

Letter to the Editor

[*The Editor is not responsible for the views expressed by the correspondents*]

James Parkinson : The Forgotten Hero

Sir, — Involuntary tremulous motion, with lessened muscular power, in parts not in action and even when supported; with a propensity to bend the trunk forwards, and to pass from a walking to a running pace: the senses and intellects being uninjured

Year 2017 marks the 200th anniversary of James Parkinson's description of the disease that bears his name and that affects an estimated 5 million people worldwide. Working as a medical surgeon in London, James Parkinson was the first to connect the dots when confronted with a handful of patients with similar involuntary tremors and symptoms of muscle weakness. In 1817, he published his findings in his seminal 'Essay on shaking palsy', a 66 page essay on six cases, the three of his own patients and the three who he saw in the street.

He referred to the disease that would later bear his name as paralysis agitans, or shaking palsy. He distinguished between resting tremors and the tremors with motion. It was almost 50 years after Parkinson's death before the significance of his Essay was fully appreciated and the shaking palsy renamed 'Parkinson's disease' in his memory. It was Jean-Martin Charcot who coined the term "Parkinson's disease" some 60 years later. Parkinson erroneously predicted that the tremors in these patients were due to lesions in the cervical spinal cord.

James Parkinson (11 April 1755 - 21 December 1824) was an English surgeon, apothecary, geologist, palaeontologist, and political activist. He is most famous for his 1817 work, *An Essay on the Shaking Palsy* in which he was the first to describe "paralysis agitans". The symptoms identified by Parkinson two centuries ago are still used to diagnose the disease today. Although unable to identify a cause for the condition, Parkinson's remarkably accurate description of the symptoms, and the disease in all its different stages, eventually led to it being named in his honour.

The Enlightened Mr. Parkinson by Dr. Cherry Lewis, Honorary Research Fellow at the University of Bristol, tells the story of Parkinson's life as an apothecary surgeon (similar to today's GP) in Hoxton, then a village on the outskirts of London. It was a time when epidemics festered in the dirty and overcrowded tenements, infant mortality was fifty percent, and no anesthetics were available for those unfortunate enough to require surgery. Smallpox killed ten per cent of the population, so when Edward Jenner discovered a vaccine, Parkinson worked with him to establish vaccination stations across London.

In 1812 Parkinson assisted his son with the first described case of appendicitis in English, and the first instance in which perforation was shown to be the cause of death.

Parkinson's interest gradually turned from medicine to nature, specifically the relatively new field of geology, and palaeontology. He began collecting specimens and drawings of fossils in the latter part of the eighteenth century. He took his children and friends on excursions to collect and observe fossil plants and animals. His attempts to learn more about fossil identification and interpretation were frustrated by a lack of available literature in English, and so he took the decision to improve matters by writing his own introduction to the study of fossils.

He revealed an unknown world, populated with 'hyenas the size of bears' and 'enormous marine animals', all of which both enthralled and terrified his readers. His exquisitely illustrated *Organic Remains of a Former World* placed the study of fossils on the scientific map of Britain before the subject even had a name.

When awarded The Royal College of Surgeons' first Gold Medal, it was not for his medical publications that Parkinson was honoured, nor even his *Essay on the Shaking Palsy*, but for his ground-breaking work on fossils.

Parkinson became a political activist after the French Revolution, which many in Britain supported. He wrote numerous outspoken publications which harangued a corrupt and incompetent Government using the pseudonym 'Old Hubert', for many were imprisoned and even transported to Australia for such seditious activities. When caught up in an alleged plot to kill 'mad' King George III, Parkinson put his own life on the line trying to save his friends.

Parkinson also contributed several papers to William Nicholson's "A Journal of Natural Philosophy, Chemistry and the Arts", and in the first, second, and fifth volumes of the "Geological Society's Transactions". He wrote a single volume 'Outlines of Oryctology' in 1822, a more popularise work.

Parkinson belonged to a school of thought, Catastrophism, that concerned itself with the belief that the Earth's geology and biosphere were shaped by recent large-scale cataclysms. He cited the Noachian deluge of Genesis as an example, and he firmly believed that creation and extinction were processes guided by the hand of God. His view on Creation was that each 'day' was actually a much longer period, that lasted perhaps tens of thousands of years in length.

We have come a long way since the publication of 'Essay on shaking palsy', but we haven't found what James Parkinson was looking for: a way to stop the disease in its tracks. We'll continue working until we do.

April 11th, James Parkinson's birthday, is World Parkinson's Day. Each year in April, thousands of people across the globe roll up their sleeves to raise awareness for the disease and the consequences for all those affected by it. To commemorate this year's bicentennial edition, the Flemish Parkinson League has organised thought-provoking event on April 23, 2017 in Ghent, where patients, clinicians, family members and researchers got together, to look back, but more importantly, to look forward to new treatment approaches on the horizon, as a salute to this forgotten man.

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