

sacred writers so write of physical fact—as for instance in the opening chapter of Genesis—as to be seen so soon as the knowledge of scientific truth has grown among men, to presuppose a deeper knowledge than any of their readers possessed for some thousands of years, and yet so speak as to convey their special moral message to the men of their own time without clogging their understanding by teaching them science before the time of science; so, the sacred prophecies are so framed as to presuppose much more than is apparent to men of the generation of their delivery, but which becomes progressively plainer from age to age with advancing knowledge of the things prophesied, and thus carry in their bosom a message for all time in ever-growing definiteness and richness. This is mere fact; and so far from opposing the strictly scientific exposition of the prophecies, is the inevitable fruit of it. They cannot be made by a severe grammatical exegesis to bear another character.

BENJAMIN B. WARFIELD.

(To be concluded.)

BLAISE PASCAL.¹

It has often been said of the celebrated Frenchman, on whose life and writings the following remarks are made, that he was more praised than read. There is certainly great truth in the remark, owing probably to the comparatively limited amount of his literary efforts, and the early period at which his career terminated. He was, however, a transcendent genius, one of the most sublime spirits of the world, as Bayle in his Dictionary says of him, and it is impossible to study his character without admiration and profit. It presented a combination of qualities seldom found together, as well as some striking con-

¹ The substance of this paper was originally delivered as a Lecture in Edinburgh.

trasts and contradictions. Famous as he became for what he did, he becomes to the student, looking back through two hundred years, almost more remarkable for the evidence which he gave of what he might have done, had his life been prolonged.

He died at the age of thirty-nine. He was from his birth of sickly constitution—never able to take an active share in the more robust avocations of his companions. For his short manhood, he lived for the most part a dreamy, self-absorbed life, without worldly ambition, and without any definite object; yet he left behind him a name in physical science brilliant enough to excite the jealousy of Des Cartes, and a reputation in French literature unique and unapproached in its style—a style which roused the admiration of Voltaire and Racine, and which is still accounted a model in French literary composition.

Yet the works which gained for him his literary fame were but two: the first, a series of controversial and in their nature ephemeral letters against the Jesuits, called forth by the passing events of the day; and, secondly, a collection of detached reflections on religion and ethics, the result of his meditations for many years on men and systems, which had never been reduced into any methodical shape, and were found after his death among his papers. These last were written for the most part on loose sheets and scraps of paper, without revision or plan, although they were certainly intended to form part of a large and systematic treatise which, however, he never lived to complete. The first of these are the celebrated *Provincial Letters*; and the second have long been celebrated under the name of *Pascal's Pensées*.

He was at the end of his career a recluse, and in the latter part of it he was an ascetic also, although he was not under vows. Indeed, it seems clear enough that towards the close of his life, in addition to the discomforts

of failing health, he subjected himself to self-inflicted pain. Yet this man was thoroughly a man of the world, who knew and understood it well. When he comes to pour out his thoughts regarding it, which he does in the second of those works, it is not as a mere moralist, standing apart, and wondering at the folly of a world he never entered. He knew it well, and although probably never conquered by its temptations, he lived for some time in its most fascinating circles. It was probably in that school that Pascal learned his polished wit, his delicate irony, his power of insinuating a humorous thought, which he played so adroitly around the heads of his imaginary antagonists in the *Provincial Letters*. There, also, he may have acquired the subtle sense of the grotesque which seasons them throughout, and that thorough knowledge of social man and his ways of which he draws so powerful a picture in the work entitled his *Thoughts*. Although latterly he withdrew from the world, it was not with the bitterness of a misanthrope, but the kindly pity of a Christian, who had grown wiser. Knowing his own, he felt no scorn of the weaknesses of others; but he dissects them with the scalpel of the philosopher, laying bare the inmost recesses, the nerves and arteries, the motives and springs of action, with the operation of which he had been long conversant. He united the most complete, although apparently unconscious, intellectual assent to the views of the leaders of the Reformation, as regards the more fundamental doctrines of evangelical Christianity, with extreme and even bitter dislike of the Reformation itself, and of all concerned in promoting it. Calvin, more especially, he never mentions without acerbity. While he exposed, and indeed scared from the light of day, the casuistry of the Jesuits, he yet held tenaciously to the doctrine of the real presence, to confession and penance, to there being no salvation outside of the Church of which the Pope was the head,

to modern miracles, to the efficacy or merit of monastic asceticism, and many other Roman Catholic dogmas which are disowned by evangelical Protestant theology.

