of manoeuvre. [THREAD = THE WW1 ARMIES]
1726 Finding himself unable to service his losses in the infamous South Sea Bubble John Lane [<=1717] sells the Llangyfelach Copperworks [1724<=1768] to a partnership led by Robert Morris [1724<=1768], [THREAD = THE INDUSTRIAL REVOLUTION]

1726 [24th January] Upon the death of Maximilian II Emanuel, Elector of Bavaria [<=1706] his titles pass to his son as Charles VII Albert, Elector of Bavaria (Holy Roman Emperor) [1742], [Wikipedia biography=>1740], [THREAD = THE SHAPING OF WW1 EUROPE]

1726 [11th July or thereabouts] Louis Henri, Duke of Bourbon [<=1723] is replaced de facto as First Minister of France by Cardinal Anne-Hercule de Fleury [Wikipedia biography]. [THREAD = THE SHAPING OF WW1 EUROPE]

1727 Andrew Schalch [1722<=1744] switches production from Borgard-pattern barrel reinforcement [<=1712] to Armstrong-pattern [<=1721], [THREAD = WW1 ARTILLERY]

1727 [17th May] Upon the death of Catherine I of Russia [<=1725] her titles pass to the grandson of her late husband by his first wife as Peter II of Russia [Wikipedia biography=>1730], [THREAD = THE SHAPING OF WW1 EUROPE]

1727 [22nd June] Upon the death of George I of Great Britain and Ireland, Elector of Hanover [<=1726] his titles pass to his son George Augustus as George II of Great Britain and Ireland, Elector of Hanover [Wikipedia biography]=>1743]. By the same token, The Princess of Wales' Own Regiment of Horse [<=1715] now has to be retitled as The Queen's Own Regiment of Horse [=>1746], [THREAD = THE SHAPING OF WW1 EUROPE]

1728 Automation, Control, and Artificial Intelligence [XII - Industrial Automation (Falcon)]: [Continued from 1725 (Bouchon)] The textile engineer Jean-Baptiste Falcon [no convenient biography=>1801 (Jacquard)] improves the performance of Bouchon's [1725<=1801] pre-programmed loom by replacing the punched tape with an endless loop of punched cards strung together by cord [sub-thread continues at 1738 (Vaucanson) ...], [THREAD = WW1 CYBERNETICS, COMPUTATION, AND FIRE CONTROL]

1728 John Hanbury [1725<=1734] and John Payne [no convenient biography] are awarded a patent for a rolling mill in which both the upper and lower rollers are powered, thus eliminating the sort of scuffing and dragging of the product which has hitherto plagued idler roller systems. [THREAD = THE INDUSTRIAL REVOLUTION]

1729 [27th March] Upon the death of Leopold of Lorraine [<=1708] his titles pass to his son as Francis I of Lorraine (Archduke of Austria) 1745 (Holy Roman Emperor) 1745 [1708<=1737], [THREAD = THE SHAPING OF WW1 EUROPE]

1729 [4th August] A son is born to Louis XV of France [1723<=1737] and his consort Marie Leszczyńska [Wikipedia biography] and named Louis, Dauphin of France [Wikipedia biography=>1765], [THREAD = THE SHAPING OF WW1 EUROPE]

1730 [29th January] Upon the death of Peter II of Russia [<=1727] his titles pass to his aunt [?] Anna [Wikipedia biography=>1740], [THREAD = THE SHAPING OF WW1 EUROPE]

1731 The British inventor Stephen Gray [Wikipedia biography], who has for several decades been carrying out some of the very first empirical investigations of electrical phenomena, demonstrates that an electrical charge will readily conduct itself away from the place where it has been generated. Gray experiments with the transfer of
electrostatic charge along glass and metal rods, fishing poles, pokers, chains of people, thin brass wire, and silken thread, and cleverly makes the distant arrival of the charge visible by having it electrostatically attract slips of foil or paper. His longest successful transmission is 886 feet along a length of cord suspended by silk threads. [THREAD = WW1 TELECOMMUNICATIONS]

1731 [9th April] The Jenkins’ Ear Incident: The Spanish man-of-war La Isabella stops the British merchant ship Rebecca off the Florida coast on suspicion of carrying contraband. In the ensuing exchange of hostile words the Spanish captain cuts off the ear of the Rebecca’s captain, one Robert Jenkins [Wikipedia biography] [continues 1739 (War of Jenkins’ Ear) ...], [THREAD = THE SHAPING OF WW1 EUROPE]

1731 [7th August] The Prussian 5th Dronger-Regiment (<=1717) is retitled the 5th Dronger-Regiment (Bayreuth-Dragoner) (=>1745 (Battle of Hohenfriedberg)). [THREAD = THE WW1 ARMIES]

1732 Edward Allgood (<=1681) now runs a successful business with his sons Thomas Allgood II [no convenient biography>=1761] and Edward Allgood II [no convenient biography] at Trosnant, Pontypool, making Japanned goods. [THREAD = THE SHAPING OF WW1 EUROPE]

1733 Having inherited his father's fortune in 1731, and capitalising upon what he has been learning at the Coalbrookdale Ironworks (1717<=1740), Thomas Goldney III (1717<=1750) invests in a new ironworks development at Willey, Shropshire [coordinates]. [THREAD = THE INDUSTRIAL REVOLUTION]

1733 [11th August] The War of the Polish Succession, 1733-1738: This war is fought between those European states (primarily Russia and Austria) approving the pro-Habsburg Augustus III [Wikipedia biography=>1738] as King of Poland and those other states (primarily France and Spain) who would prefer the return of the anti-Habsburg Stanislaw Leszczyński (1706<=1737). The key events are ...

The Russian Occupation of Poland, 1733; The French Occupation of Lorraine, 1733; The Treaty of Vienna, 1738

The overall outcome is a victory for the Holy Roman Emperor, Archduke Charles VI of Austria (1718<=1737) and the pro-Habsburgs. The war is noteworthy in the present context simply as one of the many wars which are helping to shape the world as it will stand when it finally goes to war in 1914. More specifically it finally brings long-coveted Lorraine under French control. [THREAD = THE SHAPING OF WW1 EUROPE]

1733 [13th October] The French Occupation of Lorraine: This land invasion takes place as part of the War of the Polish Succession [<=11th August]. The outcome is a scarcely contested French victory in Lorraine itself, but the gathering of strong pro-Habsburg forces along the Rhine to the east and north-east. [THREAD = THE SHAPING OF WW1 EUROPE]

1734 [14th June] Upon the death of the Pontypool iron-master John Hanbury (<=1728) his business empire passes to his widow Bridget Hanbury [no convenient biography>=1741]. [THREAD = THE INDUSTRIAL REVOLUTION]

1735 [late in the year] The Austro-Russo-Turkish War, 1735-1739: This war is fought for control of the Crimean Peninsular and the Black Sea between Russia, the Cossack Hetmanate, and (from 1737) Austria, against the Ottoman Empire and the Crimean Khanate. Little will be gained by any participant. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE HABSBURGS BECOME HABSBURG-LORRAINES **********
The marriage takes place in Vienna of Francis I of Lorraine (Archduke of Austria) and (Archduchess [Disputed]) Maria-Theresa of Austria, daughter of the Holy Roman Emperor, Archduke Charles VI of Austria. The marriage is noteworthy in the present context because the French are predictably appalled at the prospect of having a new and more dynamic Habsburg presence on its north-eastern doorstep. [THREAD = THE SHAPING OF WW1 EUROPE]

The 100-gun ship-of-the-line HMS Victory (1737) is launched at Portsmouth Dockyard, and fitted out with its stockpiled mix of Borgard and Armstrong-pattern brass guns. [THREAD = THE WW1 SURFACE NAVIES]

Charles Gwynn founds Britain's second tinplating works at Kidwelly, Carmarthenshire. [THREAD = THE INDUSTRIAL REVOLUTION]

LORRAINE PROMISED TO THE FRENCH

Francis I of Lorraine (Archduke of Austria) is persuaded by Louis XV of France to cede Lorraine to Stanislaw Lesczczyński in exchange for the duchy of Tuscany and on the understanding that it will pass to France upon Lesczczyński's eventual death. The deal will be formalised by the Treaty of Vienna.

LORRAINE IN WW1: It is impossible to unravel the causes of WW1 [nor, indeed, of WW2] without giving detailed consideration to Lorraine, politically, geographically, militarily, and - above all - psychologically. As previously side-noted, said history begins in the 9th century as the history of Lotharingen. It then spent most of the ensuing 900 years as a duchy bound to the Holy Roman Empire, and apart from short periods of wartime occupation will only become part of the French "Motherland" when Lesczczyński dies in 1766. It will then be annexed by Prussia after their victory in the Franco-Prussian War, and this annexation is one of the textbook causes of WW1.

RESEARCH ISSUE - MOTHERLANDS AND FATHERLANDS AND WHY WE SO READILY DIE TO PROTECT THEM: Science has no final explanation for the phenomenon of Motherlands and Fatherlands other than to list them as common correlates of territorial behaviour in Humankind. By contrast, the study of territoriality in non-human species is far better established, having grown popular in the closing decades of the 19th century [e.g., 1882 (George Romanes); 1894 (Conwy Lloyd Morgan)]. We shall be returning to this issue in detail in due course, not least when dealing with Wilfred Owen's famous "Dulce et Decorum Est".

Automation, Control, and Artificial Intelligence [XIII - Automata (Vaucanson Again)]: The French engineer Jacques de Vaucanson exhibits a life-sized lute-playing automaton figure to the French Académie des Sciences, who praise him for the machine's detail. Later in the year he adds (famously, because it breathes) a Flute Player, a Tambourine Player, and (famously, because it poos) a Digesting Duck, all attracting considerable public interest.

JUST FOR AMUSEMENT: Here, in what has to be termed an example of a meta-automaton, is a modern automaton showing a mechanised Vaucanson servicing his mechanical duck - click here.

