Chapter 1
Grandfathers and Fathers

On the 12th November 1756, a young physician, not long out of medical school at Edinburgh University, armed with letters of introduction, set up his shingle at the cathedral town of Lichfield, in the Midlands of England, in the time of George II, King of Great Britain and Ireland. This was Erasmus Darwin’s second attempt to establish himself as a practising physician, as the first, at Nottingham, had only yielded one patient in 4 months (King-Hele, 1999). Lichfield was at that time a thriving town, not yet under the shadow of Birmingham, then a small provincial centre of 24,000 inhabitants\(^1\), which was soon to be the driving force of the industrial revolution, in no small measure as a result of the actions of this new and penniless doctor. Luck and good judgement was on his side and as a result of curing a seemingly incurable case, Erasmus soon had enough patients so that he could relax in his new home, find a wife and start a number of intellectual pursuits over the next 20 years, which would bring him international fame\(^2\).

Erasmus Darwin was one of the greatest polymaths of the eighteenth century. The only Englishman of equivalent stature at this time was Samuel Johnson, who is also associated with Lichfield, having been born and educated there. Much has been written on these two men, both at the time and ever since (for Erasmus Darwin, see King Hele, 1999). Erasmus Darwin came from a line of distinguished lawyers and doctors and an ancestral home at Elston Hall near Newark, in Nottinghamshire\(^3\). The youngest of four brothers, he decided to study medicine at Edinburgh. Becoming established in Lichfield, he bought a house in the Cathedral grounds and married his first wife, Mary Howard\(^4\), just one year after arriving, in 1757. He had 4 children by Mary, three sons and a daughter. The last of these sons was Robert Waring Darwin, the father of Charles Darwin, one of the two subjects of this book.
England at this time was a very different land from the one that exists today. The Industrial Revolution, which was just beginning, had not left its stamp across the land, increasing the population many times, building entirely new cities and changing the grid of transport connections. Just as important as this growing commercial activity at home was the continued development of the East India Company (formed in 1600), especially after the defeat of the French in the seven years war (1756-1763), which opened up new markets in India and the East, alongside those already established in the Americas. A secondary effect of these overseas developments, was the effect at home of giving an outlet to an expanding population, and, for our story, also allowing the development of the influential Public School system of England, providing new opportunities for the sons of the ruling classes and the new colonialists, and providing the intellectual base for the Industrial Revolution and the development of the British Empire.

On a more prosaic note, this was a land in which the horse-drawn stage coach ruled supreme. Roads were not macadamised and, while some turnpikes were well maintained, many roads were rutted and dangerous. In his practice, Erasmus Darwin covered the astounding distance of up to 10,000 miles in a year, and a serious accident on the road a contributed life-long injury to his large frame, and in the end curtailed his travelling. It is important to note that the grid of staging posts then does not coincide well with current arterial roads. The main centres then were largely the diocesan towns and cities, which possessed a cathedral, often going back to Norman times, or even to Roman Britain. Having a cathedral meant that many advantages were conferred on a town: it would have special markets and other privileges conferred by the Crown, such as choristers, which usually signified a local school of high quality. Today, Lichfield, with a population of just 28,000 inhabitants is hedged in on all sides by towns and cities of the Industrial Revolution, and it is difficult to see it as the provincial hub that it once was. And even as events were developing then in the middle of the eighteenth century, Birmingham, and other cities, were beginning to drain it of power and influence. Perhaps, the best description of the effect of these dramatic changes on provincial towns is in the novels of Anthony Trollope.

Both Charles Darwin and William Darwin Fox, the subjects of this book, began their careers by taking stage coaches across the country, particularly to Cambridge. Soon, however, railways were built rapidly between the towns and across the rural countryside. The earliest of these was the Liverpool and Manchester Railway in 1830, built 1 year before HMS “Beagle” sailed off on its 5 year circumnavigation of the globe; but by 1854 every major town in England was connected by a railway. Fox was an avid supporter of railways, as his diaries make clear. Yet Darwin too made great use of them in his family migrations to places all over England and he chose his home partly on the basis of a handy rail link. And as a final observation we should note that Wallace, the co-originator, with Darwin, of the Theory of Evolution, began his working life as an assistant surveyor for railways being developed in England and Wales.

During his time at Lichfield, and later in Derby, Erasmus Darwin became not only a successful doctor, whose services were requested by George III, but also, firstly, an inventor of renown (the discoverer, for example, of adiabatic heat changes),