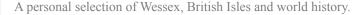
No.172



"Blow winds, and crack your cheeks! Rage, blow! You cataracts and hurricanoes, spout till you have drenched our steeples, (drowned) the cocks." Julius Caesar, 5.1.72

This month J&T 172 looks at some old traditions and then some even older weather, that can, not only shed light on some historical events, but also serves as valid data for charting the changes in the climate of our planet.

CRY 'GOD FOR HARRY, ENGLAND, AND SAINT GEORGE'1

Who was Saint George? As far as we can tell, and it is difficult to separate fact from myth, he was born into a Roman military family in Palestine, and died in the Diocletian massacres of 303 AD.

In 1964, a Coptic manuscript was discovered under a column in the ruins of the cathedral of Qasr Ibrim. This manuscript is dated between 350 and 500 AD and represents the oldest tradition of the legend of St George that eventually became known to the world thanks to the 13th Century writings called the Golden Legend by Jacobus da Varagine, Archbishop of Genoa. Also, recounted in the Ouran, the character Al-Khidr was accompanied by Moses on a journey during which Al-Khidr enacted a series of seemingly inexplicable deeds. The figure of Al-Khidr is venerated as a prophet, messenger, archetypal wise man and dragon slayer in various cultural traditions, and in Turkey and Syria he has been merged with the figure of St George. In England however we became conscious of St George during the Crusades when soldiers returned with the story that he came to their aid at the siege of Antioch. Ironically, the Saracens went home with the same story.



We know that George did well in the

Roman Army and was reputed to have risen to the status of Tribune. At that time however, the army was being purged of Christians by the Roman Emperor Diocletian and George had refused to renounce his Christian faith, even after he had been arrested and tortured. He was subsequently paraded through town and beheaded in a public execution. George's martyrdom is supposedly to have inspired thousands of pagans to convert to Christianity. Richard the Lionheart (above) took St George to be his patron and *St George* became the battle cry of both the king and his nobles. Soon this was transferred to England as its patron saint. But, to put things in perspective he is also the patron saint of: Ethiopia, Georgia, Portugal, Bulgaria, Bosnia-Herzegovina, Ukraine, Malta, and the regions of Catalonia and Aragon. The cities of Moscow and Beirut have claimed George as their patron saint. He also forms part of Muslim and Druze hagiography.

















When King Edward III established the Order of the Garter in 1348, he organised a chivalric order of knighthood in England equivalent to that of King Arthur. Wanting a patron saint that demonstrated the English values of bravery, honour, and chivalry, King Edward chose St George. The Council of Oxford in 1222 ordered 23rd April to be kept as a national festival in honour of St George. In the Catholic religion, St George is one of the *Fourteen Holy Helpers*.



These were a collection of saints (above) that people turn to in times of hardship and warfare. In medieval times he was also supposed to protect you from diseases like leprosy and plague. He was even believed to protect soldiers on the battlefield as late as the First World War.

According to the legend of St George, passed down for centuries, the town of Selene (in modern-day Libya) was being held hostage by a dragon that had a taste for humans. Upon hearing of their plight, St George rode into the town and slayed the dragon in a fierce battle. His lance was called *Ascalon*, incidentally the name used by Churchill for his private wartime aircraft. This is really a didactic story of good versus evil with dragons often being used to symbolise evil. This was reinforced in the Bible by St John the Evangelist.

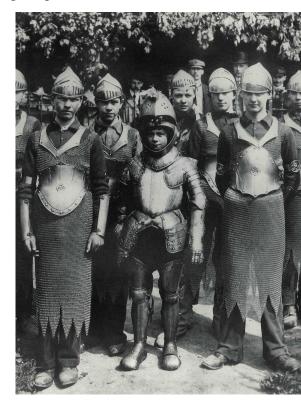
As you know, the English love tradition, so even today the English heralds all display St George's Cross on their coats of arms and the *Pursuivant Rouge Croix* is named after St George's cross. Right, the Orthodox tomb of St George in Lydda (now Lod in Israel).

CURIOUSER AND CURIOUSER²

You swear...that you will not eat brown bread when you can have white...that you will drink small beer when you can get strong (except you like them better); but you will kiss the maid in preference to the mistress, if you like the maid better - so help you Billy Bodkin.

At various pubs in Highgate, North London it was the custom to make 'travellers of the middle rank' swear a ludicrous (1796) oath *on the horns*, designed to encourage merriment and debauchery. A stick with horns attached was kept for the purpose. Some eighty coach-loads a day could pass through on the way to London and it must have been a good way of encouraging the pub trade.