The textiles engineer John Kay of Walmersley invents the "flying shuttle". Unfortunately by doubling the speed of weaving the
new invention creates a backlog in the spinning industry. [THREAD = THE INDUSTRIAL REVOLUTION]

1738 Having continually improved the Baptist Mills Brass Works [<=1709] since the departure of Abraham Darby I [<=1709], Nehemiah Champion [no convenient biography] and his son William Champion [Wikipedia biography] patent an improved process for the smelting of zinc from calamine ore by distillation. [THREAD = THE INDUSTRIAL REVOLUTION]

1738 [18th November] The Treaty of Vienna: This treaty brings the War of the Polish Succession [<=1733] to a close. The main provisions are (a) that Stanisław Leszczyński [1737<=1766] recognises Augustus III [<=1733] as King of Poland (taking the Duchy of Lorraine by way of compensation), and (b) that Francis I of Lorraine (Archduke of Austria) 1740 (Holy Roman Emperor) 1745 [<=1737] becomes Francis I of Tuscany (Archduke of Austria) 1740 (Holy Roman Emperor) 1745 [=>1740 (26th October)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1739 [23rd October] The War of the Austrian Succession, [1739]-1740-1748: This eight-year war is fought between those European states - notably Britain, Russia, the Dutch Republic, Hanover, and Saxony - approving (Archduchess [Disputed]) 1740 Maria Theresa of Austria [1737<=1740] as the legitimate Habsburg empress and those others - France, Prussia, Spain, Bavaria (1741-1745), Saxony (1741-1742), Sicily, Naples, Genoa, and Sweden (1741-1743) - who do not (although Prussia's real aim seems to have been to wrest the resource-rich province of Silesia [= astride the modern Czech-Polish border] from the Habsburgs). The war will consist of a number of annual campaigns with important encounters both at land and at sea, as follows ...

The Jenkins' Ear Incident, 1731 [British casus belli]; The War of Jenkins' Ear, 1739-1748; The Prussian Invasion of Silesia, 1740; The Battle of Mollwitz, 1741; The Battle of Prague, 1741; The Battle of Chotusitz, 1742; The Battle of Dettingen, 1743; The Battle of Fontenoy, 1745; The Battle of Hohenfriedberg, 1745; The Battle of Kesselsdorf, 1745; The Battle of Rocoux, 1746; The Battle of Cape Finisterre, 1747; The Battle of Bergen ap Zoom, 1747; The Treaty of Aix-la-Chapelle, 1748

The war is noteworthy in the present context for elevating Prussia to the world stage. [THREAD = THE SHAPING OF WW1 EUROPE]

1'ASIDE: We have dated this war from 1739 because we have included the War of Jenkins' Ear as a precursor of the War of the Austrian Succession. This is for convenience's sake because the Holy Roman Emperor, Archduke Charles VI of Austria did not actually die until 20th October 1740 and hostilities on the European mainland did not start until the Prussian Invasion of Silesia on 16th December 1740.

1739 [3rd November] The War of Jenkins' Ear, 1739-1748: Having pressed unsuccessfully for a Spanish apology for the earlier Jenkins' Ear incident [<=1731], Britain declares war on Spain. The war will shade into the broader War of the Austrian Succession in late 1740 and will be brought to a close by the 1748 Treaty of Aix-la-Chapelle [=>], [THREAD = THE SHAPING OF WW1 EUROPE]

********** "RULE BRITANNIA" STOPS THE SHOW **********

1739 [20th-22nd November] The Battle of Portobello: This battle is fought as part of the War of Jenkins' Ear [<=3rd November] between a naval task-force under Edward Vernon [Wikipedia biography] and the Spanish garrison at Portobello, Panama, under Francisco Javier de la Vega [no convenient biography]. The outcome is a much-celebrated-back-home British victory. [THREAD = THE SHAPING OF WW1 EUROPE]

********** THE BLACK WATCH ARE BORN **********
1740 [Continued from 1725] **John Lindsay, 20th Earl of Crawford** [Wikipedia biography] consolidates **George Wade**'s separate Highland Watch companies into "**Crawford's Regiment of Foot**" [=1751 (42nd (Black Watch) Regiment of Foot)]. [THREAD = THE WW1 ARMIES]

**THE BLACK WATCH IN WW1**: The 1st Battalion, The Black Watch, was part of the initial response of the B.E.F. and duly took part in the Battle of Mons [=1914 (23rd August)]. For other involvement see the Battle of Givenchy [1914 (18th December)] and follow the onward pointers from there. See also the Black Watch Museum website.

1740? Working at the **Coalbrookdale Ironworks** (1733<=1766) **Abraham Darby II** [Grace's Guide biography=1757] devises a coke-fuelled process for finery forging (his father having done the same for feedstock smelting) [=1709 (ASIDE)]. [THREAD = THE INDUSTRIAL REVOLUTION]

1740 The British locksmith **Benjamin Huntsman** [Wikipedia biography>=1770] invents a technique for producing "crucible steel", that is to say, molten steel to a level of purity and in sufficient volume to be cast in single large ingots or mouldings. [THREAD = WW1 ARTILLERY]

1740 Following the example of Robert Baker, Martin Meylin, and the like [=1719], the American gunsmith **Jacob Dickert** [Kentucky Rifle Association biography] and various other backwoods gunsmiths continue to turn out the long rifle [=1719], which gradually becomes known generically as the "Kentucky Rifle". [THREAD = WW1 SMALL ARMS]

**ASIDE**: Carl Hittleman's 1955 movie "Kentucky Rifle" (Howco Productions) features this weapon in many scenes [YouTube full movie]. There are also many helpful technical demonstrations available online (recommended including what to do with a misfire).

1740 [5th April] **Recruiting in Virginia Colony** **William Gooch** [Wikipedia biography] establishes **Gooch's American Regiment** [=1740 (10th July)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1740 [31st May] **Lawrence** [older half-brother of George] **Washington** [Wikipedia biography>=1741 (13th March)] is appointed Colonel of the 1st Battalion of **William Gooch's American Regiment** [=1739]. [THREAD = THE SHAPING OF WW1 EUROPE]

1740 [31st May] Upon the death of **Frederick William I of Prussia** [=1726] his throne passes to his son **Frederick II** [Wikipedia biography=116th December], who then sets out on a 46-year reign which will earn him the informal title **Friedrich der Grosse** [= "Frederick the Great"]. His reign is noteworthy in the present context for a gradual weakening of Austrian/Habsburg power in favour of Prussian/Hohenzollern power, not least by the acquisition of Silesia, formally ceded by the Treaty of Aix-la-Chapelle [=1748]. [THREAD = THE SHAPING OF WW1 EUROPE]

1740 [17th September] **Anson's Expedition and Circumnavigation**: Encouraged by the success at Portobello [=1739], the Admiralty assemble a squadron under **George Anson (1st Baron Anson)** [Wikipedia biography] to attack Spanish possessions on the western coast of South America. The expedition sets off with six warships led by **HMS Centurion** [Wikipedia shipography], accompanied by two merchant ships carrying stores, and rounds Cape Horn the following March. They spend 14 months playing cat-and-mouse with a pursuing Spanish squadron and taking the occasional prize ship, before turning westward on 6th May 1742 to cross the Pacific. They then capture the richly laden Acapulco galleon on 19th April 1743 before arriving back in Britain on 15th June 1744, very rich men. [THREAD = THE SHAPING OF WW1 EUROPE]
1740 [26th October] Upon the death of the Holy Roman Emperor, Archduke Charles VI of Austria [<=1737] his hereditary titles pass (in Austrian eyes at least) to his daughter Maria-Theresa of Austria [1739<=1780] and her husband Francis I of Tuscany [1738<=1745]. His elected title as Holy Roman Emperor will remain open until Charles VII Albert, Elector of Bavaria [1726<=1741] obtains the necessary electoral support [=>1742 (12th February)]. [THREAD = THE SHAPING OF WW1 EUROPE]

1740 [28th October] Upon the death of Anna of Russia [<=1730] her titles pass (under Regency) to her one-year-old nephew as Ivan VI of Russia [Wikipedia biography=>1741]. [THREAD = THE SHAPING OF WW1 EUROPE]

1740 [16th December] The Prussian Invasion of Silesia: This campaign of economic conquest is the first major adventure of the recently ascended Frederick II (the Great) of Prussia [31st May<=1741] and begins the land campaigns of the War of the Austrian Succession [<=1739]. [THREAD = THE SHAPING OF WW1 EUROPE]


1741 [10th April] The Battle of Mollwitz: This battle is fought as part of the War of the Austrian Succession [<=1739] between a Prussian Army under Kurt von Schwerin [Wikipedia biography] (but with Frederick II (the Great) of Prussia [1740<=1742] also on the field) and an Austrian Army led by Marshall Wilhelm von Neipperg [Wikipedia biography]. The outcome is a Prussian victory, thanks largely to the greater discipline of the Prussians in keeping in formation under fire. The battle is noteworthy in the present context for convincing Frederick of the need for adequate and more mobile artillery. [THREAD = WW1 ARTILLERY]

**RESEARCH ISSUE - TRAINING:** It is intuitively likely that Friedrich's father's love of parade ground perfection [<=1726] contributed in some way to his troops' ability to retain discipline under fire. However, there is no detailed scientific explanation of what it means to "keep one's head", nor of how to train for it. Certainly most 21st century training regimes involve live-fire experience [browse YouTube for examples].
1741 [28th May] **The Treaty of Nymphenburg**: This treaty allies Charles VII Albert, Elector of Bavaria (Holy Roman Emperor)\(^{1742}\) with France and Spain against Austria. [THREAD = THE SHAPING OF WW1 EUROPE]


1741 [19th November] **The Battle of Prague**: This battle takes place as part of the War of the Austrian Succession [<=1739], between a French/Saxon/Bavarian army under the German-born French general Maurice of Saxony [Wikipedia biography=>1745] and Victor-François, 2nd Duke de Broglie [Wikipedia biography=>1759] and the Habsburg garrison at Prague. The outcome is a victory for the French/Saxons/Bavarians. The battle is noteworthy in the present context for demonstrating yet again the value of the surprise attack. Charles VII Albert, Elector of Bavaria (Holy Roman Emperor)\(^{1742}\) [28th May<=1742] capitalises upon this victory by raising a claim to the throne of Bavaria on 9th December. [THREAD = THE SHAPING OF WW1 EUROPE]

1741 [6th December] Ivan VI of Russia [<=1740] is deposed and imprisoned in a bloodless coup d'état by Elizabeth [Wikipedia biography=>1743], the oldest surviving daughter of Peter I (the Great) of Russia [<=1725]. [THREAD = THE SHAPING OF WW1 EUROPE]

