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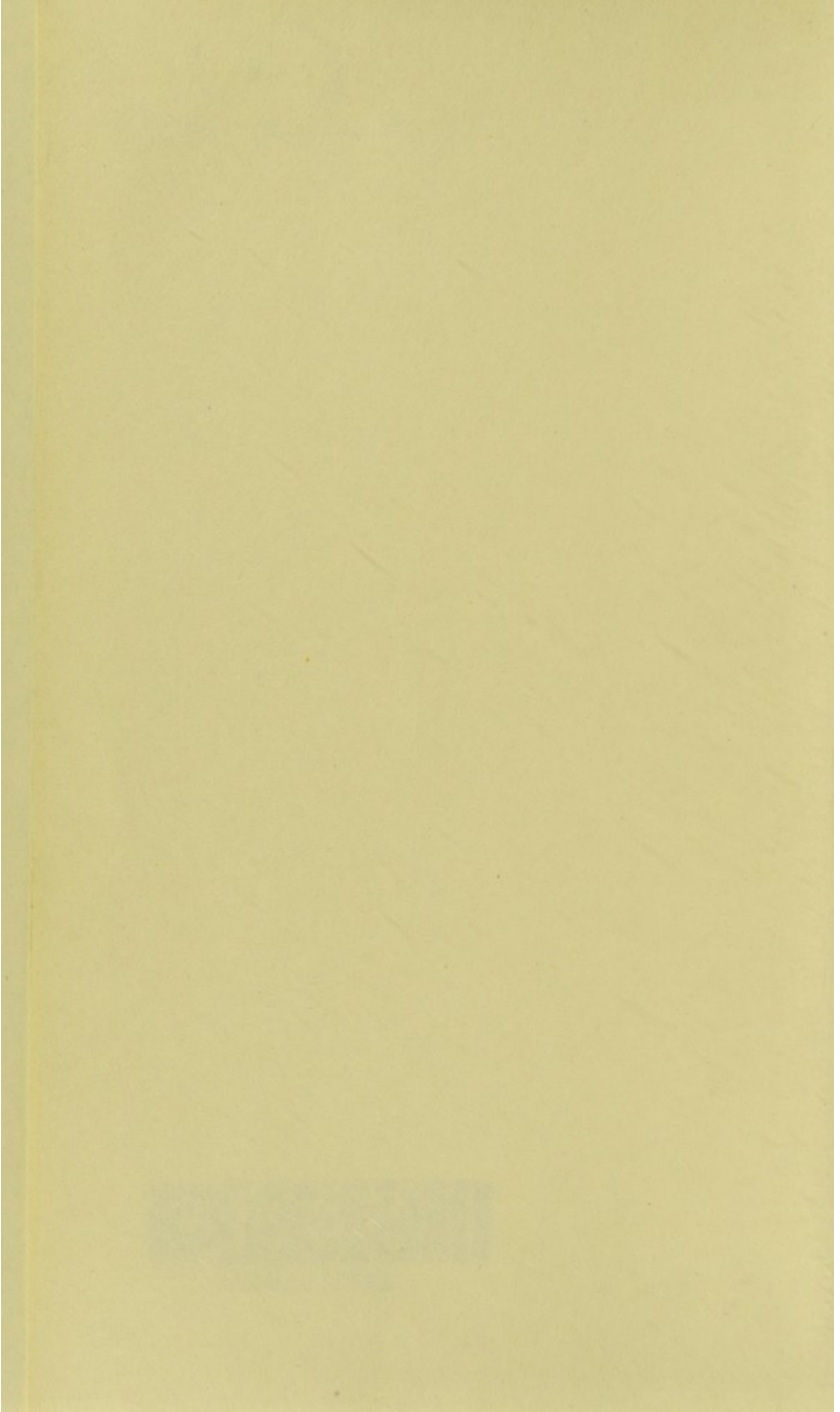


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Art. 3.—THE LIFE OF DESCARTES.

1. *Œuvres de Descartes*. Publiées par Charles Adam et Paul Tannery. 11 vols. Paris : Leopold Cerf, 1897-1912.
2. *Vie et Œuvres de Descartes*. Étude historique par Charles Adam. Paris : Léopold Cerf, 1910.

THE completion of a great national undertaking, such as is represented by the eleven quarto volumes of Descartes' works recently published in Paris under the auspices of the Ministère de l'Instruction Publique, is a notable event. This, indeed, is no ordinary undertaking ; the work of M. Charles Adam, Rector of the University of Nancy (assisted, to begin with, by the late M. Paul Tannery of mathematical fame), it represents the tribute of a grateful country to one of her most distinguished sons. Three hundred years after Descartes' birth in 1596, it was decided that there could be no more fitting celebration of that event than an edition of his writings, as far as possible complete, in the languages in which they were originally given to the world ; and the succeeding decade was devoted to the unremitting toil necessary for the accomplishment of this end.