The question, therefore, which we propose to consider in a few pages is, whence the interest his reputation has always created in the evangelical Churches of Christendom. At the root there lies, undoubtedly, his thorough faith in and acceptance of the gospel scheme of salvation, and his example of strong personal devotion. But these were in him consistently united to an unusual force of character. It is this combination which has deservedly given him his influence and fame. Thus these anonymous pamphlets, thrown off while the author was comparatively young, on a subject which chanced to engage the attention of the French public at the time, along with some scattered reflections, jotted down from time to time, on life and on the Christian religion, and not prepared for publication, have been translated into every language in Europe, and have handed down his name in unbroken lustre to the present day.

Both his character and his attainments present many remarkable features, and are well worthy of deliberate study. In some respects, the moral elements were at apparent variance with each other, as is frequently the case in minds of unusual force and originality. He was undoubtedly in the end a man of very deep religious impressions, but these were united with a fiery temperament—sometimes developing not only strong feeling, but even jealousy or rancour. Thus there are two persons to whom, throughout his *Thoughts*, he constantly refers. One was Montaigne, for whose writings and cast of thought he had an almost morbid aversion. The other was the great philosopher, Des Cartes, a friend of his father, who at first was greatly struck with the unusual aptitude of the boy, but at length undoubtedly looked upon him with

distaste. St. Beuve says of him, in his work on Port Royal (ii. p. 462): "In general, Descartes appears, from some indications in his letters, to have regarded the young Pascal, who was a geometrician, and a physicist, with that vigilance, that restless observation, and jealousy of his own rights, which one might use, beforehand, to a growing rival, and a possible successor, already dangerous."¹ The same author says, a little too strongly: "Pascal, during all his life, and in all his works, did, and wished to do, only two things; to fight the Jesuits to the death, in the *Provincials*, and to ruin and annihilate Montaigne in the *Pensées*" (ii. p. 398).

He had many other qualities which are rarely combined. He was eminent both in physics and dialectics. He knew—no one more thoroughly—the value of scientific research in its strength and in its weakness. He never allowed a theory to do duty for a demonstration, or a metaphor to be paraded to conceal a fallacy; and although he points out in the *Pensées* that the mathematical mind is not in general logical and consecutive when it wanders into ethics, there is no evidence of such a fault in his lucid pages. He is equally a master in both styles. Neither in his writings are there found any traces of morbid excitement, although there was such an element in his character. Indeed, in these northern climes, we can hardly appreciate the fervid ebullition and rapidity of a mind like Pascal's. From this cause arise those apparent inconsistencies of which we have spoken; but when he comes to reason, his logic bears no trace of heat or passion. Nothing can be more thoroughly tinged with good sense and quiet experience, than his views of life—social, religious, public. His ethical views are distinguished by strong, vivid, practical power, and he separates the real from the conventional with the hand of a master,

¹ *Port Royal*, par C. A. Sainte Beuve. Paris, 1878.

and tears away from the realities of life the veil which pride, selfishness, and custom combine to cast over them.

Such in a general view was this man who died before his fame was at its maturity, and who, during his short life, was encumbered by the feeblest of physical frames, and who composed under the tortures of bodily pain. It is no wonder that the eyes of Europe, especially of religious and literary Europe, should have been turned towards him with admiration ever since his death. He was not a Protestant; he was a Roman Catholic. If he had much in common with the evangelical Churches, he held many adverse opinions. His monastic life cannot be held up as an example to be praised, but rather as one to be lamented. Still with it all he was a sublime genius, well worthy to be held in remembrance.

