

Memoirs of a clinical thermometer

(inspired by the Thackray Museum’s collections, Leeds)

It’s hard to believe thinking about it that my great, great-grandfather was a foot long or so. Well, we all were in those days I suppose. I find it very difficult to imagine what it must have been like only being able to give the results after 20 minutes now that I reveal someone’s temperature almost instantaneously. Through us the medical profession discovered what normal body temperature was (they estimated between 36.3 to 37.5°C) and that fluctuations too far either way meant that the patient was ill. Very clever I think. Still, a foot long and taking 20 minutes must have been very impractical. It was left to one of our great idols, Sir Thomas Clifford Allbutt to design a better model and that he certainly did. He put us on the map he did. My great-grandfather, born in 1866 was only six inches long as a result meaning it was much easier for Allbutt to carry him from patient to patient. Oh the stories my old great-grandfather told me when I was only a very small thermometer! He traveled all over with Allbutt! Taking temperatures not just in Leeds but in London, Cambridge and beyond! Then my father lived mostly in Cambridge leading a very busy and exciting life, not so much in the way of being used to read temperatures anymore but in an academic way. Allbutt could never dispose of any of his beloved innovations.....And then there’s me. I guess I’ve told you a bit about how I got here so it’s only fair that I reveal to you where I am now and what I’m doing. Well, I’m still in Cambridge finishing the job my old father started. Still reading temperatures.....

But I’m an old thermometer too now, old fashioned some would say being made out of glass and not plastic, soon to be replaced I’m sure. Even though the materials we are made from have been changed these days and there have been many modern advancements (I know a digital thermometer, Tommy – he’s very flash – and one that is predictive), the general principle of our usage hasn’t changed and it just goes to show how advanced they were in the 1800’s. I mean before then what did doctors do? A thermometer like me is a vital piece of kit nowadays and in the possession of every doctor in the land, the world probably. Not blowing my own trumpet here but we are rather important to modern medicine and I doubt they could do without us. Still a little more appreciation would be nice. I mean how many appliances do you know that get exposed to countless numbers of mouths in all sorts of conditions, some of which are not very pleasant (the breath on some of them!), some of which make us feel very ill ourselves with the amount of heat they omit. Still, I wouldn’t change my job for the world. It feels good that me and my fellow thermometers are helping to improve health across the world. How many instruments can say that eh?!

As told by Claire Jones, March 2007

Anatomical Venus Speaks to the Museum Visitor*

Am I considered beautiful, encountered on a plush divan,
mirrored image of a courtesan,
her tiny toes and fingers?
Hair coiled subtle as Urbino's Venus,
stomach lifting like the catch
of secret-drawer's latch
sprung open to reveal sealed letters.

My missives? Lungs, heart, spleen,
sometimes a baby, hard and clean
as an almond. Removable. Once seen
unforgotten as fond features of a lover,
beauty closeting an exhibition space.

Look at me, you feel that something's over.

Outside, all seductress,
within, physician's puzzle-box,
not raw nakedness that shocks
but inside's true confession. See me?
Prepare for nightmares where
you're lost climbing a clicking stair,
haunted by Venus on a red divan.

Have me unburden as you stare,
hear ancient locks unfastening,
choirs of fallen angels sing, my
inner-works unravelling, mystery still deepening.

You're missing ... found ... and travelling
old ground – Lost bells of London ring.

*This poem is based on a composite of several 'Anatomical Venus' figures in the Wellcome Collection of medical history at the Science Museum. As these figures ended-up in London, that is where the poem ends.

As told by Deborah Tyler-Bennett, March 2007

Boomerang Blues

(inspired by the *Charles Heape collection*, Manchester Museum)

Oh take me back
To where platypus quack
And koala bears roar all the day.
Gone amnesiac
'bout my Outback
I've been so long away.

Yes take me home
Where wombats roam
And wallabies bounce as they may
Stuck in this case
Can't find any ways
To fly back on my own!