Possibly no nation has more adequately recognised a distinguished son as its own than France in the case of René Descartes ; and La Bruyère's description of him as 'né Français, et mort en Suède,' if it is meant to imply that by living and dying abroad he had lost his birthright, is in the last degree unjust. Above most others Descartes was typically French, despite the fact that he lived the greater part of his life out of his native land. He constantly talks of his 'French blood' ; he trusts that his country may 'defeat the efforts of all who endeavour to harm her,' and he even includes in his claim not only the rights of citizenship but those of a son of the Catholic Church. For, notwithstanding his being the 'Father of Modern Philosophy,' and in a great measure the inaugurator of modern scientific methods, Descartes never ceased to be a good son of the Church. One wonders, indeed, whether any man of his time brought up from childhood under the direction of the Jesuit Fathers ever really escaped the influence they brought to bear on him, even though in the world's eyes he might

have broken with their teaching; widely as his path might deviate in later life, there was always a restraining bond that made their former pupil seek to show that the divergence from these great educationists was one of form rather than substance. But Descartes was a Frenchman in other ways than merely by birth and religion. No one who reads his 'Method' can fail to distinguish the 'logic and lucidity' which Matthew Arnold tells us characterise the natives of a country whose sons inherit the culture of generations. The matter and form of the great Essay seem to us, in reading it, to have grown into one; and its careful reasoning is as remarkable as is the charm of its expression.

The twelfth volume of this great work has taken the form of a study of the life and writings of the author. M. Adam's biography is well described as a 'historic study.' It is not a life for the casual seeker for information, nor has it any special claims to literary style. It is a work full of research and accurate to the smallest detail, written perhaps more after the so-called German method than what we are, or at least till recently were, accustomed to look for in the literature of France. Every point that lends itself to investigation has been investigated, and the facts of the life of René Descartes are recorded in the greatest detail; though, as we are told in his preface, the writer's aim is not to deal with the large questions which might be raised in reference to the philosophy or science of the day, the personal relationship of the man to his contemporaries, or even to the history of philosophy. His object is to give the guiding thread which is indispensable if we are to make our way intelligently through the eleven volumes of Descartes' treatises and letters. In spite of the copious notes throughout the work a quantity of material had been collected by the principal editor which had not been adequately utilised. In the words of M. Adam,

'Comme cette édition est à l'usage de ceux que l'histoire de la philosophie intéresse, nous en avons fait un instrument de travail aussi utile que possible, n'hésitant pas à y prodiguer les renseignements sans compter: chaque lecteur saura bien y choisir ce qui lui convient, et laisser là le reste.'

For the student of those days, then, the student of
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history in the 17th century, the topic is of exceeding interest. Descartes himself stands out as the central figure in a time of exceptional intellectual activity. The old order was passing into the new; the rule of authority in philosophy and religion was being supplanted by the liberty of private judgment. The Scientific Method was beginning to maintain its right to judge by experiment and by refusing to accept what was taught only by tradition. The 17th century was perhaps of all others the century in which the mode of searching after knowledge was most revolutionised, because the breach with medievalism was then thoroughly and completely made. M. Adam, in his 'Life of Descartes,' does not propose to treat this most interesting theme. He does not deal with the growth and meaning of Cartesianism, which has been such a force in the modern world as we know it, but merely with its originator and his writings historically considered. This work, indeed, treated by a thorough master of his subject in possession of a vast amount of new material, suffices to fill a quarto volume of 628 pages. In addition to the better-known authorities, M. Adam brings into requisition the journals of Isaac Beeckman and Constantin Huygens, as well as the correspondence of Père Mersenne, Chanut and Brasset, all of them in manuscript, and many other materials obtained through the assistance of various collaborators.

One always wants to know how a great man looked, and an attractive feature in the book is the number of interesting portraits which are reproduced in it. The appearance of the philosopher has ever been a matter of speculation, though it is one that both he himself and his contemporaries frequently dwell upon. The best-known portrait of him is that attributed to Franz Hals, which was taken shortly before Descartes went to Sweden and is now in the collection at the Louvre. It has been reproduced in M. Adam's 'Life' by Achille Jacquet, who also reproduces another portrait, hitherto unknown, the authenticity of which is at least probable. Then there is Franz Schooten's rather poor portrait, which we know from its being engraved in the beginning of the 'Geometry,' and another portrait recently discovered in Sweden and apparently quite genuine, painted by a pupil of Van Dyck, David Beck, during Descartes' ill-starred visit to

Stockholm shortly before his death. This portrait is specially valuable to us, and we are grateful for its discovery. All these portraits, and the picture of his home at Egmond, give interest to the book, though one regrets that the original sketch ascribed to Hals, now in Denmark, is not also reproduced, since it is a more forcible presentation of the artist's work than the later painting.

Though M. Adam gives us every detail of Descartes' family history that he can collect, there is nothing new in his work that is of much interest to a modern reader. One would have liked to see some really authentic record of the strange childhood of the boy who lost his consumptive mother in infancy, and who inherited from her a 'dry cough and a pale complexion.' Until his sixth year he was left under the care of a nurse in the little village of La Haye. That nurse was remembered even in his last testament; for it was a fine trait in the philosopher, reputedly so calm and cold, that his servants were always cared for and considered by him. To some he gave an education—the best gift in his power—and one, much regarded, 'the faithful Schluter,' was with him at his death. Love, of the kind that plays a part in most men's and women's lives, would appear to have played little in that of Descartes. He was fond of a little squinting girl in childhood, and this fancy, by an association of ideas which interested him as a psychologist, made him partial to those who squinted. Later, in Holland, he had a *liaison* with a certain woman whom we know as 'Hélène,' and who became the mother of his child called Francine. In spite of every effort M. Adam has been unable to discover any particulars about Hélène. His investigations merely go to prove, what we already surmised, that the child was not born in wedlock. When she was just five years of age, and her father was considering how she could be sent to France to be educated with a relative of his own, the little Francine fell ill of a malignant fever and died. This was to Descartes, his biographer Baillet says, 'the greatest sorrow of his life.'