The biography of his early life, his parentage and associations, are too well known to require to be recapitulated here. He was born in 1623. His father was a man of distinction and intelligence, and was surrounded in his day by all that was best in the ability and wit of France. His son, Blaise Pascal, was distinguished from the first by his precocious proficiency. He taught himself geometry when only a boy, and his progress in natural science was one of the most remarkable traits of his remarkable mind. It was much later in his life, comparatively speaking, that any strong religious impulse actuated him. But in the dawn of his inventive mind he was devoted to experiments in natural philosophy. As we have said, Des Cartes had been attracted by the precocity of the lad's power, but in the end their intimacy came to an open rupture. It seems that Des Cartes had accused Pascal of taking credit for a work on conic sections, which was truly composed by his father. This paper, which Pascal wrote at the age of seventeen, created a considerable amount of interest among the men of science then in Paris. Des Cartes was one of that circle,

and was in the zenith of his reputation. Those who may be curious to see how very little a great philosopher can sometimes appear when he gives way to temper, will find the dispute between Pascal and Des Cartes very fully recounted in Bayle's Dictionary, *voce* "Pascal." The general opinion, however, of those who have considered this controversy is entirely with Pascal.

A second cause of disagreement between these two great men arose out of an occurrence of more importance than the treatise on conic sections. Torricelli had published to the world certain views as to the pressure of the atmosphere, which, among other results, displaced the received maxim, that nature abhors a vacuum. Pascal came to the conclusion that if the height to which the mercury will rise in a tube, or water in a pump, be due to the amount of atmospheric pressure, that pressure must be greater or less in proportion to the level at which the subject of the experiment is placed. He determined to verify this by actual experiment, and accordingly, having made the necessary preparations, a party of his friends ascended the mountain near Claremont, called the Puy de Dome, with the necessary instruments. The result was entirely to corroborate his anticipations. Pascal made known the adventure, and its scientific results, but after an interval of two years Des Cartes again interposed, and maintained that it was he who suggested to Pascal both the principle and the experiment. Pascal denied that he had ever had communication with Des Cartes on the subject, and there does not appear to be anything to corroborate Des Cartes' claim.

As regards Montaigne, the antipathy seems to have been very early excited. Pascal was deeply impressed with religious views, while Montaigne's general tendencies on such subjects were as far as possible the reverse. Thus we find that throughout the whole course of the

Thoughts, Pascal recurs always with acerbity, and sometimes with passion, to the opinions maintained by that distinguished writer.

Had Pascal's health not interrupted his mathematical studies, he would certainly have made some great contributions to natural science, for he had not only an ardent, but a constructive mind. In an article in the *North British Review* for 1884, Sir David Brewster says, that Pascal's treatise on the whole mass of air forms the basis of the modern science of pneumatics. This treatise was written in 1653, although not published until after Pascal's death. Sir David Brewster says of it, that the most remarkable part of this treatise, "and one which of itself would have immortalised him, is his application of the general principle to the construction of what he calls the mechanical machine for multiplying forces, an effect which he says may be produced to any extent we choose, as one man by means of this machine may raise a weight of any magnitude." The reviewer says this is the origin of Bramah's Hydrostatic Press. We find a curious indication of Pascal's ingenuity in this direction, in a work published by a traveller to Port Royal in 1814, who says, "We went to see the celebrated well dug in the midst of the farmyard under Pascal's directions. The well is 27 French toises in depth, and draws up the water from the level of the valley of Port Royal below. The curiosity consisted of the machinery contrived by Pascal, and executed under his direction, by which a child of ten years could with the greatest facility immediately draw up a quantity of water equal to nine common buckets."

Pascal also invented a calculating machine, the most perfect of its kind until Mr. Babbage's. He also set on foot a project for making and working a public carriage on the principle of the omnibus. His last contribution to science was a paper on the Cycloid, in 1661.

But these things, while they show the strength and versatility of his genius, are not the foundations of his fame. The main importance which they possess for our present object is, that beyond exhibiting the rare mental endowments of the man, they also present an example of the combination of the profound knowledge of nature and her laws, with unqualified belief in and acceptance of religious truth.

Up to his twenty-third year, that is in 1646, Pascal had not exhibited any strong interest in religion, or in the controversies which were then in progress on religious questions. He had been brought up, as his two sisters had been, with reverential views of revealed religion, and his life had been decorous and regular. But in 1646, his father Etienne Pascal, met with an accident by slipping on the ice, and during the illness which ensued, and which lasted apparently for some time, Pascal was thrown into the society of two brothers who resided in the neighbourhood, and who had strong religious impressions. They were followers and under the influence of an ecclesiastic of the name of Gilbert, who seems to have been an eloquent preacher, and a friend and admirer of St. Cyran. Intercourse with these two brothers, and probably with the popular preacher, produced a strong impression on the mind of Pascal, and a severe and rather obstinate attack of a paralytic nature obliged him soon after to relinquish study of all kinds for a considerable time. This must have occurred about 1647, as he was prevented from taking a personal share in the ascent of the mountain to which we have referred, which took place in December, 1648. He left Rouen, where he had hitherto lived, for Paris in 1648, and shortly afterwards, the father, the younger daughter Jacqueline, and Pascal himself, removed to Auvergne, where he remained till 1650. From a remark which Pascal makes in the *Pensées*, it may be gathered that he turned his attention with his usual energy