1742 The British mathematician-engineer Benjamin Robins [Wikipedia biography] publishes a treatise entitled "New Principles in Gunnery", in which, amongst other topics, he notes the advantages of rifling. [<=1719] [THREADS = WW1 ARTILLERY and WW1 SMALL ARMS]

1742 [24th January] After two years of politicking Charles VII Albert, Elector of Bavaria [1741<=1745] is finally crowned Holy Roman Emperor. [THREAD = THE SHAPING OF WW1 EUROPE]

1742 [17th May] **The Battle of Chotusitz**: This battle is fought as part of the Bohemian operations of the War of the Austrian Succession [<=1739] between an Austrian army under Prince Charles Alexander of Lorraine [Wikipedia biography=>1745] and a Prussian army under Frederick II (the Great) of Prussia [1741<=1743]. The outcome is a Prussian victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1742 [11th June] **The Treaty of Breslau**: This treaty between Prussia and Austria brings the Silesian operations of the War of the Austrian Succession [<=1739] to a close. [THREAD = THE SHAPING OF WW1 EUROPE]

1743 [27th June] **The Battle of Dettingen**: This battle is fought as part of the War of the Austrian Succession [<=1739] between a French Army under Adrien Maurice, 3rd Duke of Noailles [Wikipedia biography] and a pro-Habsburg confederation of Austrian, Hanoverian, and British armies under George II of Great Britain and Ireland, Elector of Hanover [1727<=1751]. The outcome is a defeat for the French. The battle is noteworthy in the present context (a) for being the last appearance upon a battlefield of a British monarch in person [Turner (1956) informs us that London underwriters were offering odds of 4:1 on his being killed in action], (b) for earning the 3rd Regiment of Foot [1688<=1751] the cognomen "the Buffs", this being the colour of their uniform trimmings [image], (c) as the first battle where all three British Guards regiments - the Coldstream Guards [1695<=1751], the 1st Regiment of Foot Guards [1695<=1751], and the Scottish Regiment of Foot Guards [1695<=1751] - fight as a single "Brigade of Guards", and (d) for the gentlemanly treatment afforded by both sides to each other's wounded. [THREAD = THE SHAPING OF WW1 EUROPE]
ASIDE - WORDS OF ENCOURAGEMENT BEFORE BATTLE: Turner (1956) passes on the following ...

"It was a day in which commanders were expected to address a few rousing words to their men before throwing them into battle. Sir Andrew Agnew [Wikipedia biography] judged it sufficient to say to the Royal Scots Fusiliers [=1751 (21st Regiment of Foot)]: 'My lads, you see they loons upon yon brae-face. If ye dinna kill them, they'll kill you.'" (p68). Nuff said.

WAR ART: Check out John Wootton's (1743) "George II at Dettingen". WAR MUSIC: Check out Handel's (1743) "Dettingen Anthems".

RESEARCH ISSUE - CARING FOR WOUNDED ENEMY: This is a sensitive topic for there are many instances where wounded fighters - one's own or the enemy's - are simply executed on the spot. We have already suggested [=1007BCE (Battle of Mount Gilboa)] that battlefield euthanasia may well be commonplace between comrades, let alone enemies1.

1743 [??th September] Frederick II (the Great) of Prussia [1742<=1745] introduces the Prussian army to the Herbstübung [= "autumn exercise"], an annual autumn manoeuvres event designed to field test new weapons and tactics. [THREAD = THE WW1 ARMIES]

1743 [7th August] The Treaty of Åbo: By this treaty Sweden agrees to cede eastern Finland to Elizabeth of Russia [1741<=1762]. [THREAD = THE SHAPING OF WW1 EUROPE]


1744 [4th October] HMS Victory (1737) [=1737] is lost with all 1150 hands in a storm, along with her 100 Andrew Schalch [1722<=1770] brass cannons. [THREAD = THE SHAPING OF WW1 EUROPE]

ASIDE: Odyssey Marine Exploration [corporate homepage] discovered the wreck in 2008 and spent nine months on archaeological salvage, recovering two of the ship's cannon. For the fuller story here see Trollope (op. cit. [=1712]). Odyssey's long-term ambition is to raise the entire wreck.

1745 Automation, Control, and Artificial Intelligence [XIV - Exploring the Possibilities (La Mettrie)]: [Continued from 1738 (Vaucanson)] Having carefully observed the automaton-craze presently sweeping Europe, the French physician Julien Offray de La Mettrie [Wikipedia biography] publishes a monograph on the "materialist" origins of life under the title "L'Homme Machine" [in English as "Man a Machine"; full text online]. Please see the Companion Resource for more on this work in a broad philosophical context [sub-thread continues at next entry ...]. [THREAD = WW1 CYBERNETICS, COMPUTATION, AND FIRE CONTROL]

1745 Automation, Control, and Artificial Intelligence [XV - Industrial Automation (Vaucanson and Lee)]: [Continued from preceding entry] Drawing on his experience with recreational automata Vaucanson [=1738] now reveals a more practical application of his technological expertise, namely further improvements in loom automation. In Britain, meanwhile, the millwright Edmund Lee [Wikipedia biography] devises a labour-saving device for automatically turning windmill sails into the wind. Known as the
"fan-tail", this mechanism consists of a small rotor mounted at the rear of the mill cap and set at a horizontal right angle to the main sails. As long as the wind strikes the main sails directly, the fan-tail stands idle. When the wind veers to one side or the other, however, the fan-tail starts to rotate one way or the other, and drives gears which crank the mill cap back into the wind again [sub-thread continues at 1768 (Jacquet-Droz) ...]. [THREAD = WW1 CYBERNETICS, COMPUTATION, AND FIRE CONTROL] [THREAD = THE INDUSTRIAL REVOLUTION]

1745 The British physician William Watson [RCP Munks Roll biography] demonstrates to the Royal Society that the spark from two wires connected to a Leyden Jar battery can ignite a charge of gunpowder, thus paving the way for the electrical firing of assault and demolition charges. [THREAD = WW1 MILITARY ENGINEERING]

**ASIDE - THE REMOTE DETONATION OF EXPLOSIVES:** We need to distinguish here between the detonation of (1) assault charges, which are light demolition charges carried into battle, but heavier than grenades, and (2) of mines, which are heavier still (often significantly so), and therefore take much longer to get into position. Both forms of charge have traditionally been fired using medium-to-long burn igniferous fuses [<=1596 (ASIDE)], whereas grenades are fired using short-burn igniferous fuses.


1745 [11th May] The Battle of Fontenoy: This battle is fought as part of the War of the Austrian Succession [<=1739] between a Habsburg Confederation army under Prince William Augustus, Duke of Cumberland [Wikipedia biography] and Prince Karl August of Waldeck [Wikipedia biography] and a French army under Louis XV of France [1737<=>1749] and Maurice of Saxony [1741<=>1746]. The outcome is a decisive French victory followed by major knock-on losses in the Austrian Netherlands. [THREAD = THE SHAPING OF WW1 EUROPE]

1745 [4th June] The Battle of Hohenfriedberg: This battle is fought as part of the War of the Austrian Succession [<=1739] between an Austro-Saxon army under Prince Charles Alexander of Lorraine [1742<=>1746] and a Prussian army under Frederick II (the Great) of Prussia [1743<=>14th December] personally. The outcome is a decisive victory for the Prussians thanks to a timely cavalry charge by the 5th (Bayreuth) Dragoner-Regiment [1731<=>1806] under Frederick von Gessler [Wikipedia biography]. This cavalry charge is noteworthy in the present context as a model of on-the-spot decision-making on the part of the commander of an individual unit. [THREAD = THE SHAPING OF WW1 EUROPE]

**WAR MUSIC:** The celebratory "Hohenfriedberger March" - [YouTube rendition] - is attributed to Frederick II personally.

**RESEARCH ISSUE - EXPLICIT VERSUS IMPLICIT ORDERS:** There are two sides to showing initiative on the battlefield, or in deviating in any way from your detailed instructions. In some circumstances such displays of initiative are just what is needed and may even help win the day. In other circumstances they can be anything between mildly disruptive and downright catastrophic. Individual commanders, therefore, need to know very precisely what their "terms of engagement" are, and realise that if they deviate from these they will be leaving themselves open to either promotion or disgrace.

1745 [23rd July] The Jacobite Uprising [1745-1746]: [Compare ditto 1708 and 1715] In pursuit of his father's claim to the crown of Great Britain and Ireland, Charles Edward Stuart [1743<=>1746] lands in Scotland and starts to raise support. He has James III of Great
Britain and Ireland [Claimed] [<=1743] declared James VIII of Scotland on 18th September in Edinburgh and then convenes an illegal (in the eyes of the English) Scottish Parliament. A shipment of French weapons then arrives in mid-October and on 9th November Charles leads his army southward into England. They get as far as Derby but fearing gathering English resistance return to Scotland in December to overwinter [continues 1746 (16th April) ...]. [THREAD = THE SHAPING OF WW1 EUROPE]

1745 [14th December] The Battle of Kesseldorf: This battle is fought as part of the War of the Austrian Succession [<=1739] between a Prussian army under Frederick II (the Great) of Prussia [4th June<=1756] and Leopold I of Anhalt-Dessau [<=1726] and a Saxon/Austrian army under Frederick, Count Rutowsky [Wikipedia biography]. The outcome is a Prussian victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1746 A consortium of Quaker businessmen led by an ageing Nehemiah Champion [<=1738] starts construction on a new copper and zinc smelting works at Warmley, Bristol. [THREAD = THE INDUSTRIAL REVOLUTION]

ASIDE: By the mid-1760s Warmley was employing 2000 people. It was a model factory for two reasons, one the cause for congratulation, the other quite the opposite. On the positive side it routinely taught the world of manufacturing new tricks. For example it reused the water from its many waterwheels by pumping it back upstream by steam power. On the downside, however, it was also an early example of how to cash in on greed, going out of business in 1768 with £200,000 of unsecured debt.

