

The tooth, the whole tooth and nothing but the tooth

Crooked, protruding, discoloured or missing, the British have had bad teeth for centuries. But now, despite being rather proud of our mismatched gnashers, we're beginning to convert to straighter smiles, finds Neil Buttery

THERE is a now infamous scene in the US cartoon *The Simpsons* where a distraught Lisa is informed by the family dentist that she needs to wear a set of braces to straighten her crooked teeth, a prospect about which she is none too happy. However, her dentist has a trick up his sleeve: *The Big Book of British Smiles*, a picture book of Beefeaters, guards, princes even, each with progressively grotesque smiles of gummy gaps and teeth that resemble boars' tusks. The aversion therapy works and Lisa is immediately kitted out with the required apparatus.

The British have been notorious for their perceived bad teeth for centuries, being singled out in this regard since the Elizabethan Age. In 1598, a visiting German to the Court of Elizabeth I caught a glimpse of Her Majesty in the flesh. What he saw was captured in a letter: 'Next came the queen', he wrote, 'in the sixty-fifth year of her age, as we were told, very majestic; her face oblong, fair but wrinkled; her eyes small, yet black and pleasant; her nose a little hooked; her lips narrow, and her teeth black; (a defect the English seem subject to, from their too great use of sugar).'

‘Elizabeth I has become a poster girl for the British and their bad teeth’

Although sugar was still very much a luxury foodstuff, it was during the Tudor era that it was first available in very large amounts—enough, certainly, to cause terrible rot to the pearly whites of the super-rich. Elizabeth I has since become a poster girl for the British and their apparent bad teeth—a view very difficult to shake off.

It's a common misconception that the rich showed off their rotten mouths as a mark of their wealth. It was certainly an indicator of this, yet those whose teeth had deteriorated were, in fact, embarrassed and self-conscious.



Above: Winston Churchill's dentures: 'the teeth that saved the world'. Below: The battle against tooth decay in the Victorian era. Facing page: 'And this is what you call painless dentistry, is it?' asks John Bull, as William Gladstone extracts an £11 million tooth in 1885

Elizabeth I was terrified of the royal tooth drawer, too, enough for one of her elderly advisers to put himself forward to have a perfectly healthy tooth removed, merely to show her how 'painless' the procedure would be.

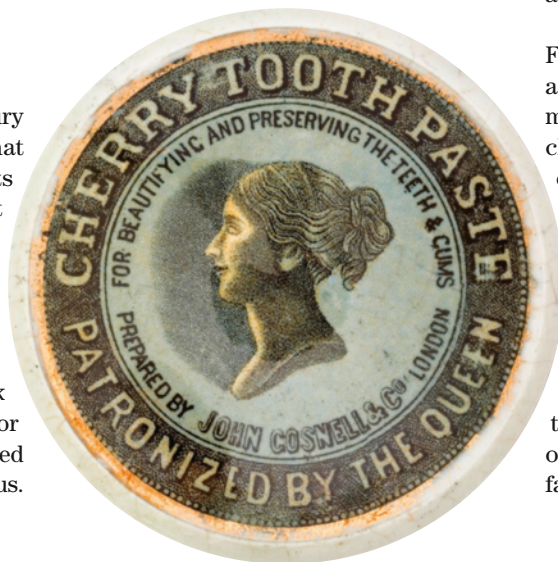
In the 1940s, an exploding bomb hit London and exposed a 17th-century plague pit, a mass grave made up of the capital's poor. They had all met a terrible fate, of course, but their gnashers were in excellent nick. This prompted archaeologists to excavate some graves belonging to the rich dating from the same

time and almost every skull, from the teenage girl to the elderly patriarch, had terrible periodontal disease and cavities.

It would take a few more centuries for the deleterious effects of eating sugar to trickle down through all of society, but the aspirational nature of the British did mean that sugar trickled down rather more quickly compared with other countries. By the mid 19th century, every member of the British population could afford to eat sugar daily—even if it was only treacle—and, soon, poor dental health became a significant driver of disease.

It first became obvious in the Boer Wars and First World War, when the officer class stared agog at the state of the teeth of the young men signing up to fight. By now, the working-class diet largely consisted of nutritionally empty sugary tea, white bread and jam or treacle and, therefore, the men had to endure the accompanying cavities and receding gums associated with sugar consumption. This was dealt with swiftly—the young lads were given a decent feed, had their teeth removed and mouths fitted with dentures.