As told by Graeme Gooday, March 2007

London Lead*

I say London kills them,
men, women, children,
my cross, quickly fashioned,
misshaped as fog-bound houses.

Pocked grey says pestilence,
curved shape, the hook-billed visitor
each household dreads,
I cry: ‘Bring out your dead.’

Cross for one breast,
jerked on carts as a city
holds cambric to its mouth,
we crosses wait our turn, and don’t discriminate

between the men, women, children,
I say London kills them.

*Based on ‘Plague Crosses’ (1348-49) fashioned in lead and intended to mark the
breasts of victims of the Black Death. Held in the Science Museum’s Wellcome
Collection of medical history.

As told by Deborah Tyler-Bennett, March 2007

The Life of an Atom

from *Fairy Tales of Science* by John Cargill Brough, 1859, pp.53-64

The particles of matter are subject to strange vicissitudes. Every atom has its peculiar history. In all probability the countless molecules of carbon, oxygen, and hydrogen which are aggregated into this lump of white sugar, met together for the first time in the juice of the cane. Where were they before the sugar-cane was planted? Who can tell? One of these atoms of carbon may have coursed through the veins of a Hottentot, another may have existed in the brain of a Laplander!

The old story-tellers never scrupled to endow inanimate objects with the faculty of speech. Let us follow in their footsteps, and create a talking atom. Such a gifted entity might thus recount his adventures in the three kingdoms of nature:-

“I am an atom of carbon. The members of my family are innumerable, and are disseminated throughout the universe. Some of my brethren are grouped together in those strange diamonds which are so much prized by the strange atomic fabrics called human beings. These jewel-forming atoms are much to be pitied, though they give themselves great airs, and sneer at their unaristocratic relations. I would a hundred times rather be the roving atom that I am, than one of the molecules of the Koh-i-noor itself...

...Such is the story of my life, or rather of a fragment of my life. I enjoy perpetual youth. Today I may be buried in a mass of corruption, but to-morrow I may form a part of a newly-opened rose. Time cannot reach me; his hour-glass may be broken and his scythe may be shattered, but still I shall exist. At the present moment I am joined to countless atoms, indestructible and eternal like myself, in a fragment of sugar, but who can tell where I shall be in a year's time!”

This peroration has been cut short by our first-born, who has run away with the lump of sugar, and we have every reason to believe that the atom is undergoing new transitions.

Pebble

from *Town Geology* by Charles Kingsley, 1876

See this pebble which I hold in my hand, picked up out of the street as I came along; it shall be my only object to-night. ...And then at last that little black rounded pebble, from the street outside, may, and will surely, if I be patient and honest enough, tell me a tale wilder and grander than any which I could have dreamed for myself; will shame the meanness of my imagination, by the awful magnificence of God's facts, and say to me:

“Ages and Æons since, thousands on thousands of years before there was a man to till the ground, I the little pebble was a living sponge, in the milky depths of the great chalk ocean; and hundreds of living atomies, each more fantastic than a ghost-painter's dreams, swam round me, and grew on me, and multiplied, till I became a tiny hive of wonders, each one of which would take you a life to understand. And then, I cannot yet tell you how, and till I tell you you will never know, the delicate flint-needles in my skin gathered other particles of flint to them, and I and all my inhabitants became a stone...

Again and again I have been part of an island, and then again sunk beneath the sea, to be upheaved again after long centuries...and was tossed by currents till I became a pebble on the beach, while Reading was a sand-bank in a shallow sea. There I lay and rolled till I was rounded, for many a century more...

And now I am a pebble here in Reading street, to be ground beneath the wheels of busy men: and yet you cannot kill me, or hinder my fulfilling the law which cannot be broken. This year I am a pebble in the street; and next year I shall be dust upon the fields above; and the year after that I shall be alive again, and rise from the ground as fair green wheat-stems, bearing up food for the use of man.”

