

SHROPSHIRE MEN.

BY E. F. MARSHALL.

CXXXVIII.
CHARLES DARWIN.

Although barely twelve months have elapsed since we wrote and published a somewhat lengthy appreciation of the great scientist, we do not think any apology is needed for our reverting to the subject of Darwin, and giving him a place in our series as one of the greatest men of whom Shropshire can boast.

Born at The Mount, Frankwell, Shrewsbury, on February 12th, 1809, Charles Robert Darwin was destined to rank amongst the intellectual mighty, and to illustrate in his own person the force of some of the scientific doctrines he was afterwards to propose.

If there be any truth in the theory of heredity, he was uniquely fortunate. His father, Dr. Robert Waring Darwin, was son to that better known man, Erasmus Darwin, who won a three-fold reputation, as physician, poet, and naturalist. His mother was Susannah, daughter to Josiah Wedgwood, the great Staffordshire potter. It was from his two grandfathers that Charles Darwin inherited those peculiar qualities which enabled him to make good his title to a place in the temple of the immortals. Neither Robert Waring Darwin nor his wife displayed more than the average intellectual ability of their class: that they were what they were was an evidence to the force of that particular law of heredity by which it is laid down that a heritable characteristic of a parent may be unexpressed in the development of the offspring, but re-appear in the third generation.

There can be no doubt that Darwin inherited the peculiarly scientific side of his mind from his paternal grandfather. That eminent authority Dr. Ernest Krause is of that opinion. He says: "Almost every single work of the younger Darwin may be paralleled by at least a chapter in the works of his ancestor: the mystery of heredity, adaptation, the protective arrangements of animals and plants, sexual selection, insectivorous plants, and the analysis of the motions and sociological impulses; nay, even the studies on insects are to be found already discussed in the writings of the elder Darwin. But, at the same time, we remark a material difference in their interpretation of nature. The elder Darwin was a Lamarckian, or, more properly, Jean Lamarck was a Darwinian of the older school, for he has only carried out the opinions of Erasmus Darwin, although with greater acumen; and it is to Darwin, therefore, that the credit is due of having first established a complete system of the theory of evolution."

If Charles had not been a born scientist, though he might have read the works of his grandfather, he would never have so thoroughly assimilated them as not only to clearly understand all they laid down and all they implied, but also to detect their weak points, and to go still deeper into the subject of the truth they were to convey. It was undoubtedly fortunate that Charles deeply inherited the scientific cloak of Erasmus, and that he was not heir to his grandfather's poetic phylactery. The elder Darwin's weak point was that he was a poet. He lost many of the solid advantages of direct science in the glare of the aureole of the bard. In his quest of truth, he was tempted to leave the highway by the flowers in the meadows. It is true that the natural beauty of any subject he had chosen for a scientific study did not deter him from dissecting it and pulling it to pieces to get at its soul; but it is equally true that, having attained his object, he tried to rehabilitate the original beauty of his subject by writing about it in poetry instead of telling the world the story of his discovery in sober and stilted prose. The scientist, if he would succeed, must not only delve into the heart of nature to find her secret, but, having found it, he must also burn the midnight oil until he has thoroughly mastered the language that secret speaks. If he does not understand its language, he cannot tell its story, complete from its initial letter to its final period. The elder Darwin was not so great a scientist as the younger, because Erasmus was a poet, and Charles was not.

Professor Pearson says, and we may safely accept his dictum, that "a man is not only the product of his father, but of all his great ancestry; and, unless very careful selection has taken place, the mean of that ancestry is probably not far from that of the general population." That being so, we may conclude that it was a good thing for the scientific world that Charles Darwin's mother was daughter to Josiah Wedgwood, the potter, whose temperament was antipathetic to that of Erasmus Darwin, the man whose scientific studies was hampered by his love of fanciful analogies in nature.

The Wedgwoods were a race of practical hard-headed men, who, having a purpose in view, followed it to the goal, undaunted by difficulties, and endowed with the habit of utilising their failures as stepping-stones to success. Josiah, the greatest of them, displayed all the family's characteristics in that respect. He, too, had a scientific mind, an unflinching aptitude for research, and for finding gold where other men had only dreamt of rubbish. He could analyse and discriminate. He was not a poet, but he had the artistic sense, and that, in a great measure, helped him on the way to success.

It was because he inherited the solid characteristics of his paternal grandfather, that Charles Darwin was able to overcome the difficulties of the path he had set himself to travel, and to weld theories into systems. The great potter was not merely a mechanician, or a man of commerce: his own peculiar genius was equal in its way to that of the poet-naturalist. His whole success was based upon his powers of research, his faith in the utility of his conceptions, and the perseverance with which he carried out his object, from the starting-point to the goal. His characteristic, combined with the peculiar scientific instincts of Erasmus Darwin, was repeated in the greater mind of Charles Darwin, who became the man he was because of what both his grandfathers were before him.

Next Week. DARWIN AS A BOY.

SHROPSHIRE MEN.

BY T. P. MARSHALL.

CXXIX.—DARWIN AS A BOY.