This wholesale removal of young men's teeth caught on: scaling up the production of whole or partial dentures suddenly made false teeth affordable. The people of Britain →





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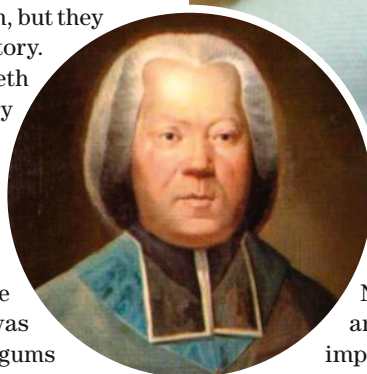
knew only too well the pain and the expense associated with poor dental hygiene, so it became the done thing to have one’s teeth whipped out, even if they were perfectly healthy, a service often gifted to new brides in the 1950s. It seems preposterous today, but the pain of extraction was nothing compared with the potential agony of the future destined for anyone with teeth in their heads. Dentures were now the norm, but they have a surprisingly long history.

In 2002, a pair of false teeth dating back to the 18th century was discovered below St Pancras Station, when workers were extending it to make room for the Channel Tunnel Rail Link. Excavation work revealed a cemetery and in one particularly ornate coffin was a pair of porcelain teeth, the gums painted a lurid pink. The owner of the teeth was Arthur Richard Dillon, the Archbishop of Narbonne, who had been living in England as an exile of the French Revolution.

An even older pair was discovered in 2019, in the Oxfordshire countryside next to a track. The set, dating to about 1825, had a base fashioned from gold with teeth made from elephant, hippo or perhaps even walrus ivory. Whoever owned them was very wealthy; indeed, it is estimated that they cost the wearer \$250—about £30,000 today. Primitive dentures such as these were really only used to aid chewing and were far too uncomfortable to wear all the time, but, as porcelain technology was improved and refined, much better fits could be achieved.



Biting back: a set of 18th-century porcelain false teeth (above) that once belonged to Arthur Richard Dillon, Archbishop of Narbonne (left)



Now, the wearer’s diction and speech were drastically improved and some speech impediments could even be reversed.

Unless you were Sir Winston Churchill, that is, who had a set made that would retain his characteristic mild lisp. He wanted to make sure everyone would recognise his unique voice when delivering his now-famous wartime rallying speeches. His dentist (whom he later knighted) made Churchill’s false teeth sit slightly loose so that they wouldn’t align properly, preserving his characteristic diction. These ‘teeth that saved the world’ were sold at auction, in 2010, for an impressive £15,200.

Today’s precision-made dentures are a luxury compared even with those of Churchill’s day and technology is forever advancing, but it’s had to—almost one-fifth of UK adults wear

either full or partial dentures. Despite the fancy toothpastes, electric brushes and variety of flosses, the message about good dental hygiene and reducing one’s sugar intake is obviously not getting through to many. It is estimated that the NHS spends £3.4 billion annually on dental services in England alone. Most worrying is that the age demographic is shifting downward: in 2017, there were 43,000 extraction operations on children and adolescents; between 2011 and 2014, 26,000 were admitted for ‘extensive tooth extraction’.

What about the state of the nation’s teeth now? Reena Wadia, global dental expert and founder of R. W. Perio, knows all too well how people of all ages are susceptible to cavities and gum disease, the latter being the most common disease in humans. She says ‘oral health is a “window” into your general health’, with it being linked to several other factors, including diabetes, stress and smoking. However, ‘we are seeing a dramatic shift within dentistry,’ she explains, with more and more people concerned with obtaining improved oral health, but also improved smiles.

According to Dr Wadia, there is a growing waiting list for treatments such as whitening and bonding, but also gum sculpting to correct gummy smiles, as well as her ‘RW Perio Preventive’ treatment to treat or prevent receding gums. Such procedures improve self-confidence, but Dr Wadia ensures the underlying causes of periodontal issues are resolved at the same time. A service, no doubt, that Elizabeth I would have barged in line for, had there been the option in her day. 🐉

Teething problems

7th century BC The oldest false teeth were made in Etruria (now northern Italy), constructed from animal teeth held together with wire

5th century BC Cavities are believed to be caused by parasitic tooth worms, a belief that carried on well into the Middle Ages

659 Su Kung, a Chinese doctor, makes a silver paste, using it to fill cavities—the earliest known metallic dental amalgam

1540s In England, rotten dentine is cleaned and filled with substances such as ground dogs’ teeth and salt wrapped in cobwebs

1685 *The Operator for the Teeth* by Charles Allen is the first book on dentistry written in English

1790 John Greenwood (right) invents the first foot-powered rotary dental drill



1840s Nitrous oxide and ether are used as anaesthetics for the first time

1955 Michael Buonocore invents white fillings

1985 British parliament passes the Water Fluoridation Act