KAY'S MARVELLOUS MEDICINE

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A GROSS AND GRUESOME HISTORY OF THE HUMAN BODY

ADAM KAY

ILLUSTRATED BY HENRY PAKER



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To Michael Sharpington, who did an amazing fart at school,
which lasted over a minute, and was known forever
afterwards as Michael Fartington.

And with thanks to my Great Aunt Prunella
for reading an early draft of this book
and giving me her thoughts.



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MAJOR MEDICAL

1600 BC (ANCIENT EGYPT)
Doctors discovered that the heart pumps blood around the body. But then again, they also reckoned that poo flowed out of the heart . . .



400 BC (ANCIENT GREECE)
Hippocrates realized that illnesses aren't caused by magic. Apologies if you thought that illnesses were caused by magic and this is a massive spoiler.



1928
Antibiotics were discovered by Sir Alexander Antibiotic. I mean Sir Antibiotic Fleming. Sorry, Sir Alexander Fleming. That's better.



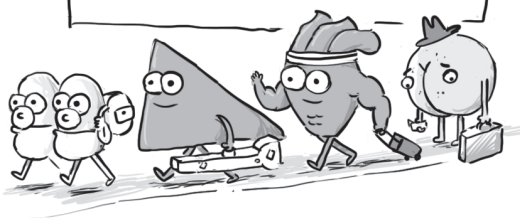
1910
Marie Curie discovered radiation and then everyone's houses were nice and warm. No, hang on, that's radiators. Radiation is a treatment for cancer.



1929
Doctors discovered that smoking was dangerous. Before then, doctors thought smoking was good for you – I don't like to call people idiots, but . . .



1954
The first kidney transplant took place, soon followed by liver transplants, heart transplants and bum transplants. (Maybe not bum transplants, actually.)

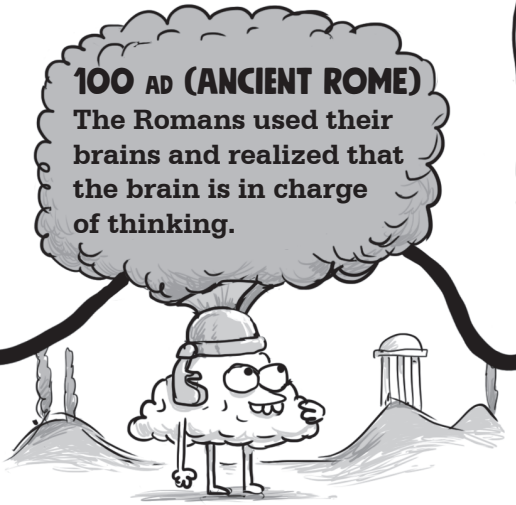


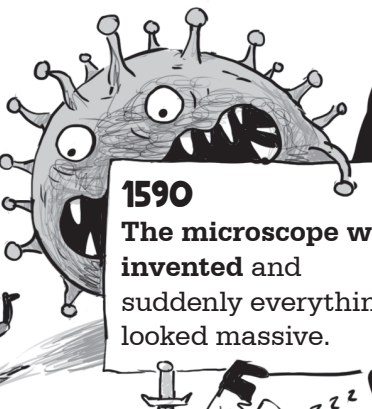
MOMENTS



800 AD (MIDDLE AGES)
The first medical school was opened. Before that, presumably people just guessed how to be doctors?

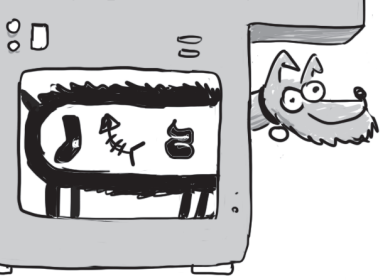
100 AD (ANCIENT ROME)
The Romans used their brains and realized that the brain is in charge of thinking.

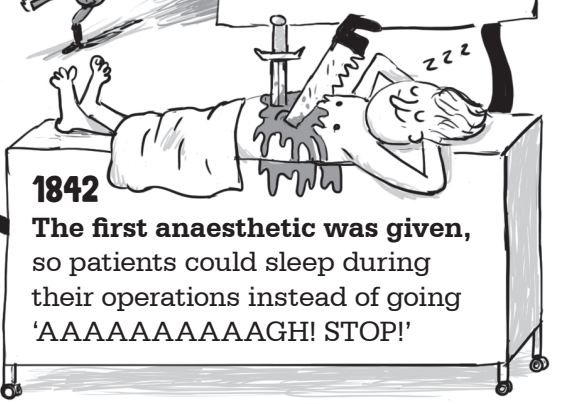




1590
The microscope was invented and suddenly everything looked massive.

1895
The first X-ray was performed. I've got no idea what the X stands for. Xylophone, maybe?





1842
The first anaesthetic was given, so patients could sleep during their operations instead of going 'AAAAAAAAAAGH! STOP!'