and enthusiasm about this time to the study of the Scriptures, and Patristic theology. He was not, and never was considered, or professed to be, a profound theologian; but he was well versed in the Fathers, and had begun to take a strong interest in the prevalent religious questions of the day. He says himself in the *Thoughts*, that he gave up his scientific pursuits, because he found that nobody cared to speak of them, and resolved rather to study the nature of man; but that he discovered to his disappointment that if his companions cared little for mathematics, still less did they care for the nature of man.

But a new element was about to enter into his life, that requires a word or two of explanation.

The period of European history with which we deal, the first half of the seventeenth century, was one in which religious dogma and politics were to a large extent intermingled. The Reformation had a considerable hold on the people in France. Within the Roman Catholic Church there were many men of power and learning, who, while they held aloof from the Reformers, and rather ostentatiously disowned them, endeavoured to stem the coming tide by a renovation of doctrine and morals within the Church of Rome. But the hand of power, civil and ecclesiastical, was too strong for them. The people were not Jesuit, and knew little of this comparatively recent ex-crescence on the Church, which, indeed, was more of a political than of an ecclesiastical federation. While the people to a large extent did not sympathize with the Jesuits, the Pope and the Crown supported them. Richelieu, and after him Mazarin, lent their power entirely to the ends and aims of the Jesuits, and, in one shape or other, made those who came under their displeasure feel the effects of it.

One of the most distinguished ecclesiastics within the Roman Catholic Church who supported the movement

towards the purer and simpler faith, and a renovation of morals within the Church itself, was the well-known Cornelius Jansen, a man of profound learning and of great ability. He had long been an object of animosity to the Jesuits, but his views were largely adopted throughout France. He was desirous that the Church should revert to the teaching of St. Augustine, especially as regarded the doctrine of the freedom and power of Divine grace. Those views were expounded by him in a book entitled "Augustinus," to the composition of which he had devoted a large portion of his life. He completed it, but was cut off by the plague in 1638, before it was published. He was followed by a band of devoted adherents belonging to the famous seminary of Port Royal, the retreat of a religious community situated ten or twelve miles from Paris, and having a corresponding establishment in Paris itself. A certain sentiment of romance hangs round this once celebrated spot, and still clings to its name, although its buildings have been long in ruins and its site very nearly forgotten. Its history went back many centuries, but its celebrity had but a short endurance, and began and terminated with the career of a knot of great men and women, whose simple faith and consistent life spread its reputation over Europe during the first half of the seventeenth century. Obscure before, it became only too powerful afterwards to suit the dominant faction in the Church, or the rulers who were ruled by it, from the eminence of those whom it nurtured. The steps by which this once renowned institution rose to fame, and was extinguished, as far as tyranny could extinguish it, are matters well known in history. They are recounted in the late work of St. Beuve, to which we have already referred. It is a touching and almost a tragic retrospect. Whatever one may think of the views and penances, the dogmatic opinions, ascetic practices, or religious ob-

servances of its inmates, their history breathes a fresh, whole-hearted consistency while it was flourishing, and a constancy when persecuted, which only thorough conviction could produce.

Among the greatest of the fraternity was John d'Hauranne, better known as the Abbé de St. Cyran. He was for years the stay of the institution. Highborn, and of imposing presence, and as simple as cultivated in manner, of unblemished character and life, he was largely instrumental in raising Port Royal to distinction. But he was the friend and coadjutor of Jansen, and on him descended the detestable tyranny of the times. Without trial, and even without accusation, he was seized and imprisoned, and remained in captivity for five years. He was released on the death of Louis XIII. in 1643, but too late to prolong his life, for he died within the year. He had been a friend of the elder Pascal, and the author of several works, which obtained considerable notice.

MONCRIEFF.

(To be concluded.)