The city of Lichfield in Staffordshire is steeped in history and each year, on the Spring Bank Holiday, they get to remind the rest of us of it. The Court of Array is the sole surviving relic of the Assize of Arms (1176) and Statute of Winchester (1285), which informed every free man between the ages of 14 and 60 to provide himself with weapons and armour appropriate to his station in life. Lichfield's 1553 charter gave its High Constables and bailiffs the right to supervise their own inspections. The St George's Day Court Leet elects two Dozeners as inspectors who join the Bower Day procession to Greenhill where ancient suits of armour are inspected. The Greenhill mound is the centre of Whitsun *Bower* celebrations, when bowers of branches were used to decorate stalls, probably a hark back to pagan times. There was also a procession of City Guilds, with 'flowery garlands'. This has now morphed into a carnival parade and sports meeting. The Leet comes from the French eslite (elected) and was a local court that also chose manorial officials such as the hayward (fair distribution of hay in winter) and the *pinder*, responsible for stray animals.



EX LIBRIS³

In his 695 page tome *The Earth Transformed: An Untold History* (Bloomsbury 2023), Professor of Global History at Oxford, Peter Frankopan looks at the interactions between human societies and the environment throughout history. There are also 200 pages of notes, not included in the printed version, but available to downloadable on-line. It is an incredible piece of work in which he has used a formidable range of sources to present as true a picture as is possible in our present state of knowledge. My list below gives you an idea:

Records of the Japanese Cherry Blossom Festival that go back to the 9^{th} century.

The changing chemistry of coastal clamshells from Peru.

Isotope data from Papua-New Guinea human bones and pig teeth.

Mineralisation process of seeds found in Abbasid Jerusalem refuse pits.

Analysis of 500 years of harbour registers from Tallinn, Estonia.

Tree-ring data from Central Asia combined with reconstructions of Aral Sea salinity.

Recent survey combining Chinese peat cellulose, stalagmites, ice cores and tree ring data.

Examination of carbonised and desiccated seeds from South-east Asia.

Tree growth rings from the Altai mountains.

Scrutiny of dried nutshells from North Australia.

Perusal of digested foods from Palestine.

Light Direction and Ranging technology.

Infrared spectroscopy.

Trends in phylogenetics.

Investigation of 80-metre sediment in Kazakhstan.

Evaluation of driftwood from Svalbard archipelago.

Measurements of solar and volcanic activity.

Research into Greenland ice-cores.

Analysis of Omani fossilised pollen.

Examination of Spanish mineral deposits.

Perhaps the most interesting discipline is the study of global climate. Not only did the weather systems change dramatically over time but their effects were felt over unexpected areas of the globe. So *El Nino Southern Oscillation* in the Pacific not only affects South America but South Asia, East Africa and Australia. Similarly, the Indian monsoon can be affected by climatic shifts in the North Atlantic.



Tapping into all these research projects is vital as too simplistic theories can, and have been appended to too little data. For example, Napoleon and Hitler's invasions of Russia being brought to a halt by bad weather (left), completely ignores other factors such as *overambitious objectives*, *inefficient supply lines*, *poor strategy and worse execution of plans on the ground*.

The breadth of his field from China to the Americas gives a truly original perspective. So rather than the Huns being a simple destructive force, we find that they also intermarried with the

conquered inhabitants and took up farming - leading one historian to parody their leader as *Tiller the Hun*.

OFF AT A TANGENT!

We will look at some of his findings on another occasion, but in the meantime here are some snippets that I found interesting:

The Hanging Gardens of Babylon is the only *Wonder of the Ancient World* whose location is still unknown. No evidence has been found for it to have been in Babylon and it is possible that there may be archeological remains, as yet undiscovered beneath the River Euphrates. The evidence we do have comes from Akkadian inscriptions that place the gardens in the city of Nineveh.

Ancient Mesopotamian Cults sometimes whispered questions into the ears of sacrificial sheep just before death - so as to get to the gods quickly.

The Biblical story of Sodom and Gomorrah was probably based on real towns like Tall el Hammat in Jordan (right). It was destroyed by a comet or meteor airburst that melted the walls with its 2,000° heat. It also left objects encrusted with salt - Lot's wife?

Standardisation of weights and measures stopped farmers and merchants fiddling taxes owed to the king of England. This shines a whole new light on Magna Carta's Clause 35.



Minority ethnic persecutions (Gypsies, Jews etc.) can be related to changing temperatures. When agriculture became difficult, it is easy to imagine that someone was going to get blamed.

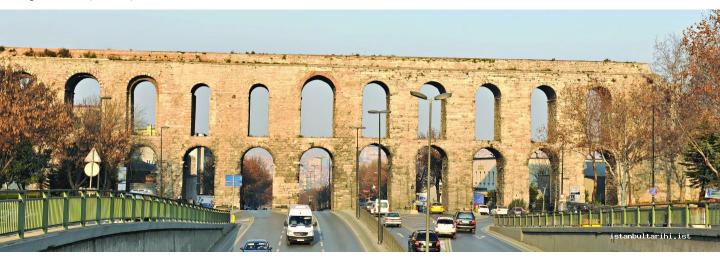
High city walls were built mainly to protect sources of supply.

The Romans utilised coal from surface mining.

The Mayan city of Tikal in Guatemala had to rely on seasonal rainfall, so they built a convex microshed system with its buildings and plazas designed to direct water into large underground tanks.