One would also like to have had yet fuller details of young René Descartes' life in that wonderful Jesuit school at La Flèche where he spent eight years of his life. It was one of the schools established under the authorisation of King Henry IV, and, as Descartes himself tells us

(at the beginning of his 'Method'), it was one of the most celebrated schools in Europe. The rector and professors were selected with the greatest care, for in those days the Jesuits as a body alone understood that education was a matter on which too much consideration and thought could not be lavished. René, a delicate motherless boy, received special attention; he was allowed to awake in the mornings of his own accord and get up when he would. Like some other great men, all through life he rose late and worked in bed; indeed the sudden change from this lifelong habit is thought to have been partially responsible for his death in Sweden. He had a room to himself at school, and in this charming old building, which may yet be seen (it is still a school, although now a military one), a room is shown as his, which looks out on a beautiful garden and park; while the chapel is just as it was in his time. He tells us himself of his course of studies in that wonderful self-revealing autobiography given in the 'Method'—an autobiography which for conciseness and depth of meaning has rarely been equalled. He speaks of the fables and stories that he read (probably the 'Metamorphoses' of Ovid and in Roman and Greek biographies), the poetry and rhetoric which he was taught, and the 'philosophy' that formed the subject of his final year at school, i.e. logic, physics and metaphysics. Latin was, of course, used as a spoken language as well as a subject of study, as in all the establishments for learning of the day.

M. Adam discusses the interesting question how the young boy was influenced on the religious side by the good Fathers who showed him so much kindness. The view to which he inclines is that the catholicism of the Jesuits simply imposed certain dogmas from without and left the mind free to speculate as it would; at the same time in their seminaries the teachers excelled in laying hold of the imagination and senses by the ceremonial side of their worship, thereby accustoming their pupils to those outward habits of piety that remained with them all their lives, and induced them to form themselves into a *confrérie* of a religious kind, so giving a definitely religious tone to their lives. One fancies that the reason may go deeper than the explanation implies, but it is anyhow the case that the religious strain is traceable all

through Descartes' later life, exaggerated though it may have been by those biographers who wished to protect him from the ill-will of the Church. In later days he tells us how he dreamt of his college chapel, of going there to pray; and in reference to the visit made by him to Loretto, it appears that a distinguished member of the Order had recommended pilgrimages to be made to that very shrine in a treatise which, M. Adam tells us, would most likely have been placed in the young boy's hands.

Even at school, Descartes came in contact with the political events of the day in a most striking and impressive way. In 1610, on May 14, the King by whose aid the college was established was struck down by the hands of an assassin. In accordance with his own expressed desire, his heart was taken from Paris to La Flèche, the college of his own foundation. It was naturally interred with the greatest pomp and circumstance, and young Descartes was not only present as a witness of the ceremonial, but was distinguished by being selected as one of the twenty-four gentlemen students who took part in the procession. All through his life Descartes had that love of pageants that many possess but few educated persons confess to. He made a point, for example, of being present at the coronation of the Emperor Ferdinand at Frankfort and at the marriage of the Doge with the Adriatic at Venice. But none of these events could have impressed him more than the long-drawn-out obsequies (involving a three weeks' cessation of work) of the King whose loss was so overwhelming to his country.

One cannot help wondering, in reading the account of the school and college life under the Jesuit régime, whether with all our study of the theory and practice of education we have made any very real advance on the methods of the 17th century. Such schools as La Flèche were of course exceptional, but in these the teachers certainly succeeded in interesting the scholars in learning, which is presumably the principal object in teaching. Despite a curriculum scholastic in its essence, the lighter side of education was not neglected, for dancing, fencing, and versifying were taught; but what impresses us most in these modern days (for it is a matter that was too long neglected) is that the instructors were chosen as men of

polished and agreeable manners, and taught to teach by long years of training. They learned the lesson which subsequent generations too frequently forgot, that in a school like this, which might be called the Eton of France, in order to teach the governing classes of the future to carry out their work, hard and serious preparation is necessary on the part of the teachers. It was this personal influence of cultured men that made their pupils look back on the years at school, between eight and sixteen, as the most valuable in their lives. No university education of the modern kind followed the school training. Descartes, though he graduated in law, for the most part continued his studies in the camp and amongst rough soldiers. We certainly miss in his later life a real appreciation of the classics, and also of the artistic side of life. He regrets time 'wasted on philological studies,' as he terms purely classical pursuits; and, though he lived in the country and during the lifetime of the great Dutch artists, he never even mentions the work of a Rembrandt, any more than the learning of a Grotius. His interests indeed were elsewhere. In Descartes' time the wonders of a century of scientific discoveries were just being revealed; and the telescope, whose capacities were as yet undiscovered ('might we not know whether there were animals in the moon?' he asks), was the instrument on which all eyes were turned. The scientific side of nature was indeed as engrossing to him as was the speculative.

How the young man occupied his time during the seven years following his schooldays is not very clear. M. Adam, not without reason, scorns the idea that he should be supposed to have retreated from public view for two whole years, as his earliest and almost contemporaneous biographer, Baillet, suggests. He may have studied at Poitiers, where he took a degree in law in 1616. We have, however, only glimpses of his doings until he reached the age of 22, when it would seem that he definitely adopted the profession of arms, and offered himself as a volunteer with the army of Prince Maurice of Nassau in Holland, despite the fact that he was thereby espousing the Protestant cause at the beginning of what became the Thirty Years' War. It is characteristic of the man that he gave thanks that he could fight as a volunteer, and had not to adopt a profession for the sake of the

remuneration it might bring. He always had the pride of family and tradition which this reveals, and this personal pride extended even to the dress befitting his rank, though that rank did not extend beyond that of the smaller landed gentry or the 'noblesse de la robe.' His wigs were made in Paris, and he took the trouble to give careful directions about their manufacture. He always wore a scarf, sword, belt and feather, whether in Paris or the country; and his stockings were of silk.