2020
The coronavirus pandemic swept through the world.



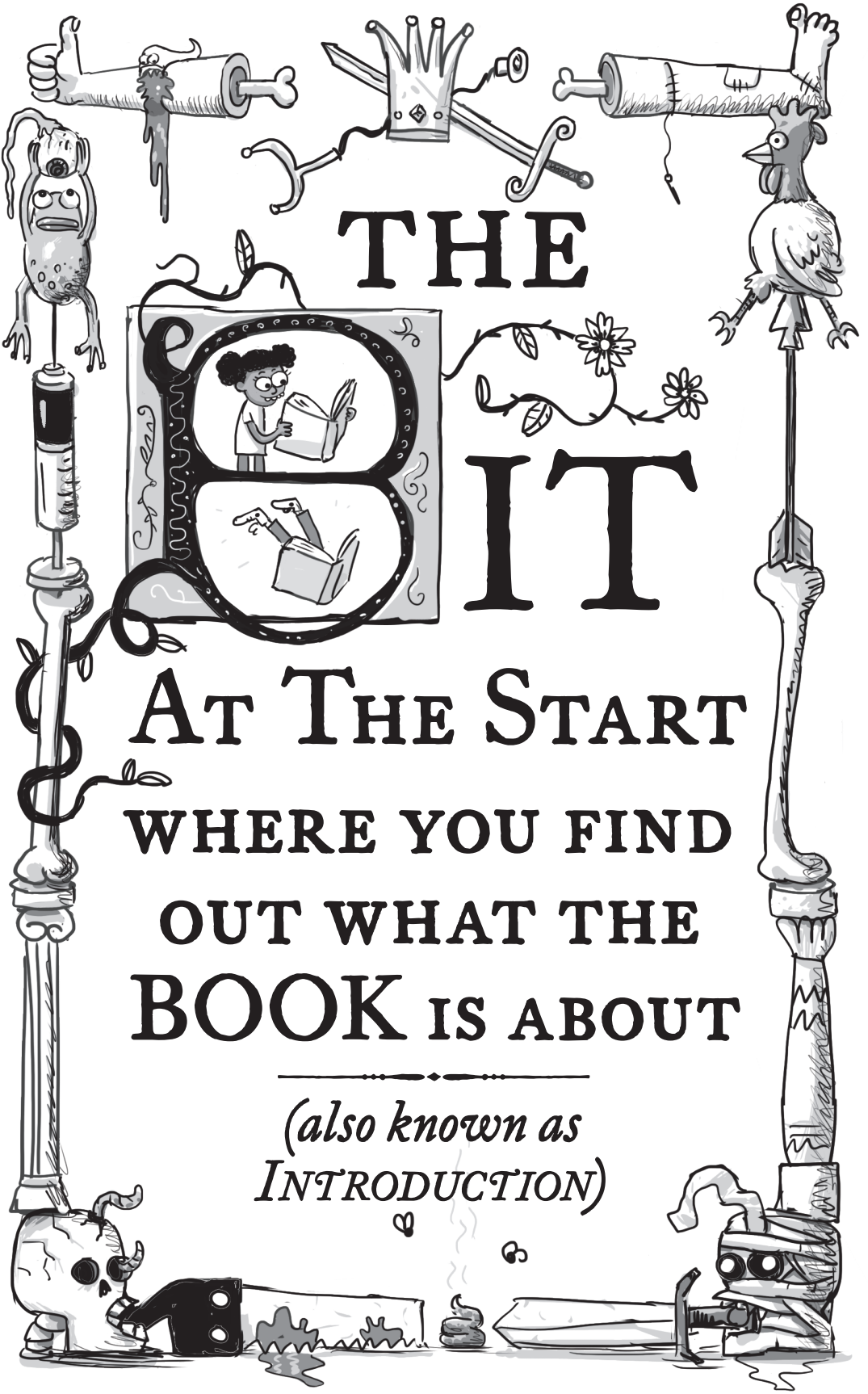
1980
Adam Kay was born, the most handsome genius in all of medicine.



2185
Earth gets taken over by the Octopus People of Zaaarg. Sorry about that.







THE BIT

At The Start

where you find out what the BOOK is about

(also known as Introduction)

LET'S TALK ABOUT THE OLDEN DAYS. No, not last Christmas – we need to go even further back than that. Where are you now? Dinosaurs. Nope, you've gone too far. Forward a bit – right, that's better.

When you think about history, you might imagine knights in clunky-looking armour riding off into battle, or Ancient Egyptians building pyramids, or kings and queens chopping people's heads off. You might have heard of poo plopping its way down the streets because no one had invented toilets yet, and grown-ups forcing children to climb up chimneys.