1746 [16th April] The Battle of Culloden: [Continues from 1645 (23rd July)] This battle is fought as part of the 1645 Jacobite Uprising [<=] between a crown army under Prince William Augustus, Duke of Cumberland [1745<=1757] and a Jacobite/French army under Charles Edward Stuart [<=1745]. The outcome is a decisive crown victory with massively disproportionate Jacobite/French casualties. Charles flees the battlefield and seeks sanctuary in France. [THREAD = THE SHAPING OF WW1 EUROPE]

1746 [25th June] The Carnatic Campaigns, 1746-1763: These campaigns are fought as part of broader wars between the British and French East India Companies over rights to influence and trade in the Indian Subcontinent. The campaigns will rumble on until (and then throughout) the Seven Years War [=>1756] and, taken as a whole, will result in a conclusive victory for the British. [THREAD = THE SHAPING OF WW1 EUROPE]

1746 [9th July] Upon the death of Philip V of Spain [<=1720] his titles pass to his sole surviving son Ferdinand VI [Wikipedia biography]. [THREAD = THE SHAPING OF WW1 EUROPE]

1746 [11th October] The Battle of Rocoux: This battle is fought as part of the Austrian Netherlands operations of the War of the Austrian Succession [<=1739] between an Alliance army under Prince Charles Alexander of Lorraine [1745<=1757] and Prince Karl August of Waldeck [<=1745] and a French army under Maurice of Saxony [<=1745]. The outcome is a decisive French victory, leading to the loss of Liège and the fragmentation of Austrian control in the region for the rest of the war. [THREAD = THE SHAPING OF WW1 EUROPE]

1746 [4th December] Ferdinand VI of Spain [9th July<=1759] appoints José de Carvajal [Wikipedia biography] as his First Secretary and charges him with maintaining a policy of Spanish neutrality as far as possible. [THREAD = THE SHAPING OF WW1 EUROPE]
1747 Around this time a more reliable "single fire" mortar fuse starts to appear, using built-in powder-filled wooden tubes of predetermined burn time. [THREAD = WW1 ARTILLERY]

ASIDE: Compare the "double fire" system [=1689 (Thomas Binning)]. The single-fire system is the safer of the two methods because it is not possible to suffer a misfire under an already ignited projectile.

1747 Around this time Lord Peterborough's Regiment of Horse [=1685] is retitled 2nd Queen's Regiment of Dragoon Guards. [THREAD = THE WW1 ARMIES]

1747 [3rd May] The First Battle of Cape Finisterre: This battle is fought as part of the War of the Austrian Succession [=1739] between a British battle-fleet under George Anson (1st Baron Anson)\textsuperscript{1747} [1740<=1749] and an escorted French convoy under Jacques-Pierre de la Jonquière [Wikipedia biography]. Because all such encounters are essentially unequal contests the outcome is a predictable British victory, in which all four of the escorting French men-of-war are captured. [THREAD = THE SHAPING OF WW1 EUROPE]

1747 [14th July-17th September] The Siege of Bergen ap Zoom: This two-month siege is fought out as part of the Austrian Netherlands operations of the War of the Austrian Succession [=1739] between a besieging French army under Ulrich Woldemar, Count of Lowendal [Wikipedia biography] and the Dutch/British garrison at Bergen ap Zoom. The outcome is a much-trumpeted French victory, noteworthy in the present context for the near-annihilation of two battalions - 1450 men - of the Scottish Brigade, who suffer 75% casualties in the street-to-street fighting during the final assault. [THREAD = THE SHAPING OF WW1 EUROPE]

1747 [25th October] The Second Battle of Cape Finisterre: This battle is fought as part of the War of the Austrian Succession [=1739] between a British battle-fleet under Admiral Sir Edward Hawke [Wikipedia biography] and an escorted French convoy under Admiral Henri-François des Herbiers [Wikipedia biography]. Because all such encounters are essentially unequal contests the outcome is a predictable British victory, in which six escorting French men-of-war are captured. The engagement is noteworthy in the present context for enforcing the blockade so tightly that it brings the French to the negotiating table [=1748 (24th April)]. [THREAD = THE WW1 SURFACE NAVIES]

1748 [??th January] With 20 years' field experience under his belt Stringer Lawrence [Wikipedia biography] is appointed Commander-in-Chief of the East India Company's private army, earning him the nickname "Father of the Indian Army". [THREAD = THE SHAPING OF WW1 EUROPE]

1748 [24th April] The Treaty of Aix-la-Chapelle: Following the decisive victory at the Second Battle of Cape Finisterre [=1747 (25th October)] a peace congress is held at Aix-la-Chapelle (= modern Aachen, Germany) to bring the War of the Austrian Succession [=1739] to an end. The resulting Treaty will be formally ratified on 18th October this year. In the present context it is not necessary to list the detailed provisions, merely to note (a) that the Prussians successfully take Silesia from Austria, and (b) that the peace will be remarkably short-lived. [THREAD = THE SHAPING OF WW1 EUROPE]

1749 Around this time a Welsh entrepreneur named John Griffiths\textsuperscript{1} [no convenient biography] starts to develop a combination forge, rolling mill, and tinplating works at Ponthir, Caerleon. [THREAD = THE INDUSTRIAL REVOLUTION]

\textsuperscript{1}ASIDE: For a longer history of the Ponthir works see Kennerley (1980 online).
1749 [15th February] The French Army consolidate its experienced grenadiers into a single regiment, the *Grenadiers de France*, based at Arras. [THREAD = THE WW1 ARMIES]

1749 The British admiral George Anson, 1st Baron Anson helps Parliament draft an Act entitled "The Government of His Majesty's Ships, Vessels, and Forces by Sea", in which is set down the disciplinary code for the Royal Navy. The Act will remain in force with only minor amendments until replaced by Lord Paget's Naval Discipline Act [=>1860]. [THREAD = THE WW1 SURFACE NAVIES]

1750 An obscure personage named only "Mr. Kettle" is reported to be operating a foundry at Sirhowy, South Wales. At much the same time Thomas Goldney III invests in a lead/copper/zinc mine at Gronant, Flintshire. [THREAD = THE INDUSTRIAL REVOLUTION]

**ASIDE - SIRHOWY VERSUS TREDGAR:** Sirhowy is nowadays the north-eastern suburb of the valleys town of Tredegar. Both places began as little more than isolated farmsteads, but grew with their industrialisation, the latter soon absorbing the former. Scriveron's (1841) "A Comprehensive History of the Iron Trade" [full text online at http://books.google.co.uk/books] contains many useful details.

1750 Haselrig's Regiment of Cuirassiers is renamed The Royal Horse Guards (the Blues) [=>1751]. [THREAD = THE WW1 ARMIES]

1750 The French military engineer Marc René, Marquis de Montalembert sets up three *Fonderies de Canons* at Ruelle-sur-Touvre, Forge Neuve, Javerlhac, and L'Ile d'Indret, Nantes. [=>1781 (1st April)] [THREAD = WW1 ARTILLERY]

1750 As part of his famous experiments with the nature of lighting, the American writer, philosopher, and amateur scientist Benjamin Franklin succeeds in generating an electrical spark between two bare wires sealed inside a tightly wrapped twist of gunpowder, thereby exploding it. [THREAD = WW1 MILITARY ENGINEERING]

**ASIDE:** Franklin explained what he did in a letter to a correspondent of his, Sir Peter Collinson: "We do it this way: A small cartridge is filled with dry powder which is rammed in tightly enough to crush a few grams; two pointed brass wires are then placed init, one at each end so that their points are not further apart than half an inch at the centre of the cartridge, which is then placed in the circuit of the electric machine; when the communication is completed, the flame leaping from the point of one wire to that of the other, through the powder of the cartridge, fires it instantaneously" (quoted in Ilsley and Hooker, 1926 online, p2).

******* THE 1751 REGIMENTAL NUMBERING *******

1751 George II of Great Britain and Ireland, Elector of Hanover issues a Royal Warrant to reorganise his army with regimental numbering replacing the personal names of founders and colonels ...

**NOTE:** Between the date of original establishment (1685, say) and the 1751 renumbering exercise most regiments will have replaced their Colonels half a dozen times. With few exceptions the table below does NOT show these intervening events. The next major mobilisation will be in 1755 in readiness for the Seven Years War. The next major reorganisation will be in 1782, and the one after that in 1881.

CAVALRY REGIMENTS (ELITE AND CEREMONIAL)
The 1st (King's Own) Troop of Horse Guards [<=1661] remains as such [=>1788].
The 2nd (Queen's) Troop of Horse Guards [<=1659] remains as such [=>1788].

CAVALRY REGIMENTS (LINE, HEAVY)
The Queen's Regiment of Horse [<=1685] becomes the 1st (King's) Regiment of Dragoon Guards [=>1782].
The Earl of Peterborough's Regiment of Horse [<=1659] becomes the 2nd (Queen's Bays) Regiment of Dragoon Guards [=>1782].
The Earl of Plymouth's Regiment of Horse [<=1659] becomes the 3rd (Prince of Wales's) Regiment of Dragoon Guards [=>1782].
The Earl of Arran's Regiment of Cuirassiers [<=1665] becomes the 4th (Royal Irish) Regiment of Dragoon Guards [=>1782].
Lord Shrewsbury's Regiment of Horse [<=1665] becomes the 5th Regiment of Dragoon Guards [=>1782].
Lord Lumley's Regiment of Horse [<=1665] becomes the 6th (Carabiniers) Regiment of Dragoon Guards [=>1782].
Lord Cavendish's Regiment of Horse [<=1665] becomes the 7th (The Princess Royal's) Regiment of Dragoon Guards [=>1782].
Berkeley's Dragoons [<=1665] become the 4th Regiment of Dragoons [=>1788].

CAVALRY REGIMENTS (LINE, LIGHT)
The King's Own Royal Regiment of Dragoons [<=1683] becomes the 1st Royal Dragoons [=>1782].
The Royal Regiment of Scots Dragoons [<=1681] becomes the 2nd (Royal Scots Greys) Dragoons [=>1782].
The King's Own Regiment of Hussars [<=1665] becomes the 3rd (King's Own) Hussars [=>1782].
Princess Anne of Denmark's Regiment of Dragoons [<=1665] becomes the 4th (Queen's Own) Hussars [=>1782].
James Wynne's Regiment of Dragoons [<=1669] becomes the 5th (Royal Irish) Lancers [=>1782].
Sir Albert Cunningham's Regiment of Dragoons [<=1689] becomes the 6th (Inniskilling) Dragoons [=>1782].
The Queen's Own Regiment of Dragoons [<=1690] becomes the 7th (Queen's Own) Hussars [=>1782].
Henry Conyngham's Regiment of Dragoons [<=1693] becomes the 8th (King's Royal Irish) Hussars [=>1782].
Owen Wynne's Regiment of Dragoons [<=1693] becomes the 9th (Queen's Royal) Hussars [=>1782].
Richard Munden's Regiment of Dragoons [<=1695] becomes the 10th (Prince of Wales's Own Royal) Hussars [=>1782].
Philip Honeywood's Regiment of Dragoons [<=1695] becomes the 11th (Prince Albert's Own) Hussars [=>1782].
Phineas Bowles's Regiment of Dragoons [<=1715] becomes the 12th (Prince of Wales's) Royal Lancers [=>1782].