It was on this early venture into active life that Descartes met one who was to be a friend who influenced him greatly—Isaac Beeckman, Principal of the College of Dordrecht. 'I slept and you awakened me,' he said to Beeckman; and what higher testimony could man give to man? M. Adam compares him to an elder brother who helped in the direction of those studies which applied mathematics to physics and physics to mathematics. Whatever Beeckman's merits may be from the point of view of posterity, he deserves to be remembered for the help he gave to the young philosopher-soldier or soldier-philosopher of twenty-two.

While with the army at the commencement of the great war, and possibly at Ulm on the Danube, where he most likely made the acquaintance of Faulhaber the mathematician, Descartes experienced that wonderful spiritual experience which resembled the 'conversion' of his great contemporary Pascal. In a warm room where he had settled during the winter-time in Germany in order to give himself to study, he had strange dreams hard to understand, but such as brought him to a consciousness of sin; smitten with remorse he repented of his past life and vowed to make the search for truth the object of his life. It was at this period, too, that he came into touch with the Order of Rosicrucians, of which Faulhaber was a member, and with which he was accused (falsely, if we are to judge by his protestations) of having some connexion at a time when this was considered hardly less than a crime.

The following years of his life, 1620-29, were occupied in the search he had vowed to make. He tried hard to rid himself of his prejudices by the study of mathematics and by reading in 'the great book of the world.' We do not know whether he fought in the battle of Prague.

Had he done so, he would curiously enough have taken arms against the father of his future friend and pupil, Princess Elizabeth, daughter of Frederick, Elector Palatine, and Elizabeth, the Queen of Hearts. But of soldiering the future philosopher soon had enough. He returned to France after some further travel, and then made his way to Italy, where he observed the vow made on the occasion of his awakening in Germany, and visited the shrine of Our Lady at Loretto. As M. Adam points out, he was by so doing merely following in Montaigne's footsteps, for Montaigne did the same, not omitting any portion of the ordinary ceremonial. It was the custom of the country and represented traditions in which both men had been bred and with which neither formally broke. It is easy for us to point out that neither of these men was a Christian, in the sense at least that the word then possessed—Montaigne, the man of the world and sceptical exponent of common-sense, perhaps even less so than Descartes, who taught men to doubt in order that they might know the better. Consistency is a virtue of no age or time; our actions are guided by a hundred motives besides those that we advocate by our lips; and if this is so in these days, can we expect it to have been otherwise in those far-off and difficult times?

Subsequently to his 'Wanderjahre,' three years were passed by Descartes more or less in Paris, where he led the life of a young man of fashion in a time of gaiety and intellectual enthusiasm. He read, he listened to music, he fenced, and was even attracted by the gaming table. There is an unauthorised tale of a lady for whom he had a certain regard, 'so mediocre in intellect that her merit could not possibly have affected the great philosopher,' as the early account so rashly states; also of another lady of 'birth and merit,' Mme du Rosay by name, who, however, seems to have felt that for the young man philosophy held the first place. Possibly, being by no means plain, she was hardly flattered by being told that 'no beauty was comparable to that of Truth,' and that 'a beautiful woman, a good book, and a perfect preacher were the things most impossible to discover in the world.' In any case she seems to have felt that she had little encouragement to proceed with the acquaintance. Paris was at that time the home of

atheists and free-thinkers, as the literature of the day shows, though it was also the centre of a literary life that has seldom been equalled. The age of Corneille, Molière, of the *Précieux*, of Balzac and Voiture, was opening. Balzac at least was a friend and correspondent of Descartes; but we do not know how far the latter figured in the *salons* of the gay capital. Scholasticism in these days was on its defence, and new ideas were being rigorously suppressed by Parliament on the requisition of the Sorbonne; this, M. Adam thinks, may have influenced Descartes' resolution to leave the country. In any case he was probably dissatisfied with the life he was living, though this was a time when he made many friends—some literary, but most of them scientific. The friends then made were indeed his constant correspondents during his exile in a country which he already knew, and whose climate suited him better than did the sunny Italian skies.

Holland in the 17th century was a centre not only of commerce and wealth, but also of letters, science and art. Leyden had a university already, but young schools and academies were springing up in many of the little towns—in Utrecht (in 1636 this school became a university), in Breda, and even in the busy commercial town of Amsterdam. It was a time, indeed, when commerce and science were associated in a remarkable degree, for the merchants were men of taste and culture, the patrons not only of Rembrandt and Hals, but also of the publications of the famous Elzevier press. Books like those of Galileo, hardly to be had in the country from which they emerged, were easily procured in Holland. And Descartes was careful to ascertain that the services of a priest of his own religion were to be had in that Protestant country, though it was not tolerance that he sought for so much as solitude and calm. That this was to be found one can judge even now by visiting the quaint little towns and villages like Franeker in Friesland, the first of many of Descartes' abodes in Holland. To this day, if one sought peace, one could hardly find its externals at least more clearly present than in these simple communities of Dutch peasants. Friends of a different sort were of course to be had amongst the learned, and some opponents

too before very long. Constantin Huygens, secretary to the Prince of Orange, a courtier and one of the *beaux esprits* of the day, was amongst the former; and his family, of whom the great mathematician of later days was one, were included in the number of the philosopher's acquaintance. Their country-house near the Hague must have been an agreeable place of resort. In Amsterdam, also, well supplied with butchers' shops, Descartes sometimes lived in order to find material for his anatomical studies, and at Endegeest, near Leyden, he had a charming abode, a portion of which is still to be seen in the midst of an asylum for the insane. It was in scenes like these that Descartes composed and published his 'Method' and 'Meditations.' But publication, both scientific and philosophical, was delayed owing to a matter which was agitating Europe.