There was little, if anything, in the life of Darwin the child that foreshadowed the coming of Darwin the man. Physically, he was an ordinary lad. Intellectually, there was nothing to distinguish him from the rack. He received his first education at the hands of the Rev. George Case, minister of the Unitarian Chapel, High-street, Shrewsbury, where his mother was a worshipper, for the Wedgwoods of that day were adherents of the Unitarian form of faith. There were then four public educational institutions at Shrewsbury: the well-known Free School, founded in the reign of Edward VI.; Bowdler's Charity School, founded in 1734, by Mr. Thomas Bowdler, for the instruction, clothing, and apprenticing of poor children in the parish of St. Julian's; the Subscription Charity School, near the Abbey Church, established in 1708 for charitable purposes by the town at large; and Allatt's Charity School, instituted in 1798 by Mr. John Allatt, for many years chamberlain of the Corporation. Of the four, the Free School was the only one to which Darwin might have been sent; but, for some reason, his parents preferred that he should go to Mr. Case's private seminary. The Unitarian minister, like most of his class, was a thoroughly well-educated man, and therefore qualified to impart suitable instruction to the young; but, though his curriculum may have had many good points, it was not calculated to give the lad those advantages which are consequent upon a career at a public school.

It is probable that Darwin was only put under Mr. Case for preparatory purposes, for while he was yet no more than a child he became a boarder at Shrewsbury School, of which the famous Dr. Butler was then headmaster. In the interests of truth, we are compelled to say that Charles Darwin did not distinguish himself in his studies. He was not a dullard in any sense of the term: he was an ordinary, everyday boy, who went through his lessons as a part of his daily duty, without any ambition to rank amongst those Shrewsbury scholars who had attained distinction in almost every branch of learning. He does not seem to have cared for the ancient classics; but there were certain books for which he entertained a great fondness, notably the works of the British poets, and especially those of Shakespeare, over the perusal of whose writings he spent many happy hours. One of the books in which he took great delight was White's "Natural History of Selborne." It appealed to his latent genius, and stimulated his natural powers of observation; it led him to study the habits of birds, and to make notes thereon. Another book which set him re-thinking was entitled "The Wonders of the World." It was lent to him by a schoolfellow. That book fascinated him. He read it carefully and thoughtfully, from its title page to its colophon; and, as he could not accept some of its statements, he boldly expressed his disagreement therewith; but with what result history sayeth not. One effect the book produced: it filled him with a desire to visit some of the distant parts of the earth of which he had read. He tells us, in his autobiography, that he had "a keen pleasure in understanding any complex subject or thing." Probably, that was why he was interested in the study of Euclid, a knowledge of which was imparted to him by a private tutor. In after years he expressed his deep regret that he had not paid the same attention to algebra.

Out of school he gave himself up to those amusements which appealed to his tastes. He was fond of collecting shells, seals, coins, and minerals, a repetition of one of the juvenile characteristics of his maternal grandsire, Josiah Wedgwood. It was not singular that he should also display some of the traits which marked the boyhood of his paternal grandfather, Erasmus Darwin. A visit to the seaside led him to commence a collection of insects, which, however, he did not carry out, his sister having dissuaded him from it on the ground that it was cruelty. One of his favourite sports was that of angling, for which the river at Shrewsbury gave him the fullest opportunity. He was also fond of shooting; and nothing delighted him better than to spend his holidays on the estate of his uncle, Josiah Wedgwood, at Maer, where he had the fullest freedom to tramp through the woods, with a gun under his arm, ready for use, and a dog at his heels. He had a great love for dogs, and for the sports in which he found them useful allies. His father looked with strong disfavour on this side of his character; and, on one occasion when he was displeased with the lad because of his backwardness in some particular study, he exclaimed, "You care for nothing but dogs, shooting, and rat-catching; and you will be a disgrace to yourself and all your family."

Like many other over-anxious fathers, Dr. Darwin was mistaken. Though he knew it not, Nature was working out his son's salvation in her own way, and in her own time. And she was doing it very simply, for simplicity is one of her greatest laws. The lad's contact with the things of outdoor life was slowly preparing his mind for the great work which was to crown his career. The

Bell Stone at Shrewsbury was destined to be one of her instruments. To most people that stone represents no more than the primrose did to Wordsworth's "Peter Bell;" it is simply a boulder, to be pushed over and gazed about. As a lad, Charles Darwin had seen it thence out of number; but he took no more interest in it than if it were the parish pump, until an old gentleman, a Mr. Cotton, told him that there was no stone of the same kind nearer than Cumberland or Scotland; and assured him "that the world would come to an end before anyone would be able to explain how this stone came to where it now lay." That set him a-thinking, and led him to take an interest in geology; his first longing to master some of the secrets of the universe: the pursuit which was destined to engross his future life.

Then, again, for a brief period, he dabbled in chemistry. His brother had fitted up a laboratory in a tool-house in the garden at The Mount; and Charles was delighted to act as his servant when he was carrying out his experiments. The fact that he was engaged in such work became known at school: it reached the Headmaster, who openly rebuked him before his fellows for wasting his time on what he called such "useless subjects." For once Dr Butler was mistaken. No headmaster was more in touch with his boys—none had more reason to be justifiably proud of a long list of successful and distinguished pupils—but Darwin was a lad whom he did not understand: the boy would have been better understood and would have shone more conspicuously at school if his youth had been lived to-day, when science is regarded as one of the most important sides of education. Just as in the case of the Bell Stone, so also in that of the little laboratory in the garden at The Mount, Darwin's spirit of inquiry "found its foot," and here contributed to the bringing about of the dawn of that genius which was to make him one of the most remarkable figures in the history of the world.