FOOT GUARDS REGIMENTS
The Scottish Regiment of Foot Guards [<=1743] remains as such [=>1782].
The 1st Regiment of Foot Guards [<=1743] remains as such [=>1782].
The 2nd (Coldstream) Regiment of Foot Guards [<=1743] remains as such [=>1782].

LINE INFANTRY REGIMENTS
Lord Orkney's Royal Regiment of Foot [<=1692] becomes the 1st (Royal) Regiment of Foot [=>1782].
The Earl of Peterborough's Regiment of Foot [<=1661] becomes the 2nd (Queen's Royal) Regiment of Foot [=>1782].
The Holland Regiment [<=1668] becomes the 3rd Regiment of Foot [=>1782].
The 2nd Tangier Regiment [<=1702] becomes the 4th (The King's Own) Regiment of Foot [=>1782].
Lloyd's Regiment of Foot [<=1689] becomes the 5th Regiment of Foot [=>1782].
Babington's Regiment of Foot [<=1689] becomes the 6th Regiment of Foot [=>1782].
The Royal Regiment of Fusileers \(\leq 1695\) becomes the 7th (Royal Fusiliers) Regiment of Foot \(\geq 1781\) (Battle of Cowpens).

The Princess of Denmark's Regiment of Foot \(\leq 1685\) becomes the 8th (Queen's) Regiment of Foot \(\geq 1782\).

Henry Cornewall's Regiment of Foot \(\leq 1685\) becomes the 9th Regiment of Foot \(\geq 1782\).

The Earl of Bath's Regiment of Foot \(\leq 1685\) becomes the 10th Regiment of Foot \(\geq 1759\).

The Duke of Beaufort's Musketeers \(\leq 1685\) becomes the 11th Regiment of Foot \(\geq 1782\).

The Duke of Norfolk's Regiment of Foot \(\leq 1702\), 25th Regiment of Foot \(\geq 1759\).

The Earl of Huntingdon's Regiment of Foot \(\leq 1685\) becomes the 13th Regiment of Foot \(\geq 1782\).

Sir Edward Hale's Regiment of Foot \(\leq 1685\) becomes the 14th Regiment of Foot \(\geq 1782\).

Sir William Clifton's Regiment of Foot \(\leq 1685\) becomes the 15th Regiment of Foot \(\geq 1782\).

Archibald Douglas's Regiment of Foot \(\leq 1688\) becomes the 16th Regiment of Foot \(\geq 1782\).

Solomon Richard's Regiment of Foot \(\leq 1688\) becomes the 17th Regiment of Foot \(\geq 1782\).

The Earl of Granard's Regiment of Foot \(\leq 1684\) becomes the 18th (Royal Irish) Regiment of Foot \(\geq 1782\).

Francis Lutterill's Regiment of Foot \(\leq 1688\) becomes the 19th Regiment of Foot \(\geq 1782\).

Sir Richard Peyton's Regiment of Foot \(\leq 1688\) becomes the 20th Regiment of Foot \(\geq 1782\).

The Royal North British Fusilier Regiment of Foot \(\leq 1713\) becomes the 21st (Royal North British Fusilier) Regiment of Foot \(\geq 1887\).

The Duke of Norfolk's Regiment of Foot \(\leq 1689\) becomes the 22nd Regiment of Foot \(\geq 1782\).

The Welch Regiment of Fusiliers \(\leq 1702\) becomes the 23rd (Royal Welch Fusiliers) Regiment of Foot \(\geq 1782\).

Sir Edward Derig's Regiment of Foot \(\leq 1684\) becomes the 24th Regiment of Foot \(\geq 1782\).

Lord Leven's Regiment of Foot \(\leq 1689\) becomes the 25th Regiment of Foot \(\geq 1759\).

The Earl of Angus's Regiment of Foot \(\leq 1689\) becomes the 26th Regiment of Foot \(\geq 1782\).

Zachariah Tiffin's Regiment of Foot \(\leq 1689\) becomes the 27th Regiment of Foot \(\geq 1782\).

Sir John Gibson's Regiment of Foot \(\leq 1694\) becomes the 28th Regiment of Foot \(\geq 1782\).

Farrington's Regiment of Foot \(\leq 1702\) becomes the 29th Regiment of Foot \(\geq 1770\).

Viscount Castleton's Regiment of Foot \(\leq 1689\) becomes the 30th Regiment of Foot \(\geq 1782\).

George Villiers' Regiment of Marines \(\leq 1702\) becomes the 31st Regiment of Foot \(\geq 1782\).

Edward Fox's Regiment of Marines \(\leq 1702\) becomes the 32nd Regiment of Foot \(\geq 1782\).

The Earl of Huntingdon's Regiment \(\leq 1702\) becomes the 33rd Regiment of Foot \(\geq 1782\).

Lord Lucas' Regiment of Foot \(\leq 1702\) becomes the 34th Regiment of Foot \(\geq 1782\).

The Earl of Donegall's Regiment of Foot \(\leq 1701\) becomes the 35th Regiment of Foot \(\geq 1782\).

Viscount Charlemont's Regiment of Foot \(\leq 1701\) becomes the 36th Regiment of Foot \(\geq 1782\).

Meredith's Regiment of Foot \(\leq 1702\) becomes the 37th Regiment of Foot \(\geq 1759\).

Lillington's Regiment of Foot \(\leq 1702\) becomes the 38th Regiment of Foot \(\geq 1782\).

Coote's Regiment of Foot \(\leq 1702\) becomes the 39th Regiment of Foot \(\geq 1782\).

Phillip's Regiment of Foot \(\leq 1717\) becomes the 40th Regiment of Foot \(\geq 1782\).

Edmund Fielding's Regiment of Foot \(\leq 1719\) becomes the 41st Regiment of Foot \(\geq 1782\).

Crawford's Regiment of Foot \(\leq 1740\) becomes the 42nd (Royal Highland) Regiment of Foot \(\geq 1763\).

Fowke's Regiment of Foot \(\leq 1741\) becomes the 43rd Regiment of Foot \(\geq 1782\).

Long's Regiment \(\leq 1741\) becomes the 44th Regiment of Foot \(\geq 1782\).

Houghton's Regiment \(\leq 1741\) becomes the 45th Regiment of Foot \(\geq 1782\).

John Price's Regiment \(\leq 1741\) becomes the 46th Regiment of Foot \(\geq 1782\).

Sir John Mordaunt's Regiment \(\leq 1741\) becomes the 47th Regiment of Foot \(\geq 1782\).

Cholmondeley's Regiment \(\leq 1741\) becomes the 48th Regiment of Foot \(\geq 1782\).

Trelawney's Regiment \(\leq 1744\) becomes the 49th Regiment of Foot \(\geq 1782\).

[THREAD = THE WWI ARMIES]

***** THE PRINCIPLES OF ELECTRICAL TELEGRAPHY STATED *****

1753 [17th February] Inspired by Stephen Gray's earlier demonstrations \(\leq 1731\), the British inventor Charles Marshall \[Wikipedia mention\] publishes a theoretical proposition of no little foresight, thus ...
be fixed in glass or Jewellers' cement to some firm body, both to prevent them from touching
the earth or any other non-electric, and from breaking from their own gravity." (Marshall,
1753, cited in Naughton, 2002.)

Marshall's proposed method of operating the telegraph is to place slips of paper bearing
the letters of the alphabet an eighth of an inch below suspended metallic balls at the
receiving station, which will be attracted to these balls as each wire is electrostatically
charged from the sending station. It then only remains for a human operator at the
receiving end to observe and record which letters move, and in which order, for the
message to have been successfully "telegraphed". [=>1794 (Claude Chappe)] [THREAD = WW1
TELECOMMUNICATIONS]

1753 In helping to establish the British Library, the British government pays £10,000 [at
least a million pounds in 2013 money] to the Harley Estate for the library accumulated during their
combined lifetimes by Robert Harley, 1st Lord of Oxford [Wikipedia biography] and his son
Edward Harley, 2nd Lord of Oxford [Wikipedia biography]. The collection includes
what are now known as the "Harleian Genealogies", a collection of genealogical
timelines of the Welsh kingdoms. [THREAD = THE SHAPING OF WW1 EUROPE]

1754 THE FRENCH AND INDIAN WAR, 1754-1763: This nine-year war takes place
between the colonial British forces in New England and the colonial French forces in
Ohio County, and in 1756 becomes a theatre within the broader Seven Years War [=1756
(18th May)]. It includes the following events ...