On June 23, 1633, Galileo was condemned by the Inquisition for his 'Dialogue on the two greatest Systems of the World'—those of Ptolemy and Copernicus. The time-honoured doctrine of an immovable earth, in the centre of the universe, round which the firmament turned, was threatened, and the Holy Office felt the time had come to interfere. Now the movements of the earth had formed an integral part of Descartes' theory of physics, and he found himself to his alarm liable to a similar condemnation. No personal injury threatened him in the land he had chosen as the home of his exile; why should he have been so disturbed? M. Adam is clear that it was the ultimate triumph of his ideas that really troubled him, rather than any personal fears. He wanted them to gain entrance, not only to the enlightened spirits, but also to the universities and schools. He hoped to have on his side not only his old friends the Jesuit fathers, but the professors of Louvain and even Douai. What object was there, then, in publishing his 'World,' which would certainly set all these influential persons by the ears? The suppression of this, his first important work (it appeared finally in another form), was not the greatest harm that was done by Descartes' fears. As M. Adam justly remarks, through the sentence of the Inquisition we are deprived of the true Descartes. The Church brought about a moral intimidation which really retarded the progress of science and philosophy for the

time. Science was compelled to disown her findings. The philosophic figures of the century, the new philosophy that was to carry its influence right down to the present day, suffered a check. In point of fact, Descartes found means of presenting his ideas in a modified form, so that he should not have reason to feel anxious about the results that they might bring about. He carefully explained that his system of the heavens resembled that of Tycho-Brahé, rather than that of Copernicus, thereby effecting a sort of half-hearted compromise. But so far as his theories of the world were concerned, they never again displayed the absolute spontaneity that they would otherwise have possessed.

His first actual publication took the form of 'Essays on Dioptric [which M. Adam thinks might have been called the Telescope], Meteors and Geometry,' with the ever-famous 'Discourse on Method,' an autobiography as well as a discourse, as their preface. This appeared in 1637, and the following years were taken up with the usual polemics that in those days followed the publication of a notable book on controversial subjects. It was three years later that the 'Meditations' were ready for the printer, and it was written in Latin, whereas the first work had been in French, so that anyone—'even women'—might read and understand it. The 'Meditations' had been sent round the learned of the day for purposes of criticism, and amongst those who responded were Arnauld, of Port Royal fame, and the English Hobbes. With the latter Descartes, of course, had little in common, but Arnauld—the great Arnauld—was an opponent for whom he had an almost exaggerated respect; and it was with him that he discussed that never-failing topic, the true meaning of the Eucharist. In 1644 there followed Descartes' other great work, the 'Principles,' though meanwhile he had been engaged in interminable disputes with theologians and philosophers. This book is a complete scientific statement of how the world and all its manifestations in nature were capable of explanation by methods which were at least rational and possible, however strange they may seem to us. Descartes' idea always was to have a theory of how the operations of nature *might* be rationally carried on, rather than to trust to the vague surmises and traditional

beliefs of his predecessors; and this was a real advance in the scientific standpoint.

But while immersed in his profounder studies an influence had come into Descartes' life of a quite new kind. Love, as we have said, did not play any great part in his existence, but with Platonic friendships it was otherwise. The strange thing about these friendships was that both of them were with women of royal blood; and we cannot help wondering whether his extraordinary reverence for royalty had not something to do with the exuberance of his feelings. His doctrines of Divine Right are not such as we often hear in these days; he believes that 'the means taken by princes to establish themselves are nearly always righteous if they believe them so to be,' and 'God gives the right to those to whom he gives the strength.' This was written to Princess Elizabeth, eldest daughter of Elizabeth of Bohemia, the Queen of Hearts, and granddaughter of our King James I, and to Frederick V, Elector Palatine, who was crowned at Prague and lost his kingdom in the following year by that battle at which Descartes himself was very probably present. The family took refuge at the Hague, where they kept up a little exile court. After her husband's death, the Electress continued to make the Hague her home and that of her ten children, who must indeed have been a lively crew. Amongst them were Rupert of the Civil Wars, Maurice, and Sophia, mother of King George I of England. Elizabeth was the eldest of the daughters, and besides being remarkably gifted intellectually by nature, she was well instructed by her teachers in modern languages, Latin and mathematics. Although a strong Protestant in religion, she was strongly attracted by the distinguished philosopher whom she made her friend. In her younger days she was far from a recluse, but as time went on and trouble, family and other, came to her, she turned for consolation to the philosophy she had learned to care for from her friend and master. It was long after his death that she found peace in the Abbey of Hervorden, where, as Abbess, she was able to offer refuge to her old friend Anna Maria Schurmann, another learned lady of the day, and where she also entertained William Penn the Quaker. She died there, finding satisfaction in the somewhat mystical views of Labadie, though at the

same time she was always faithful to the teaching of Descartes.