Constantinople's enduring resilience was, in part due to its water supply, comprising of 500 kilometres of aqueducts (below).

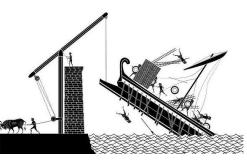


GREAT BIG SHIPS

There have not been many first-rate minds but Archimedes has to rank alongside Leonardo da Vinci for fertility of imagination*. The *Syracusia* (right⁵) was a ship designed by him for his relative Hieron II of Syracuse (Sicily) which the historian Moschion of Phaselis stated 'could transport a cargo of some 1,600 to 1,800 tons as well as 1,942 passengers; and she also carried more than 200 soldiers, as well as a catapult.' It was even painted with antifouling made of horsehair and pitch.



The ship only sailed once, to Alexandria, where she was given to Ptolemy (Ptolemaios) III Euergetes of Egypt and renamed *Alexandreia*. However the ship is believed to have been too large for other ports. Ptolemy's son sought to outdo *Syracusia*. He ordered the construction of a huge warship, the *Tessarakonteres*: 420 feet long, and bearing more than 4,000 oarsmen and 2,850 soldiers. Plutarch though, reports that it was almost immobile and never left port. Hardly a eureka moment.



*The Romans besieged Syracuse in 213 BC. The defending Greeks were aided by Archimedes who devised ingenious devices to counter the Roman efforts including a huge crane-operated hook that was used to lift the enemy ships out of the sea (left) before dropping them to their doom. Legend has it that he also created a giant mirror that was used to reflect the powerful Mediterranean sun onto the ships' sails, setting fire to them. These measures, along with the fire from ballistas and onagers mounted on the city walls, frustrated the

Romans and forced them to attempt costly direct assaults. Alas, against proconsul Marcellus's instructions a soldier killed Archimedes whilst he was drawing in the dust. His last words are supposed to have been: *do not destroy my circles*.

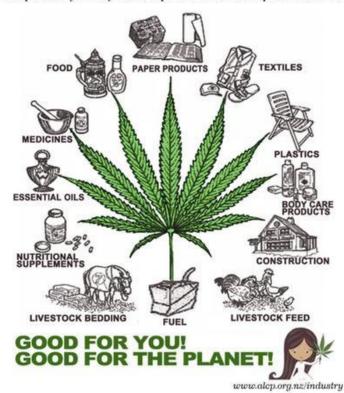
CANNABIS SATIVA⁶

During the American War of Independence, the British blockade forced printers to look for a substitute for pulp. Benjamin Franklin - the inventor of the lightning conductor, bifocal glasses and an efficient stove - used hemp in his printing works which printed the Declaration of Independence. George Washington and Thomas Jefferson also grew hemp. It was used for rope throughout the British Navy but had to be regularly tarred to prevent rotting, a horrible job that gave the sailor his nickname. Probably the rope's most notorious use though was for the hangman's noose.

A Nevada tailor, Jacob Davis, and his partner Löb Strauss, patented their process of reinforcing twilled cloth for workmen's trousers with copper rivets. The twilled cloth was known as *jean* (from Genoa). Löb changed his name to Levi and changed the original hemp material to *serge de Nîmes* as the hemp chafed. So jeans are the trousers and *denim* is the material. Hemp is being championed now as it is more environmentally friendly than paper or cotton. Perversely, its bad press over the years has not been due to its association with executions but more thanks to its 'recreational' use as Cannabis and Marijuana. Hemp originated in Russia but China is the biggest producer.



Hemp is the only annually renewable plant on Earth able to replace all fossil fuels.



- 1. Based on article written by Jo Rowan in Sky History with elements also taken from Wikipedia, *Lives of the Saints* by Fr. Alban Butler (Tan Books 1955), *Brewer's Dictionary of Phrase & Fable* (Weidenfeld & Nicolson 2005), *A Dictionary of Chivalry* by Grant Uden (Longmans 1968) and *The Story & Language of Heraldry* by Stephen Slater (Southwater 2012). King Richard I from *A History of England* by Rudyard Kipling, lithograph by Henry Justice Ford 1911. *Fourteen Holy Helpers*, remaining depiction of ruined castle of Dobl, Lower Bavaria. Resaturated and photographed by Alois Lieberwein. In Public Domain. Tomb from *Embrace the Middle East*.
- 2. Courtesy of The Customs and Ceremonies of Britain by Charles Kightly (Thames and Hudson 1986).
- 3. Napoleon's Retreat from Moscow by Adolph Northen 1851, in the Public Domain. Tall el Hammat courtesy of Sci.News.
- 4. Courtesy of livius.org and Wikipedia.
- 5. Replica of Syracusia by Kotsanas Museum of Ancient Greek Technology.jpg
- . For more info read Fifty Plants that Changed the Course of History by Bill Laws (David & Charles 2015). Poster courtesy of Permies.com.