Quite right too – might as well make lazy, stinking children do some work for once in their miserable lives. Prunella

While all this was going on, one thing stayed pretty much the same: the human body. The doctor you saw last week about those spots on your bum (don't worry, I won't tell anyone) was just the latest in a long line of doctors who've been examining people's bums – and various other body parts – for centuries. But I'm pretty sure that the doctor you saw was a bit different from the

ones in Ancient Egypt. First of all, she probably had better teeth and didn't wear a massive gold headdress. (I wish I'd been allowed to wear a massive gold headdress when I was a doctor.) More importantly, she knows an awful lot more about the human body than people did back then.

That was the main problem with the olden days – people didn't have the slightest clue how our bodies worked. So if you got ill, even if it was something really minor, like bum-spots, you could be in massive trouble. And the cure for your unfortunate bum-spots (how are they doing now, by the way?) would've been something mega-weird and useless – like gargling with wee or shoving insects down your pants.



Don't believe me? Well, how do you and your spotty bum fancy a bit of time travel? It's OK – you don't need a packed lunch, and there's no chance of changing history by accidentally sneezing on Julius Caesar and somehow causing the human race to be overthrown by earthworms.

We'll head back thousands of years to see how doctors of the past muddled through without all those things that now save our lives every single day, from anaesthetics and antibiotics all the way to X-rays and . . . umm . . . something else beginning with X. Plus, we'll look at all the mistakes and experiments (mostly mistakes, to be honest) that eventually led to us figuring out how everything works. When I say 'us', I mean famous scientists of the past – **YOU** didn't discover how any of the body works. → *Nor did you, Adam, you useless weasel. Prunella*



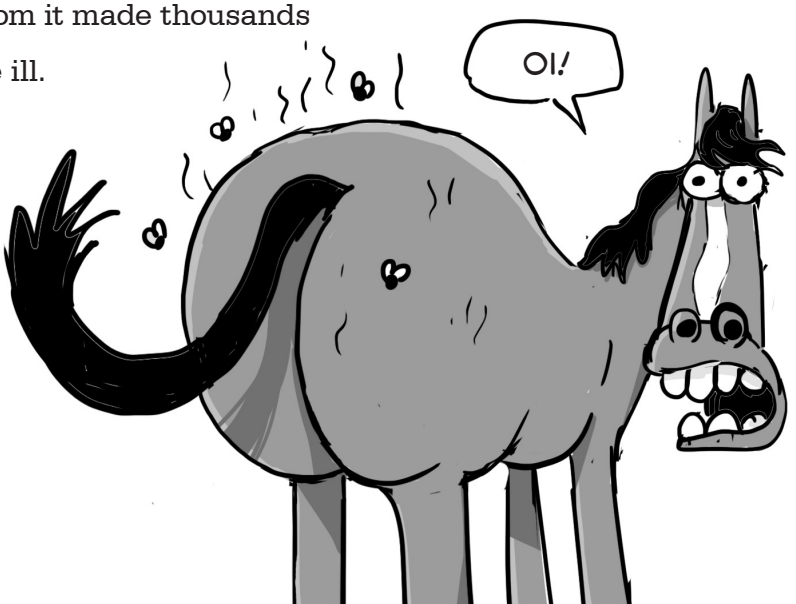
I'll answer all the questions you didn't even realize you had to ask, like:

WHAT HAPPENED IF YOU NEEDED A TOP-UP OF BLOOD BEFORE BLOOD TRANSFUSIONS WERE INVENTED?

It depends on which doctor you saw, but they might have told you to drink wee, or beer, or even dog's blood. I don't want to spoil the surprise, but none of those treatments worked particularly well . . .

WHAT WAS THE GREAT STINK?

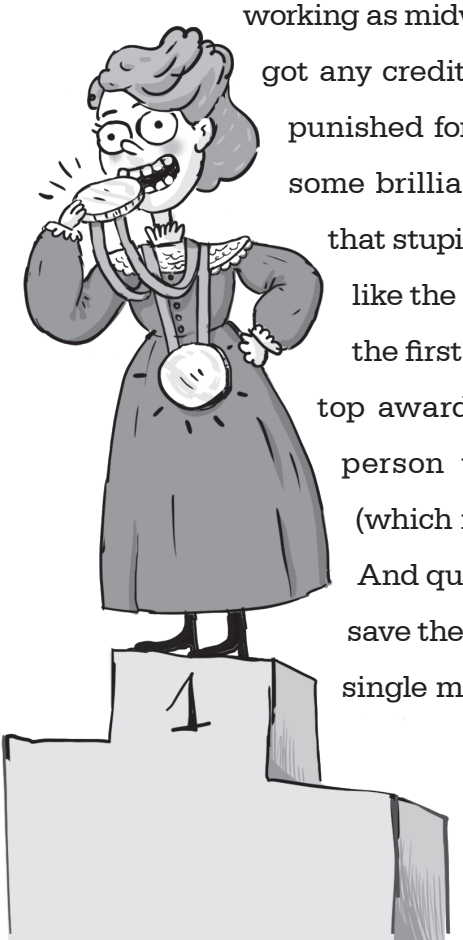
No, it wasn't what historians called your bedroom after you ate that baked-bean and cauliflower casserole. It was a time when there was so much poo in the River Thames that the whole of London smelled like the inside of a horse's bum for months and months, and all the germs from it made thousands of people ill.