Elizabeth was a remarkable woman, and her letters show true appreciation of the problems she discussed with Descartes when her correspondence was not occupied with her own woes, physical and mental. There was a family scandal at the Hague, as a result of which a Frenchman was killed by one of Elizabeth's brothers in circumstances not yet cleared up. But the issue was that Elizabeth, whether personally involved or not, departed from Holland and never returned—a sad distress to her. The subsequent execution of her uncle, Charles I of England, was one of the keen trials which she, like the rest of this suffering but courageous family, had to meet. And besides, there were frequent difficulties of other sorts, in all of which Descartes was ready with his sympathy. He always enjoyed prescribing for his friends, and he had ample opportunities of doing this in the young princess's case, for her health was often far from good, and he had the consolation that few lay physicians enjoy, of knowing that his advice would certainly be followed. A mind diseased appealed to him as strongly as a body, and 'The Passions of the Soul,' one of his later works, was written in order to meet the objections to his philosophy made by his royal friend. The complete correspondence between the two is to be found in the edition which is before us; some day it may be, one may hope, published in a separate and more accessible form.

Descartes' interest in science was, as we know, as keen as his interest in speculative philosophy, and at this time there was a scientific problem which concerned him deeply. The great and world-famed experiment on the decrease of barometric pressure with altitude was made on September 19, 1648, on the Puy-de-Dôme mountain in Auvergne. The nature and amount of atmospheric pressure was first discussed and measured by Torricelli, whose account of the subject was conveyed from Italy to France by Mersenne, who made it known to friends in Paris. Mersenne, however, could not satisfactorily repeat the experiment, despite many efforts in which Chanut helped him. Petit succeeded in doing so with mercury, and Pascal carried out further experiments with other

liquids and long tubes expressly made for the purpose. It was Descartes, however, who suggested that the experiment should be made of measuring the height of the column of mercury at the foot and at the top of a mountain respectively, since he expected that the pressure of air on the mercury would decrease as the mountain was ascended, and hence the mercury in the tube would fall. When he suggested this to Pascal, Pascal got his brother-in-law to carry out what became the famous experiment. Pascal published an account of it, but Descartes did not hear of the publication for several months subsequently, and was somewhat hurt at receiving no recognition of his suggestion. The whole story, with Jacqueline Pascal's account of Descartes' visit to her brother, then a young man of twenty-five living in Paris, is one of the most interesting of the many romances of scientific discovery. Descartes' part in it has been overlooked (just as was Mersenne's until recent times), but that he is entitled to a considerable amount of credit in the discovery of the behaviour of the barometer—credit which never was accorded to him—is indubitable if we are to accept M. Adam's account; and he has studied the whole question most carefully in connexion with the original documents, some of which were until recently overlooked.

To return to the story of Descartes' life. A visit to Paris during the troubles of the Fronde, when he found himself in the position of a 'guest arriving when the kitchen was in disorder and the saucepans upset,' gave Descartes little pleasure, though we cannot but feel a wish to have heard more of a dinner party given by the Marquis of Newcastle to Hobbes, Descartes and Gassendi, a very remarkable trio of guests. Back in his 'hermitage' at Egmond he set himself to work at his various experiments and also to complete the 'Passions,' the last-published of his books. But we have no reason, in spite of his solitary life, to look on Descartes as a pedant; he was also an *honnête homme* in the 17th-century sense of that phrase.

Now comes the last stage in this remarkable life story. Queen Christina of Sweden desired to make for herself and her country a reputation, but of another kind from

that of her father, Gustavus Adolphus. He had distinguished himself in war; she would do so in the realm of learning and science, and try to get, amongst others, the most famous of living philosophers to grace her Court. Negotiations were carried on with the utmost skill by the French representative in Stockholm, Pierre Chanut, also a philosopher, though that name was used in a freer sense than nowadays. Chanut was a newly-acquired friend of Descartes, and one of considerable diplomatic powers. He was perhaps a little weary of the part he himself had to play of acting as interpreter to his royal mistress, and following her in her distant expeditions to the mountains, where his head, he confesses, suffered from the cold, uncovered as it had to be. Anyhow he persuaded his correspondent that it was an easy matter to get to Stockholm—a 'simple promenade'—and, ostensibly on his own account, but in reality, one must surmise, to find diversion and interest for the head-strong young Queen, he at length persuaded Descartes to agree to go to Sweden. Of course, courtier as he was, Descartes hesitated to take so formidable a step as to change his abode and quiet bachelor ways, especially as he was no longer young. He feared, as he says, to go and live in 'a country of bears'; and even an emissary in the shape of a Swedish Admiral could not at first persuade him to 'quit his hermitage.' He doubted also, characteristically enough, how the world would regard the visit of a Catholic to a Protestant Queen.

All scruples, however, were at length overcome, and Descartes took his departure in September 1649, after carefully putting his affairs in order and obtaining a sort of trousseau of the sort he deemed most suitable. Never forgetful of his personal appearance, he saw to his wig, gloves and shoes being of the fashionable sort. The weary month's voyage accomplished—and during that voyage he enormously impressed the pilot by his knowledge of navigation—he was enthusiastically received by Queen Christina, though for the month succeeding his arrival he saw nothing at all of his erratic mistress. In his heart he soon began to doubt the young lady's having the same inclination for philosophy that she certainly had for letters, and probably he began to compare her unfavourably with his other royal friend, Princess

Elizabeth, who seems to have been a little hurt by hearing that copies of letters to her on philosophical questions had been sent on to the Queen. In any case, she was not as anxious to make friends with Christina as Descartes, in all innocence and with an uncommon lack of human knowledge, imagined she was likely to be.