The Battle of Jumonville Glen, 1754; The Battle of Fort Necessity, 1754; The Braddock Campaign, 1755; The Forbes Expedition, 1758

The overall outcome of the war is slow progress for the British in the field, followed
by major gains politically at the Treaty of Paris [=1763 (10th February)]. [THREAD = THE SHAPING
OF WW1 EUROPE]

1754 [28th May/3rd July] The Battles of Jumonville Glen and Fort Necessity: These battles
are fought for control of the Ohio River Valley as part of the French and Indian War
biography][1755] and a force of French militia under Joseph Coulon de Jumonville
[Wikipedia biography]. The focus of the present operation is Fort Duquesne/Pitt [= modern
Pittsburgh], occupied by the French since 18th April. The engagement is brief and results
in the death of de Jumonville and nine of his men and the capture of the fort. This
engagement is noteworthy in the present context for the appearance of George
Washington on history's stage, and for doing so amidst a storm of controversy, it being
alleged that Washington's troops had butchered surrendering enemy. The French then
counter-attack under Louis Coulon de Jumonville [Wikipedia biography] on 3rd July at
nearby Fort Necessity and reoccupy the region. It will remain a French strategic
stronghold until the Forbes Expedition takes it for the British again four years later
[=>1758]. [THREAD = THE SHAPING OF WW1 EUROPE]

**********  THE 1755 MOBILISATION  **********

1755 [December] With war looming, the British authorise new infantry regiments as follows:
James Abercrombie [Wikipedia biography] Establishes the 50th [temporarily as 52nd] Regiment of
Foot [=1782], Robert Napier [Wikipedia biography] establishes the 51st [temporarily as 53rd]
Regiment of Foot [=1759], Hedworth Lambton [no convenient biography] establishes the
52nd [temporarily as 54th] Regiment of Foot [=1782], William Whitmore [no convenient biography]
establishes the 53rd [temporarily as 55th] Regiment of Foot [=1776], John Campbell (5th
Duke of Argyll)1770 [Wikipedia biography] establishes the 54th [temporarily as 56th] Regiment of
Foot [=>1782], **George Perry** [no convenient biography] establishes the 55th [temporarily as 57th] Regiment of Foot [=>1782], **Charles Manners** [Wikipedia biography] establishes the 56th [temporarily as 58th] Regiment of Foot [=>1782], **John Arabin** [no convenient biography] establishes the 57th [temporarily as 59th] Regiment of Foot [=>1782], **Robert Anstruther** [no convenient biography] establishes the 58th [temporarily as 60th] Regiment of Foot [=>1782], and **Sir Charles Montagu** [presumed Wikipedia biography] establishes the 59th [temporarily as 61st] Regiment of Foot [=>1782]. [THREAD = THE WW1 ARMIES]

**ASIDE - THE 51ST REGIMENT IN WW1**: The 51st Regiment of Foot appears in most WW1 histories as the "1st Battalion, KOYLI", that is to say, the King's Own Yorkshire Light Infantry [=>1897]. Having been stationed in Singapore at the outbreak of war they do not appear on the Western Front until early 1915.

1755 [29th May] **The Braddock Campaign**: This campaign is fought as part of the French and Indian War [<=1754] between a British column under **Edward Braddock** [Wikipedia biography]—dies this day] and **George Washington** [1754<=>1758] and a force of French and Native Indians under **Daniel de Beaujeu** [Wikipedia biography]. The outcome is a catastrophic defeat for the British. The campaign is noteworthy in the present context (a) for an incident in which a young rifleman named **Daniel Morgan** [Wikipedia biography] is sentenced to 499 lashes for assaulting a superior officer, resulting in his becoming rabidly anti-British, (b) for demonstrating that skirmishing can be more effective than strict regular army order, at least in wooded countryside, and (c) for de Beaujeu's effective use of camouflage. [=>1775 (Morgan's Sharpshooters)] [THREAD = THE SHAPING OF WW1 EUROPE]

**RESEARCH ISSUE - EFFECTIVE CAMOUFLAGE**: De Beaujeu is reported to have copied the Native Indian practice of applying war paint. Camouflage was intensively used during WW1 but more as a defence against artillery spotters than individuals. Thus no lights were to be shown at night, nothing shiny by day. The use if camouflage by WW1 snipers will be discussed in due course.

1756 The Prussian artillery officer **Lieutenant-Colonel Karl Wilhelm von Dieskau** [Wikipedia biography] is promoted Inspector-General of Artillery, and made responsible for rationalising and modernising the Prussian Army's field artillery. [THREAD = WW1 ARTILLERY]

1756 The British Army introduces the 3-pounder "galloper" field gun. Like the Prussian 3-pounder [<=1717] this weapon consists of a relatively light gun on a very sturdy carriage with large wheels (for crossing potholes) set wide apart (for lateral stability at speed). This allows it to be raced into position over relatively rough ground and brought rapidly into action. [THREAD = WW1 ARTILLERY]


**ASIDE - THE ROYAL AMERICAN REGIMENT IN WW1**: The 60th Regiment of Foot appears in most WW1 histories as the "KRRC", that is to say, the King's Royal Rifle Corps. The regiment will field 22 battalions during WW1, the first action being by the 1st Battalion during the Battle of Mons [=>1914 (25th August)].

1756 [18th May] **The Seven Years War, /1754//1756-1763**: This war is fought between Britain, Hanover, Prussia, and lesser allies on the one hand, and France, Austria, Russia, Spain (from 1761), and lesser allies on the other (or, at family level,
Hanoverian-Hohenzollern against Bourbon-Habsburg). It will consist of a number of geographically widely separated campaigns, as follows ...

THE FRENCH AND INDIAN WAR, 1754-1763 [see separate indexing entry]

ASIDE: Note that this war had been under way since 1754, although it was not formally declared until 18th May 1756.

THE MEDITERRANEAN CAMPAIGN, 1756-1763
The Battle of Minorca, 1756

THE NORTHERN EUROPEAN CAMPAIGN, 1756-1763
The Prussian Invasion of Saxony, 1756; The Battle of Prague, 1757; The Battle of Gross Jägersdorf, 1757; The Battle of Zorndorf, 1758; The Battle of Minden, 1759; The Battle of Kunersdorf, 1759; The Sieges of Kolberg, 1759; The Battle of Emsdorf, 1760; The Battle of Villinghausen, 1761

THIRD CARNATIC CAMPAIGN, 1757-1763
The Battle of Plassey, 1757; The Siege of Pondicherry, 1760

THE CANADIAN CAMPAIGN, 1759-1763
The Siege of Quebec, 1759; The Battle of Quebec, 1759; The Battle of Quiberon Bay, 1759

PONTIAC'S WAR, 1763
The Battle of Bushy Run, 1763

The outcome of the separate campaigns generally favours Britain and (but to a much lesser extent) Prussia, albeit through different treaties. The war will be brought to a close by the Treaty of Paris [<=1763 (10th February)]. [THREAD = THE SHAPING OF WW1 EUROPE]

WHAT WAS THIS WAR LIKE?: Stanley Kubrick’s 1975 movie "Barry Lyndon" (Warner Brothers) contains a nice reconstruction of what it might have been like to have been a new recruit in an infantry unit in this war [YouTube clip].

ASIDE: A German researcher named Christian Rogge has recently reviewed the Prussian field artillery available at this time - check it out. A good older source is William O. Shanahan’s (1945) "Prussian Military Reforms, 1786-1813", but this is harder to get hold of.

1756 [20th May] The Battle of Minorca: This naval battle takes place as part of the Mediterranean operations of the Seven Years War [<=18th May] between a French invasion fleet under Roland de la Galissonière [Wikipedia biography] and a British fleet under John Byng [Wikipedia biography]. The outcome on the day is a French victory, followed by a successful French occupation of Minorca. [THREAD = THE SHAPING OF WW1 EUROPE]

1756 [29th August] The Prussian Invasion of Saxony: This land invasion takes place as part of the northern Europe operations of the Seven Years War [<=18th May] between a five-column Prussian army under Frederick II (the Great) of Prussia [1745<=>1757], Frederick of Braunschweig-Wolfenbüttel-Bevern [Wikipedia biography], Augustus of Brunswick-Bevern [Wikipedia biography], Prince Ferdinand of Hanover [Wikipedia biography], and Prince Maurice of Anhalt-Dessau [Wikipedia biography]. The outcome is a successful Prussian occupation of Saxony. [THREAD = THE SHAPING OF WW1 EUROPE]

1756 [27th December] The Byng Court Martial: John Byng [<=1756] is court martialed for his failure to engage more vigorously with the French at the Battle of Minorca [<=20th May]. He is found guilty and executed by firing squad on 14th March 1637. [THREAD = THE SHAPING OF WW1 EUROPE]

1757 The British iron-master John Wilkinson [Wikipedia biography] constructs a blast furnace at Willey, Shropshire, and from this base rapidly expands across the West Midlands. [THREAD = THE INDUSTRIAL REVOLUTION]
1757 The British iron-master **John Mayberry** [no convenient biography] constructs an ironworks at **Hirwaun** [map], South Wales. [THREAD = THE INDUSTRIAL REVOLUTION]

1757 The British iron-masters **Abraham Darby II** [<=1740], **Thomas Goldney** [1750<=1768], and (Darby's son-in-law) **Richard Reynolds** [Grace's Guide biography =>1762] take equal shares in a new ironworks at Ketley, near Coalbrookdale, Shropshire. [THREAD = THE INDUSTRIAL REVOLUTION]

1757 The **Third Carnatic Campaign, 1757-1763**: This campaign is fought as part of the broader Seven Years War [<=1756 (18th May)] between the British and French East India Companies for control of trading access to the Indian subcontinent. The overall outcome is a British victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1757 The Quakers are exempted from military service on conscientious grounds. [THREAD = PACIFISM AND CONSCIENTIOUS OBJECTION]

1757 The German-born British military theorist **John Muller** [biography] publishes "A Treatise of Artillery". [THREAD = WW1 ARTILLERY]

1757 [6th May] The **Battle of Prague**: This battle takes place as part of the northern Europe operations of the Seven Years War [<=1756 (18th May)] between a Prussian army under **Frederick II (the Great) of Prussia** [1756<=1758] and an Austrian army under **Prince Charles Alexander of Lorraine** [<=1746]. The outcome on the day is a Prussian victory, although in the longer term the losses sustained force Prussia's broader offensive in Bohemia to be scaled back. [THREAD = THE SHAPING OF WW1 EUROPE]

1757 [2nd July] The **Newcastle-Pitt Coalition: Thomas Pelham-Holles, 1st Duke of Newcastle** [Wikipedia biography] becomes Prime Minister in a Tory-Whig coalition parliament, with **William Pitt (the Elder) [1st Earl of Chatham]** [1766] [Wikipedia biography =>1766] as Leader of the House of Commons. Together they implement a strategy to win the ongoing Seven Years War [<=1756 (18th May)], which involves (a) keeping Spain neutral, (b) tying the French down in a sustained infantry war on the continent of Europe, and (c) mounting repeated amphibious assaults on French possessions overseas. [THREAD = THE SHAPING OF WW1 EUROPE]

1757 [17th May] The **Battle of Gross Jägersdorf**: This battle is fought as part of the East Prussian operations of the Seven Years War [<=1756 (18th May)] between an 85,000-man invading Russian army under **Stepan Apraksin** [Wikipedia biography] and a 28,000-man defending Prussian army under **Hans von Lehwaldt** [Wikipedia biographies]. The outcome is a with-the-odds Russian victory on the day, followed by an unexplained Russian withdrawal. [THREAD = THE SHAPING OF WW1 EUROPE]

1757 [23rd June] The **Battle of Plassey**: This battle is fought as part of the Third Carnatic Campaign of the Seven Years War [<=1756 (18th May)] between a British East India Company army under **Robert Clive** [Wikipedia biography] and a Bengali/French army under the **Nawab of Bengal, Siraj ud-Daulah** [Wikipedia biography]. The outcome is a British victory and control of Bengal. [THREAD = THE SHAPING OF WW1 EUROPE]

1758 [18th February] The marriage takes place of **[Sir] Charles Gould I [Morgan, 1st Baronet Tredegar]** [1792 (16th November)] [History of Parliament biography =>1792 (25th June)] and **Jane Morgan** [Stanford University biography]. Their union will be blessed with "at least two daughters and two sons"¹, including ...
4th February 1760 Charles Gould II [Morgan] \(\Rightarrow 1792 (16th November)\) [2nd Baronet Tredegar] \(\Rightarrow 1791\)

[THREAD = THE INDUSTRIAL REVOLUTION]

\(^1\)ASIDE: Online resources are not precise on this point, nor has it been possible to establish the date of birth of Jane Gould. Note that both Charles Gould I and Charles Gould II change their name by Royal Assent to Morgan on the same day, the father aged 66 years and the son, as heir presumptive to the new Baronetcy of Tredegar, aged 32 years.