It's lucky you weren't around then, or you'd have been arrested for attempted murder every day. Prunella

I'll introduce you to geniuses like Louis Pasteur, who invented pasta. No, hold on, that's not right. He worked out that infections come from germs. Before that, people used to think infections were caused by bad smells! He even worked out how to get rid of germs in food, so people didn't die from drinking manky milk.

For hundreds and hundreds of years, women weren't allowed to be doctors or scientists – a horrible example of a thing called sexism, which means treating women and men differently. Women helped millions of people by working as midwives and healers, but they never got any credit for it – or even worse, they got punished for it! I know, right . . . We'll meet some brilliant women who pushed past all that stupid sexism and changed the world, like the marvellous Marie Curie. She was the first woman to win a Nobel Prize (the top award in science), and then the first person to win a second Nobel Prize (which is slightly greedy, if you ask me). And quite right too – her discoveries still save the lives of people with cancer every single minute.



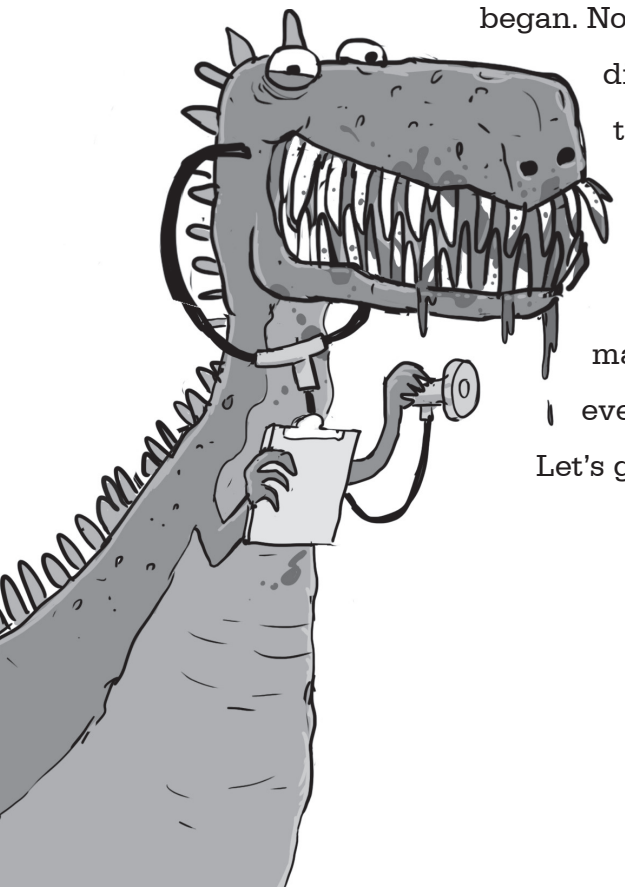
I can tell who you got your brains from. Prunella

But not everyone in history was a genius. For example, there's my dad, who once destroyed his laptop by cleaning the keyboard with soapy water. Going a bit further back, we'll find out why the Ancient Egyptians thought the brain was just a useless load of old stuffing that might as well be chucked in the bin, why teachers forced their pupils to smoke cigarettes, why hairdressers would chop their customers' legs off and why people got paid for farting. (Unfortunately, that's no longer a thing – sorry.)



Not gross enough for you? Well, how about the surgeons who never washed their hands and believed that the more blood and guts and brains they had on their clothes, the better? Or the ones who thought that patients should be wide awake and screaming during their operations, otherwise the surgery wouldn't be successful? Don't worry – none of them are still working today. Well, hopefully not . . .

So, if you're ready, pop a peg on your nose (there was a lot of stinky pus back then), pull on your wellies (there was a lot of poo around too), wash your hands (because *they* certainly didn't) and let's go back to where it all began. No, not dinosaurs – dinosaurs didn't have doctors. Maybe that's why they became extinct . . .



A doctor and a time machine – why has nobody ever thought of this before?! Let's go!