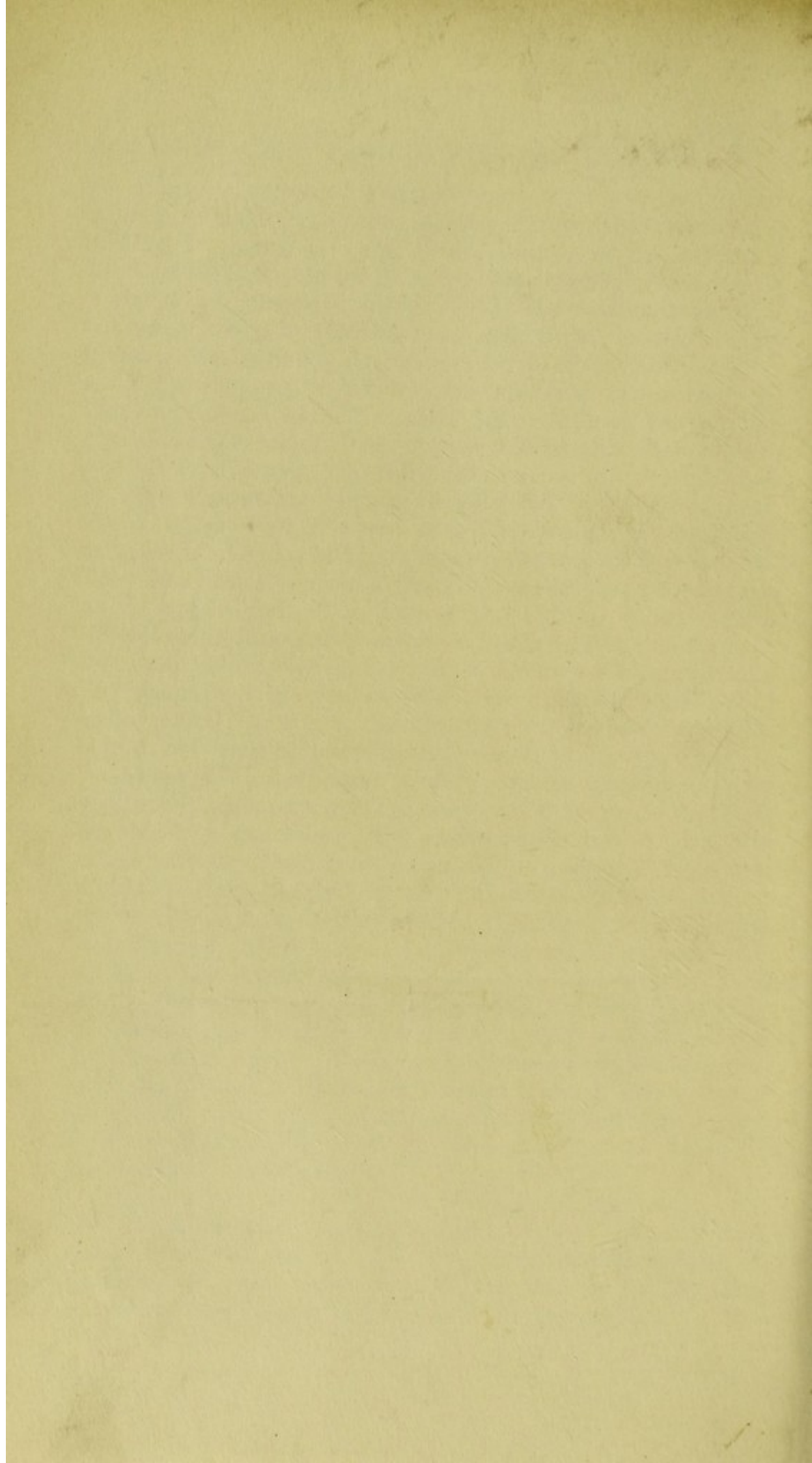
Queen Christina was indeed a striking figure at the age of twenty-three. She had, by the wish of her father, had the training of a man, and in appearance, dress and action played the part well. Ten hours on horseback did not tire her, and she was an excellent shot, besides being a woman of great erudition. But all her education had unfortunately not taught her that self-control which is most necessary to a Queen, and she certainly had not learned consideration for others. The winter drew on; Chanut was away; and Descartes spoke of returning home, solitary as he found himself and destitute of like-minded friends. He irritated the Greek scholars of the Court by openly depreciating their erudition, and he himself composed, of all unlikely things, the verses for a *ballet*, glad doubtless to have escaped being asked to dance. This is the time at which he probably had the portrait painted that has recently been discovered. At length Chanut returned, but the cold increased. Then at last the Queen summoned him to explain to her his philosophy, but to do this she chose the extraordinary hour of five in the morning, when the philosopher had to attend her at the Palace. To the healthy young Queen this was apparently a pleasure. To the recluse, who regularly spent his morning in bed in order to reflect the better, it meant misery. To make matters worse, Chanut, his friend, fell ill of pneumonia; and Descartes, in nursing him, probably contracted the malady. The Queen pressed on him the attentions of a German doctor; but he begged that he should leave him, or at least that he should not bleed him. 'Messieurs, épargnez le sang francais,' was what he said. His own remedies had no effect, and he expired on February 11, 1650, after receiving the last offices of the Church.

