## *Chapter 12* **Last days** Torquay 1924–25

American universities were streets ahead of their British counterparts in bringing Heaviside's methods into their courses. At Cornell, Professor Vladimir Karapetoff invented a machine called the Heavisidion for solving the equations of transmission lines. When he heard of it, Oliver expressed surprise but said that it didn't provoke him to commit Heavicide. One of the most vibrant departments of electrical engineering was in Union College in New York State. The department's founder, the brilliant, hunch-backed Charles Proteus Steinmetz, had been a great admirer of Heaviside, and so was the current head, Professor Ernst J. Berg.

In 1924, Berg made the long journey to Torquay to visit the great man. Oliver was pleased to hear the latest news from America – engineers were taking enthusiastically to the operational calculus and a new edition of *Electromagnetic Theory* was on sale at \$35 a set – but to Berg's disappointment he wouldn't discuss his writings, saying he had forgotten all about them. Even so, they found plenty to talk about. Like all new visitors to Homefield, Berg was shocked at what he found. Oliver's physical condition was especially worrying. It was June and he had recovered from the winter but he still had a formidable array of ailments. His feet were in a dreadful state and he didn't have any suitable shoes, so when Berg arrived home he sent a pair of American boots that he thought might do the job. They must have cost more to send than to buy, and transportation by ship was slow, but they eventually arrived and Oliver was grateful. His reply, written on 16 November, was one of the last letters he wrote and shows him as ready as ever to fight for justice as he saw it.

I duly received the boots marked '5 dollars' and I think they are as near as possible perfect without orthopaedic operations .... The arrival of winter has caused Gas Co. trouble again. Hardly ever enough gas and rapid failure of the old, small mains by naphthalene and other chokage.

Worse than that I had to have some repairs done to the windows and roof slates and gutters, to keep out the wind and rain. The single man I got was most willing, but was too confident, and he was not well, though he said he was. He was quite grateful for my practical way of helping the out of works, by giving them work they *can* do, treating them liberally as well. But he didn't understand the construction of the roof (his master does mostly repairs to small workmen's houses). So I had to direct him in many respects, and be out of doors, and I had an accident. In coming down a ladder my coat caught in something, and down I went, a fall of 11 feet on the broad of my back. The man did the usual stupid thing by trying to get me on my feet to see if I had hurt myself. I said let me lie, till the pain in the back goes. In about five minutes it was gone, and I was able to be pulled up, and actually walked indoors shakily. The pain had gone through me to the front, to the muscles

and bones all the way down from the top-of-the-chest. Well, by warmth and in bed I would cure that in a few days. But I could not get the warmth or proper food, and the window mending had to go on, so the house chilled and the man had to be looked after. The result was a violent attack of internal derangement ...

I have another fight on. I order Milkmaids Pure Cream with no Preservatives. Liptons send me the common heavily sugared and adulterated tins they call 'Milks'. I refuse them. They try to make me take them. I write to Switzerland. They sent my letters to London. The London firm said they were greatly obliged to me. They were astonished to learn that Liptons didn't stock the Pure Cream Milkmaid Brand and would do their best for me. Liptons made a special requisition for me and got 24 Milkmaids from their London firm. With lump sugar added according to taste they are splendid, and I ordered 48 more, with 6 pounds of lump. They sent the lump but no more Milkmaids. Yet I have to proceed cautiously. I have 167 'Milks' and I want them taken back in exchange for 'Milkmaids' and I won't pay their bill unless they will allow for difference in price; so Xmas is coming on when business is blocked, I want a settlement quickly. I am aiming at Liptons, the largest grocer in the world, permanently stocking Pure Unadulterated goods, so pray do not send me any as I know you might want to for they would come too late.

Oliver Heaviside, champion of consumer rights!

He wrote to Searle in December 1924, joking about the fall and inviting him and his wife to visit. The four-year freeze in their relationship was over. But soon afterwards he wrote again, saying 'jaundice, so don't expect much'. They called on New Year's Day and found him, impish as always, but frail and yellow with the jaundice. He asked them to get him some handkerchiefs. They took them the next day but could get no answer to their knocking. It seemed as though their friend had decided to shut them out of his life again but two days later a man called at their hotel. He was a doctor. Oliver had been found unconscious in his house by Constable Brock, who straightaway alerted his nieces. They had called two doctors and were considering moving their uncle to a nearby nursing home but he had insisted that nothing be done until he had spoken to his friend Searle.

The doctor who called at the Searles' hotel drove them to Homefield where they found Oliver, conscious but very weak, with Brock and the other doctor. After talking to his friend, Oliver agreed to go to the Mount Stuart Nursing Home and an ambulance was sent for. It was Oliver's first ride in a motor vehicle.

After a few days he was better and the Searles called to have tea with him almost every day until their holiday was over. Mr Tree from the Institution of Electrical Engineers came down from London and for several days joined them for tea. Searle reports that Oliver was full of fun and won the affection of everyone in the nursing home, especially the little ward maid, whom he called the Marchioness. But his body, worn out by years of ill-nourishment and a hundred nagging afflictions, had run its course and he died on 3 February 1925.

Oliver was buried with his parents in Paignton cemetery. The funeral, on 6 February, was attended by family members and Mr Tree. The journals and papers carried glowing obituary notices, and his neighbours and others who had come into contact with the odd resident of Homefield were astonished to read of his worldwide fame. His name appears at the bottom of the gravestone, under those of his parents, and cannot be seen when the grass grows a little – a metaphor, perhaps, for the way his name

has been neglected elsewhere. But a curious thing happened in the summer of 2005. Visitors found that the gravestone had been cleaned of years of grime and was now shining white, the area around it had been cleared, and the lettering picked out sharply so that 'Oliver Heaviside F.R.S.' could again be clearly seen by anyone walking past. The person who did the good deed wanted to remain anonymous and the local papers ran 'grave mystery' stories.

Perhaps the grave renovation is a metaphor, too. Just as Heaviside had many wellwishers during his lifetime, there are many now who would like to see him achieve his proper place in the public's affections. The work of great poets and painters is there for all to see and their personal lives are remembered as much for their faults as their virtues. Heaviside was a great artist of a different kind and lived his life as a free spirit. He was always provocative, often amusing, sometimes infuriating but never dull. His legacy is not tidily labelled but you don't have to go to a book or gallery to find it. It is all around us, every day of our lives.