1758 [25th August] The Battle of Zorndorf/Sarbinowo: This battle is fought as part of the Polish operations of the Seven Years War \(\Rightarrow 1756 (18th May)\) between a Russian army under William Fermor [Wikipedia biography] and a Prussian army under Frederick II (the Great) of Prussia \(\Rightarrow 1757\). The outcome is inconclusive, but noteworthy in the present context for its sustained ferocity, both sides suffering 30-40% casualties. [THREAD = THE SHAPING OF WW1 EUROPE]

1758 [25th November] The Forbes Expedition: This military expedition to secure the Ohio River Valley for the British is mounted toward the end of the French and Indian War \(\Rightarrow 1754\) and culminates in a confrontation between a British column under John Forbes [Wikipedia biography] and George Washington \(\Rightarrow 1755\) and the French garrison at Fort Duquesne/Pitt. Abandoned by their former Native American allies, the French decide to abandon the territory. [THREAD = THE SHAPING OF WW1 EUROPE]

1759 The British government acquires marshland near Faversham, Kent, and establishes a gunpowder factory. [THREAD = WW1 ARTILLERY]

1759 The Canadian Campaign: This campaign is fought as part of the broader Seven Years War \(\Rightarrow 1756 (18th May)\). We shall deal with it here under the following subheadings ...

- The Siege of Quebec, 1759
- The Battle of Quebec, 1759

The eventual outcome is that Canada is awarded to Britain by the Treaty of Paris \(\Rightarrow 1763 (10th February)\). [THREAD = THE SHAPING OF WW1 EUROPE]

1759 [28th June] The Siege of Quebec: This three month siege takes place as part of the Canadian Campaign of the Seven Years War \(\Rightarrow 1756 (18th May)\) between a British army attempting to take Quebec and a French-Québécois army defending it. The British are commanded by James Wolfe [Wikipedia biography] and the French by Louis, Marquis de Montcalm [Wikipedia biography] and the French by Louis, Marquis de Montcalm [Wikipedia biography] and the French by Louis, Marquis de Montcalm [Wikipedia biography] and the French by Louis, Marquis de Montcalm [Wikipedia biography]. The siege will eventually be brought to an end by the Battle of Quebec \(\Rightarrow 1759\). [THREAD = THE SHAPING OF WW1 EUROPE]

1759 [1st August] The Battle of Minden: This battle takes place as part of the Hanoverian operations of the Seven Years War \(\Rightarrow 1756 (18th May)\) between a Hanoverian/British army under Prince Ferdinand of Hanover \(\Rightarrow 1756\) and George Germain, 1st Viscount Sackville [Wikipedia biography] and a French/Saxon army under Louis George, 6th Marquis de Contades [Wikipedia biography] and Victor-François, 2nd Duke de Broglie
The outcome is a convincing Hanoverian/British victory, despite a failure to engage on the part of Sackville's cavalry [=>next]. [THREAD = THE SHAPING OF WW1 EUROPE]

**ASIDE:** Seven British regiments will go on to claim **MINDEN 1759** as a battle-honour, namely the **Royal Artillery** and the **12th**, **20th**, **23rd**, **25th**, **37th**, and **51st** Regiments of Foot.

1759 (1st August) **The Sackville Affair:** Following accusations of dereliction of duty (in that he repeatedly refused to commit his cavalry when ordered to do so) at the Battle of Minden [<= preceding] George Germain, 1st Viscount Sackville [preceding<=1775] asks to be formally court martialed in order to clear his name. This stratagem backfires, however, when he is found guilty and ruled "**unfit to serve his Majesty in any military capacity whatsoever**". To Britain's cost this advice seems to have been forgotten when Sackville is put in charge of the Americas just before the American Revolution [continues at =>1775 (10th November) ...]. [THREAD = THE SHAPING OF WW1 EUROPE]

1759 (10th August) Upon the death of **Ferdinand VI of Spain** [<=1746] his titles pass to his younger brother as **Charles III of Spain** [Wikipedia biography=1761]. [THREAD = THE SHAPING OF WW1 EUROPE]

********** HORSE ARTILLERY IS INVENTED **********

1759 (12th August) **The Battle of Kunersdorf:** This battle is fought as part of the Brandenburg operations of the Seven Years War [<=1756 (18th May)] between an invading Russian/Austrian army under **Pyotr Saltykov** [Wikipedia biography] and **Ernst von Laudon** [Wikipedia biography] and the main Prussian army under **Frederick II (the Great) of Prussia** [1758<=1763] and **Frederick von Seydlitz** [Wikipedia biography]. The outcome (in Frederick's own words) is a total Prussian disaster. The battle is noteworthy in the present context for the experimental deployment by the Prussians of horse artillery batteries permanently attached to cavalry units. [THREAD = THE SHAPING OF WW1 EUROPE]

**ASIDE - HORSE ARTILLERY IN WW1:** The Prussian **Berittene Artillerie** will soon be matched by the French **L'Artillerie à Cheval** [=1791] and the British **Royal Horse Artillery** (RHA) [=1793]. When war is declared in 1914 the RHA put 25 batteries of 13-pdr field guns into the field, with D and E batteries involved as early as 24th August in the Battle of Mons [= 1914 (23rd August)].

********** HISTORICALLY DECISIVE BATTLE **********

1759 (13th September) **The (1759) Battle of Quebec:** [a.k.a. the Battle of the Plains of Abraham] This 15-minute battle brings the Siege of Quebec [<=1759 (28th June)] to an end. The British have staged an overnight stealth landing at L'Anse de Foulon, three miles upstream from Quebec town, and in the battle proper both sides are led by their respective generals personally. Both **James Wolfe** [28th June<=dies this day] and **Louis, Marquis de Montcalm** [28th June<=dies this day] receive mortal wounds. The outcome is a decisive British victory. The battle is noteworthy in the present context for demonstrating yet again the value of the surprise attack. The **60th (Royal American) Regiment of Foot** [1756<=1763 (5th August)] are singled out for praise. [THREAD = THE SHAPING OF WW1 EUROPE]

**WAR ART:** Check out Benjamin West's (1770) "**The Death of General Wolfe**".

1759 (19th September) A consortium of British businessmen led by **Thomas Lewis** [Wikipedia biography] and **Isaac Wilkinson** [Wikipedia biography] sets up a blast furnace at **Dowlais**, Merthyr Tydfil, to practise the "art, misterry, and business of an iron master". They produce about 18 tons of iron a week. [=1767] [THREAD = THE INDUSTRIAL REVOLUTION]
1759 [4th October-16th December 1761] **The Sieges of Kolberg/Kolobrzeg:** This two-year series of sieges takes place as part of the Pomeranian operations of the Seven Years War [<=1756 (18th May)] between besieging Russian armies and the Prussian garrison at Kolberg/Kolobrzeg under [Heinrich von der Heyde](http://en.wikipedia.org/wiki/Heinrich_von_der_Heyde). The outcome is an eventual Prussian surrender. [THREAD = THE SHAPING OF WW1 EUROPE]


1759 [20th November] **The Battle of Quiberon Bay:** This battle is fought as part of the Seven Years War [<=1756 (18th May)] between a British blockading fleet under Admiral [Sir Edward Hawke](http://en.wikipedia.org/wiki/Sir_Edward_Hawke) [<=1747] and a French blockade-running fleet under [Hubert de Brienne, Comte de Conflans](http://en.wikipedia.org/wiki/Hubert_de_Brienne). The outcome is a decisive British victory. The engagement is noteworthy in the present context in that by deterring the French from further attempts at running the Royal Navy blockade they are unable to reinforce Canada. [THREAD = THE SHAPING OF WW1 EUROPE]

************ MEN WITH FIFTY SONS **********

1759 [7th December] [Charles Moore, 6th Earl of Drougheada](http://en.wikipedia.org/wiki/Charles_Moore) is appointed colonel of the newly established 18th Regiment of Light Dragoons [=>1782], a position he will hold until 1821! [THREAD = THE SHAPING OF WW1 EUROPE]

**ASIDE - BEING FATHER TO YOUR MEN IN WW1:** The story goes that Drogheda dedicated a plantation of trees to his men in the grounds of Moore Abbey. Caring for those entrusted to you is one of the themes we shall be developing in detail in due course. Some idea of the issues which will emerge may be gained from the WW1 poem "In Memoriam" by [Lieutenant Ewart Mackintosh](http://en.wikipedia.org/wiki/Lieutenant_Ewart_Mackintosh) [=>1917 (16th May)]. This work was written upon the death in action of one of his platoon - one of his 50 sons - and argues with great poetic force that a commander's grief can be every bit as painful as a father's. This from the last verse ...

"Happy and young and gallant,
They saw their first-born go,
But not the strong limbs broken
And the beautiful men brought low,
The piteous writhing bodies,
They screamed 'Don't leave me, Sir'.
For they were only your fathers,
But I was your officer."