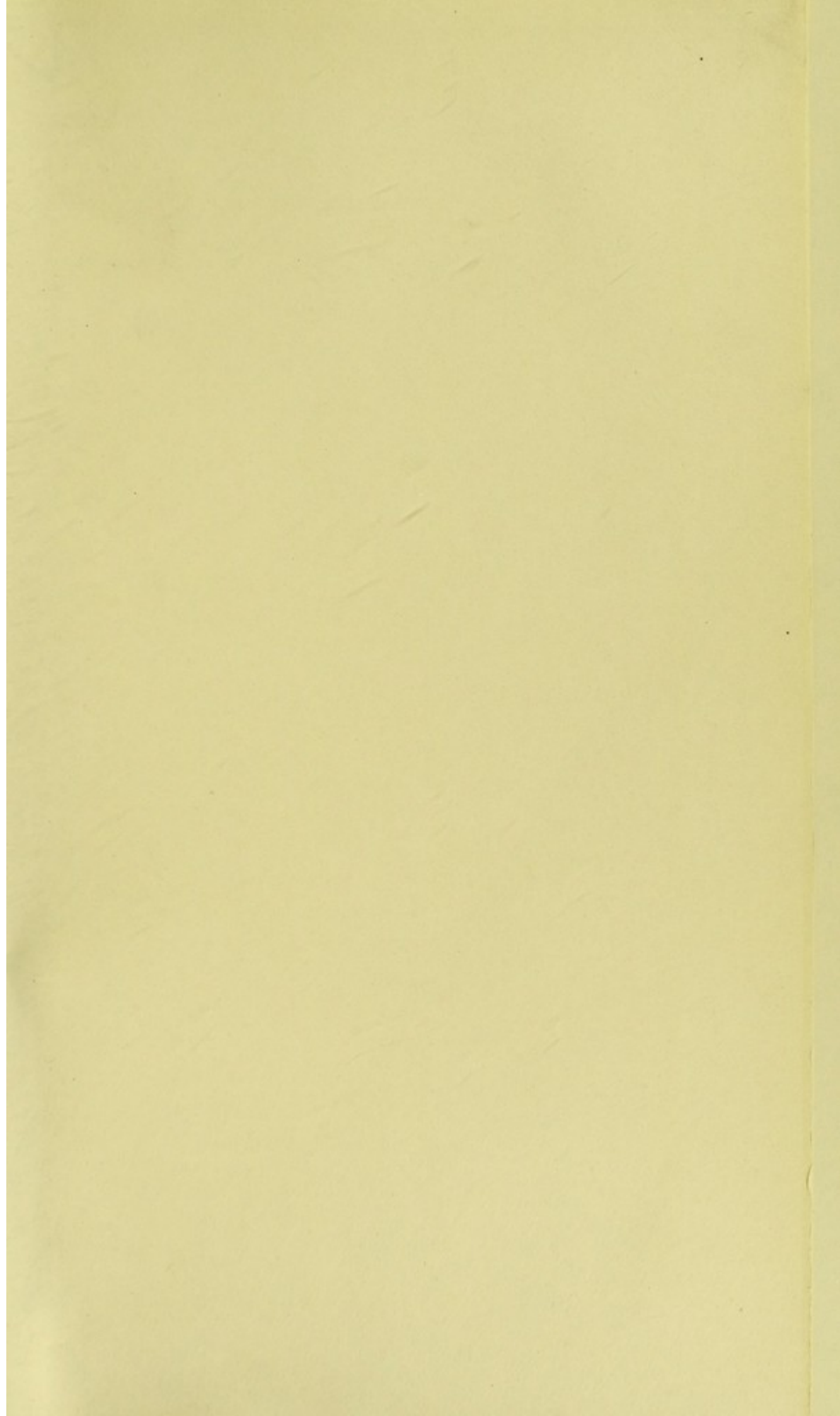
Few portions of the great philosopher's life were more dignified than the end. He wrote to his brothers, with whom his intercourse had been of the slightest, commending to their care an aged nurse. He had always

maintained an orthodox demeanour in the eyes of the world, and this attitude he preserved to the end. The last words he is recorded by Clerselier to have said, are very beautiful: 'My soul, thou hast long been held captive; the hour has now come for thee to quit thy prison, to leave the trammels of this body; suffer, then, this separation with joy and courage.' His first burial was at Stockholm, in a cemetery set aside for unbaptised infants, since a regular Catholic burial ground was not available. His body, however, was soon removed to Paris, and buried with great pomp in the church of Ste Geneviève, the modern Panthéon; later it was removed to St Germain-des-Prés (where the tomb is now to be seen), though it was temporarily deposited in the Court of the Louvre during the Revolutionary times. We have of late been entertained by a hot discussion as to the genuineness of a skull reputed to be his, which is now at the Museum of Natural History in Paris.

It was a great career; the story of a life lived worthily and with the highest ends consistently in view. The very failings of the man make us feel he is no remote figure dim from the dust of ages. His teaching that we are to set aside mere conjecture and seek to know with certainty, making sure of each step as we go, is a system of knowledge that is also very modern. We may not build on that system just as he directs us, though the excellent rules he lays down might well be kept before us still, but the substance of his method is as true to-day as it was three hundred years ago. His dualistic view of mind and body, like his theory of the world, has been criticised; but what makes him the originator of the modern, as opposed to the medieval, outlook is the clear and distinct thinking that strives for truth alone. Others will write of Descartes and add to the great literature that has gathered round his name. But they will always turn to M. Adam's volume for an accurate and carefully verified statement of the facts, and to this great edition for an authoritative version of the philosopher's works.

ELIZABETH S. HALDANE.





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