All this and more, gentlemen and ladies, the pebble could tell to you, and will: but he is old and venerable, and like old men, he wishes to be approached with respect, and does not like to be questioned too much or too rapidly; so that you must not be offended if you meet with more than one rebuff from him; or if he keeps stubborn silence, till he has seen that you are a modest and attentive person, to whom it is worth while to open a little of his forty or fifty thousand years' experience.

The Diamond and the Loadstone

from *Exercises for the memory and understanding, with a series of examinations. Fourth edition, consisting of fables and narratives, selections on natural and civil history, with moral & religious extracts in prose and verse*, by Thomas & John Holland, 1805, pp.10-11

A diamond of great beauty and lustre observing not only many other gems of a lower class ranged together with him in the same cabinet but a loadstone placed not far from him began to question him how he came there and what pretensions he had to be ranked among the precious stones he who appeared to be a mere flint a coarse rusty-looking pebble without the least shining quality to advance him to such an honour and desired him to keep his distance and pay a proper respect to his superiors.

I find said the loadstone that you judge by outward appearances it is your interest that others should form their judgement by the same rule. I must own I cannot boast of splendour but I may venture to say that I make amends for my outward defects by my inward qualities. The great improvement of navigation in modern times is entirely owing to me. It is owing to me that the distant parts of the globe are known and accessible to one another that the remotest nations are connected and all in a manner united into one common society that by a mutual intercourse they relieve one another's wants and enjoy the several blessings peculiar to each. Great Britain is indebted to me for her wealth her splendour and her power the arts and sciences are in a great measure obliged to me for their later improvements and their continual increase. I am willing to allow you your due praise in its full extent you are a very pretty bauble I am delighted to see you glitter and sparkle I look upon you with pleasure and surprise but I must be convinced that you are of some real use before I acknowledge that you have any genuine merit or treat you with that respect which you seem to demand.

Diary of a Misanthropic Magnet (edited extracts 1820-21)

(inspired by the magnets of the Royal Institution, London)

May 1820

Spending my first weeks in a comfy wooden box, occasionally disturbed by someone opening the box to stare rather rudely and poke me about a bit. The glaring light that comes in at least shows up the label on my box lid: ‘Mr John Newman, Instrument-maker’. Quite who that villain is I don’t know - and I’m not sure I want to!

October 1 1820

Turbulent day! I’ve been carried off by a reassuringly unexcitable looking young chap called Faraday. He seems to be in thrall to a rather more dynamic over-dressed fellow called Davy. Rather tiresomely he can’t stop talking about bizarre news he has heard from Denmark that those new-fangled ‘Voltaic currents’ can affect the direction of compass needles. Affectation indeed! The flightiness of those lightweight magnets used in compasses has long led many astray on to a rocky shore. And besides, we lodestone types have been around for thousands of years. How impertinent to suggest that the parvenu electricrky can gatecrash our ancient and exclusive order!

October 2 1820

Most displeased. Some fliberty-gibbert magnetic needle in the laboratory has caved into the interference of the electric current! I watched this pitiful specimen dangling off a thread and absurdly contorting itself into ‘rotations’! Surely it was just feigning the influence of the Voltaic current to win favour with Professor Davy, who manifests an unseemly pleasure in all this novelty. At least Mr Faraday remains calm: I hope we can trust this sensible fellow not to confuse the world with any more of these ghastly ‘discoveries’!

September 3rd 1821

Mr Faraday scribbling in his diary with uncharacteristic animation. There is much commotion in the laboratory: wires twizzle about without going anywhere nor anything obviously pushing them. Anything likely to increase the amount of motion in the world can only be bad for those of us trying to conserve decorum!

October 1821

I beheld a revolting spectacle! A fellow magnet has been held captive in the bottom of a metal chamber and half drowned with mercury. To compound his humiliation he is made to stand there while some voltaic current apparently makes a wire spin around him at an unspeakable velocity. And all apparently to show that the damn fool Dane ‘Oersted’ was right about the ‘rotational’ effect of currents on magnets! Frankly this is just getting silly. Must do what I can to avoid Mr Faraday’s attention lest I too get dragged into all this...