************ SMOKE AND MIRRORS IS BORN **********

1760?? **Belief Systems [XIII - Superstition, Witchcraft, and Magic (Schröpfer and the Séance)]:** [Continued from 1708] In Leipzig at around this time the German showman [Johann Schröpfer](http://en.wikipedia.org/wiki/Johann_Schröpfer) is pioneering the magic-lantern séance, complete with projections as though from the spirit world, with whom customers are encouraged to communicate. These performances will soon be marketed as *Schröpferische Geisterscheinungen* [= "Schröpfer-style ghost appearances"], and will earn the magic lantern, always an eerie experience, the out-and-out epithet "lantern of fear" [sub-thread continues at 1769 (Guyot) ...]. [THREAD = THE BATTLE FOR HEARTS AND MINDS]
1760 The British businessman John Roebuck [Wikipedia biography] sets up a gun foundry at Carron, Stirlingshire, only to experience trouble with his coal supplies due to repeated flooding of the mine workings. [=>1769] [THREAD = WW1 RAILWAYS]

********** IMPORTANT WW1 WEAPON **********

====== THE RIFLE GRENADE ======

1760 The gunsmiths at St. Étienne, France, produce a flintlock grenade launcher [image], not conceptually dissimilar to the Hales rifle grenades which will be used in WW1 [<=1907] or late-20th century grenade launchers such as the Colt M203 [YouTube demonstration] or the General Dynamics Mk19 [YouTube demonstration]. [THREAD = WW1 SMALL ARMS]

1760 [4th February] Details for Charles Gould II [Morgan]1792 (16th November) [2nd Baronet Tredegar]1800, born this day, are entered under his parents' wedding day [<=1758 (18th February)]. [THREAD = THE INDUSTRIAL REVOLUTION]

1760 [14th July] The Battle of Emsdorf: This battle is fought as part of the Hanoverian operations of the Seven Years War [<=1756 (18th May)] between a British/Hanoverian/Hessian army under Charles William Ferdinand, Duke of Brunswick-Wolfenbüttel [Wikipedia biography] and a French army under Baron Christian [?] de Glaubitz [no convenient biography]. The outcome is a British/Hanoverian/Hessian victory. A 12-year-old (Sir) John Floyd [Wikipedia biography] experiences his first battle this day (Turner, 1956). [THREAD = THE SHAPING OF WW1 EUROPE]

1760 [4th September-15th January 1761] The Siege of Pondicherry: This four-month siege is fought out as part of the Third Carnatic Campaign of the Seven Years War [<=1756 (18th May)] between a besieging British East India Company army under Sir Eyre Coote [Wikipedia biography] and a French East India Company army under Thomas de Lally [Wikipedia biography]. The outcome is a decisive British victory. [THREAD = THE SHAPING OF WW1 EUROPE]


1761 The Austrian physician Leopold Auenbrugger [Wikipedia biography] publishes "Inventum Novum", in which he argues as follows for fixed term military service ...

"When young men who are still growing are forced to enter military service and thus lose all hope of returning safe and sound to their beloved homeland, they become sad, taciturn, listless, solitary, musing, full of sighs and moans. Finally they cease to pay attention and become indifferent to everything which the maintenance of life requires of them. This disease is called 'nostalgia'. Neither medicaments, nor arguments, nor promises, nor threats of punishment are able to produce any improvement. [...] Some years ago this disease was rather common but now occurs very rarely since the wise arrangement was instituted of limiting the period of military service to a definite number of years. As a result the young men retain the hope of leaving military service after this period has elapsed, and of being able to return to their homes ..." (quoted in Zajtchuk and Bellamy, Textbook of Military Medicine, p6 [full text online]).

We shall be discussing the psychology of enlistment in detail in due course. [THREAD = WW1 MILITARY MEDICINE]

1761 [15th-16th July] The Battle of Villinghausen: This battle takes place as part of the Hanoverian operations of the Seven Years War [<=1756 (18th May)] between a Hanoverian/Prussian army under Prince Ferdinand of Hanover [<=1759] and a
significantly larger French army under Victor-François, 2nd Duke de Broglie [<=1759] and Charles, Prince of Soubise [Wikipedia biography]. The outcome is a Hanoverian/Prussian victory. [THREAD = THE SHAPING OF WW1 EUROPE]

1761 [15th August] Charles III of Spain [1759<=1770] brings Spain into the Seven Years War [<=1756 (18th May)]. He succeeds only in losing Havana and Manila to the British. [THREAD = THE SHAPING OF WW1 EUROPE]

1762 The Lydbrook forges [<=1720] are taken over by the Bristol ironmasters Richard Reynolds [1762<=1763] and John Partridge [no convenient biography=>1763]. [THREAD = THE INDUSTRIAL REVOLUTION]

1762 Baring's Bank Founded: Second-generation Britons John Baring [check him out] and his brother Francis Baring [check him out] divert some of the family fortune to set up a merchant bank based in London. They soon learn to specialise in government and large commercial bonds issued at quite large discounts to themselves as underwriters. Defaults occasionally happen, but what you lose on a bond will normally have been offset by exceptionally well-informed stock market trading in the meantime [THREAD = THE WW1 FINANCIAL AND ARMAMENTS INDUSTRIES]

1762 [5th January] Upon the death of Elizabeth of Russia [<=1743] her titles pass to her nephew [?] Peter of Holstein-Gottorp [Wikipedia biography] as Peter III of Russia [=>9th July]. This succession is noteworthy in the present context for the fact that Peter immediately takes Russia out of the Seven Years War [<=1756 (18th March)], much to the relief of the hard-pressed Prussians. [THREAD = THE SHAPING OF WW1 EUROPE]


1762 [9th July] Following a coup against her husband Peter III of Russia [<=5th January], Yekaterina Alexeevna [Wikipedia biography] becomes Catherine II (the Great) of Russia [>=1766]. She will reign for 34 years, add 200,000 square miles of geography to her nation, and make Russia a force to be reckoned with in international affairs. [THREAD = THE SHAPING OF WW1 EUROPE]

********** ONE LITTLE BOY **********

1762 [5th December] A certain John Boscowen Savage [no convenient biography] is commissioned - at the age of two and a half years! He will not actually take up this post, however, until after his 11th birthday. [THREAD = THE WW1 ARMIES]

ASIDE - BOY OFFICERS: Turner (1956) explains that it was standard practice for wealthy families to buy their sons' commissions well in advance, thus ensuring their future advancement. The child in question here will repay his family's investment handsomely, going on to become Major-General Sir John Boscowen Savage, K.C.B.!

1763 The French naval officer Sebastien Bigot de Morogues [Wikipedia biography] publishes "Treatise on Signals" [buy on Amazon], in which he explains how various fleet manoeuvres - he calls them "evolutions" - can be initiated by simple flag signals from the flagship. The system routinely uses a "preparatory" hoist, requires echo-back acknowledgement, and permits "repeater" vessels to allow transmission beyond line of sight (in poor visibility, for example, or over the horizon). [THREAD = THE WW1 SURFACE NAVIES]

ASIDE: Charles Wood kept a detailed diary which survives to the present day as "Diary of Charles Wood of Cyfarthfa Ironworks" [buy from Amazon].

1763 The Reynolds and Partridge Partnership [1762<=>1771] take out a 21-year lease on a forge at Monmouth. [THREAD = THE INDUSTRIAL REVOLUTION]

1763 The British university technician James Watt [Wikipedia biography] is asked to repair his university's model of a Newcomen engine [<=1714], only to realise just how fuel-inefficient such engines are. The critical weakness is that cold water has to be injected into the piston at the top of its stroke in order to create the partial vacuum which then powers the down stroke. He therefore starts to examine how the condensing functions might be separated from the power functions. [=>1769] [THREAD = THE INDUSTRIAL REVOLUTION]

1763 [10th February] The Treaty of Paris: This treaty brings to an end the Seven Years War [=1756 (18th May)]. The treaty instructs that a number of war gains should be returned to their previous owners, but also enforces some historically important gains for the British, including Canada, Louisiana east of the Mississippi, Florida, and much of the Indian Subcontinent. Prussia receives little for its troubles, much to the annoyance of Frederick II (the Great) of Prussia [1759<=>1772 (Partition of Poland)]. The Treaty will do much to shape the British Empire for the ensuing century and therefore also the British Commonwealth as it will stand at the beginning of WW1. [THREAD = THE SHAPING OF WW1 EUROPE]

1763 [27th April] Pontiac's War: This war is fought as a follow-up armed confrontation between the British army in the Great Lakes region and rebellious Native American tribes. The war begins with the destruction of a number of forts and settlements in the frontier territory, followed by a no-holds-barred disciplinary British campaign master-minded by Jeffery Amherst, 1st Baron Amherst [Wikipedia biography] [=29th June]. [THREAD = THE SHAPING OF WW1 EUROPE]

********** BIOLOGICAL WMD PROPOSED **********

1763 [29th June] The Governor General of the North American colonies, Jeffery Amherst, 1st Baron Amherst [=27th April], writes to Henry Bouquet [Wikipedia biography] [=5th August] proposing to infect troublesome Native Americans with smallpox by handing out infected blankets. [THREAD = THE SHAPING OF WW1 EUROPE]

1763 [5th-6th August] The Battle of Bushy Run: This battle is fought as part of Pontiac's War [=27th April] between a British column under Henry Bouquet [=29th June] and a Native American army laying siege to the garrison at Fort Pitt. The outcome is a British victory. The column includes light infantry companies from the 42nd (Black Watch) Regiment of Foot [1751<=>1776], the 60th (Royal American) Regiment of Foot [1759<=>1782], and the 62nd Regiment of Foot [1757<=>1782]. [THREAD = THE SHAPING OF WW1 EUROPE]

********** 1662 - 1763 SUMMARISED **********

Much has changed in the hundred years reported here. France now has its modern shape (suitably squared off by the recent acquisition of Lorraine) but has been exhausted by constant war. Prussia is coming along nicely and has added considerably to its economic
powerbase by its annexation of Silesia. Russia, too, has grown in international stature and is promising even greater things under the firm hand of Catherine the Great. Austria, however, has lost ground, weakened by having had to defend so many frontiers simultaneously, and the Ottomans have maintained a firm hold on the Balkans as a result. Sweden and Spain are likewise past their prime. And Britain's war planners, having had Canada and India drop so recently into their laps, now have to work out how to keep hold of them.

********** Sorry, but this file's gotten too big to handle **********