November 1 1821

Horror of horrors! Not content with making wires spin fatuously around my imprisoned colleagues, Mr Faraday forced me to perform an act so unbecoming I can scarcely relate it. Not only was I immersed in an evil mercury vats under the smug gaze of that pesky wire, but I was left to drift around, held down only by a flimsy anchor. On came the current and - ghastly to relate - my head began to move round in circles round the wire! How that infernal fellow chuckled at my discomfiture! Nothing good can come of all this ‘electromagnetic’ commotion in years to come!

Extract ends here. (No historical facts were harmed in the making of this diary)

As told by Graeme Gooday, March 2007

Radar Rap

(inspired by the Science Museum's collections, London)

I am a cavity magnetron
Livin' in southerly Kensington
As I helped get that Second World War won
I'm an historic artefact, so hear me everyone.

My game is radar, so when I get humming
Those bouncing rays shout "missiles incoming!"
I weren't the first to go radar gunning,
But daddy "Chain Home" weighed a ton and something!

Made in Birmingham by Randall and Boot
In 1940 I looked so cute.
My waves were short, with lots of power to boot
All in box no more than a foot.

Now I'm so light I can travel in a plane
And submarines in a naval campaign:
Detecting enemies in the fast lane,
I became the enemy's pain and bane,

Once we'd given those dark powers a stuffing
War was over and the peace pipe was puffing.
Now my kids work in microwave ovens
Heating ready-cooked meals that you'all are lovin'

I am a cavity magnetron
Livin' in southerly Kensington
As I helped get that Second World War won
I'm an historic artefact, and that's a lot of fun!

As told by Graeme Gooday, March 2007

Section of an Atlantic telegraph cable

(from the *Making the Modern World* gallery at the Science Museum, London)

Hello there! Excuse me if my voice is a bit crackly but I've carried many messages over the years and I'm now enjoying some peace and quiet here in the museum. I suspect you're wondering what I am? At first glance, I may look like some alien creature from another planet but I haven't always had this strange appearance! I started life as a sleek and sophisticated telegraph cable composed of copper wires surrounded by an insulating waterproof layer. My journey to the bottom of the Atlantic started in 1869 when I was coiled up inside huge drums aboard Brunel's ship, the *Great Eastern*. As the ship sailed from Ireland to Newfoundland, the cable was fed out behind. Some of my fellow cable segments were weak and snapped, so the ship had to turn around and retrieve the broken ends using a forked anchor. But I was strong and did my duty for 40 years, carrying messages from Britain to the New World and vice versa. Most of my messages were fairly mundane things such as money transfers and stock market figures, but I was glad to be of service to my country.

In fact, I did my job a little *too* well; by the beginning of the twentieth century, the number of messages had increased rapidly so my owners decided to replace me with a newer cable that could handle larger amounts of telegraph traffic. I was eventually recovered by the cable ship *Colonia* in 1909. Most of my friends ended up on the scrap heap but luckily someone decided to keep me as a mantelpiece decoration. It was marvellous to have a warm and cosy location after the dark chilly depths of the Atlantic where these bizarre marine creatures decided to adopt me as their home. I feel a bit overdressed now with all these fancy decorations but at least people get the chance to admire me now! My mantelpiece owners, Mr. and Mrs. Burrows of Lavender Hill, were quite keen to show me off to their dinner party guests. This attention was not entirely welcome, however, as their young sons decided one day to snap off my marine companions, so I'm now safely tucked away beneath this glass cover. I've been in this museum gallery for a few years now and it's delightful to be surrounded by my fellow cables again, although we're a bit quieter these days!

Anyway, that's my story so now please tell me yours? What made you decide to visit the museum today?

As told by Louise Thorn, March 2007